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Can market knowledge lead to entrepreneurial opportunities and commercialization in sports startups

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Abstract
Sports startups are entering the knowledge-based economy, where knowledge and intangible assets are recognized as the most important factor in production as well as the most important competitive advantage. Therefore, the main purpose of this article is to examine whether market knowledge can lead to the formation of entrepreneurial opportunities and commercialization in sports startups. The statistical population of the study consisted of 100 technology-based entrepreneurs of sports startups in IRAN. The research tool for this paper was a questionnaire containing 40 questions using a 5-point Likert scale. The construct validity of the questionnaire was confirmed by factor analysis and AMOS 23 and SPSS software were used to test the hypotheses. The findings suggest a significant impact of market knowledge ($T=4.58$, $\beta = 0.45$, $p < 0.01$) and each of its dimensions, namely Identifying the right market, Awareness of supply and demand trends, and Market technology on the entrepreneurial opportunity formation in sports startups. According to the results of the research, we can state the positive impact of the market knowledge on the level of entrepreneurial opportunities of sports startups. It was concluded that market knowledge based on the commercialization of sports science research is a potential source of value creation and competitive advantage for the startups that ultimately develop such enterprises and help improve the technology-driven entrepreneurship status of these enterprises and job creation in sport scope.

Keywords: Commercialization, entrepreneurship, market knowledge, physical education, sport, startup

Introduction

Commercialization and knowledge translation of sports research is nothing but the transfer of sports science achievements by academic entrepreneurs to the target market and the application of sports science and technology by individuals, businesses and society, and the profitability of innovations based on sports knowledge (Ratten, 2019; Schaillée *et al*., 2019; Kubayi *et al*., 2019) [35, 39]. Commercialization is one of the ways in which science can be tied to economics (Martyniuk, Jain & Haft, 2002) [28]. Therefore, transfer and apply knowledge and commercialize sport research results in order to improve performance and achieve human interests and goals in relation to sports requires the conversion of sports knowledge and innovative ideas into reality (Hardman, 2012) [17].

This study focused only on Sport startups for four main reasons. First, startups are organizations created by entrepreneurs in the field of innovation to help produce new products and services in an increasingly uncertain environment (Kim, Kim & Jeon, 2018) [21]. Second, technology-based startups or businesses have high growth potential that are set up by knowledge owners with the aim of becoming a repeatable, Expandable and scalable business model (Henriques, Sobreiro, & Kimura, 2018) [18]. Third, startups are launched based on economic and non-economic incentives (Kim, Kim & Jeon, 2018) [21], which also exist in the field of sports as economic and social incentives (Ratten, 2019) [35]. Fourth, startups, especially those interested in sustainable wealth creation and applying academic knowledge and ideas, cannot succeed solely on the basis of one-sided, entrepreneurial-only activities. In other words, startups need to develop opportunistic and advantageous behaviors to generate wealth and create value (Ketchen, Ireland & Snow, 2007) [19].

In recent years, increased attention has been directed toward the formation of new ventures from the new knowledge that is created by incumbent firms. This process focuses on a firm-centric approach that considers entrepreneurial opportunities from a spin-off and an endogenous perspective (Cantù, 2017) [7]. One can identify two dominant perspectives on how entrepreneurial opportunities are shaped in the literature of entrepreneurship: the theory of opportunity discovery and the theory of opportunity creation. In both perspectives, the goal of the entrepreneur is to create and exploit the opportunity, but the two have different assumptions. Contrary to discovery's view that opportunities are objective phenomena that exist in the environment and must be explored; the creation perspective views opportunities as a product of the process of social formation (Bolívar-Cruz *et al*, 2014) [6]. The companies that acquire knowledge from within and outside the organization can reduce uncertainty, explore more opportunities and gain more technological advantages, thereby market innovative products and services. Therefore, knowledge in the sports market can support innovation and identify new and entrepreneurial opportunities and ideas and have a significant positive impact on the utilization of entrepreneurial opportunities (Morrish, 2011) [30]. Accordingly, much effort must be put into implementing market knowledge to create a shared culture with the aim of

maximizing the Identification and recognition of entrepreneurial opportunities and improving the innovation performance that creates a competitive advantage for entrepreneurial businesses (Seric & Ljubica, 2018; Ratten, 2019) [41, 35].

