

Huang, Y and Yang, X (2024) EXPLORING THE INTEGRATION OF ARTIFICIAL INTELLIGENCE IN THE SPORTS TOURISM INDUSTRY. Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte vol. 24 (95) pp. 225-239.

DOI: <https://doi.org/10.15366/rimcafd2024.95.014>

## ORIGINAL

# EXPLORING THE INTEGRATION OF ARTIFICIAL INTELLIGENCE IN THE SPORTS TOURISM INDUSTRY

Yao Huang<sup>1,\*</sup>, Xueqin Yang<sup>2</sup>

<sup>1</sup> School of Literature, Guangxi Normal University, Guilin, 541000, China

<sup>2</sup> Institute of Physical Education, Yunnan University, Kunming, 650000, China

E-mail: [gxnuwxyhy@mailbox.gxnu.edu.cn](mailto:gxnuwxyhy@mailbox.gxnu.edu.cn)

**Recibido** 13 de Junio de 2023 **Received** June 13, 2023

**Aceptado** 12 de Febrero de 2024 **Accepted** February 12, 2024

## ABSTRACT

Artificial intelligence (AI) has advanced from a theoretical concept to a practical application thanks to the quick development of computer science and information technology. AI, a fundamental component of contemporary civilization, has a growing impact on all facets of daily life, including sports training. Artificial intelligence (AI) can be viewed as a supporting technology that specifically supports athletes' physical education training through methods like data analysis and simulation of training scenarios. Even though research on AI is still in its early stages, it is important to investigate how it may be used in sports training because this cutting-edge technology could in some ways make it easier for individuals to train physically. This study begins by reviewing the prior work on AI applications. In, this study investigates three specific situations of AI application in sports training and describes the key concepts based on the core idea and related research findings of AI. This study focuses on the close connection between artificial intelligence (AI) and physical education instruction and emphasises the benefits of AI, such as its use, ease, and innovation. This study creates the appropriate information data interface mode based on the integration of the sports tourist sector and the culture industry.

**KEYWORDS:** Artificial Intelligence, Tourism Industry, Sports, Industry Integration

## 1. INTRODUCTION

Sports are improving and arriving at up to this point incomprehensible level of achievement on account of the idea of computerized reasoning. The data show that estimations and quantitative exploration have been significant

in sports for a long, however A.I. is truly changing how matches are coordinated, played, and the number of onlookers they that draw in. Baseball, tennis, soccer, football, b-ball, and numerous different Sports display this example. Man-made consciousness has advanced onto television shows with speedier elements, guide suggestions with better examples, and extra room consults with better pieces of data about the resistance (Kaplan & Haenlein, 2019). Not just that. With steady Sports bits of knowledge for players and fans, Sports techniques gauge to empower the player to pick the right system, and, surprisingly, disturbing the player on the off chance that there ought to emerge an event of an expected diminishing in execution or injury, man-made brainpower is making ready for a more imaginative way for everybody in sports, from competitors to broadcasters. Sports development has ended up being unpreventable and a vital part of the business' development both inside and past the field, empowering each player and group to perform at their very best.

Umpires and players are searching for more profound data to propel their Sports, authorities request help from mentors to settle on the ideal decisions in critical minutes, and fans need more specific encounters and more unmistakable availability. Every one of these requirements can be met thanks to computerized reasoning (Cheng et al., 2020). PC based knowledge improvements are progressing quickly and are more vital for a brandishing affiliation's capability to dominate matches, foster mentors and players, deal with their undertakings, and grow, administration, and hold their fan base.

