Exploration of Employment Orientation and Ability Development Methods for Students in Sports Majors in the Context of Digital Economy

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Abstract: Starting from analyzing the new requirements for sports talents in the context of the digital economy, this paper explores the employment opportunities and specific positions available to students in sports majors under this background, such as: digital operation in the sports industry, digital media and communication, intelligent sports, education and training with online courses, digital health and fitness management, digital sports market and marketing, digital transformation of sports administration and management, sports data analysis and evaluation, digital sports marketing and promotion, smart sports equipment and technology development, esports and virtual sports, and sports new media and content creation, among others. It can be seen that the digital economy provides a diversified range of employment positions for sports major students. At the same time, the paper proposes insights into the methods for cultivating students for these employment positions and the essential qualities and skills required, such as the cultivation of data analysis skills, digital marketing skills, information technology literacy, innovative thinking, and interdisciplinary collaboration abilities.

Keywords: Digital Economy; Sports Majors; Employment Orientation; Employment Positions; Diversification; Cultivation Methods

1. Introduction

The wave of the digital economy has permeated every aspect of our society, and students in sports-related majors at universities face new challenges and difficulties in employment under this background. This paper uses the method of literature review to explore the employment requirements of students in the context of the digital economy, clearly showing that a diversified role is required to meet modern needs. Through empirical analysis, the employment positions and opportunities of graduates from different sports majors were qualitatively analyzed, providing direct reference for students in their job search. The paper also discusses from multiple perspectives the new employment challenges faced by sports major students and the methods for cultivating their employability, particularly emphasizing the higher requirements in digital sports education. The aim is to provide practical solutions to help sports major students meet employment challenges under the new circumstances.

2. New Employment Requirements for Sports Major Talents in the Context of the Digital Economy

In the context of the booming digital economy, sports major talents face a series of new employment challenges, which place the following demands on students' literacy and abilities [1-4].

Data Collection and Analysis Skills. The digital economy relies heavily on data to drive decisions and optimize business operations. Sports major talents need to have the ability to collect, organize, and analyze sports-related data, such as athlete performance data, audience data from events, and market consumption data. By deeply analyzing these data, they can provide valuable insights and strategic advice to sports organizations. For example, analyzing an athlete's training data can help formulate more personalized training plans to improve performance.

Digital Marketing Professional Skills. With the rise of social media and online platforms, digital marketing plays an increasingly prominent role in the sports industry. Sports

major talents need to master various digital marketing tools and techniques, such as social media marketing, search engine optimization, and content marketing, to enhance the visibility and influence of sports brands. For instance, using social media platforms to plan online event promotion activities can attract more viewers and participants.

Information Technology Literacy. Understanding and mastering relevant information technology knowledge, including digital broadcasting technology for sports events, digital monitoring equipment for sports training, and intelligent management systems for sports venues. Being proficient in using these technologies can improve the efficiency and quality of sports work. For example, skillfully operating smart wearable devices to collect athletes' physiological data for analysis and feedback.

Innovative Thinking. The digital economy encourages innovation and disruptive business models. Sports major talents should have innovative thinking, capable of proposing novel sports products and service concepts to meet the ever-changing needs of consumers. For example, developing sports training simulation software based on virtual reality technology or creating online interactive sports fitness courses.

Interdisciplinary Collaboration Skills. The digital economy has made the integration of sports with other fields such as technology, finance, and media more closely intertwined. Sports major talents need to have the ability to collaborate across disciplines, working together with professionals from different fields to jointly promote the development of the sports industry. For example, collaborating with fintech companies to develop innovative sports financial products.

In summary, the digital economy presents new opportunities and challenges for sports major talents. Only by continuously improving their comprehensive qualities and abilities can they find ideal employment opportunities in this era of change and contribute to the development of the sports industry [5-7].

3. Employment Trends for Graduates in Sports Majors under the Digital Economy

3.1 Sports Digital Operations
E-commerce and Online Operations Specialist for Sports: Responsible for managing sports products and fitness equipment on e-commerce platforms, including store setup, product promotion, and online event planning. Employment Case: A smart fitness tracker developed by a tech company has gained widespread market popularity.

3.2 Digital Media and Communication
Sports New Media Editor, Reporter, Commentator, and News Publisher: Utilize digital tools and platforms to edit, write, and publish sports news, commentate on events, release sports data, and cover news hotspots.

