

Capstone Paper

Digitization:

a new opportunity for the sustainable
development of China's sportswear industry

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Thesis Statement

Although the market size of China's sportswear industry has tripled from 2012 to 2019, the growth of it slowed down in 2020 due to the COVID-19 Pandemic. The problems we face in the short term are the postponement and cancellation of games, the reduction of outdoor activities and the plunging of travel. In the long run, people are losing faith about the predictable future and are less willing to invest. This paper proposes that digitization will be a new opportunity for the sustainable development of China's sportswear in the next five years, and discusses why, what and how digitization contributes to the long-term development from five sports segments: place, performance, production, promotion, people. Further, we will discuss what roles will government policy makers and free markets entrepreneurs play in the process. Overall, digitization can accelerate technologies application in sportswear industry, increase the extensive connection between the governments and emerging enterprises.

Literature Review

From the Sport Industry and financial report(statista,2020), we can draw a clear picture that Chinese sports industry has been experienced a continuously growth ever since 2013, from 1710.7 billion proliferate to 2948.3 billion Yuan, leading the sportswear segment growth from 138.3 billion proliferate to 316.6 billion Yuan with a positive correlation relationship. Even in 2020, the world has been faced covid-19 spread, lockdown, postpone of games and cancellation of travels, there are still some key drivers to keep the Chinese sport market kept growth with a 2nd rank in the world total sportswear spending country.

Earlier researches have been studied on how to drive Chinese sportswear industry. we will see examples and directions of how digitalization contributed to Chinese sports market growth. According to Sports Digitalization: An Overview and A Research Agenda Completed Research

Paper: The previous study demonstrates how digitalization has prompted tremendous changes to the sport industry and sport organizations, marking a new era where studying digitalization and sports has become more relevant and important. This is evident from a broad range of sports, from the ones with long history and tradition, such as badminton, soccer, baseball, cricket, skiing, to newly-emerging, digitally-born sports –eSports. In this paper, they look for different topics that are of theoretical and practical importance across the organizational, technological, symbolic, and educational components of sport organizations, in relation to the digitalization in these areas (Xiao. et al,2017). In recent years, the retail industry has reshaped its industry structure and ecosystem, and many terminal retailers and brand owners are in the upgrading and transformation stage. As an emerging technology, artificial intelligence (AI) has penetrated many scenes and links of the retail chain. A report (iResearch,2020), aims to comprehensively show the specific application of AI technology in the retail ecosystem and the core value of each link; From the perspective of solving the pain points in each link of the retail industry, this paper discusses the real demands of the demand side of technical solutions and the landing logic of application scenarios, and discusses the development paths and market opportunities provided by different types of technologies for enterprises. The purpose is to describe the development status and future prospects of the artificial intelligence + retail industry, and to provide thinking for the future development of the industry.

Methodology

As the no.1 brand in China's sportswear market with a market share of nearly 23%, Nike can provide a good case for studying the digital method of China's sportswear market. In this paper, I am putting myself in the shoe of Nike general manager in China, providing a report to her

discussing its strategy and how Nike is performing against external and internal factors.

Moreover, we will research on the uprising trend of digitization in retail business in Chinese market, to provide possible course of work to the following questions: 1. Why digitization is conducive to unleash potentials of Nike's business opportunities? 2. What is the marketing plan based on 5ps to implement digitization in Nike? 3. What KPIs and transparency we can create when implement the plans?

Strategy Analysis

Strengths

- Nike's reputation around the world, as well as its position among celebrities and sports professionals, have considerable brand equity. Its continued sponsorship of various events has also built brand awareness for the company, including a reputation for quality, performance, reliability, and innovative style. Since entering the Chinese market, we have been serving the local market. Through the form of public welfare, such as the volunteer services of Jordan Wings Program: a scholarship program to offer access to opportunities that can level the playing field to young people all over the world(Nike,2021) and Boundless Girl: launched 2019 to help girls to break through the prejudices in sport and unleash their potential (Madetoplay,2019) in cooperation with the China Foundation for Poverty, we have maintained a positive communication and image with local consumers.