Man-made intellectual prowess (PC based intelligence), a field of study laid out during the 1950s, is portrayed as a structure's capacity to exactly scrutinize and acquire from outside information as well as to take on the learning results to achieve explicit targets and tackle issues through versatile variety. It is a piece of a field of computer programming that inspects how laptops may be changed to learn, think, and reason. Considering this, Housman recommended that PC based intelligence has two capacities: the first is the capacity to produce redundant assignments by determining the result of classification data (Housman, 2018), and the second is the capacity to go with choices that look like those of people by settling issues utilizing calculations (Du, 2021). As of late, as worldwide innovation has kept on progressing, insightful innovation has likewise progressed rapidly. Computer based intelligence has for some time been utilized in different ventures as an arising innovation, including discourse acknowledgment, picture ID, independent innovation, and others. In a short measure of time, computer-based intelligence has progressed from hypothesis to genuine use, expanded the quantity of occupation helps for individuals, and, surprisingly, began to supplant human work to some degree. Eventually, man-made consciousness (simulated intelligence) alludes to a machine's or alternately PC's ability to complete indicated positions for people, like diagnosing diseases. Man-made intelligence should be visible as a device to bring down expenses and lift participation, efficiency, and administration

quality. From a hypothetical outlook, computer based intelligence can likewise assist with peopling simply decide (Russell & Norvig, 2003).

A part of man-made brainpower called AI can offer dynamic examinations to individuals. It incorporates a large number of complex calculations. For example, the issue of improving the circulation of taxi assets at the air terminal can be settled utilizing the BP brain network strategy (McArthur, Lewis, & Bishary, 2005). To emulate the effect of government, Cheng et al. made a framework dynamic model in view of machining learning (Cheng et al., 2020). Valuable for upgrading strategy. The Markov chain strategy was utilized by Yang et al. to figure the volume of cargo in Xi'an, and it can offer the concerned divisions a few pragmatic arrangements. Subsequently, there are various and significant applications for artificial intelligence (Yang, Tang, Gan, Zhang, & X. Han, 2021).

## **2. REVIEW OF LITREATURE**

### **2.1 Impact of Sports Tourism**

An area of the worldwide economy that is quickly extending, the travel industry is firmly connected with the social and social movements happening in contemporary societies. On the grounds that it offers an assortment of income choices as well as selling neighbourhood products, it really brings down destitution in a few customary networks. By drawing vacationers and framing associations with financial backers, an advanced nearby the travel industry can enormously build the local area's work choices and advance economic development, guaranteeing continuous local area improvement. Since the turn of the twentieth hundred years, upgrades in correspondence and transportation innovation have sped up the globalization of the travel industry. (Yang et al., 2021)The ascent of the travel industry upholds economic development, especially in agricultural countries, as a result of expanding interests in human and actual assets. The development of the travel industry prods the development of different enterprises, including as farming, food handling, and crafted works, which work on the personal satisfaction for everybody locally. Regardless of its advantages, the fast development of the travel industry influences different social viewpoints, inflicts any kind of damage, and delivers a sizable measure of trash. To monitor and safeguard normal assets and social qualities, natural associations and associations from everywhere the world are encouraged to act right now. The travel industry has caused struggle between more youthful people who regularly draw in with sightseers and more seasoned individuals who like to keep to them and have moderate viewpoints. Cardoso and Silva Cardoso underlined, in any case, that pay from the travel industry exercises emphatically impacts the climate through the restoration and conservation of verifiable framework and earth safeguarded places (Liang, 2021). This is important for a criticism circle. Given its adverse consequences,

it would have the option to further develop the travel industry related exercises with significant arrangement support.

Sports the travel industry is a critical part of the travel industry area, contributing fundamentally to the economy and delivering great merchandise. It has been underscored as one of the significant the travel industry enterprises that adds to the world economy. It has been distinguished as a urgent wellspring of income for the travel industry. Sports the travel industry is connected with a recreation trip where individuals leave their homes for a brief timeframe to take part in actual brandishing exercises, travel, or see destinations. Sports are habitually included into the travel industry area to propel nearby culture, help in economic development, and draw sightseers. Sports visits are one kind of Sports the travel industry action. Sports visits are given to normal vested parties that plan excursions to visiting areas with an accentuation on Sports. Contingent upon availability, area, and nature, sports the travel industry journeys can be independent or coordinated. Sports the travel industry has specific attributes, as per Kurtzman. (i.e., number of appearances). Sports the travel industry is seen by the travel industry supervisors as a strategy to modify occasional examples of vacationer request on the grounds that both the travel industry and sports are characterized via irregularity Significant urban communities and countries have dynamically started to perceive the significance of sports the travel industry, while humble communities have set up committed sports the travel industry associations (Adams, 2017).

