





"One day, a thousand miles."



**TITLE #** Using Design Processes as a Creative Resource to Enhance Entrepreneurial Globalization of Born Global Start-ups

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LAY OUT AND GARPHICS # Hanna Poranen COVER PICTURE # Heikki Sjöman PAGES # 108 + 28 Using Design Processes
as a Creative Resource to
Enhance Entrepreneurial
Globalization of
Born Global Start-ups

#### **ABSTRACT**

There is a clear need for global small and medium size enterprises (SMEs) entering new markets to modify and improve their processes and products in order to be able to attach new markets to their global portfolio. This journey requires international skills and multidisciplinary working. Design processes can enhance and accelerate the globalization and several born global firms (BGs) already utilize this resource as their key asset. The primary goal in this research was to demonstrate the value and benefits of mind-sets and design processes as a part of entrepreneurial globalization process. The secondary goal was to provide, for the Finnish artificial surf wave start-up Artwave, practical implications in a form of a service path to expand their business to China markets. The whole work was carried out in the context of Western, Nordic - Asia, China relationships and the information were sourced from these two regions. The research data was collected from China-Western based BG SMEs and from China based sport service providers. These semi-structured interviews provided valuable insights to analyse the globalization processes and to create later the service concept for the surf machinery provider Artwave. The results showed that design processes can enhance global start-ups to develop their internationalization processes while building up the businesses as supplier for the service providers in the case country. In addition, the research revealed that there is a growing interest towards innovation and extreme sports and that many popular sports from West are still in the beginning of their entry to the China markets. This provides an opportunity to explore the research field as one of the first ones.

KEYS WORDS: Recreational Sport, Leisure Time, Surfing, Artificial Surfing, Entrepreneurship, User Innovation, Service Path, Design Thinking, Born Global

### 利用设计过程作为一种工具,以提高全球初生创业者 的创业全球化

## 摘要

全球中小企业(中小企业)进入新的市场以调整和改进他们的流程和产品,为了能够连接新的市场,以他们的全球投资组合有一个明确的需要。这个过程需要国际化的技能和多学科的工作。设计的过程已经能增强和加速利用全球化和几个初生的环球公司(BGs)这一资源为核心的资产。本研究的主要目标是展示的价值和利益的思想和设计过程的一部分,创业的全球化过程。次要目标是提供,为芬兰人工冲浪波启动该公司,以服务路径的实际影响来拓展中国市场业务。整个工作是在西方,北欧-亚洲,中国的背景以及来自这两个地区的信息来源下进行的。本研究收集的数据来自中国西部的中小企业和中国体育BG基础服务提供商。这些半结构化的访谈提供了宝贵的见解,分析全球化进程和创建后的冲浪机械供应商该公司服务理念。结果表明,设计过程可以提高该国家的全球初创企业,以发展他们的国际化进程,同时建立的企业作为供应商的服务供应商。此外,研究显示,西方国家对创新和极限运动和许多流行的运动有越来越大的兴趣投放进入中国市场。这提供了一个探索领域作为第一个的机会,

关键词: 休闲体育,休闲时间,冲浪,人工冲浪,创业,用户创新,服务路径,设计思想,初步全球化

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This thesis work combines together design and business. Concentrating on how design methodologies can enhance SMEs and born global start-ups, in case of a new Nordic recreational sport innovation business, to enter China market and how to identify the most critical touch points on which to focus. The thesis work is undertaken in the context of Artwave, A Finnish surf innovation start-up, that designs, develops, manufactures and markets high-tech machinery for artificial surfing in natural waters e.g. lakes and seas, so that no man-built pools are necessarily needed. The key elements of this research are how a born global start-up could through design approach and enter the China market as effectively and efficiently as possible, what are the opportunities in it and especially what are the practical implications that should be considered and implemented in terms of providing and developing the service for local customers on a global basis.

#### 1.1 CONTEXT

The world is now more global than never before and keeps globalizing with fast pace. New open information society, ease of communication, enhanced transportation, worldwide scientific revolution and international education all stimulate the globalization and offer totally new opportunities for SMEs, which with growing number hire more employees, to expand businesses (Utkin, 2002). Globalization is also the growing interdependence of national economies involving customers, producers, suppliers and government in different countries. In order to succeed, SMEs directing to global business must be able to tackle the challenges related to culture, environment, regulations and motives. In addition, they must have flexible formulation and implementation of strategy. This thesis work suggests design methodologies as an accelerating power to globalization.

It is expected that these companies (SMEs) that compete in active environments can cope more successfully with these conditions through practicing entrepreneurial abilities that consists of innovative behavior, risk taking, and pro-activeness (Dess, Lumpkin, and Govin 1997; Khandwalla 1977; Miller and Friesen 1984; Morris and Paul 1987).

Design embodies all of these abilities and provides within it good, well planned tools to implement the flat communication, pro-activeness and entrepreneurial strategies.

The thesis work uses born global ideology to manage the globalization process in the firms start-up phase. BGs are companies that manage to become global faster than so called normal SMEs. The research refers to them as the best practices to expand businesses. In figure or, the both models are illustrated. The thesis work compares the Nordic ways of developing services for business-to-business start-ups to Chinese ways and researches what kind of role design could have in this process. It involves looking for clear methods and concrete guidelines to start-ups that see design as one of the competitive factors in their practices. Also, this work intends to give an example for BG start-ups that have not yet experienced the value of design.



Figure 01. Globalization processesses now and then. Above traditional SMEs globalization process, bleow BGaccelerated globalization process.

The research in this thesis considers end users as a valuable source of information and as a key to the successful globalization process. Visualizing the customer's service path makes it easier to understand both the end user and the service provider and it provides them better services that will attract more visitors. This in itself will already improve the benefits received by the service provider and make the developer better able to provide machinery, which can if needed be customized for the end user as well as for the service provider. Design methodologies be business planning when entering new markets with new product. To implement design methodologies holistically into globalization process of service and product development helps to avoid the pitfalls and identify the goldmines that appear in the changing environment.

The analyses showed that the urgent elements to pay attention are the communication with stakeholders, trust building in the relationship and to ensure the continuous communication even after the deal and education was given for the service provider. Usually at this phase in the Western countries the path will divide, but in China this only means a new beginning of a future relationship. In the same way the business is much more family and community oriented compared to the more individualistic west. To communicate these differences design showed to be significant resource to pass information locally and globally to enhance the likely hood of business success.