With the advent of the knowledge-based economy, customer needs have become increasingly diverse and specific, and competition in the market has intensified (Roxas, Chadee & Wu, 2012) [37]. These conditions have forced individuals and organizations to continually make changes to themselves to anticipate the emergence of new trends in the marketplace, identify new opportunities in the market and improve their products and services to increase profitability, in addition to enhancing competitiveness (Casillas, Barbero & Sapienza, 2015) [8]. Therefore, it is very important for individuals and companies to learn about the market in which they operate and apply this market knowledge to plan marketing strategies and make business decisions (Lee, Son & Suh, 2010) [24].

Market knowledge reflects new ventures' understandings of their competitors and customers (De Luca & Atuahene-Gima, 2007; Li & Calantone, 1998) [26, 25]. It concerns business-to-business relationships and actions such as market reactions to competitive moves and organizational-level responses to customer needs and wants (Martín-de Castro, 2015; Ferreras-Méndez, Newell, Fernández-Mesa, & Alegre, 2015) [27, 11]. Market knowledge is essential if organizations are to seize opportunities for strategic action in their product-market space. However, organizations differ in their opportunities to capitalize on market knowledge because they vary in their levels of market knowledge or in their capabilities of obtaining market knowledge (Sambamurthy, Bharadwaj & Grover, 2003) [38]. More important, according to the knowledge-based view of the firm, which was originally built on the resource-based view of the firm, a firm's level of market knowledge is an important predictor of the firm's performance (Grant, 1996; Barney, 1991) [16, 4]. This is especially true for sellers operating in on-line marketplaces because they are likely to face intense competition due to increased market transparency (Soh, Markus & Goh, 2006) [42]. In short, sports market knowledge (SMK) can imply the knowledge of an organization such as sport startups about its customers, competitors, and technologies (Schlosser & McNaughton, 2009; Li & Calantone, 1998; Song *et al*, 2017) [40, 25, 43].

Institutionalizing the technology-driven entrepreneurial process and commercializing technologies derived from sports science research has led to improvements not only for the academic community but also for coaches, athletes, and managers (Bishop *et al*, 2006) [5], facilitate greater collaboration and participation between sport organizations and institutions, Increasing awareness of sport research and product development at all levels of sport (Ringuet-Riot, Hahn & James, 2013) [36], gaining competitive advantage for professional sports clubs (Giblin, Tor & Parrington, 2016) [14], increasing the income of sports non-profit organizations (Khieng & Dahles, 2014) [20], increasing effective communication between sports science researchers and practitioners (Kubayi, Coopoo & Toriola, 2019) and other economic and social benefits.

The Importance of using technological entrepreneurial opportunities and the brilliant track record of entrepreneurs in the development of many countries (Audretsch & Belitski, 2017; Anderson & Jack, 2002) [1] and also, the need to launch knowledge-based companies, especially in the Iranian sports industry, requires startups and knowledge-holders to be well-informed and knowledgeable about the market they are undertaking. Several studies (Dastoom *et al*., 2013; Azimi Delarestaghi *et al*., 2016; Goudarzi *et al*., 2016) [10, 15] show that at present, the model of cooperation, partnership, and synergy in Iranian universities, technological segments, and sports industry is a dysfunctional paradigm. The involvement of sports entrepreneurs and the role played by sports science achievements in society through market orientation and the formation of sports entrepreneurship opportunities is a missing link that has received little attention. Therefore, this article attempts to take an effective step towards technology-driven development of Iranian sports market by examining the commercialization literature of sports science research, market knowledge, and sports entrepreneurship opportunities and to bring the status of sports startups beyond the symbol of knowledge to the epitome of transforming knowledge into action. Accordingly, Figure 1 shows the conceptual framework and research hypotheses.