The fame of athletic occasions can be connected to the way that, contingent upon their scale, they give have networks at the state, province, city, or district level with critical advantages. Sports supposedly for the most part affect the economy and the travel industry. The economic benefits of sports the travel industry normally come about because of selecting purchasers with discretionary cash flow and financial backers who partake in unambiguous ventures. (Lee & Lee, 2021)It is habitually connected to new business possibilities for local people, delivering a significant wellspring of income and encouraging economic potential in the space González 2022 Furthermore, it can go about as a springboard for metropolitan renewal, development, and the production of new administrations. On the opposite side, by improving their openness and brand advancement, networks can profit from supporting Sports. The advancement of a town as an appealing the travel industry objective is likewise made conceivable by expanding its deceivability and notoriety. Changes in moral and social guidelines and values have been associated with the advancement of sports the travel industry, equivalent to other vacationer sorts, and its social effect on the local area.

## **2.2 Sports Tourism Development**

The extension of the travel industry area is generally a political

movement, and thus, various factors and interests are continually in conflict with each other. Hence, legislatures typically consolidate significant impact through open area foundations on the course and pace of the travel industry improvement. Thinking about that it might advance economic development and end destitution, states at all levels are unequivocally keen on advancing the travel industry business in numerous areas. Albeit the advantages of the travel industry are notable, the development of sports the travel industry can affect travel objections, particularly the networks there. It is fundamental to grasp expansive prescribed procedures to ensure that various perspectives are considered during the advancement cycle (Roll & Wylie, 2016). As of late, drives to create and advance Sports the travel industry have been made in both created and non-industrial countries. Sports are crucial for the improvement of sports the travel industry. These events further develop the income that sports get from the travel industry. Sports the travel industry is fixated on the encounters and associations that occur because of people going to a vacation destination, whether to play sports or watch them. For some countries all through the world, the development of sports the travel industry has turned into an industry, a place of exploration, and a procedure for both social and economic turn of events (Sohn & Choi, 2013). All the more as of late, particularly in non-industrial countries, sports the travel industry and occasions normally made a positive enticement for the Worldwide South Bama.

Sports the travel industry is habitually used to rearrange provincial and metropolitan neighbourhood networks, which require recovery in arising economies, because of its gainful effect on the economy. It is feasible to take utilization of other long-haul benefits for the drawn-out maintainable improvement of the nearby economies notwithstanding the normally announced economic impacts of sports the travel industry and occasion facilitating. For example, sports the travel industry much of the time brings about the extension of framework, the development of different donning offices, and the improvement of relaxation exercises. The viability of the travel industry as a drawn-out instrument against neediness relies heavily on how really the travel industry development lines up with generally venture, economic, horticultural, energy, and natural policies. The mix of the travel industry with business, its associations with the horticultural and administrations enterprises, and its help of foundation projects like the structure of air terminals, streets, ports, railroads, and different speculations that can uphold economic worth adding exercises are extra considers the improvement of feasible the travel industry (Lei, 2018).

### **2.3 Integration of Social Exchange Theory and Emotional Solidarity**

SET was at first presented by Emerson as a social hypothesis. It discusses a compensating cycle that is corresponding and includes at least two gatherings. when alluded to in the writing on the travel industry SET signifies a

discussion among local people and guests. Occupants will be bound to collaborate and trade with sightseers assuming they see that travel industry offers a larger number of advantages than disadvantages. Fred line 2005 who focused on that assuming that local people trust that the benefits of facilitating an occasion offset the expenses, will show a steady conduct aim and have an energetic demeanour for facilitating occasions from now on, has upheld this case. On the off chance that local people think the advantages offset the expenses; they will help with orchestrating future occasions and have an uplifting outlook(Xian, 2010 ). On the off chance that occupants have a negative encounter, their viewpoints will move, which will subvert support. On the other hand, local people who see the trade as harming would quit supporting the extension of the travel industry area (Davenport, 2018).