#### 1.2 RESEARCH QUESTION AND SCOPE

The focus of this research is to implement design methodologies into entrepreneurial globalization process in the context of Finland and China. The research outcomes are supported by expert and service provider interviews, the later one presenting the possible future user perspective, feedback collected from the service providers, personal experiences of living in China and benchmarking at the service locations.

The objectives in this study are in the design methodologies in business environment. The two research questions frame the scope of the research in following manner:

- I. How can design methodologies value and mind-sets enhance the entrepreneurial globalization process?
- 2. What are the practical implications to demonstrate the value and benefits of the design methodologies mind-sets as a part of entrepreneurial globalization process?

This work employs Artwave, a Finnish artificial surf machinery developer start-up as a case study to find out what would be the best practices for a Nordic extreme sport equipment provider to enter and adapt to China market. The secondary goal is to provide, Artwave, practical implications in a form of a service path to expand. This service path could be also in future used as a base to build and modify other service paths to new entry countries.

While this studys analysis may be illuminating, several limitations in the data are important to recognize. Interviews and collected feedback are based on the interviewed individuals opinions and visions how they experience different sport services. The sample size is not significant and so cannot present the entire population of the potential future customers, but the result sourced provided still enough information to create convincing prototype.

One interesting future step is to test the service path concept in real life when the surf set-up is finally ready and customers use it. After this new feedback and iteration loops should be conducted to improve the prototype. These iterations should be repeated annually to stay on the top of the time. Another interesting research topic in the future would be also to see how the prototyped service path would evolve under time.

#### 1.3 PERSONAL GOALS

"To know your Enemy, you must become your Enemy."
- SunTzu, Art of War

It is no coincident that this work concentrates on China – Nordic context. China came to my life suddenly and has since then been part of it. Over two and half years of experience in the country studying and working on design and business field has opened many interesting viewpoints. Design in general in China is still fairly traditional branch and for example user cantered design, service design and strategic design are still almost unknown. My passion while living in Shanghai and Beijing has been to slowly introduce these forms of design to the colleagues around me. This is also one reason why I chose a topic combining design and business. The other one was my background in working for the artificial surf machinery start-up and my double degree master studies in School of Arts, Design, and Architecture, Helsinki and Beijing and in School of Economics and Management, Shanghai.

China is a fascinating country where sometimes everything goes smoothly and sometimes from unexpected reasons insurmountable seeming obstacles occur. This means that when living in China saying, go with the flow can help greatly. It is not expected that a person could understand all the reasoning behind locals behavior but it helps to let it go sometimes. Also this mind set welcomes learning instead of being irritated. Living in China requires immerse amount of patience, curiosity and ability to step outside of the comfort zone. This especially applies when living in less globalized and more Chinese regions.

The practical background of the work lies in the personal working experience in the Finnish artificial surf wave machine manufacturer start-up. A lot of basic knowledge about surf culture, recreational sports, machinery and start-up life was gained during this time period and some information also naturally echoes from there, such as the

topic selection. To narrow down the topic was the most challenging part to create a compact and easy-to-understand package. This part of the process took longest part on the time frame but was crucial to do so that the work was well framed and easier to execute. In the literature part several new ideas were researched and the aim was to gain information equitably from innovation methodologies, BGs and user driven innovation supported by the academic information of Chinese leisure time activities and culture and surfing itself.

One other motivation to start this work was to challenge myself and be able to do something I have never done before. This thesis work is an experiment of how business and design can strategically compliment each other in BG start-up environment. Several obstacles to conduct the research challenged this process. These were for example lack of time, language barriers, cultural differences, lack of existing contacts and limited access of Internet. Still without these challenges the work would not have been as interesting and motivating to accomplish and the learning experience would have remained much smaller.

#### 1.4 ARTWAVE THE FINNISH SURF START-UP

This thesis work is done in co-operation with Finnish recreational sport innovation start-up, Artwave. Artwave produces high-tech and high quality Nordic surf machinery designed for artificial surfing in natural waters and is the first company to operate artificial wave machinery out of the pool. Artwave started as a research and commercialization project in Aalto University, department of Engineering Design and Production and has now grown to be a group of twelve passionate real life and academic surfers with engineering, economics, design and surf backgrounds. Also several people from outside of the project have generously donated their time to the project to take it forward and make the dream of Finnish surfers to come true and accessible for the whole world.

The ideology behind Artwave is to provide the opportunity to surf for everybody regardless of the living location. The machinery would ideally be located into big cities, close to the people and reachable for the busy metropolitans lifestyle. Potential surfers would not need to travel to other countries and invest a lot of money and time to have a try. These two factors are considered as the biggest stepping-stones to start surfing

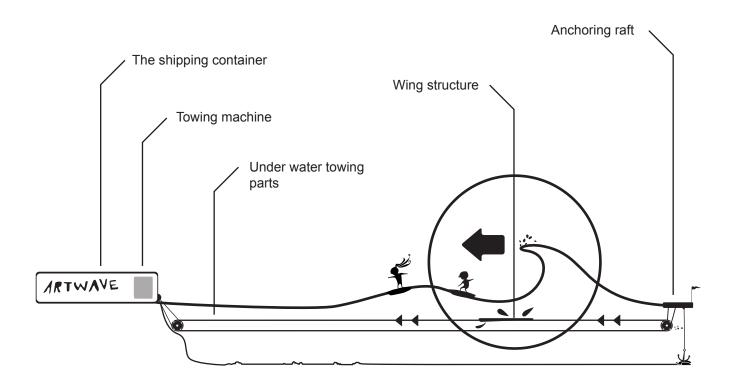


Figure 02. Artwave artificial surf set-up main components in action.

and could be removed with artificial options. Close location would also benefit from semi-active surfers to professionals by providing a place where to train and add condition before surf trips to further destinations. In this way professionals could immediately enjoy the natural waves in the travel destination and no time is needed to put to warming up, that normally could take minimum one week. The location selection makes the surf also more visible for critical masses and so more people could be introduced to surf sports, this would benefit the general standard of living and health factors.