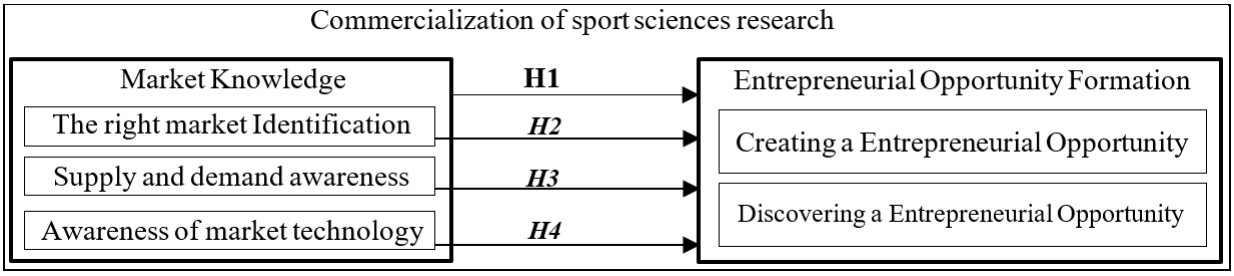

Fig 1: Conceptual Model of the Research

Material & Methods

Participants

This was a descriptive-correlational study conducted using a survey method. The population included all entrepreneurs of Iranian sports startups who participated in the 18th International Sport Exhibition and Sports Equipment (SPORTEX2019) in Tehran and presented their scientific achievements. Given the purpose of the study and the effort to study a sample that could generalize the results to the research community, the statistical sample was considered as a whole. Of the 100 startups present, 93 startups participated in the study (n=93).

Measures

The data collection was performed as a field method using a questionnaire. The questionnaire used in the research was first translated into Persian from English. Afterward, was returned by an English expert from Persian to English and was edited in cases of nonconformance. Questionnaire content validity have bee n

evaluated by 9 professors in sport management and 2 professors in entrepreneurship.

Procedures

By reviewing the experts' opinions, final adjustments were made to the tools and their content validity was confirmed and guaranteed. The reliability of questionnaire was 0.834 using Cronbach's Alpha. Confirmatory Factor Analysis (CFA) also used for construct validity. Likert's four-scale from totally disagree to totally agree was considered for each question. Structural equation modeling using AMOS software was used to examine the model fit. The questionnaire information is provided in Table 1.

Table 1: Structures, variables, number and other information of the questionnaire

Structure	Variable	N.	Cronbach's Alpha	Source
Market Knowledge	Right market identification	10	0.81	Schlosser & McNaughton, 2009 [40]; Li & Calantone, 1998 [25]; Song *et al*, 2017 [43]
	Awareness of supply and demand trends (S&DT)	12	0.86	
	Awareness of market technology (MT)	9	0.87	
Entrepreneurial Opportunity Formation (EOF)	Creation and Discovery	9	0.9	Puhakka (2009); Li & Calantone (1998) [25]

Analysis

To analyze the research data, descriptive statistics were used to determine the mean, standard deviation, frequency, and percentages. The confirmatory factor analysis method was used to estimate the importance, factor load of the elements, determine the most important indicators, and prepare a model. Data analysis was performed using SPSS software and Amos version 23. We arranged this section to be coherent with the hypotheses.

Results

Descriptive statistics of gender indicated that 10.8% (10 persons) of the subjects were women and 89.2% (83 persons) men. Most of the research samples were in the age range of 20 to 30 years (75 persons, 80.6%) followed by 31 to 40 years (14 persons, 15.0%), and more than 41 years (4 persons, 4.3%). Regarding educational qualifications, the majority of the subjects had a bachelor's degree (70 persons, 75.2%). Also, in terms of field of study, 25 (26.8%) had sports science education and the rest were in engineering and computer science. The results of investigating the conceptual model of the study and the relationship between the variables in the model are presented in the two modes of coefficients of significance and standard path coefficients which are shown in Fig. 2 and Tables 2 and 3. Based on the results of Figure 2, the coefficients related to the relationship between each of the variables in the conceptual model are presented.