SET has habitually been utilized in examinations that evaluate the perspectives of local people. SET has little viability in regions including intergroup understanding and concern. Confidence in the public authority, and occupants' social and mental strengthening since it needs sufficient hypothetical exactness with standing its notoriety. These discoveries show that social associations and local people's assessments of the travel industry are altogether impacted by non-economic advantages (Housman, 2018). The way that SET has for the most part been utilized to look at cooperation's among individuals and the travel industry or government issues, overlooking social exchange and its effects inside a local area, is one more detriment of using it in the travel industry research. Given these worries, various scholastics advocate combining SET with other hypothetical systems for an all the more sweeping methodology. While surveying feelings in friendly contact among local area individuals and sharing feelings that fortify social bonds, profound fortitude is suitable. Three parts of close to home fortitude — inviting nature, profound closeness, and thoughtful comprehension — were utilized by Woodsman and Norman to assess the close to home associations among occupants and guests to a specific district (Shi, Wang, Hu, Wang, & Peng, 2018). It is used to anticipate extra factors like help for vacationer development as well as different aspects like shared convictions, shared conduct, and communication Woodsman, for example, was quick to utilize profound fortitude and its attributes to anticipate how individuals would see the results of the travel industry (as estimated through the travel industry influence disposition scale or TIAS)

### **3. ANALYSIS OF VIRTUAL REALITY TECHNOLOGY**

#### **3.1 Virtual reality sports simulation system introduction**

Arising innovation called augmented simulation (VR) consolidates a few disciplines, including PC designs, detecting, and man-made brainpower. To mirror the genuine climate by making a virtual one, it coordinates media, man-

made intelligence, human-machine interface innovation, dynamic gadget organizations, and different other data advancements. VR innovation utilizes programmatic experience to make a virtual organization region that drenches the client in a three-layered virtual climate. Clients could encounter a practical ongoing cooperation between many faculties in this virtual climate. Clients can accomplish visual, acoustic, and material multimodal further developed experience criticism in the three-layered unique climate delivered by a programmatic experience framework in view of the head-mounted show, data gloves, keen language, and other intelligent gadgets. The utilization of this innovation can make it workable for clients to encounter submersion, intuitiveness, and reality inside a virtual organization. The VR recreation framework is intelligent, vivid, and incorporates various perceptual components. Competitors' various faculties, including vision, hearing, and contact, should all cooperate during actual instruction preparing.

Subsequently, with the further progression of VR innovation, VR-based reproduction has become broadly utilized in the guidance of actual schooling. One of the most significant and effective instruments for educating and preparing is augmented reality (VR). It can give competitors new and effective preparation strategies that can assist them with fostering their capacities. Moreover, VR can resolve issues like an absence of colleagues to more readily fulfil the targets of different team activities' preparation programs. Thusly, lately, the people who wish to have a superior preparation experience are developing increasingly keener on VR. The VR-based sports recreation framework requires the accompanying elements.

### **3.1.1 Construction of virtual training scenarios**

It is important to display virtual preparation situations and virtual preparation gear since certain Sports similar to b-ball, have interesting prerequisites for preparing offices. Consequently, this element is the most fundamental part of the VR preparing framework. It might emulate certified preparing conditions, giving competitors the most key virtual preparation conditions. Competitors will encounter preparing in the genuine world in this virtual setting, giving them a phenomenal preparation air. Regardless of whether they miss the mark on certifiable preparation field, they can in any case prepare thanks to this virtual setting.

### **3.1.2. Capturing Motion Data**

A sensor GPS beacon from the framework can be utilized to straightforwardly record data about the competitor and afterward investigate it for re-enactment on a PC. The data of competitors in preparing is very fundamental since they can sum up and outline their preparation state through the data. The main component is that it could catch data from genuine human

developments. Explicit gadgets can naturally store their data, for example, pulse and development speed, when the competitors are preparing. Thusly, recording movement data is a fundamental part of the VR sports reproduction framework.

