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Co-operations. Opportunities. Challenges.
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*New Trails for SMEs in Germany and China:
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Part 3 Sustainability and health

H Changes in the sports economy – Consequences for SMEs in the sports and health sector

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Abstract

In this article the Competence Section of Sports Business (KSW) for Sports Economics & Sports Management of the German Competence Centre SMEs and Entrepreneurship (KCE) is concerned with the critical situation of SMEs in the German and Chinese fitness, health and sports industry based upon their research studies. The two substantial factors 'spiral of market flexibility' and 'real virtuality' jointly responsible for the changes in sports economics are presented. Furthermore one aspect of the consequential core-cause is introduced under the term of 'vacant sports management'. The article concludes with an outlook on the factors threatening the existences of most Chinese and German SMEs as the lack of universities' degree programmes in the sectors of sports business (sports economics and sports management) and the absent intensification of scientific research.

1 Introduction

The fitness, health and sports industry is besides constant growth characterized by excellent future prospects although this does not apply to all enterprises. While large chains and group of companies held by investors show disproportionately high growth rates, SMEs operate under enormous competitive constraints endangering their future performance.

Promises of resolutions to this problem are well dealt commodities in times of insecurities. Every year business consultancies specialized on this industry push dozens of self-made trend concepts on the market, promising cure for injured SMEs. But instead of enabling fundamental restructuring for an economic turnaround these trend concepts shape up as mere licensing for marketing campaigns the lack of fundamental scientific research identifying actual causes, evaluating approaches and converting these findings into new sustainable restructuring concepts for affected SMEs is necessary. This exactly is addressed by the research and counselling of the Expertise Section of Sports Business (KSW) for Sports Economics & Sports Management of the German Competence Centre SMEs and Entrepreneurship (KCE).

The KSW examines two substantial factors jointly responsible for the changes in sports business applicable for Germany and China. First belongs to the sector of sports economics and refers to the rapid growth of chains and enterprises. This can be combined under the caption 'spiral of market flexibility'. The second factor is intrinsically concerned with changes in sporting activities due to new technologies and the connection to virtual reality and is recapped under the term 'real virtuality'. Furtherly combining both factors results to the core-cause concerning the sector of sports management and above all the education of sports managers which can be described as 'vacant sports management'. The situation of the core-cause resulting from both factors is additionally hindered by the demographic change's enormous influence.

Below the substantial factors 'spiral of market flexibility' and 'real virtuality' as well as the resulting core-asset 'vacant sports management' are to be introduced after enabling an insight to the German and Chinese industry by giving certain economic data.

2 Industry revenues

2015 Europe repeatedly presented itself as the economically strongest region in the fitness and health industry. By contrast with every other region China still holds the most rapid growth rates. While the German fitness and health industry grew about 74% from 2004 to 2014, the Chinese counterpart managed to grow about 84% in only half the time from 2009 to 2014. In comparison of the time span between 2014 and 2015 the Chinese growth rate was five times as high as the Germans'.

The significant difference between China and Europe is that China includes production incomes for machines and attachments in their economic results, while the income in Europe, especially from Germany, almost exclusively derives from the service sector.

3 Chain stores replace individual family businesses

Regarding the fitness industry in Germany and the most important market figures as number of enterprises, number of members and sales volume a trend becomes apparent.

Between 2014 and 2015, the number of enterprises increased by about +3.8 % to 8332. In contrast, the number of chain companies increased about +11.8 % to 3513 enterprises. The number of members in the entire industry rose about +4.2 % to 9.46 million, while chain companies generated a growth of +14.2 % to 4.82 million. The industry increased about +2.7 % to 4.83 billion € in sales volumes, on the contrary the chain companies could generate a growth from +14,2 % to 1.93 billion €. The fifth biggest players on the market (McFit, Fitness First, clever fit, Kieser Training, Injoy) reclusively pocketed 13.3 % of the total market's sales volume with 744 million €.

This enormous growth of chains and company groups (C&C) compared to SMEs also shows an enormous shift of the market. Growth rates of enterprises in opposition to the entire industry lead to the conclusion their growth is borne at the expense of SMEs. This assumption is supported by slightly increasing sales volume data of the entire sports, fitness and health industry primarily elicited by franchise economics. 'According to the statement of the German Franchise Union in the year 2014 already 9 percent fell upon these sectors amounting to about 6.6 billion Euro. According to the Union of Employers of German Fitness and Health Centres the fitness industry (without the sports and health industry) achieved about 4.7 billion Euro in sales volumes in the year 2014. While [...] sales volumes in fitness studios from 2004 to 2014 increased from former 2.7 billion about 74%, franchise economics increased their volume of sales about 162% over the same period. The number of owner-operated studios significantly dropped during the last ten years and will continuingly decrease about at least 10%.' (Pauling 2015,2): 52, translation by the author).