Artwave also aims to increase the new demand on the recreational surf sport market that is clearly growing in western world. Artificial surfing in natural waters is a new field of business for surfing service providers, resorts, designers, entertainment businesses, cities and academics worldwide. The surf set up build to the sea shore of the city could provide much more than just the core service itself by employing people to run the additional services around it, such as cafes, bars, restaurants, surf schools, apparel and equipment rental. Artwave's goal is to be business-to-business start-up that can by its product and service development provide new business for both manufacturers and service providers. The target is to be the market leader in the field of artificial startup solutions by 2020.

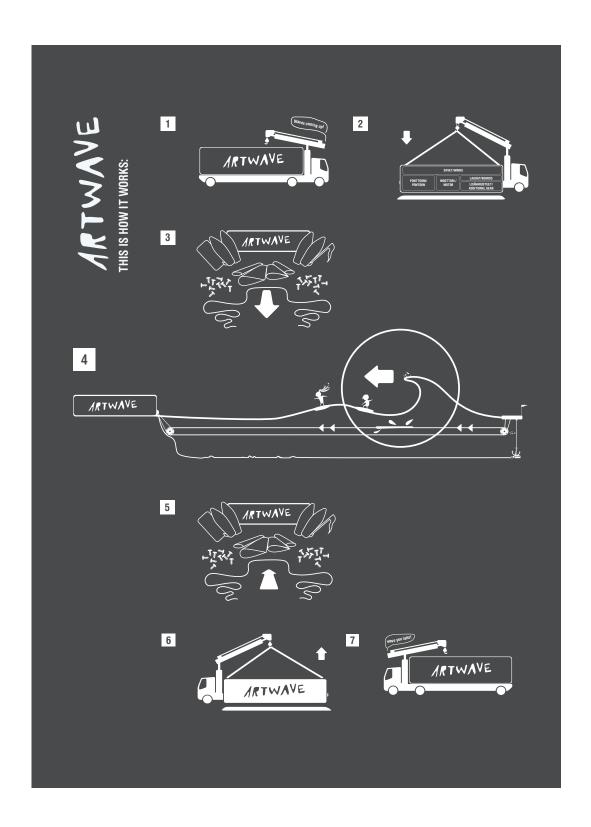


Figure 03. Artwave, artificial surf set-up, overview of the arrival of the container, setup and packing.

### 1.4.1 The Concept

The surf machinery consists of a container, where all the machinery can be packed and shipped to the other side of the world to the service provider, 250kW towing machine stationery inside the other end of the container, self-adjusting, passive wing structure creating waves as it is towed, electric tracing and under water towing ropes and wheels installation. The figure o3. shows how the set up is placed next to the water line and how waves are towed with the machinery and figure o2 shows the principle of how Artwave solution works as a artificial surf wave generator. Operating in natural waters ensures lower investment rate for the buyers/service providers compared to the other existing solutions that all require a pool. For the end user experience is more authentic and can bring people closer to the nature in todays growing urbanization. One prototype is installed in the city of Helsinki's natural waters as seen niin figure o4.

Artwave is providing very unique surfing experience with its north location. It does not have to compete with the southern tiki tiki culture or palm beaches.



Figure 04. Artwave artificial surf set-up at the natural water shore.

#### 1.4.2 Surf in Finland

In Finland, the origin of Artwave, there are only few waves but the local surfers have such strong passion and will to pursuit their lifestyle to the extent when the great autumn storms come with snow and ice the surfers jump into water to catch the best waves. Surfing in Finland requires hard-core devotion and passion to the sport when warm surf waters are several flight hours away. A Finnish short movie from Bablo films Finsurf (2011) describes the Finnish surf culture in their poster accurately and briefly.

"Wind 31m/s, water +1 C"
- Finsurf, Bablo Films



Figure 05. Material from Finnsurf movie (Finnsurf Presskit, Pablo Films, 2011).

### 1.5 STRUCTURE OF THE THESIS

The research data for the work was collected through semi-structured thematic interview interviews conducted together with three BG companies management-founder level and with six China based sport service providers who either owned the company or were founders of the service.

This work follows the next structure. At first (1st) section the research question and context are defined. In the second section, the background research done by reviewing latest literature of design processes, globalization patterns, users and upcoming trends. The third (3rd) section gives the context for the project by describing the surf culture and what surf in general means. The fourth (4th) section describes the design development and what is the base of the service path development. This section describes in more detail the used methods and criteria and analyses the interview and benchmarking outcomes. The fifth (5th) part presents the concept generation and final service path prototype with descriptive illustrations. It also provides advices to consider around the service. The evaluation or the concept and reflections to the literature are discussed after the concept. The sixth (6th) and last section summarizes the outcomes and evaluates the process.



## 2 LITERATURE REVIEW

#### 2.1 THE DESIGN PROCESS

Increasing number of companies declares design as one of their key asset to compete on global markets. Design creates value for both corporate and public sector and growing amount of related research has been done. Several world class Multinational Enterprises (MNEs) have already openly published how they use design to differentiate and increase significantly their economic growth on markets, Small and Medium sized Enterprises (SMEs) are doing the same.

Design can help to communicate companys strategic visions to shareholders so that strategy is not just expressed as numbers and frameworks but as something concrete. These things elements can be for example prototypes, pictures, visualizations, artefacts or video clips (Hollaway, 2009). Globalization sets also new requirements for designers. UK Design Council (2007) listed the main abilities in their research to be business acumen, design management skills, multidisciplinary skills, go-getter attitude, user focus and evangelizing. Designers need to be bold and claim the assets they have to be used and spread the word of power of design even wider. The listed abilities apply also to this work; in witch design meets business management and challenges of globalization.

## 2.1.1 Design and globalization

Nowadays world has already reached high level of production and consumers and companies are shifting from producing new products towards designing various services and strategies. There is also growing number of global design consultancies. IDEO, an US founded international design and consulting firm, has been one of the pioneering powers on this field. At the time small company, which has now grown to one of the largest design consultancies in the world, redefined good design and started to provide services to their customers. This changed globally the way to do innovations. They developed five steps to better consumer experience: observation, brainstorming, rapid

#### 2 LITERATURE REVIEW

prototyping, refining and implementation and are now competing with consultancies such as McKinsey, Boston Consulting Group and Bain & Company, that normally look things through business-school prism. Design methods can open the mind and be key to the greater success. Increasing amount of CEOs is implementing this ideology to increase the competitiveness and innovation (Tonkinwise, 2011; Nussbaum, 2004; Hsiao, & Chou, 2004; Loch, 2000).