- It has a recognizable "just do it" label around the world, which continues to inspire consumers. Nike has announced a new sustainability initiative with the "singular aim" of "protecting the future of sport". Called Move to Zero, the new campaign will see the multinational corporation dramatically shift its operations to circular models, from moving to 100% renewable energy to eliminating all single-use plastics and diverting waste into new products (Ho,2020). In China, there will also be special theme of Chinese market activities every quarter to help better

communicate with local consumers. For example, during the Olympic Games in this quarter, the brand uses multiple channels to light up the consensus of consumers on the happiness of sports, reminding consumers to pay attention to their feelings while paying attention to the results of the games.

- The company's strategy is to outsource all production overseas to keep manufacturing costs as low as possible while focusing on U.S. design, research and development. In China, there are also product stories (Chinese New Year) and design elements (China City Series) designed specifically for local consumers to create the most efficient labor cost structure while serving local consumers as much as possible, and therefore very profitable. In the just ended FY21, according to the financial statement (Nike,2021), full year reported revenues increased 19 percent to \$44.5 billion. Gross margin increased 140 basis points to 44.8 percent. The Chinese market accounted for 16 percent of the business and led global growth with 25 percent growth.

- The company has a very good reputation among employees and has been awarded the title of "Top Employer in China" for three consecutive years. To provide the most competitive, interactive, and engaging workplace, Nike creates opportunities for employees to interact with the world's top athletes and Nike Group leaders. Employees were inspired by the interactions with Kobe Bryant. At the same time, the company has injected Nike DNA into the workplace experience, and employees can be seen actively in sports activities such as bubble football game, summer games, Nike+ Training Club, Nike+ Run Club and Shanghai Marathon. In addition, Nike also encourages every employee to become the owner of the company, and more and more employees benefit from employee stock purchase programs. Team and talent are Nike's most important assets. The Great Manager Program (# JustMaxit) unlocks the unlimited potential of employees and helps managers better lead, coach, inspire enthusiasm and deliver high performance. During the 30-day Great Manager Month, 3,000 employees participated in the training and shared what they learned. And that doesn't stop there. The WINGS program

accelerates the development of high-potential talent for sustainable growth and provides 94 percent of participants with new job challenges. In addition, the Ignite China program builds a young talent pool for companies through digital recruitment. At the same time, the participants of the Retail College program rapidly improved their abilities during the job rotation, gained personalized guidance through the communication with the mentors, and gradually grew into the future retail management talents of the company (Nike,2016).

Weaknesses

- Nike focuses on footwear. According to the latest results released by Nike, Inc. Divisional REVENUES (Nike, 2021), shoes in the Chinese market contributed 69% to the overall revenue in fiscal 2021. This can be risky given the changing trends in the market and the fact that most companies are sustaining themselves through product diversification strategies.

- The company chooses to do business with retailers that also have competing brands, thus losing exclusivity. For example, Topsports, the Chinese biggest distributor and retail partner of Nike, is one of the earliest domestic distributors of overseas sports brands in China. After 20 years of development, there are a total of 11 agent brands. As the largest sports shoes and clothing retailer in China, the retail market share reached 15.9% in 2018. This year, the group set up a new retail platform operations center that integrates retail teams from various brands and is managed by the head office. Retailers may easily disclose Nike's consumer data, pricing, products, management experience and other information to competitors, which may also increase the risk of consumers choosing other brands based on price and choice.

- The overall high price of Nike products has often made it untouchable for many as a high-end brand and has even been the subject of criminal cases overseas, where people have been shot and killed over Nike shoes. In China, Nike's Jordan brand is positioned as a luxury brand. Its operation strategies, such as limited quantity sale and lottery, have led to high reselling in the

secondary market and frequent phenomenon such as the onsite purchase number of shoe dealers. This increases brand service and pricing strategy dilemmas and can lead to alienation and eventual migration among real consumers who are more sensitive to service and price.

Opportunities

- Nike should continue to focus on emerging markets where consumers are getting more disposable income and interest is growing in western brands. Areas of focus could include China, especially the low tier areas. According to a report by Statista (Textor, 2020), China's per capita disposable income is 30,000 yuan, which can be divided into three tiers according to cities and regions. There are two global cities in Tier1 is: Shanghai and Beijing, with a per capital disposable income of more than 60,000 employees. There are 7 provinces in Tier2 with a per capital disposable income of more than 30,000 employees, and there are 22 provinces with a per capital disposable income of more than 20,000 employees, which is growing continuously every year. At present, Nike's investment is mainly concentrated in Tier1 cities. In the next 10 years, Tier2 and Tier3 investment can become a new growth point.