### 3.1.3 Gathering of physiological and psychological data

Physical and mental signs assume a critical part in evaluating a competitor's athletic condition. Competitors' physiological and mental data can be accumulated by various sensors relying upon the Sports. For example, metabolic signs like pulse and circulatory strain as well as practical marks of various organs are remembered for the gathering of physiological data. The mental data set incorporates the competitors' emotional episodes during preparing.

### 3.1.4 Action Replay

The system's most important feature is action replay, which can be used in situations when traditional camera techniques are ineffective. Due to their innovative nature, some training methods cannot be implemented; however, VR can resolve this problem. For instance, in gymnastics, instructors can aid students in developing new movements, skills, and abilities by emulating the VR sports re-enactment frameworks can be sorted into vivid and no vivid frameworks. Vivid frameworks utilize the developments of genuine competitors to motivate new moves, which are then recreated utilizing VR. To connect with the virtual climate, clients of vivid frameworks should wear cap-based 3D sound system shows, sound system glasses, data gloves, sound system headsets, superior execution PCs, and different gadgets. Clients of no vivid frameworks fundamentally depend on programming innovation to make rich virtual universes with visual and hear-able data. All in all, vivid frameworks have an exorbitant however strong submersion factor, while no vivid frameworks have a cheap and customary variable.



Figure 1. VR-based simulation system



### 3.2 Virtual Reality Sports Simulation System Case Study

Football players can utilize the expert preparation reproduction framework QB SIM, which depends on VR, for day to day, tedious practice. This framework empowers successful quarterback preparing for football in a protected, exact computer-generated simulation setting, helping competitors in progressing from secondary school to the Public Football Association as quickly as could be expected (NFL). As such, this innovation could assist clients with getting more powerful preparation. Competitors can get the most exact preparation experience with the QB SIM reproduction preparing framework, which was developed in a genuine rugby arena and utilizations OPTI Track movement catch and VR computer generated reality innovation. The QB SIM system then, uses development get advancement to get the contender's positions and the spots of the football and set the turns of events and play of the virtual player in the Sports, enabling effective arrangement. Football itself is an inflexible body with development get marker centres around its surface, and the headset worn by the contender is similarly furnished with marker centres around its surface. Competitors can rehearse all the more promptly while managing certifiable issues by utilizing the QB SIM re-enactment preparing framework. For example, it is very much perceived that football is a group activity. In the event that there aren't an adequate number of individuals to prepare, it turns out to be less sensible if the competitors actually have any desire to make it happen. Nonetheless, they could possibly prepare alone on account of the QB SIM recreation preparing innovation.



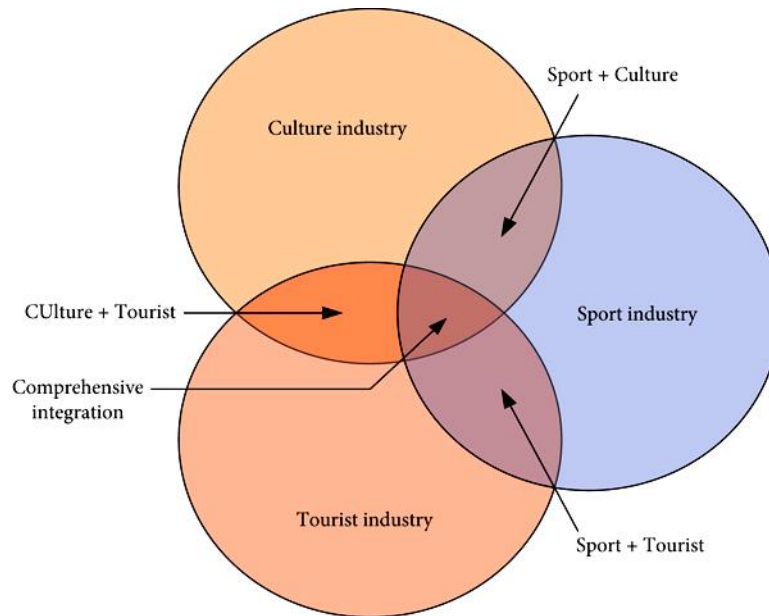
Figure 2. QB SIM simulations training system