3.3 Intelligent Sports Field
Assistant in Intelligent Sports Equipment Development: Assist engineers in the research and testing of intelligent wearable devices (such as fitness trackers and smart sportswear) and intelligent fitness equipment. Sports Data Analysis Specialist: Use big data technology to analyze athlete training and competition data. Intelligent Sports Venue Operations and Maintenance Personnel: Responsible for the maintenance of facilities and equipment in intelligent venues to ensure their proper operation.

3.4 Education, Training, and Online Courses
Online Sports Course Designer: Design and develop sports course systems and content suitable for online teaching.

3.5 Digitalization of Health and Fitness Management
Health Management App Operations and Promotion: Involved in the promotion, market expansion, and user services of health management applications. Online Fitness Trainer and Rehabilitation Manager: Provide personalized rehabilitation fitness guidance and training plans to clients through video conferencing.

3.6 Digitalization of Sports Market and Marketing
Sports Digital Marketing Specialist: Use social media marketing, search engine marketing, etc., to promote sports events. Sports Big Data Market Analyst: Analyze sports market trends, consumer behavior, etc., based on big data, providing support for corporate

decision-making. Esports Events and Related Industries: Includes organizing and managing esports events and analyzing esports data.

3.7 Digital Transformation of Sports Administration and Management

Digital Management Specialist for Sports Associations or Organizations: Assist associations in the digital process transformation and daily operations of member management, event management, etc.

3.8 Sports Data Analysis and Evaluation

Athlete Performance Analyst: Collect and analyze various data on athletes, such as physiological indicators, technical movements, and competition performance, to provide recommendations for improving training programs and competition strategies.
Example: Analyzing data for professional football club players to enhance their performance in matches. Event Data Analyst: Analyze various data from sports events, including audience traffic, ticket sales, and broadcast ratings, to provide decision-making support to event organizers and sponsors.

3.9 Sports Intelligent Equipment and Technology Development

Sports Intelligent Equipment Development Engineer: Participate in the development of various sports intelligent equipment, such as fitness trackers, smart running shoes, and sports monitoring instruments, to enhance sports experiences and training effectiveness. Sports Software and Application Developers: Develop sports-related software and applications, such as training apps, sports event live-streaming platforms, and fitness management software. For example, build an APP that provides training plans and social interactions for runners.

3.10 E-sports and Virtual Sports

E-sports player or coach. With the rapid development of the e-sports industry, students with a sports background can transform into e-sports players or coaches.
Virtual sports project planning and operation. Participate in the planning and operation of virtual sports, such as virtual football, virtual racing, etc. For example, responsible for organizing a fictitious motor race, and conducting the operation and management of

the event. Job description: Participate in e-sports event organization, player training, or engage in the development and operation of virtual sports projects. Skill requirements: Understanding of e-sports industry rules and game technology, with team cooperation and event management skills. Employment case: Event planner of an e-sports company successfully held a number of large-scale e-competitions.

3.11 Direction of New Media and Content Creation of Sports

Sports new media editor. Responsible for the content editing and publishing of sports-related new media accounts to attract fans and readers. For example, writing high-quality articles for sports public accounts to interpret the latest sports events and industry developments.
Sports video creator. Produce sports themed video content, including event clips, athlete interviews, fitness tutorials, etc., and publish it on the video platform. For example, uploading self-produced basketball teaching videos on the platform to accumulate fans and traffic.
Sports new media and content creation. To produce sports-related text, pictures, videos and other content and disseminate it through new media platforms, its skills require good writing, shooting and editing abilities, and familiar with the operation rules of new media.

4. Employment Cases of Sports Majors in the Context of the Digital Economy

Case 1
Name: XX
Major: Sports Management
Employment Direction: Sports Digital Marketer
After graduation, XX joined a sports brand company, responsible for marketing and brand promotion through digital platforms. He is adept at using social media, short-vision and other channels to plan a series of eye-catching online marketing activities. He organized an online fitness challenge, inviting users to participate via social media, and showcased participants' results through live streaming, gaining a large number of potential customers.
Case 2
Name: XX
Major: Sports Education
Employment Direction: Online Sports

Education Course Developer

XX analyzed big data to understand students' needs and learning habits, designing personalized and highly interactive course content. For example, the fun basketball course she developed for children became very popular among kids.