- Nike should look at opportunities in segmented sports markets as well as its accessories and apparel products to further diversify its product portfolio, and portfolio and continue to look for brands to expand partnerships with sporting goods manufacturers to incorporate Nike-branded sports equipment. Traditionally, Nike's earning 80% are coming from basketball, running, soccer, and lifestyle footwear. However, according to the Nielsen report (Ringuet,2019), niche sports such as cycling have grown in popularity recently, perhaps a result of the increased national investment in several Olympic sports in the build-up to Beijing was hosting of the 2008 Olympic Games and more recently the debut of events like the Tour de France China Criterium. Motorsport and mixed martial arts are also growing strongly. Given the 2020 Winter Olympic hosting in Beijing, about 150 million people in China have participated in ice and snow sports last winter, according to a report released by Renmin University of China

(Xinhua, 2020). Also, as Covid-19 spread, as Daxue consulting (2021) reported, the Yoga market in China bolstered by fitness digitalization. The yoga market in China is riding the wave of the nation's increasing health awareness. The annual revenue of the yoga market in China reached around 25.4 billion yuan in 2017 and projected to reach 46.8 billion yuan in 2020. Sales of yoga-related products, such as yoga apparel, mats, and other equipment, as well as yoga courses drive the market growth.

- Woman business is another opportunity to growth. In Nike, inc Fy21, Woman business contributed 23% of total income, comparing with China's gender share 48%(Textor,2021), there is a big gap to close. According to IOC statistics, female participation will reach a record-high 48.8 percent in Tokyo 2020, more than double that of Los Angeles in 1984. China sent 432 athletes to the Tokyo Olympics, among whom 298, or 68.9 percent, were women, more than double the number of men. "As a result of more female athletes competing in the sports, many very talented female athletes have become heroes and stars which inspire more women and girls come to play sports," she said. With 34 world titles to her name, Yang founded Champion Foundation in 2009 to promote youth sports activities in schools and communities and started a Skating Academy in Shanghai. "So many parents have told me how sports helped the girls be strong and confident in schools, how sport teaches kids about responsibility and team spirit, positive thinking, etc. They enjoy skating, they enjoy sports, and that makes my work so much more meaningful," said the mother of two kids, who believes sports could play an important role in children's growth (Xinhua,2020).

Threats

- Threats may come from US-China relations remain tense. (Bain,2021). For example, Several Western brands, including Nike and Swedish fashion retailer H&M, recently faced a backlash from Chinese shoppers after the firms expressed concerns about the alleged use of Uyghur forced labor in cotton production. In March, a group of Western countries imposed sanctions on

officials in China over rights abuses against the mostly Muslim Uyghur minority group. The sanctions were introduced as a coordinated effort by the European Union, UK, US and Canada. In December, the BBC published an investigation based on new research showing China was forcing hundreds of thousands of minorities including Uyghurs into manual labor in Xinjiang's cotton fields. Nike has seen its apps scrubbed from the store of telecom giant Huawei, had two popular Chinese actors announce they were cutting ties, and been the target of calls for a boycott on Chinese social media, where users may know little of the forced-labor reports from Xinjiang. Guo Ailun, the first Chinese basketball player signed to Nike's Jordan brand, unexpectedly sat out a Chinese Basketball Association game over the weekend, sparking speculation that his absence was related to the endorsement deal. Nike's strong foundation in China is suddenly in danger of being shaken. (Bain,2021).

- Competitive pressure from the rise of local brands. In 2016, Nike and adidas recorded a whopping \$3.8 and \$3.6 billion dollars in revenue, respectively, but domestic leader ANTA generated a cool \$1.9 billion, approximately half of what Nike did, surprising many who've never even heard of the brand. What comes as more of shock is that, by adding up the revenues of the top five domestic brands, they would have surpassed Nike and adidas' respective revenue in China (highsnobiety,2018). By 2020, China's largest sportswear company Anta Sports posted robust performance in the year 2020 despite the sluggish market caused by the COVID-19 pandemic. The Fujian-based company raked in a total of 35.51 billion yuan (about 5.45 billion U.S. dollars) in revenue last year, up 4.7 percent year on year, maintaining growth for the seventh consecutive year, according to its annual financial results filed with Hong Kong stock exchange on Wednesday. Its gross profit margin rose to 58.2 percent, the highest in the industry; cash, cash equivalents and deposits at the end of the reporting period reached 20.3 billion yuan, according to the report (Xinhua,2021).