## 4. EFFECT OF COORDINATED DEVELOPMENT AFTER INDUSTRIAL COUPLING

### 4.1. Effectiveness of Tourism Platform Communication

Man-made consciousness and huge data are utilized to enhance asset

portion and overhauling for the coupled new industry in research on the coupling and composed advancement of sports the travel industry and social industry in the period of artificial intelligence. This opens up another method of profound reconciliation of disconnected insight, online administrations, and asset upsides of different Sports the travel industry To concentrate on the appraisal of composed advancement following



**Figure: 3** Cultural industry and sports tourism relationship chart.

As demonstrated in Table 1, to survey the powerful correspondence rate impact of traveller stages when coupling in a useful application under similar number of tourism stages, Beijing and Hainan sports tourism enterprises were picked. They chose Beijing sports tourism area and the Hainan sports tourism business when coupling is obviously unique in relation to each other in Table 1.

The new industry's successful correspondence rate is higher than it was before coupling on the tourism stage, as shown by the t worth of 10:000 and P worth of 0.05. The discoveries of the correlation are viewed as measurably critical, and there is factual importance between the two.

As per the coupling examination of artificial intelligence (IDIJA) information brings about the assessment framework, it might not just concentrate different traveller at any point highlight codes and key client data consequences of the tourism stage from huge information to precisely find stage sightseers and judge the significant trademark ways of behaving, yet in addition in the examination and assessment of the coupling and composed improvement of sports tourism and social industry. It is normal that the coupled new industry may actually advance the coupled improvement of the industry and can speed the effective integration of the sports traveller and social ventures.

**Table 1:** Before-and-after comparison of the coupling of the cultural tourist business.

GROUP	N	BEFORE COUPLING	AFTER COUPLING
BEIJING SPORTS TOURISM	112	3.26	2.96
HAINAN SPORTS TOURISM INDUSTRY	12	4.22	3.55
T VALUE		5.23	4.89
P VALUE		5.96	6.23

The accompanying estimation applies the math mean and standard deviation rate method.

$$\sigma = \frac{1}{n-1} \sqrt{\sum_{i=1}^n (x_i - \mu)^2} \quad \mu = \frac{1}{n} \sum_{i=1}^n x_i \quad (1)$$

Among them, n is the quantity of components in the info grouping x, xi is the I input worth of the information arrangement x, and is the math mean of the info succession x. is the computation after-effect of the standard deviation pace of the information succession x.

In SPSS, the following formula displays the results of the vicariate t-test:

$$t = \frac{\mu_1 - \mu_2}{\sqrt{((n_1 - 1)\sigma + (n_2 - 1)\sigma_2^2(n_1 - 1)\sigma_1^2)}} \quad (2)$$

**Table 2:** Visual comparisons of the cultural tourist industry linkage before and after

BEFORE COUPLING	AFTER COUPLING
2.6	3.2
3.2	3.9
3.5	4.2
4.2	4.6
5.3	5.6
6.2	7.5
6.9	8.2

**Table 3(a):** A travel platform's quiz about customer satisfaction.

SERIAL NUMBER	TRAVEL PLATFORM CUSTOMER SATISFACTION SURVEY PROJECT	OPTIONS	OPTIONS
1	Platform's quality of customer service	Quite satisfied	Satisfied
2	Timeliness of the travel platform's services	Satisfied	Satisfied
3	savings on customer travel costs	Quite satisfied	Quite satisfied
4	Security for platform users travelling	Quite satisfied	Satisfied