Based on the results presented in Table 2, all indicators are in a very favorable and satisfactory level and this indicates a suitable fitness of the model of the study. Therefore, the conceptual model of the research is confirmed based on the structural equation modeling. The coefficients related to the causal relationship of the variables of the model are presented in Table 3.

Based on the results of Table 3, there is a significant causal relationship between the various variables of the model including the market knowledge and entrepreneurial opportunity formation; and the right market identification and entrepreneurial opportunity formation; and awareness of supply and demand trends and entrepreneurial opportunity formation; and awareness of market technology and entrepreneurial opportunity formation.

Fig 2: Path Coefficients for Final Research Model

Table 2: Goodness of Fit Indexes

Indexes	Acceptable values	Research values	Result
CMIN /DF	1-3	1.98	good fit
RMSEA	0.1≥	0.047	good fit
AGFI	0.9≤	0.92	good fit
NFI	0.9≤	0.91	good fit
CFI	0.9≤	0.92	good fit
GFI	0.9≤	0.94	good fit
IFI	0.9≤	0.94	good fit
TLI	0.9≤	0.93	good fit

CMIN /DF: Normed Chi-Square; RMSEA: Root Mean Squared Error of Approximation; AGFI: Adjusted Goodness-of-Fit Index; NFI: Normed Fit Index; CFI: Comparative Fit Index; GFI: Goodness of Fit Index; IFI: Incremental Fit Index; TLI: Tucker-Lewis Index.

Table 3: The results of testing the hypotheses

The Path of the Hypotheses	Path coefficient	Result
Market knowledge have a positive and significant effect on Entrepreneurial Opportunity Formation (EOF)	0.68*	confirmed
The right market identification have a positive and significant effect on EOF	0.73*	confirmed
Awareness of supply and demand trends have a positive and significant effect on EOF	0.59*	confirmed
Awareness of market technology have a positive and significant effect on EOF	0.61*	confirmed

*: $p<0.01$

Discussion

The importance of using technological entrepreneurship opportunities and the brilliant track record of entrepreneurs in development of many countries is not a secret (Audretsch & Belitski, 2017; Anderson & Jack, 2002) [1]. To get situated within the startup industry as an entrepreneur takes many things, as this study has demonstrated. The real focus of this study, however, was to explore the role of the market knowledge of entrepreneurs who have elected to open their startups in the narrow window of the sports startup industry. Startup companies have been getting substantial attention over recent years (Kim, Kim & Jeon, 2018) [21]. Part of this is business, and part of this is social, both key indicators of popularity, but not necessarily of success (Tripathi *et al*, 2019) [44]. Indeed, this study focused on sports startup entrepreneurs and what made them successful market In spite of the few studies available in the field of sports startups, we have come to the conclusion that market knowledge can potentially play a role in shaping entrepreneurial sports opportunities (Kilic & Ince, 2015; Ozkaya *et al*, 2015; Kollmer & Dowling, 2004). Accordingly, this study was designed to test the impact of the knowledge of sports entrepreneurship market on the formation of entrepreneurial opportunities. An important point in this study was that we assessed the emergence of entrepreneurial opportunities in the context of commercializing sports science research and sought to exclusively highlight the role of education, research, and sport science achievements in the shaping of entrepreneurial opportunities (Schaillée *et al*. al, 2019; Ratten, 2019; Hardman, 2012) [35, 39, 17]. The findings indicated that market knowledge has a significant positive effect on entrepreneurial opportunities formation. Better yet, as market knowledge grows and develops in a startup and among its entrepreneurs, the number and value of recognized entrepreneurial opportunities has increases and by exploiting them, the startup's profitability will also increase. The findings show that entrepreneurs in sports startups can identify and exploit more opportunities by identifying the right market, being aware of supply and demand trends, and being aware of market technology. Therefore, identifying opportunities and creating value for the customer are areas of market management and entrepreneurship that less attention has been paid to them. Market knowledge was also identified as one of the essential resources for exploiting market opportunities (McMullen, Plummer, & Acs, 2007; Cantù, 2017) [7]. The findings also show that new conditions governing the business environment, especially competitive and variable sports environment, has led sports startups to continually make changes to better anticipate new trends in the market, identify new opportunities in the marketplace and improve their products and services, thereby increasing profitability in addition to enhancing their competitive ability (Casillas, Barbero, & Sapienza, 2015) [8]. Therefore, it is essential for sports startups to be able to discover many opportunities by using research achievements and create a good market through the market in which they operate. The H1 endorsement also shows that sports startups are better able to use this market knowledge to plan marketing strategies and make business decisions so they can explore and create more opportunities.