#### 2.1.2 Variety of design processes

Large variety of design processes can be used to enhance business, but none of them alone is the right or only way to. UK Design Council conducted a study with eleven globally well-known companies and drew a double diamond model out of the methods used in these MNEs such as Alessi, Starbucks, LEGO and Microsoft (figure o6).

In this model design teams start by discovering the behaviour and space of the given problem area without bigger restrictions. The diverging, teams gain knowledge and distinguish the problem definition using creative workshops, idea generation and engaging users. After definition teams move on to developing the ideas, diverging again. They review ideas and map out possible solutions for the defined problems. In the delivery phase teams converge again and narrow down to the final solution and produce the deliverable concept by prototyping, testing and implementing. In this work double diamond model has been used to crate the final service concept, although the reality may sometimes differ from the model.

## 2.1.3 Design as a differentiator

Design is now seen as a differentiator for the whole European market when the production of industries themselves is sifting to cheaper countries. European designers are seen as world-class professionals and they have gained a strong foothold in the field. Many European designers work for European and non-European companies globally and help the companies to achieve even higher brand status and revenue (Thomson, & Koskinen, 2012; Design Council, 2007).

#### The 'double diamond' design process model:

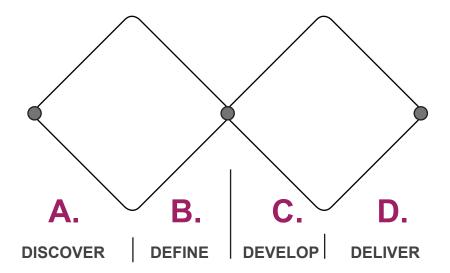


Figure o6. The double diamond model (Design Council, Eleven lessons: managing design in eleven global brands. A study of design processes, 2007)

Design thinking is a new inviting concept that is used now globally to describe the designerly ways of doing things and so far design researchers have cherished the multiple perspectives and pictures to describe design thinking. Now the demand to define the term has increased due to the increasing popularity globally. Design thinking is practices, cognitive approach and right kind of mind set to use the tools provided and a way to solve novel problems anywhere where it is needed. It has become one of the most desired methods to implement in business (Koria, Graff, & Karjalainen, 2011; Dorst, 2006). Through design thinking concept companies can apply design into their daily activities.

## 2.2 IDENTIFYING WHOM TO INVOLVE IN THE DESIGN PROCESS

To involve right people to the design process is exceedingly important. Nearly 30 years ago a new wave of making user inspired innovations started to achieve status. In the beginning the user innovation was considered as a minor oddity, but today it is seen as an excellent generalized phenomenon used by most of the market leading companies in several different industries.

In global knowledge economy the competitiveness on innovations has increased and competition focuses on consumer understanding and uncovering the customer needs. Innovations are being democratized, which means that users of products and services, both individual consumers and firms, are progressively able to innovative for themselves. The importance and awareness of user-centered innovations has been growing. In which understanding the customer needs is the driver of the innovation process. This is already well adopted into product development and service design processes, but yet less known in business modeling. User innovation helps manufacturers to create novel products, since it is a source of new product ideas for consumer goods companies (Rosted, 2005; Von Hippel, 2005; Luthje, 2004; Holmquist, 2004). End users and service providers are both considered as an important information source in these thesis work as well and the user-centered ideology as a driving power of this process.

#### 2.2.1 The diffusion of innovations

The diffusion of innovations provides valuable information to design processes, decision-making, information technologies, information experts and guides technological innovations through the diffusion curve meeting the needs of all of the adopter groups (Figure 07). It is defined to be a process, in which the innovation is communicated using certain channels over time among members of the social system (Rogers, 2003).

The theory stresses the value of peer-to-peer communication over the adopter groups and shows how people adopt new ideas. Initially the open-minded individuals adopt first the innovation, speak about it and critical mass follows this lead. Critical mass is the highest peak of the diffusion of innovations bell curve and innovators pursue to reach this group through early adopters. After the critical mass has accepted the innovation latecomers will adopt the idea as the last group. Diffusion spreads cultural and social innovations from one society or environment to another. Social change requires penetration of inventions that diffuse through the process of imitation. For example surf can be this kind of penetrator in the Chinese leisure time market (Kaminski, 2011; Ryan, & Gross, 1943; Kinnunen, 1996; Valente, & Rogers, 1995; Katz, 2006).

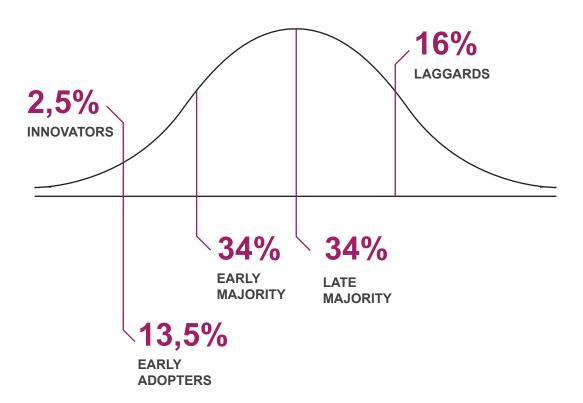


Figure 07. The diffusion of innovation bell-curve.

#### 2.2.2 Adopter Groups

The five adopter groups in the diffusion of innovation are innovators, early adopters, early majority, late majority and laggards. Innovators (2,5%) are the great venturers, risk takers and gatekeepers who peer educate the next adopter group. The early adopters (13,5%) are the opinion leaders; they set the future trends, work as role models and are excellent test subjects. The early majority (34%) is the first part of the critical mass. They are the deliberate contacts as well as opinion leaders, but less prudent and smaller risk takers. The late majority (34%), second part of the critical mass, responses to the peer pressure; they are skeptical, cautious and require bulletproof solutions. Laggards (16%) are isolated from the opinion leaders; they response suspiciously to innovations and want to maintain their status quo (Figure 07). Sometimes also sixth group is included, non-adopters, who don't never accept or hear about the innovation. Time, innovation, social systems and communication channels influence the shifts between these adopter groups. In the extreme sports, trends diffuse the same way and innovators and early adopters provide great source of information (Kaminski, 2011).