Treats also come from international trade practices, labor strikes, currency fluctuations and other issues related to doing business in an international setting, including the implementation of its entire supply chain. According to Bloomberg, large amounts of the Chinese production capacity used by global sportswear brands may be lying idle due to foreign manufacturers leaving the country. Analysts believe increased restrictions will cause many companies to focus harder on the local market due to the shorter supply chain logistics required of manufacturing and selling within China itself. This change inevitably gives local athletic brands a home-court advantage. They know the Chinese market better and are becoming increasingly competitive. Analysts already say younger Chinese, born after 1990, are confident in China's rise and have developed an affinity for national brands. And though China only represents half the market share of the US for sporting goods, it has immense growth potential (Upton,2019).

Vulnerability

Based on the above analysis, we can summarize Nike's vulnerability since the COVID-19 outbreak: Foreign sportswear has been a booming business area in China. International brands such as Nike and Adidas are currently ahead of local brands such as Li Ning and Anta in terms of overall scale, but they are not as fast as local brands in terms of growth. The trade war between the United States and China is currently making it difficult for many foreign sporting goods companies to fully leverage Chinese supply chains to export to other sporting goods consumers around the world. It also gives domestic brands the advantage of relying on the supply chain to respond quickly.

Leverage

But it is not necessarily to say we are out of cards to play. Leverage can be focus on how to bring the best strength of brand power, build an unbreakable relationship with local consumers and professional employees, then to unleash the potential of three business opportunities in

China: lower tier areas, emerging sports, and women business. Also, there is an obvious trend in Chinese marketplace to take use of. From the trend of 2014-2019, the growth rate of total retail sales of consumer goods in China declines year by year, the growth rate of online retail sales is higher than that of social zero growth rate, and the penetration rate of online retail is rising year by year. The shrinking market share and slowing growth of offline sales channels mean that traditional channels, led by physical retail business, are facing great challenges. Although large retail stores and all kinds of supermarket chains have been committed to embrace e-commerce and build online sales channels, the demand for consumer drainage in offline sales scenarios and enterprise cost reduction and efficiency increase also needs to be addressed urgently. At the same time, due to the gradual disappearance of the demographic dividend of the Internet and the increase of customer acquisition costs, the growth rate of online retail sales has also entered a slow period. Internet retail enterprises are also faced with the pressure of how to maintain growth and market share. In search of change amid risks, retail enterprises actively seek new technological means to help business transformation and seek to develop new drivers to meet the challenges. From the perspective of industrial production factors, retail industry is a typical labor-intensive industry, which needs many human resources in sales, marketing, customer service, supply chain and operation. In recent years, the scale of China's labor market is shrinking, and the retail industry is also facing a labor shortage. It is estimated that China's chain retail industry is currently facing a talent gap of more than 4.77 million people; At the same time, the labor efficiency of retail employees (retail sales/number of retail employees) also showed a downward trend from 2018. In the context of intensified competition in the retail market, retail enterprises need intelligent means in cashier, marketing, customer service, store management and other fields to assist industry employees to improve efficiency. Promote intelligent transformation to cope with the talent gap and save labor costs. The generation of demand provides more space for the integration and application of artificial intelligence and other emerging technologies in the retail field. At the same time, technological