One of the interesting results of this study was the impact of technology knowledge on the formation of entrepreneurial opportunities ($\beta 3 = 0.61$, $p < 0.01$). In other words, the greater the awareness of market technology, the sports startups will discover and create more entrepreneurial opportunities. This part of the findings showed that technology-based entrepreneurship entails the search and creation of technological knowledge. In the full picture we must not only recognize that technological entrepreneurship is based on knowledge, but also that the demand for technological innovation and entrepreneurship often results in the production of knowledge and knowledge transfer. Although prior knowledge may be important, continuous acquisition of new market knowledge and technological strategies consistent with this new knowledge are essential for the successful discovery and exploitation of opportunities. Entrepreneurs of sport startups pointed out that the development of technology used in sports is very fast. Today, technology has features and capabilities that were unimaginable several years ago (Kos *et al*, 2018). Given that technology is seen as a practical application of knowledge and a tool to aid human endeavor (Hardman, 2012) [17] or, more simply, 'converting science into practice' (Galbraith, 1972), it can be argued that market technology awareness relates to equipment knowledge and sports information analysis, which has a significant impact on the discovery and creation of entrepreneurial opportunities.

In accord with prior research (Ringuet-Riot, 2013; Ratten, 2019; Kubayi *et al*, 2019) [36, 35], the findings of this study highlight the critically increasing need for the development of market knowledge in sports startup entrepreneurs in order to enable them to create the effective climate and strategies for innovation and entrepreneurial opportunity formation and overcome the challenges and complexities of competitiveness and success of their business. Finally, as opportunity formationcontinually functions as a vital component of entrepreneurial success, our results provide substantial implications for policymakers in terms of training programs for those with low market knowledge. Based on the present findings, the effect of knowledge acquisition, regardless of whether it is attained from business networks or autonomously, is more powerful for those with low market knowledge. To this end, current and prospective sports startup entrepreneurs need to be actively engaged in entrepreneurial opportunities management courses and training programs. Previous researchers argued that a single strategy in market knowledge is not effective in forming entrepreneurial opportunities and improving innovation behavior (Ozkaya *et al*, 2015; Li & Calantone, 1998; Lee *et al*, 2010) [31, 24, 25]. Therefore, sport startups entrepreneurs should also learn how to incorporate

sports market knowledge with other market knowledge to better promote innovation and opportunity formation among their employees and startup.

Conclusions

Examining the impact of the market knowledge on entrepreneurial opportunity formation in sport startups, this study provides several implications for theory development First, by exploring the impact of market knowledge and its dimensions means identifying the right market, being aware of the supply and demand trends and being aware of market technology on the emergence of entrepreneurial opportunities, this study assists developing theories on technological entrepreneurship and opportunity formation development specifically for sport startup businesses using market knowledge (Kubayi *et al*, 2019; Ozkaya *et al*, 2015) [31,]. Second, by introducing the sports market, this study extends the types of market knowledge in forming entrepreneurial opportunities (e.g., Pyne, 2014; Czarnitzki *et al*, 2016) [33, 9].