# 2.2.3 The five steps of the innovation adaptation process

Innovation adaptation process describes the process that shifts the innovation from an adaptation group to another and from an individual to next one in the same social group. The process divides and rhythms the diffusion of innovation into five stages (figure o8). The first one, knowledge/awareness stage exposes individuals to the initial information of the innovation. The persuasion/interest stage follows the first stage growing the interest and makes individuals seek additional information. The decision/evaluation stage leads to mental acceptance of the innovation and the decision, whether or not to try the product. On the implementation/trial stage individuals finally use the innovation for the first time and on the final confirmation/adoption stage the decision to continue to use the innovation is done (Kaminski, 2011).

These steps are important to know when implementing the theory into real life solutions even the real life situations don't always obey the set models. Mass media, TV, interpersonal communication and social systems are efficient tools to increase the diffusion power. Social media, for instance, connect people in totally new way and makes

the early adopters more visible than ever before. They are opinion leaders, who play an important role in providing positive word of mouth (WOM) and companies should pay attention to catch them to accept and endorse their product, so that later groups can follow. How WOM is accepted depends on the speaker, brand credibility and the passion it is transformed with. Also cultural manners that can affect the diffusion should be recognized i.e. in China different social media is used to endorse brands (Mazzarlo, 2011; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Wejnert, 2002).

#### Five stages in the decision innovation process:

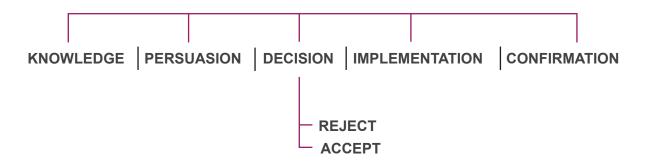


Figure 08. Five stages in the decision innovation process.

## 2.2.4 User innovation, Participatory design

User driven innovation comprises several different ways of doing the creative work between manufacturers and users, where the user is defined to be a firm or individual consumer that benefits from using the particular product or service. Both an individual person and a firm can change the given role. For instance if a firm buys material for their product from other manufacturer they are considered as users, but when they provide the service forward they transform into manufacturers. If the user functions as a middleman and thus has users, should the manufacturer discover also these end-users. For example a surf service provider can be both a user and a provider.

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The user group selected to co-operate with is usually highly specialized, even an extreme user, who have met challenging conditions and is highly involved into the interest area. These kinds of extreme users are used especially when developing sports equipments or high tech that require specific and hard-core user knowledge. This kind of knowledge is also crucial when developing artificial surf machinery. Luthje, Herstatt and Von Hippel (2005) provide the next example in their research how users innovate new products.

Problem encountered by user in stunt riding: When doing tricks that require me to take my feet off the bike pedals in mid-air, the pedals often spin, making it hard to put my feet back onto them accurately before landing. Solution devised: I have added a foam ring around the pedal axle near the crank. This adds friction, and prevents the pedals from free-spinning when my feet are off. (Luthje, Herstatt, & Von Hippel, 2005)

The users tend to be modest with their innovations and firms should be able to separate these innovating users from non-innovating users. The differentiator between them is that the innovating users expect to benefit from using their innovations and have high level of expertise in the use of the product. Firms can take these ideas forward with the right resources and all the parties will benefit of it (Von Hippel, 2005; Holmquist, 2004; Luthje, 2004; Luthje, Herstatt, & Von Hippel, 2005; Brata, Hagen, Hauge, Kotro, Orrenmaa, Power, & Repo, 2009; Potts, 2008).

## 2.2.5 Involving right users

There are several methods to include users into the process. The main categories of practice are listed as follows. First, manufacturer can actively seek for innovations developed by lead users. Second, manufacturers can draw innovating consumers into joint design sessions using toolkits for user innovation and third, users can turn into manufacturers in order to widely diffuse their creations. Notable is that users and manufacturers tend to develop different kind of innovations since they maintain different kind of knowledge. Innovations made by users seem to be more open source and freely revealed to the social welfare, this prevents other users from doing the re-design on same problem. Users also tend to use more local and experience based information. Manufacturers are stiffer to open their processes to public due to the investments they have made to produce the innovation (Von Hippel, 2005; Luthje, Herstatt, & Von Hippel, 2005; Hjalager, & Nordin, 2011).

#### 2.2.6 Co-creation

Co-creation aims to design for a purpose rather than a product involving users, researchers, designers and other possible stakeholders into the creative process (Figure 09). Designers role there is to empower the users to disclose ideas, prototype and develop further the resolutions of set problem definition. The co-creation and co-designing blurs the traditionally seen roles and to succeed it must take into account different perspectives and expectations. The subsequent suggested service path for artificial surf machinery start-up follows the co-creation process where service providers, the future users of the service, were involved into the design process and their input taken into account as valuable source of information. The Co-creation sessions were guided accordingly with prototyping materials and questionnaires (Sanders, 2008).

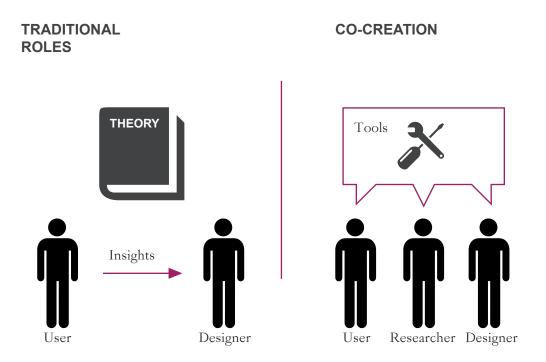


Figure 09. Traditional roles of stakeholders in the creation process (left side).