**Table 3(b):** A travel platform's quiz about customer satisfaction

SERIAL NUMBER	TRAVEL SATISFACTION SURVEY PROJECT	CUSTOMER OPTIONS	OPTIONS
5	Online and offline tourist projects are consistent.	Quite satisfied	Satisfied
6	attitude of those working in picturesque spots	Quite satisfied	Quite satisfied
7	Problems with the travel process are accommodated	Quite satisfied	Quite satisfied
8	Project integrity for the travel platform	Quite satisfied	Satisfied
9	Individualized travel assistance	Quite satisfied	Quite satisfied
10	Reliability of transportation vehicles	Satisfied	Satisfied

The math means of the two looked at series, the quantity of components in the two analyzed successions, the standard deviation pace of the two analyzed series, and the vicariate t check result are among them. Figure 3 outlines a visual examination of the Beijing and Hainan sports vacationer businesses when their association. Figure 3's representation of the Sports the travel industry enterprises in Beijing and Hainan uncovers that there is an unmistakable vertical pattern in the wake of coupling contrasted with the pattern prior to coupling. This shows that, against the setting of the computerized reasoning time, coupling and planning the Sports the travel industry and social enterprises is an effective procedure for the development of the modern economy, further developing the market worth of the Sports the travel industry ventures, and better gathering the different requirements of customers.

#### 4.2. Customer Satisfaction Survey

A few clients from the movement stage coordinated into the new business were picked for a fulfilment study to all the more likely comprehend the assessment impact of the coupling and facilitated improvement of sports the travel industry and social industry against the scenery of man-made brainpower time, as displayed in Table 3. In Table 2, the study of consumer loyalty with the movement stage in the clever time, it very well may be seen that the general fulfilment with the help level, administration mentality, issue taking care of, cost adequacy, and security of the web-based travel stage is better during the time spent clients' insight of the coupled new Sports the travel industry. It shows the suitability of assessing the coupling and composed improvement of the social and wearing enterprises against the background of man-made consciousness and can raise guest fulfilment.

### 5. DISCUSSION

Individuals' utilization levels are ascending because of the country's fast economic development and drives for modified and fluctuated sports the travel

industry is additionally growing up, showing a vertical pattern. The marriage of the social area and sports the travel industry is similarly an undeniable propensity of modern economic improvement against the setting of this savvy period. While the social area has solid economic potential, the Sports the travel industry area is a firmly related relaxation and diversion area. While the last option offers voyagers a material and visual commonsense experience, the previous can take special care of their otherworldly requests. (Iansiti & Lakhani, 2020) The planned and coupled development of the Sports the travel industry and social businesses based on modern reconciliation broke the regular administration model of the particular improvement of single enterprises before, enhanced the administration model of new ventures after the coupling, made the social and sports the travel industry businesses drive one another, endure one another, and share assets in the modern coupling, and constructed a decent new modern common guide and emotionally supportive network (Qian et al., 2020).

As per the coupling examination of computerized reasoning (IDIJA) data brings about the assessment framework, the applicable traveller highlight codes can be removed from the enormous data and the key client data of the travel industry stage can be surveyed in the assessment of the coupled and composed advancement of sports the travel industry and the social business. The discoveries empower exact stage vacationer restriction and assessment of appropriate trademark ways of behaving. It is accepted that the coupled new industry can facilitate the viable joining of the Sports the travel industry and the social business and can successfully advance the coupling and association of the ventures in the review and assessment of the powerful correspondence pace of the huge data the travel industry stage and consumer loyalty. (Gksel & Bozkurt, 2019) It is important to keep improving and transforming the system, break the ongoing negative advancement circumstance, understand the coupling and association between the social business and the Sports the travel industry, and vivaciously advance the practical improvement of China's economy in spite of the coupling degree actually being in the undeveloped improvement stage.