This finding also assists in theory development in enhancing opportunity formation by including sports entrepreneurship. Furthermore, this study extends the theory of entrepreneurial sport policy (Ratten, 2017) by applying it to explain opportunity formation in sport startups. By looking at past studies, we have concluded that there is little research on market knowledge and its impact on the emergence of entrepreneurial opportunities. In sport, no research has been found on market knowledge and the emergence of sports entrepreneurship opportunities. By focusing on a variety of market knowledge in Iranian sports startup entrepreneurs, we acknowledged the impact of market knowledge on discovering and creating entrepreneurial opportunities that have been emphasized in previous research (Martyniuk, Jain & Haft, 2002; Czarnitzki *et al*, 2016; Lee *et al*. al, 2010) [28, 9, 24] In particular, this study suggested the impact of market knowledge on entrepreneurial opportunities in the business environment of Iran as a developing country despite the strong difficulties and constraints that managers encounter in practicing the principles of entrepreneurship and marketing in such countries (Anderson & Jack, 2002; Rahimi & Alidoust Ghahfarokhi, 2019) [1, 34]. It seems that technology-based entrepreneurs and sports startup managers need to collaboration between marketing and sales units and R&D units to develop and implement further innovations and strive to make this collaboration a good synergy between managing a startup sport and providing entrepreneurial opportunities.

Concerning the results, it is suggested that sports startups

- Try to meet with customers at least once a year to find the products and services they need in the future, and to gain insights into future market trends based on their interactions with them.
- Increase research to identify appropriate markets. Entrepreneurs and marketing startups spend a good deal of time discussing the future needs of their customers with other functional segments.
- Updating information on the latest technology by participating in international startup business-related exhibitions, researching partners and competitors, as well as subscribing to top technology companies' websites, as well as upgrading sports startup technology to international standards.

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Conflicts of interest

There were no conflicts of interest as such. The studies were carried on at our own expenses. No grants were used. The authors declare no conflict of interest.

References

1. Anderson AR, Jack SL. The articulation of social capital in entrepreneurial networks: A glue or a lubricant? Entrepreneurship & Regional Development. 2002; 14(3):193–210. doi:10.1080/08985620110112079
2. Audretsch DB, Belitski M. Entrepreneurial ecosystems in cities: establishing the framework conditions. The Journal of Technology Transfer. 2016; 42(5):1030–1051. doi:10.1007/s10961-016-9473-8
3. Azimi delarestaghi A, Razavi S, Boroumand M. Identifying the Effective Context Conditions of Strategic Entrepreneurship Deployment in Sports Business. Sport Management and Development. 2019; 7(4):70-87. doi: 10.22124/jsmd.2019.3253
4. Barney J. Firm Resources and Sustained Competitive Advantage. Journal of Management. 1991; 17(1):99–120. doi:10.1177/014920639101700108
5. Bishop D, Burnett A, Farrow D, Gabbett T, Newton R. Sports-Science Roundtable: Does Sports-Science Research Influence Practice? International Journal of Sports Physiology and Performance. 2006; 1(2):161–168. doi:10.1123/ijspp.1.2.161
6. Bolívar-Cruz A, Batista-Canino RM, Hormiga E. Differences in the perception and exploitation of entrepreneurial opportunities by immigrants. Journal of Business Venturing Insights. 2014; 1(2):31-36. doi:10.1016/j.jbvi.2014.09.005
7. Cantù C. Entrepreneurial knowledge spillovers: discovering opportunities through understanding mediated spatial relationships. Industrial Marketing Management. 2017; 61:30–42. doi:10.1016/j.indmarman.2016.07.002
8. Casillas JC, Barbero JL, Sapienza HJ. Knowledge acquisition, learning, and the initial pace of internationalization. International Business Review. 2015; 24(1):102–114. doi:10.1016/j.ibusrev.2014.06.005
9. Czarnitzki D, Doherr T, Hussinger K, Schliessler P, Toole AA. Knowledge Creates Markets: The influence of entrepreneurial support and patent rights on academic entrepreneurship. European Economic Review. 2016; 86:131-146. doi:10.1016/j.euroecorev.2016.04.010
10. Dastoom S, Ramezaninezhad R, Benar N, Rasouli R. Survey of interactions administrative departments and industry sport in Iran Based on the Analysis Documents and structural. Applied Research of Sport Management. 2013; 2(2): 91-108.
11. Ferreras-Méndez JL, Newell S, Fernández-Mesa A, Alegre J. Depth and breadth of external knowledge search and performance: The mediating role of absorptive capacity.