Co-creation merges together different stakeholders (right side)

#### 2.2.7 Lead users

Lead users are defined to be pioneers of their field obtaining knowledge no one else yet has. They benefit by developing further the solutions under design and are recognized in new product development and innovation management. With the help of lead users companies, public sector and NGOs can precede more accurate evaluations, future forecasting and trend spotting. Product innovation decisions and the fastest moving technological innovations have increasing interest for expert opinions, where benchmarking points may not even yet exist. This means that some of the most novel products may not yet have lead users, lead users can still be found from similar fields of interest. For example lead users of surf design could be found from skating. These lead users can provide product ideas to the developers (Schreier, Oberhauser, & Pr□gl, 2007; Ozer, 2009; Von Hippel, 1989; Von Hippel, 1986; Ozer, 2009).

For identifying the lead users there is a lead user method. In order to find the individuals at the leading edge of each trend in terms of related new product and process needs one should find those users who are expected to obtain a relatively high net benefit from those solutions and needs. They are the ones whose present strong needs will come common desires months or years later in a marketplace and so they are reflectors of important information. Lead users are familiar with the conditions that wait in the future for the critical masses acceptance and they can work as forecasters for marketing research. Lead users are most often early adopters with significantly higher user innovativeness and product involvement compared to other diffusion of innovation groups (Von Hippel, 1986; Ram, & Jung, 1994; L□thje, & Herstatt, 2004).

Especially in extreme sports lead users play an important role. They are passionate about the topic, keen to high performance and want to develop the field and the equipments rapidly. Extreme sports provide emotional stokes that fosters the will to pursuit better execution, safety, quality and endorsement. Both B2B and B2C markets have benefitted from this. In Chinese market the first ones to adopt this culture were young modern males from wealthy families. (Schreier, Oberhauser, & Pr\(\text{Dg}\)l, 2007; Ozer, 2009).

#### 2.2.8 Lead user implementation

To implement and benefit from lead users deep knowledge companies must follow four step program. First it is crucial to identify the important market or technical trend in order to enable the right focus. On the second step company must identify the right type of the lead users, who leads that particular trend in terms of experience and intensity of need. On the third step lead users need to be analyzed and at the fourth step the lead user data will be projected onto the general market of interest. Through this process companies can get the best value of the lead users they are operating with.

Development, adaptation and diffusion of new products can benefit highly from co-operation with lead users. They demonstrate stronger domain-specific innovativeness than the more ordinary users. They have strong opinion leadership and weaker opinion seeking tendency than other individuals. Lead users differ from product experts, that cannot provide equally accurate data sourced for example from their personal experiences on the interest field. Lead users possess information about both user needs and products trends, though they may not carry knowledge of supply chain or production (Von Hippel, 1986; Von Hippel, 1989; Urban, & Von Hippel, 1988).

# 2.3 INTRODUCTION TO BORN GLOBAL COMPANIES AND GLOBALIZATION

This chapter presents different globalization processes of SMEs. The speed of globalization is used here as a differentiator and defines the category of globalization pattern.

## 2.3.1 Globalization processes of SMEs

SMEs obtain a lot of entrepreneurial skills and face challenges such as lack of capabilities, market power and resources of the traditional multinational enterprises (MNEs). SMEs can achieve higher level of globalization by mastering entrepreneurial orienta-

tion, globalization response and internationalization preparation (Knight, 2000). These features are common for almost all the globalizing SMEs and so also guide their globalization processes. Gabrielsson, Kirpalani, Dimitratos & Solberg (2008) present four globalization processes for SMEs: born globals, born again globals, inward internationalizing and normally globalizing SMEs. The last one has the slowest form of globalization that may happen gradually during several years even decades. To the three first forms entrepreneurial abilities apply especially well. As figure 10. presents, firm, business and financing characteristics, finance strategy dimension and firm capabilities all lead to global expansion despite the type of the globalizing SME, the speed is the differentiator (Gabrielsson, Sasi, & Darling, 2004).

It is important to note, that globalization processes can be done in several different ways and within different time frames. Nonetheless there is less research about standardized globalization processes of SMEs, companies that employ less than 500 people.

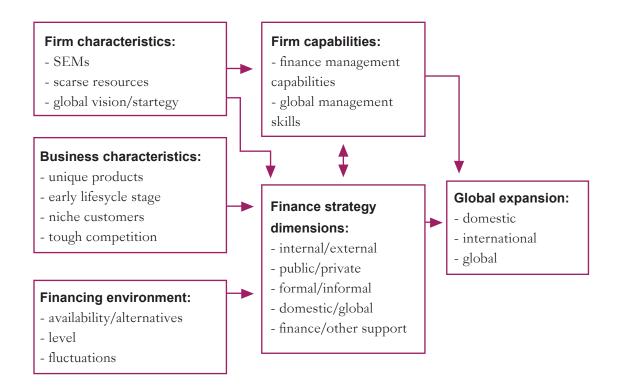


Figure 10. Conceptual framework model (Gabrielsson, Sasi, & Darling, 2004)

#### 2.3.2 Born global

Born global companies (BGs) are start-ups or rapidly globalizing small and medium size businesses (SMEs) that aim from the very beginning to gain global markets. There are several ways for SMEs to internationalize and globalize their markets; the differentiator to born global firms is the ability to accelerate this process. Traditionally the globalization process has been seen as an iterative and incremental process, respecting geographical markets, market entry models and product strategies. When the first circle of business has been stabilized the company can systematically extend to the next, bigger circle around the previous on, like rings around the water droplet (Madsen & Servias, 1997). On the contrary, BGs don't wait the opportunities to change more favourable for them, they aim to enter the global markets as soon as possible, despite the challenges their products or services might have encountered in their country of origin.

Each BG needs specific skills in order to manage to succeed. These skills are learning through networks, to be flexible and willing to adapt the internationalization process to agilely align with the current situation. BG firm must be bold and obtain a lot of similar skill sets as entrepreneurial firms, since they also face a lot of identical challenges as start-ups and entrepreneurs. The risks are bigger than in SMEs, but the returns may be much higher (Gleason, Madura, & Wiggenhorn, 2006). The services or products provided by BGs must be novel and innovative, their motivation should be high since a lot of obstacles must be met with limited resources and low finance (Sharma & Blomstermo, 2003). There are not many differences in the development of the BG firms between different countries. This strengthens the idea that the BG entrepreneurs carry similar skills sets, attitudes and goals wherever they are based from. Born global firms don't see problems on the home market as discouraging for creating a firm, but go to find markets overseas (Andersson, & Evangelista, 2006).