This already leads to 'banks and capital providers investing in fitness-franchise-systems, but not in small fitness-enterprises. This quasi blocks the way to credits for independent founders of new businesses. Existing older single-centres also barely obtain credits for necessary investments, accelerating their recession.' (ibid.).

The centre of insolvency and restructuring of the University Mannheim provided one of the most extensive surveys concerning the question of insolvency causes and was conducted on behalf of Euler Hermes. This survey mentions 'funding

gaps' with 76 percent as the second most important cause. If the lack of credits as cause of these 'funding gaps' frames restructuring and adaption to the competition as impossible, the descent to insolvency is inevitable.

According to the last analysis of the industry by Creditreform in 2013, 37.5% percent of German studios show a return on assets of less than two percent. The situation in China is even more precarious: Only 20 percent of all sports facilities in China are profitable (China Sports Business 2011).

The growth of C&C and denying SMEs required credits for their turnaround is not the crisis' cause but only one of its symptoms. One of the causal factors is the enormous flexibility of C&C. Their ability to adapt to annually changing trends in the market or even introducing own impulses faces the SMEs' inability to sufficiently observing the market to prematurely recognize shifts. This inability lays in the lack of expert knowledge and the management of human resources, which will be furtherly characterized in the point of 'vacant sports management'. While C&C can afford trained and specialized sports managers, in the SMEs mostly few all-rounders are overstrained with simple day-to-day routines. A similar management problem is detectable in China also as asserted by Deloit's: 'Most gyms are having problems in management strategies and operation.' (China Sports Business 2011).

The C&Cs' competitive advantage of enormous resources can easily push SMEs especially in terms of expert knowledge and human resources management. The C&Cs' sales volume subsequently increases with every small extinguished family business in the overtaken sectors of the markets and every further expansion of not yet accessed areas. It is a spiral forming around their outstanding flexibility in competition.

The best example of this 'spiral of market flexibility' is Europe's biggest fitness enterprise McFit that founded the franchise chain High5 in 2015. With this concept McFit quickly and creatively responded to the New Year's trend 'functional training'. The competitive price of below 10 Euro per month and membership substantiates the enormous competitive strength. This price cannot be accomplished by the smallest one-man-SME which is the reason for criticizing High5 or rather McFit. Despite this critic one must admit 'that the concept of High5 correlates the spirit of current times.' (Pauling 2015,1): 18, translation by the author).

4 The way in which people train changes

‘The ancient Chinese sport includes three disciplines: Military Sports (horseback riding, archery, wushu, etc.), Yang Sheng (health care) and popular games (e.g. Cuju.). [...] Cuju was an ancient sport similar to football, which was played in China and Korea and Japan. Cuju emerged since the time of the combatants States about 2,500 years ago.’ (Liu 2008: 40, emphasis added and translation by the author).

People always got exercise and sports have always been organized, systematized and commercialized. Historical sports form the basis, i.e. generation 0.

A brief overview on how exercising in the fitness industry evolved:

- The classic equipment-based gym is fitness of the generation 1.0 and was started with the first fitness studio of Hippolyte Triat 1847 in Paris. Special and new about this generation of ‘equipment-based exercising’ was the idea: of single movements on automatic lanes. ‘Equipment-based exercising is a form of fitness and/or health-safety training, which is completed on machines that are designed mainly for workout devices which are mainly designed for developing strength.’ (Stemper 1994: 12, translation by the author).
- In the generation 2.0 ‘group fitness / aerobics’ the step of group movements in free space followed. ‘In Aerobics a form of rhythmic gymnastics is performed to music.’ (Pauling 2016: 34, translation by the author).
- The expansion of generation 2.0 followed. ‘The second revolution occurred after the conversion to service fitness. Previously the product Fitness was for sale. [...] Today we only speak of service in the following and not about a product.’ (Pauling 2004: 2, emphasis added and translation by the author).
- Through generation 3.0 and personal training sports became even more individual. The idea: One single client is trained personally by one coach. ‘Personal Training is a form of workout support. One single client is trained personally, directly and individually by a qualified trainer according to the current principles and findings of sports science, sports medicine, sports teaching.’ (Pauling 2004: 2, revision and translation by the author). Personal Training is not linked to a specific kind of sports but can be used as support for every sportive workout. In a broader sense Per-

sonal Training is a general concept, a way of life and a health management system. The client shall find to a balanced lifestyle forming a unit with his spirit, diet, exercise and relaxation.