Industrial Marketing Management. 2015; 47:86–97. doi:10.1016/j.indmarman.2015.02.038
12. Fullagar HHK, McCall A, Impellizzeri FM, Favero T, Coutts AJ. The Translation of Sport Science Research to the Field: A Current Opinion and Overview on the Perceptions of Practitioners, Researchers and Coaches. Sports Medicine, 2019. doi:10.1007/s40279-019-01139-0
13. Galbraith JK. The New Industrial State. London, UK: Andre Deutsch, 1972.
14. Giblin G, Tor E, Parrington L. The impact of technology on elite sports performance. Sensoria: A Journal of Mind, Brain & Culture. 2016; 12(2):3-9. doi:10.7790/sa.v12i2.436
15. Goudarzi M, Jalalifarahani M, Rajabi H, Hamidi M. Analyzing behavioral factors affecting the development of entrepreneurship of management sport students. Organizational Behavior Management in Sport Studies. 2016; 3(11):45-53.
16. Grant RM. Toward a knowledge-based theory of the firm. Strategic Management Journal. 1996; 17(S2):109-122. doi:10.1002/smj.4250171110
17. Hardman A. Sport, Technology and the Body. Sport, Ethics and Philosophy. 2012; 6(1):78-81. doi:10.1080/17511321.2011.587199
18. Henriques IC, Sobreiro VA, Kimura H. Science and Technology Park: Future challenges. Technology in Society. 2018; 53:144–160. doi:10.1016/j.techsoc.2018.01.009
19. Ketchen DJ, Hult GTM, Slater SF. Toward greater understanding of market orientation and the resource-based view. Strategic Management Journal. 2007; 28(9):961-964. doi:10.1002/smj.620
20. Khieng S, Dahles H. Commercialization in the Non-Profit Sector: The Emergence of Social Enterprise in Cambodia. Journal of Social Entrepreneurship. 2014; 6(2):218-243. doi:10.1080/19420676.2014.954261
21. Kim B, Kim H, Jeon Y. Critical Success Factors of a Design Startup Business. Sustainability. 2018; 10(9):1-15. 2981. doi:10.3390/su10092981
22. Kollmer H, Dowling M. Licensing as a commercialisation strategy for new technology-based firms. Research Policy. 2004; 33(8):1141–1151. doi:10.1016/j.respol.2004.04.005
23. Kubayi A, Coopoo Y, Toriola A. Analysis of sports science perceptions and research needs among South African coaches. South African Journal for Research in Sport, Physical Education and Recreation. 2018; 30(1):1-4. doi:10.17159/2078-516x/2018/v301a4240
24. Lee J, Son JY, Suh KS. Can Market Knowledge from Intermediaries Increase Sellers' Performance in On-Line Marketplaces? International Journal of Electronic Commerce. 2010; 14(4):69-102. doi:10.2753/jec1086-4415140403
25. Li T, Calantone RJ. The Impact of Market Knowledge Competence on New Product Advantage: Conceptualization and Empirical Examination. Journal of Marketing. 1998; 62(4):13. doi:10.2307/1252284
26. Luca LMD, Atuahene-Gima K. Market Knowledge Dimensions and Cross-Functional Collaboration: Examining the Different Routes to Product Innovation Performance. Journal of Marketing. 2007; 71(1):95-112. doi:10.1509/jmkg.71.1.95
27. Martín-de Castro G. Knowledge management and innovation in knowledge-based and high-tech industrial markets: The role of openness and absorptive capacity. Industrial Marketing Management. 2015; 47:143–146. doi:10.1016/j.indmarman.2015.02.032
28. Martyniuk AO, Jain RK, Haft MN. Market opportunity analyses and technology transfer. International Journal of Technology Transfer and Commercialisation. 2002; 1(4):385. doi:10.1504/ijttc.2002.001795