In the exploratory work of Gabrielsson, Kirpalani, Dimitratos, Solberg, & Zucchella (2008) BGs are defined as firms with global market potential and enhanced ability for internationalization. In the work three main phases of BGs are presented, that distinguish them from other traditionally internationalizing SMEs. In the first phase initial launch and introduction take place. In the second phase, BGs concentrate on growth and resource accumulation. And in phase three, the BG gains its own global positioning finally Breaking-out from the bigger investors. This phase differentiates BGs most explicitly from SMEs due to the speed of the globalization process. Global vision alone is not

#### 2 LITERATURE REVIEW

enough to ensure the success and the focus should be on continuous learning and iteration to perform better. The role of commitment in BG is visualized in figure of the challenge in the field still is to define the key terminology and to explore and validate comparative research (Rialp, Rialp, & Knight, 2005).

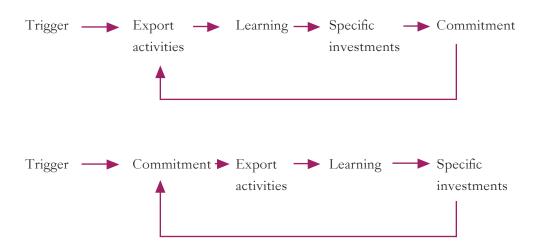


Figure 11. Upper line describes commitment in traditional internationalization, lower one in born global internationalization (Gabrielsson, Kirpalani, Dimitratos, Solberg, & Zucchella, 2008).

### 2.3.3 Born international

The difference of globalization and internationalization must be understood and appreciated, since internationalization is not always aiming to get global, but just crossing the nearest borders, when globalization on the other hand aims to cross-continental businesses and refers to merger of national economies into single worldwide system, where some capital is easier to globalize than others (Jørgensen, 2014; Utkin, 2002).

The difference between born international and born global approaches is depicted in figure 12. BGs see the whole world as their market place and perceive to enlarge their

business to quickly attain a critical mass (Gerschewski, Rose, & Lindsay, 2014). The term born global is still living the period of being strictly defined and should not be mixed for example to born border that only adjacent to one foreign country (Jørgensen, 2014) or born international firms, that may have internationalized quickly to address opportunities, but without necessarily a global presence (Circk, 2009).

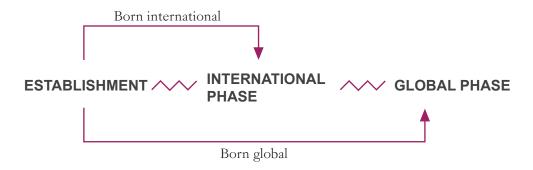


Figure 12. Born international and Born global firms behavior (Gabrielsson, Sasi, & Darling, 2004)

# 2.3.4 Globalizing sports

Sports business is one concrete example of the power of globalization. In sports players, equipment and publicity are global and move around media, technology, economics, intellectual property and ideologies. There is substantial amount of money and planning involved into prizes, celebrity endorsements, , advertisements, marketing and facilities. For example American football, basketball, golf and soccer are nowadays globally known sports bound to cultural messages. It is easy for specific countries arranging mega-sporting events to advertise and spread good image of the country (Dolles, & Soderman, 2008). This is also very useful for SMEs, since the country image can effect positively or negatively to the business. Globalization process in sports is to grow networks of interdependencies, politics, economics and cultures binding human beings together for better and worse (Maguire, 2000; Harvey, 2000; Xu, 2006). SMEs on sports field have totally different change to reach communities with messages in a way that politicians, multilateral agencies or NGOs cannot (Levermore, 2008). For example an artificial surf provider can have a change to positively affect the condition of the seaside and leisure time behaviour.

## 2.4 CHINESE CULTURAL CONTEXT

## 2.4.1 Upcoming trends and possibilities

There are several megatrends flowing through the world all the time and changing peoples behaviour, looks and interests. Consultancy office PWC listed the coming megatrends of 2015 on their website (20.6.2015). Among those were Demographic and social change, rapid urbanization, climate change and resource scarcity, shift in economic power and technological breakthroughs.

These trends land nowadays also to China after the policy of openness was adopted in 1978. China's borders opened up to travellers and its economy to international trade and businesses in every corner of the world took note. A huge opportunity and trend called China boom had born, to try to find some potential partners and shares on this market (Yu, Chan & Ireland, 2006).

# 2.4.2 Sport leisuretime trends

The ways of spending time have changed in the past decade and travelling as well as free time forms brought by digitalization have gained increasing popularity. Game industry is flourishing, but simultaneously people long after activities and experiencing by doing (Hall, & Weiler, 1992).

In China sports and physical exercises were defined in following way: 7% of people had little consciousness of sports and physical exercises, 68.5% though that sports are good for health and entertainment, but did not participate actively and 45% of men and 5.86% of women aged 30–45 participated regularly in sports. This provides a large room for improvements in future when it comes to the development of leisure consumption in sports and physical exercises. To increase popularity of physical exercises should be combined with entertainment, cultural activities, and health care. Chinese Outline of Nationwide Physical Exercise Plan estimated that physical exercise participants would increase from what it is currently, 300 million, to 500 million over the next 5 years, if the improvements would be done. Adventure and heath tourism are truly already im-

#### 2 LITERATURE REVIEW

proving individuals lives even in China. The same happened in West during 1980s and 1990s, when popularity towards outdoor leisure activities grew as a response to urbanism. This is a huge opportunity for recreational businesses to catch. China has over one billion people and if the businesses will master the local monolithic cultures and take in account the influence of urban youth, it may have a chance to enter one of the worlds largest market trends (Yin, 2005; Yu, Chan, & Ireland, 2006; Hall, & Weiler, 1992).

Concurrently Chinese people value on consumption gradually modernized and the changes in lifestyle become more visible. Some people accepted westernized life standards including more leisure time. Western influence nourished individualized consumption, travelling and experience seeking. According to international experience, people generated travel motives after GDP per capita reached about 3,500 (US\$ I = 8.3) and China reached this magical level in 1985 with even higher rate in cities. Leisure time activities become a way to take care not only of the physical health but mental as well and seek the excitement and reach back to the nature (Wu, Zhu, & Xu, 2000).