innovation also changes the type of talent demand in the retail industry. The modern retail industry has undergone many business model changes, giving birth to department stores, chain stores, supermarkets and online shopping. In the era of Internet, technological upgrading and breakthroughs directly promote the development of the retail industry. IT technology management, the popularity of mobile payment, digital retail, artificial intelligence + retail, all stages of the overlapping influence, forming an integrated and rising pattern of innovation. The landing application of AI technology requires the support of IT facilities and digital systems. At present, the IT data access of offline scenes in the retail field is still in the early stage of development. The digitalization degree of e-commerce platform is relatively high, and the application degree of AI technology is relatively advanced. With the gradual deepening of technology penetration, the transmission and distribution retail enterprises will also carry out more AI technology construction. In the future, the retail industry in procurement, production, supply chain, marketing, sales, service and other links of the operation model and consumer experience will continue to optimize, intelligent level will continue to improve. The transformation and upgrading of the retail sector is driven by the convergence of emerging technologies such as the mobile network, big data, cloud computing, the Internet of Things, blockchain and artificial intelligence. In recent years, AI technology has developed rapidly, and significant breakthroughs have been made in the research and development of computer vision, machine learning, speech recognition and other technologies. Computer vision technology has important value in data collection. Through the identification of consumer behavior and commodity information, it can quantify the store operation and consumer wandering behavior, which is the necessary basis for precision marketing, intelligent operation, store management and other applications. On this basis, machine learning technology is applied to data modeling and decision aid. A variety of AI technologies are integrated and used in all aspects of retail to jointly improve the intelligent level of each retail scene(iResearch,2021).

When combined the earlier researchers of digitalization and Nike's business opportunities, the next reasonable question for us is how digitization equipped by AI new retail solution contributes to the long-term development of Chinese sportswear industry, which in terms of Nike, will be the question how to unleash business from lower tier areas, emerging sports, and women business through a 5p marketing plan.

Marketing Plan

Now that we have learned that digital solutions can enable sportswear industry in China, according to the recent iResearch (2020) report, the following five scenarios would introduce on the AI and ML can be applied from the 5 Ps perspectives.

Placement

From a distribution perspective, as recently as a decade ago in 2011, 84% of Nike's brand sales were to wholesale customers. Nike makes up just 16% of its business by selling to consumers through stores and websites. In fiscal 2021, which ended May 31, Nike brand direct sales accounted for about 39 percent, while wholesale sales accounted for about 61 percent. The company expects direct sales, led by digital channels, to account for 60% of its business by 2025 (Bain & Company, 2021). Nike's current approach to DTC is a two-pronged DTC and wholesale collaboration:

DTC:

1. Nike's Online Solutions: Global consumers, including those in China, are increasingly shopping online, and Nike's digital distribution strategy may be the key to its success. Simply put, designing an effective e-business strategy is key for any consumer company, and Nike is no exception. Now we have Nike Apps, SNKR Apps, Swoosh, and Tmall (the largest online distribution channel in China) as our main online distribution channels.

2. Nike's brick-and-mortar retail stores. Nike stores offer quality products for service - seeking consumers. Since the value proposition involved is athletes serving athletes, they tend to attract more shoppers. By the end of the 2019 fiscal year, Nike operated 300 direct-owned stores in China (MOHIT OBEROI, CFA,2020).

Partners:

1. Online solutions owned by partners: At present, the largest sales channel is the Taobo Top Sports Store of JD, the second largest online sales platform in China. Meanwhile, other partners such as Julius Baer and local partners are looking for sales solutions for live streaming and online sales on WeChat platforms and Douyin, China's No. 1 and No. 2 social media platforms.

2. Partners-owned retail stores: Nike has more than 3,000 partner retail stores in China, of which 200 are provided by the Nike retail team as the central door, and the rest are managed and owned by the partners.

Although there are four main channels, Nike's focus on online distribution is paying off. In fiscal 2019, the company's digital sales grew 35 %percent from a year earlier. By contrast, the company's consolidated revenue grew only about 7%. In the future, with the support of AI and ML, Nike in China will have more possibilities in terms of online sales channels and offline store location. One possibility is that ML algorithm can be used to judge the growth potential and investment value of future online cooperation platforms by purchasing the data of China's three major network operators or social media platforms, so as toto better decide which partners to open online or offline stores with and where. In Nike China's placement case, the current investment focused on Shanghai and Beijing could be a result of business analysis, but also could be regional discrimination. If ML based on big data can prove that low tier cities in majority of China are worth to invest, it would be easier for decision makers.