29. McMullen JS, Plummer LA, Acs ZJ. What is an Entrepreneurial Opportunity? Small Business Economics. 2007; 28(4):273–283. doi:10.1007/s11187-006-9040-z
30. Morrish SC. Entrepreneurial marketing: a strategy for the twenty-first century? Journal of Research in Marketing and Entrepreneurship. 2011; 13(2):110-119. doi:10.1108/14715201111176390
31. Ozkaya HE, Droge C, Hult GTM, Calantone R, Ozkaya E. Market orientation, knowledge competence, and innovation. International Journal of Research in Marketing. 2015; 32(3):309–318. doi:10.1016/j.ijresmar.2014.10.004
32. Puhakka V. Versatile and flexible use of intellectual capital in entrepreneurial opportunity discovery. Journal of Management Research. 2009; 2(1):3. doi:10.5296/jmr.v2i1.144
33. Pyne D. Ed. Improving the Practice of Sports Science Research. International Journal of Sports Physiology and Performance. 2014; 9(6):899–899. doi:10.1123/ijspp.2014-0451
34. Rahimi A, Alidoust Ghahfarokhi E. Identify the Effect of Entrepreneurial Marketing on Creating and Improving the Performance of Small and Medium Sport Enterprises. New Trends in Sport Management. 2019; 6(23):23-31.
35. Ratten V. Sport entrepreneurial ecosystems and knowledge spillovers. Knowledge Management Research & Practice, 2019, 1-10. doi:10.1080/14778238.2019.1691473
36. Ringuet-Riot CJ, Hahn A, James DA. A structured approach for technology innovation in sport. Sports Technology. 2013; 6(3):137–149. doi:10.1080/19346182.2013.868468
37. Roxas B, Chadee D, Wu T. Export Knowledge and Performance of Small and Medium-Sized Enterprises in the Philippines: The Moderating Effects of Relational Capital. Impacts of Emerging Economies and Firms on International Business. 2012; 250-271. doi:10.1057/9781137032546_12
38. Sambamurthy Bharadwaj Grover. Shaping Agility through Digital Options: Reconceptualizing the Role of Information Technology in Contemporary Firms. MIS Quarterly. 2003; 27(2):237. doi:10.2307/30036530
39. Schaillée H, Spaaij R, Jeanes R, Theeboom M. Knowledge Translation Practices, Enablers, and Constraints: Bridging the Research–Practice Divide in Sport Management. Journal of Sport Management. 2019; 1-13. doi:10.1123/jsm.2018-0175
40. Schlosser FK, McNaughton RB. Using the I-MARKOR scale to identify market-oriented individuals in the financial services sector. Journal of Services Marketing. 2009; 23(4):36–248. doi:10.1108/08876040910965575
41. Seric N, Ljubica J. Market Research Methods in the Sports Industry. Emerald Publishing. Howard House, Wagon Lane: Bingley, 2018.

42. Soh Markus, Goh. Electronic Marketplaces and Price Transparency: Strategy, Information Technology, and Success. MIS Quarterly. 2006; 30(3):705. doi:10.2307/25148746
43. Song G, Min S, Lee S, Seo Y. The effects of network reliance on opportunity recognition: A moderated mediation model of knowledge acquisition and entrepreneurial orientation. Technological Forecasting and Social Change. 2017; 117:98–107. doi:10.1016/j.techfore.2017.01.004
44. Tripathi N, Oivo M, Liukkunen K, Markkula J. Startup ecosystem effect on minimum viable product development in software startups. Information and Software Technology, 2019. doi:10.1016/j.infsof.2019.06.008