Case 3

Name: XX

Major: Sports Training

Employment Direction: E-sports Coach

In the wave of digital economy, e-sports has developed rapidly. The graduate has transformed into an e-sports coach with an understanding of gaming and athletics. By analyzing competition data and developing training plans, he helps sports to improve the level of competition, and he once led the team to win the championship in an important e-sports competition, showing excellent coaching ability.

Case 4

Name: XX

Major: Rehabilitation Therapy (Sports Rehabilitation Direction)

Employment Direction: Intelligent Sports Rehabilitation Equipment Development Consultant

After graduation, XX joined a tech company, where she combined clinical experience with digital technology to optimize the algorithms and functions of the equipment. For example, the AI-based rehabilitation assessment plan she proposed improved the accuracy and efficiency of the equipment.

5. Discussion on Cultivation Methods of Employability for Sports Majors

5.1 Cultivation of Data Analysis Skills

This includes learning related courses, hands-on projects and online learning resources. Take relevant courses. You can participate in statistics, data analysis, database management and other courses to systematically learn the theory and method of data analysis. For example, courses such as "Fundamentals of Data Analysis" and "Data Mining and Application" are selected in the university; Practice project exercise. Participate in actual sports data analysis projects, such as analyzing athletes' training data, competition data, etc. Be familiar with the data processing and analysis process through practical operation. For example, to provide data analysis support for school sports teams, to help coaches develop training strategies; Online learning resources. Take advantage of data analysis courses and tutorials on online platforms such as Coursera to learn the latest data analysis techniques and tools on your own. Coursera is a major online education platform that partners with many of the world's leading universities and institutions to offer a large number of high-quality online courses across multiple subject areas, including computer science, business, humanities, arts, and more. Courses are available in a variety of formats, including video lectures, online quizzes, assignments, discussion boards, and more. These courses are usually taught by well-known professors and experts, and after completing the course, you can also obtain the corresponding certificate, which is helpful to your career development [8-10].

5.2 Cultivation of Digital Marketing Skills

Social Media Practice: For example, promoting a sports event through platforms like Weibo, TikTok, etc.; Attend Marketing Training: Enroll in professional digital marketing training courses to learn skills in marketing planning, content creation, fan interaction, etc.; Case Analysis: Study successful sports digital marketing cases, such as analyzing the NBA's digital marketing success in China.

5.3 Cultivation of Information Technology Literacy

Attend Technical Training: Participate in IT-related training courses to understand the latest applications of sports information technology; Deep Practice: Intern at sports tech companies or relevant institutions to get hands-on experience in applying information technology in the sports field; Self-exploration: Actively explore new sports information technologies, such as sports training monitoring software, sports event live-streaming platforms, etc.

5.4 Cultivation of Innovative Thinking

This includes participation in innovation competitions, cross-disciplinary exchanges and thinking training courses. Enter an innovation competition. Participate in various sports

innovation competitions to stimulate innovation inspiration and exercise innovation ability. Cross-disciplinary communication. Communicate with people in different fields, broaden their horizons, and create sparks of innovation. For example, participate in cross-boundary seminars on sports and technology. Thinking training courses. Attend innovative thinking training courses to learn innovative methods and techniques, such as brainstorming, reverse thinking, etc.

5.5 Cultivation of Interdisciplinary Collaboration Skills

This includes participation in interdisciplinary projects, team training and academic exchange activities. Participate in interdisciplinary projects. Actively participate in interdisciplinary collaborative projects at school or work, and work with people from different professional backgrounds to complete tasks. Teamwork training. Participate in teamwork training courses to improve communication, coordination and cooperation skills in interdisciplinary teams. Academic exchange activities. Participate in interdisciplinary academic exchange activities, understand the research methods and ideas of different disciplines, and promote the integration of disciplines.

6. Conclusion

In conclusion, the digital economy has opened up diversified employment paths for sports major students. Graduates in sports majors should seize the opportunity to continuously enhance their knowledge in the field of the digital economy. They should select employment preferences based on their interests and strengths, target the improvement of skills that match specific job positions, make thoughtful employment plans, and apply the theoretical knowledge learned in school to practice.

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