Price & Promotion

Nike's portfolio features premium products at high prices. This allows the company to differentiate its products in the market and charge higher prices than competitors. However, as the global economy weakened due to the epidemic, consumer desire decreased, and local competition from cost-effective products, Nike needs to have a better forecast of consumers' psychological purchase price. For example, before the outbreak of the epidemic, the average price of Nike products was around 800 yuan, but consumers were still flocking to it, especially the limited-edition shoes of the Jordan category, whose price in the secondary market could reach 4-5 times the premium. However, after the outbreak of the epidemic, consumers' willingness to consume decreased, coupled with the boycott of foreign goods brought about by the Sino-US trade friction, many second-hand shoe dealers went bankrupt, and the inventory of goods increased (Horowitz,2021). Nike had to reduce the discount rate of market price by subsidizing retailers, so as to increase the sold-out rate and reduce the pressure on inventory. However, with the support of ML's big data analysis, we can further optimize the strategy of product promotion. After the outbreak of the Xinjiang cotton boycott, for example, each region for the incident response is different, lower tier cities is assumed to response slower and quitter than capital city. If we can be analyzed in different parts of the consumer sentiment index, used to determine the brand purchase intention, can further according to consumer feedback to specify different in different parts of the promotion strategy, pricing strategy to achieve more efficient.

Product

Nike has always been committed to providing customers consumers with well-constructed and uniquely designed products. However, with the rapid development of the market and the change of the business philosophy of sports apparel, which is centered on consumer demand, the fragmentation of orders, the substantial increase of SKUs and the complexity of warehouse

management pose all-round challenges to the traditional retail supply chain. Especially when domestic brands can achieve accurate prediction and efficient order flow through live broadcast and e-commerce channels, big brands like Nike will lack foresight and flexibility in inventory and inventory categories, which will lead to customer loss, storage cost increase and negative impact on working capital (iResearch,2020). For example. The good news is that Nike can extract information from the huge accumulation of merchandise sales data, consumer data, and business data, and use artificial intelligence and big data technologies to assist with digital information flow and automated analysis at various points in the supply network. As before the SWOT analysis, if we can more accurate demand emerging sports in China, the development trend of prediction, sales, automatic selection and procurement, inventory planning, order and procurement, inventory optimization, cargo tracking, order management process, such as efficient collaboration, reshape the different sports, such as snow sports, yoga sports industry model, Promote the transformation from traditional supply chain model to intelligent supply chain network. At present, with the help of Internet genes, e-commerce giants can use machine learning algorithms to assist operational decisions relatively quickly and conveniently through the data flow of each node, but the accuracy and complexity of the algorithms still need to be improved. As it is difficult for traditional retailers like Nike to obtain data resources from different channels and regions, there are great deficiencies in the acquisition and standardization of data information. So, there is an urgent need for digital tools to speed up the response. Investing in more smart devices to provide multidimensional data collection could help machine learning become smarter and more accurate. For example, by collecting more data on consumers' participation in sports and preferences through stores and online malls, we can know their more accurate demand for products.

People

With the growing demand for Nike's online customer service, decentralized non-professional customer service systems based on social media, such as WeChat, have disadvantages such as high manpower training cost, difficult to guarantee the quality of reply, slow response speed and so on. With the continuous development of artificial intelligence, cloud computing and other technologies, more and more intelligent customer service systems represented by natural language processing (NLP) technology have been applied in retail enterprises, covering the whole process of pre-sale, in-sale and after-sale. 7x24 hours service can efficiently and high-quality meet consumer needs of commodity consultation, self-service shopping, order inquiry, logistics tracking, automatic return and exchange, improve customer satisfaction, improve the conversion rate of store inquiry, save more than 50% of customer service labor costs. On this basis, the intelligent customer service system can also collect consumer information labels, insight into user behavior, and provide supporting data for precision marketing, intelligent operation and other links. In addition, with the continuous development of voice interaction technology, more and more consumer interaction behaviors are also carried out through voice, and business scenarios such as voice robots and intelligent outbound calls are gradually enriched(iResearch,2020).