- In the Generation 4.0, fitness came via to-homes, via web or as an app on smartphones and tablets. The idea was to make fitness digital and mobile. In 2004 already the Nokia cell phone 5140 transmitted the training data of a heart rate monitor via SMS worldwide. In 1995 a radio system from Polar already sent the pulse data of students to a display system in the aerobics studio. In 2013, in the category 'health' an estimated 5 billion apps have been downloaded. The magazine PC-World asked with reference to the Consumer Electronics Show (CES) in Las Vegas: "Will 2014 be a digital historical turning point?" (Stelzel-Morawietz 2014: 8, translation by the author). "Many manufacturers presented so-called wearables, these are bracelets and fitness activity sensors with network connectivity." (ibid.). The Handelsblatt published a prognosis under the title 'Wearables: the next billion market? Sales trend for wearables in Europe' that forecasts sales turnovers of 5.59 billion in 2016, 7.22 billion in 2017 and 9.03 billion in 2018.
- With modern video game consoles generation 5.0 was launched. The Eye Toy Camera (idea from 1999) was introduced in 2003, Eye Toy Kinetic for the PS2 in 2005 and Kinect for the Xbox followed in 2010. Special for this step of evolution was the ability of computers to detect motions.

Following points of developments on which has been researched since years or on which currently is researched are listed. We are talking about visions that have not yet been realized in the possible extent.

- Fitness 6th generation: Already almost a decade ago in 2005, the personal trainer, sports scientist and business coach Kai Pauling began working in secret with a major European telecommunications company on Fitness Sport 6.0. In the near future the vision's implementation will be technically and especially financially possible, comprising the global virtual network of fitness content providers and home/mobile exercisers. In addition kinetic and physiological data will be collected interactively. A personal real-time training supervision by a personal trainer via live stream can be realized.

- Fitness 7th generation: Autosensitive training (Successor of EMS training). Autosensitive: New technical term created by the author for a training/workout. The training stimulus (e.g. for a muscle) is created fully automatic. It is not necessary that a stimulus of the body or its nerves has been created before. Essential characteristics are no self-motion, no exercise equipment, self-learning training control and it can take place anywhere at anytime. A step in the evolution of generation 7.0 is the development of Antelope. 'The Antelope fitness suit sets joggers under power. Weights or headwind simulate and thoroughly massage: The Antelope fitness suit is to bring the body of amateur athletes with more than 100 electrodes in top form quickly. The prototype in the test. [...] The only problem is the price - just under 1300 Euros are already large amounts of cash.' (Die Zeit 2016, translation by the author).
- Fitness 8th generation presents a combination of stationary training in a gym and a parallel virtual online training (device supported cloud training). A first step in this generation's evolution are amongst others treadmill controlled by Google Glasses or 3D training equipment by tecnobody. Target is the establishment of hybrid devices with the characteristics of reactive resistance control, motion detection and global/local interactive networking/control. The Hybrid devices are interfaces between a person working out and its virtual avatar who interactively coaches and is network controlled while being integrated to the cloud, e.g. social media or computer games. The generation 8.0 lets virtual reality become real virtuality. Another small step towards this direction was recently made by the premiere of fitness machine 'Icaros'.

It is obvious that the industry will go through fundamental changes in the foreseeable future. There might still be classic fitness studios with workout involving exercise equipment and aerobic-courses but today already the growth of so called 'special interest' studios is exceedingly strong. They offer newest inventions and ideas mostly in form of micro studios that cannot be implemented equally fast even by C&C because these innovations are in most cases very personal, i.e. a person of enormous expert knowledge is required. These entrepreneurs can be hope and example for all SMEs, while they will barely be any future prospects for the mass of old SMEs without restructuring with regards to the new generations' technical and athletic abilities.

Besides fitness studios as service providers, manufacturers of equipment must equally adapt to the new ways of exercising and incorporate this for the development of new equipment.

5 Staffing needs for qualified professionals in the management in the future

Two associations are linked under the term of 'vacant sports management'. First in the sense of 'vacant' as there are no sports managers, and second in the assumption that those available are mentally 'vacant' without any new expert knowledge or professional competence.