## **6. CONCLUSION**

This study surveys how the improvement of sports the travel industry and the social area have been coupled and composed against the background of computerized reasoning. This paper lays out the data interface method of the travel industry stage, lays out the coupling innovation method of astute data innovation, examinations it, and judges the important the travel industry stage data results in view of the coordinated improvement of the Sports the travel industry and social industry. (Ding, 2019) The discoveries exhibit that by utilizing this coupling innovation, the effect of the new business made by the combination of sports the travel industry and the way of life industry can be

efficiently surveyed, and the general insight of sports the travel industry is raised. The profound joining of the Sports the travel industry has arisen as another power for China's great economic improvement in the new period as well as another change in the manner that individuals carry on with their lives and their otherworldly societies. It shows another stage in the combination of China's Sports culture and the travel industry enterprises and offers new points of view on the most proficient method to progress metropolitan business.

## REFERENCES

- Adams, R. L. (2017). Powerful examples of artificial intelligence in use today. *Forbes Technology*, [online] <http://www.forbes.com/sites/robertadams/2017/01/10/10-powerful-examples-ofartificial-intelligence-in-usetoday>.
- Cheng, B., Wei, Y., Zhang, W., Zhou, X., Chen, H., Huang, L., . . . Kang, X. (2020). Evolutionary game simulation on government incentive strategies of prefabricated construction: a system dynamics approach. *Complexity*, 2020, 1-11.
- Davenport, T. H. (2018). *The AI advantage: How to put the artificial intelligence revolution to work*: mit Press.
- Ding, P. ( 2019). Analysis of artificial intelligence (AI) application in sports,”. *Journal of Physics Conference Series*, 1302.
- Du. ( 2021). “Assistant training system of teenagers’ physical ability based on artificial intelligence,” *Mathematical Problems in Engineering*.
- Gksel, N., & Bozkurt, A. (2019). “*Artificial intelligence in education: current insights and future perspectives*.”
- Housman, M. (2018). “*Why “augmented intelligence” is a better way to describe AI. AI news*,”
- Iansiti, M., & Lakhani, K. R. (2020). *Competing in the age of AI: Strategy and leadership when algorithms and networks run the world*: Harvard Business Press.
- Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who’s the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons*, 62(1), 15-25.
- Lee, H. S., & Lee, J. ( 2021). “Applying artificial intelligence in physical education and future perspectives,”. *Sustainability*, 13.
- Lei, Y. C. (2018). Research and Implementation of Badminton Technical Characteristics Statistics and Pace Training Based on Machine Learning. In: Central China Normal University, Wuhan, China.
- Liang, H. L. ( 2021). Role of artificial intelligence algorithm for taekwondo teaching effect evaluation model,”. *Journal of Intelligent and Fuzzy Systems*.
- McArthur, D., Lewis, M., & Bishary, M. (2005). The roles of artificial intelligence in education: current progress and future prospects. *Journal of Educational Technology*, 1(4), 42-80.

- Qian, Y., Chen, S., Li, J., Ren, Q., Zhu, J., Yuan, R., & Su, H. (2020). A decision-making model using machine learning for improving dispatching efficiency in Chengdu Shuangliu airport. *Complexity*, 2020, 1-16.
- Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26, 582-599.
- Russell, S., & Norvig, P. (2003). *Artificial Intelligence: A Modern Approach*. Prentice Hall, Upper Saddle River, NJ, USA, 2nd edition.
- Shi, L., Wang, Y., Hu, H., Wang, H., & Peng, X. (2018). Application of wearable artificial intelligence products in modern physical education. *New West*, 35, 135-136.
- Sohn, J., & Choi, H. (2013). "Are golf-shots distinguished by power control? or it is just individual differences?" *International Journal of Performance Analysis in Sport*.
- Xian, L. (2010). "Artificial intelligence and modern sports education technology,". In. Proceedings of the 2010 International Conference on Artificial Intelligence and Education, pp. 772–776, Hangzhou, China, October.
- Yang, X. Y., Tang, Y. X., Gan, X. D., Zhang, J. C. L., & X. Han. (2021). "Forecast of freight volume in Xi'an based on gray GM (1, 1) model and Markov forecasting model," *Journal of Mathematics*, 2021.