In addition, shopping in offline stores has many advantages that both brands and customers, especially female customers, like. Female customers, for example, are more relationship-based and prefer to be able to talk directly to the store's athletes and share their views on competition and training. Nike's current AI analysis in some of our pilot stores shows that while our sales data shows that only 23% of our business comes from women (Nike,2021), the actual number of women coming into our stores can be as high as 50%. They may be buying for themselves or for others, but they prefer to shop in stores. Because athletes may ask female customers about certain items in certain colors or sizes, that information is limited online, and customers must go

through time-consuming (and sometimes frustrating) checkboxes or enter keywords. Therefore, we still need to retain offline stores and services. We need to aid offline athletes through AI and ML to better serve consumers, especially women, so as to improve the turnover of women's transactions. For example, existing machine recognition technology could allow athletes to identify a consumer's age, gender, identity and preferences in a store, and when they make a purchase, pay for it with a face scan, getting the information in real time. In the future, there may be a technology that consumers when entering the store can let the players know this information, based on these consumer information recommendation and service can meet the demand of consumers' preferences and, thus the accurate matching, on the basis of consumer demand and product supply, to further expand sales. Some consumers may worry about privacy, but the risk is relatively low in China, where paying for facial scans is already widespread. There are also technologies that are working on how not to collect facial data, but to identify gender, preferences, and methods of collecting data from consumer movements. In China, for example, there are several shops in the pilot installation to cover the entire store, high-density passenger counter is an unit with square meter, can through the analysis of the consumer behavior of each point, to judge the consumers for the product, display, service, buying preferences, and intelligent devices to collect consumer feedback in terms of feelings. For example, we can know her satisfaction with the athletes' service, recommendation index and so on. By understanding the data on these behaviors and feelings, AI and ML can provide better advice for decision makers.

Key Performance Indicators Plan

The key to the digital solution framework lies in balancing, and measuring, digital investments across three strategic focus areas, including infrastructure, data professional team and operation. Each focus area is associated with specific metrics and related key performance indicators (KPIs) that allow companies, Nike as an example, to track and measure the impact of

their digital initiatives more accurately, reset the implementation process when necessary, and make teams accountable for their roles in achieving the desired transformation goals (Hirji, 2016). In the three years strategy of Nike Inc, the vision of business contributed by digital channel is projected to be 50%. Due to the different recovery rate of the pandemic, China can take a slower but steadier step, for example, to aim at a 40% contribution from digital-enabled solution grow from 10%. In terms of this goal, we can further divide this goal into three opportunities of Chinese marketplace: women +20%, emerging +10% and lower tier +10%. To meet the target of further growth in woman, low tier city and emerging sports, investment shall be focused on the following three aspects with suggested KPIs:

Infrastructure

Implementing and running new backstage systems and tools for on-line services and app development. For example: a data warehouse can connect all data with a single version of truth. Apps that can connect women community directly and collect their insights in a digital way. Opening new digital-enabled stores in lower tier cities, Installation of instore traffic counter(retailesensing,2021) and RFID to collect quantify data of consumers' behavior in stores in low tier cities. Kpis in this investment can be: Real time of data update; Speed of new technology implementation; Response time to resolve issues. Accuracy of traffic counter.

Data professionals

With Infrastructure, we need to further recruit or train up certain employees who are mathematical-minded and capable of data analysis. These data professionals can be structured cascade from data warehouse center, functions (product, marketing, sales) to retail especially in lower tier cities. related fees could be generated by recruitment, develop (Nike owned) or cooperate(Linked in for example) digitized training solution which creating compelling experiences; allocating tailor-made training and elevating analysis capabilities. In this

investment can be: Data team R&R and performance evaluation; The integration degree of team; Engagement scores; Likelihood to recommend; Turnover; Digital adoption rate.

Operations

With infrastructure and team, we need to further invest in shifting the working process so that this whole organization can be adapted to the updated digital strategy, which include consumer demand sensing, insight gathering, and inventory management, especially for consumers and products of female, emerging sports and low tier cities. Spontaneously, the process of collecting consumers insights, the process of working with data team and other functional team, process of supply chain and partners would be needed to update too. In this investment can be: Process efficiency; Manufacturing throughput; Just-in-time inventory levels; Supply chain efficiency; Response times of emails/chats/ phone calls Number of interactions; resolving issue on first contact. According to Twin (2021), Key performance indicators (KPI) gauge a company's output against a set of targets, objectives, or industry peers. We need to further measure the KPIs of women, emerging sports and lower tier cities business achievement to see whether the segment of Infrastructure, Data professionals and Operations can help us deliver these business results or not.