At this point, the first connection of meanings is to be explained. The KSW recently published a prognosis forecasting a deficit of work forces of estimated 170.000 sports academics and 100.000 fitness specialists in Germany by the year 2030 (c.p. Pauling & Vatanparast 2016). Responsible for this are the demographic change as well as the average annual growth of the industry until 2030 of 3.6% to 20 million members, i.e. there is a penetration rate (share of fitness members to inhabitants) of 25%. In this situation at least 500.000 qualified workers (currently 266.000) will be needed. After analyses of expected graduates figures and rates of employment in the industry only 50.000 sports academics and 40.000 fitness specialists add up.

There are several small private universities having already discovered this tremendous potential and massively extending the offered degree programmes in the sector of sports management. Especially demanded are dual bachelor programmes so the number of enterprises in the fitness industry engaging in co-operations with universities decreased by 23% from 3.000 in 2014 to 3.700 in 2015. The number of students of these programmes rose by 26% from 5.000 in 2014 to 6.300 in 2015. Compared to the count of required graduates in the future, current numbers of students are no longer sufficient.

The Chinese situation is more alarming. Although China is enormously bigger, the number of exercising citizens increased to 382 million in 2014 and the governments expects the sports industry to earn 71.9 billion Euros (524 billion CNY) in the next ten years, the industry has still 10.000 less qualified workers available than smaller Germany while the number of sports managers having run through university is vanishingly low. Adding on offers of degree programmes of sports management in China only slowly progresses and desperately needed dual bachelor programmes after the German formula of success are sought in vain though compared to the German prognosis China will lack millions of qualified workers due to demographic changes and shifts in the markets by the year 2030. But some universities have realized the potential and have taken up discussions in favour of a German-Chinese degree programme for sports management.

6 Conclusion

In the KSW's view there is barely any hope for fundamental improvement of the German and Chinese SMEs situation, without universities offering new degree programmes in the field of sports business, i.e. sports economics and sports management, and without intensification of scientific research concerning this. C&C will control the market to such a large extent, the economic downfall of SMEs will continue without checks.

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Table 1: Industry revenues worldwide

	€ (Bn)	¥ (亿)	Global %
Europe 欧洲	23.7	1732	31.6%
USA 美国	21.4	1564	28.5%
China 中国	17.9	1308	23.9%
Others 其他	12	870	16.0%
Total总	75	5474	

Figure 1: Industry revenues in China

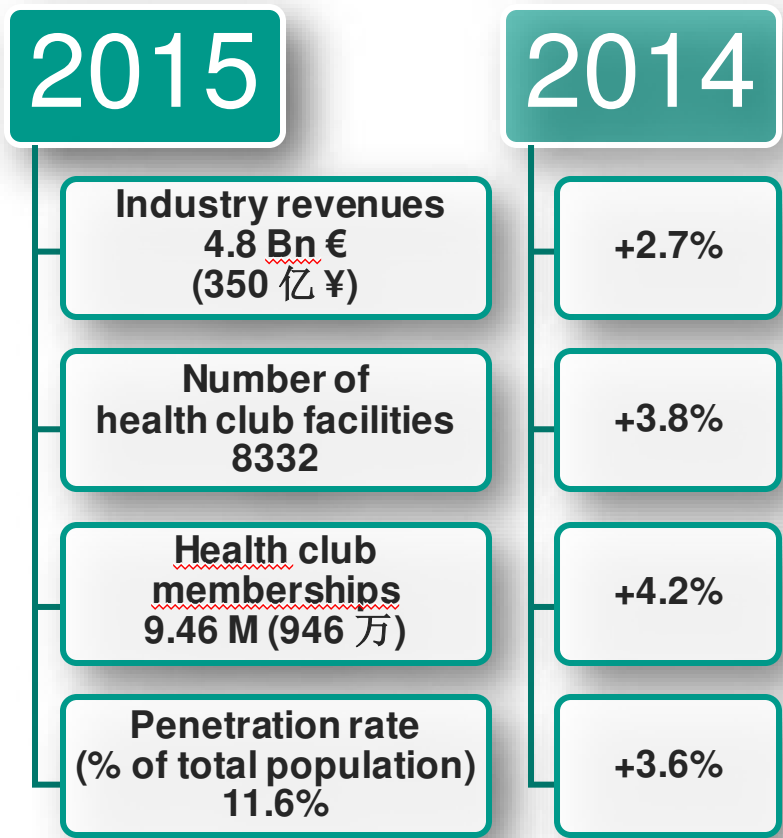


Figure 2: Industry revenues in Germany