Transparency

To gain the transparency of shareholders, the practice would be better to scale to other sportswear company with a further framework on what roles will government policy makers (central and regional Chinese government), and free markets entrepreneurs (Western brand like Nike, Lululemon; Local brand Anta, Lining etc) could play in the process.

Government Role

The government plays a dual role in shaping the interactions among actors and components of the digital transform ecosystem: as policy and rule maker to create the enabling environment, and as a strategic investor in digital technology applications and data in support of transformation of the target sector. Government procurement of digital technologies and services play an important role in promoting competition and innovation among suppliers of digital technologies. Advanced economies have used government procurement to promote open standards, best practices in ICT adoption and process reengineering. They have also devised programs and practices to nurture small and medium local suppliers of the new technologies. Local governments are at disadvantage of dealing with global ICT suppliers and often lack the internal capacity to assess new technologies for their local needs. Progressive central governments continue to play a leading role in working with local and city governments to procure and test the technologies and their adaptation to local contexts. They also facilitate knowledge management and information sharing across municipalities to promote effective adoption of innovations and applications across the public sector and levels of government (Hanna,2018), China's digital economy has expanded rapidly in recent years. While average digitalization of the economy remains lower than in advanced economies, digitalization is already high in certain regions and sectors, e-commerce and fintech. Such transformation has boosted productivity growth, with varying impact on employment across sectors. Going forward, digitalization will continue to reshape the Chinese economy by improving efficiency, softening though not reversing, the downward trend of potential growth as the economy matures. The government should play a vital role in maximizing the benefits of digitalization while minimizing related risks, such as potential labor disruption, privacy infringement, emerging oligopolies, and financial risks (Zhang&Chen, 2019).

Entrepreneurs Role

Entrepreneurs have become the driving force of China's economy over the past few decades.

With a rapid surge in the growth of digital platforms, and the success of China's platforms outside China, the aspiration to be entrepreneurial is recognized and celebrated

(Wang&Keane,2020) . Over the past few decades, entrepreneurs have become the driving force of China's economy. With the rapid growth of digital platforms and the success of platforms outside China, the desire to start a business is recognized and celebrated. The Internet and digitization have lowered barriers to entry for entrepreneurs and allowed companies like Alibaba and Tencent to become industry giants in just over a decade. After years of accumulated consumer data, traditional enterprises, including Western companies like Nike, if they want to know more about Chinese consumers, they need to work with these companies that have huge amounts of consumer data to create a data application scenario, so as to better serve consumers. A good example is the flagship store that Nike cooperated with Tmall Mall. While Tmall attracts Nike brand, Nike brand also provides Tmall consumers with better products, promotion and services, achieving a win-win situation.

Conclusion

The McKinsey Global Institute (MGI) assessed the strength of China's digital system and the degree to which the industry is digitized. China is home to dynamic digital innovators and a leading global investor in the latest technologies. China's traditional digital approach suggests that the country is only in the middle. In e-commerce, about a decade ago, China accounted for less than 1 per cent of global transactions; Now it is more than 40%. It is estimated that China now handles more e-commerce transactions than France, Germany, Japan, the United Kingdom and the United States combined. The penetration of mobile payments among Internet users in China grew from 25 percent in 2013 to 68 percent in 2016. In 2016, the value of mobile

payments related to personal consumption was \$790 billion, 11 times that of the United States. A third of the 262 unicorns in the world are Chinese, accounting for 43 per cent of their global value (Mckinsey&Company,2017). In this context, Western companies in China, including Nike and other traditional sportswear businesses, should be thinking about how to better integrate with China's digital wave, enabling them to grow and provide better services to local consumers both online and offline. In the future, China's venture capital industry will increasingly focus on digitization. Overall, China's venture capital sector has grown rapidly, from \$12 billion (6% of the global total) in 2011-13 to \$77 billion (19% of the global total) in 2014-16. Venture capital is focused on digital technology companies such as big data, artificial intelligence (AI) and fintech. China ranks among the world's top three in venture capital investment in key digital technologies such as virtual reality (VR), self-driving cars, 3D printing, robotics and drones. We also expect more research to explore how these new digital technologies can inspire further development of the sports apparel industry.

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