## 2.4.3 Outdoor activities

The urge to visit nature and do sports may be backlash of the fast urbanization, that itself is already a big megatrend. People, especially in China, move into cities for various reasons and the quality of air and environment have become a big issue. Globally



Figure 13. Picture from Huangshan Mountain, popular hiking destination.

the climate change affects leisure time sports and life in general and ecological values are accommodated by more people and spread through social media. Environment is changing and people are willing to stretch even further to get to feel unique or genesis of an adventure. Adventure tourism is a rapidly growing trend inside the umbrella of tourism and it is not either ignored in Asia. Due to the rising living standards and yet not high enough acceptance of active lifestyle the obesity is a growing trend in China as well and not anymore only a problem of western countries. Impacting power to this is other megatrend of digitalization, social media, smartphones and computers. There is the first time in history a generation of young people that grown up entirely in the digital era. They are rapid adopters of cell phone technology and therefore a huge potential for multiple markets, also in sports. Everything can be shared and hyped at once, globally (Weng, & Chiang, 2014; Unbehaun, Pr□bstl, & Haider, 2008; Carnicelli-Filho, 2013; Bauman, Allan-Farinelli, Huxley, & James, 2008; Finucane, Stevens, Cowan, Danaei, Lin, Paciorek, & Global Burden of Metabolic Risk Factors of Chronic Diseases Collaborating Group, 2011; Lepp, 2014; Sakamoto, 2012)



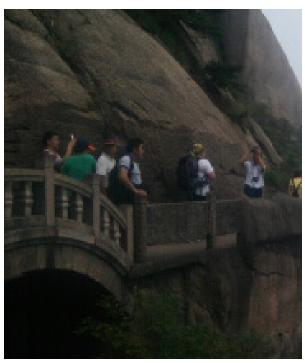


Figure 14. Picture from Huangshan Mountain, people walking in aline on the path.

# 2.5 URBAN PLANNING AND CITY LIFESTYLE IN CHINA

Fast urbanization has globally leaded to new ways of living. People have left countryside and moved into cities to pursuit better work opportunities, education, housing and transportation. This has some negative results like alienation, stress, health problems and increased daily life costs. Currently these problems are recognized in cities and urban planning as well as different organizations is focusing to improve the living conditions of urbanized people. Individualism in cities is more common than in countryside and can be considered some times even as a way of survival. People want to stand out from mass and extreme experiences can provide that (Wang, Chen, Chan, & Zheng, 2000).

## 2.5.1 Leisure time in China

Chinese leisure time has changed during past decades and people are ready to spend more time and money on it. Growing middle class has now bigger consuming power and more free time than ever before. This time and money is increasingly put into leisure time and recreational activities, such as sports (Salazar, & Zhang, 2013; Li, Lai, Harrill, Kline, & Wang, 2011; Li, Meng, Uysal, & Mihalik, 2013).

The time usage survey of the activities of Chinese individuals reveals three broad types where the time is used daily. These three types were maintenance activities, subsistence activities and leisure activities and the moderating factors gender, region, age, employment status, and income. These factors vary as well depending on from which of the five employment status categories the individual comes from. These categories in China are migrant workers, full-time students, retirees, the unemployed, and homemakers all following unique patterns. According to the time structure of the average Chinese person least time was still used for leisure. The most popular free time activities were listed to be religious, cultural and civic participation, social entertainment, sports, hobbies and mass media. Primarily people engaged into passive leisure time activities and freedom that was perceived as a distinguishing factor in western world was not considered intensely important (Zhang, 2012; Hui-fen, Zhen-shan, Dong-qian, & Yang, 2012; Walker, & Wang, 2008).

## 2.5.2 Recrational sports in China

In China to maintain the balance of the body and mind is considered important and so sports supporting these two elements have been popular. The holistic view of healthy lifestyle is based on the way of viewing life itself. Confucianism, Taoism and Buddhism have had significant role to shape the Chinese culture and even these days people follow those guidelines how to live. Most popular sports have been sword plays, cuju, football, martial arts and board games such as go and mahjong. Nowadays basketball, table tennis, badminton, snooker and swimming have become popular forms of sports as well. Traditionally these sports have been practiced outside in fields, parks or monasteries.

Foreign and local media has immensely influenced Chinese sentiments toward seashore leisure time, water sports and hotels. Amusement parlours, restaurants, and fashionable stores have been built to the seashore to satisfy growing population of visitors. For example Beidaihe beach in China mixes the rise of bathing and swimming as leisure sports with sensual fashion of beach culture and the hard military realities of the late 1920s era (Gao, 2012). The recreational sports marketing in China has not yet been widely analysed, but sports marketing has still huge potential not only economically but also culturally and lifestyle wise. The driving forces to purchase sport services are quality, style and price (Gen, Lockhart, Blakemore, & Andrus, 1996). In China foreign sports endorsement has generated two different reactions. The other was largely driven by the desire for global cosmopolitanism and status goods for the sake of mianzi (prestige face) and the other driven by a more nationalistic desire to invoke Chinese values that are seen as local in origin (Zhou, & Belk, 2004).



# 3 BACKGROUND

## 3.1 SURF AS A LEISURETIME SPORT

"The most accurate way to understand surfing is just to surf and experience itself.

Surfing isn t easily categorized.

It is based in sport, but can drift into art, vacation, and even religion."

- A Surfer

Surf is an unstandardized water sport, where surfers, the individuals riding the broad surfboards, catch waves at the right timing. Surf origins back to Hawaiian culture and have strong spiritualistic connections. Importance of the nature is often emphasized among the sport practitioners.

During past 40 years surfing has grown from minority past time sport, practiced in a handful of countries, to a professional sport. 2002 there were estimated to be 10 million surfers in the world and the industry worth approximately \$8 billion dollars (Corne, 2009; Dolnicar, & Fluker, 2003). Australia and America have a long history of the sport, estimated over two million Australians and two-and-a-half-million Americans surfs on regular bases. At the moment most crowded beaches are in developed countries, but due to the congestion, the growing industry is spreading also to developing countries, i.e. in African continent. Surfing provides economic, social and cultural importance globally and locally and the global worth of surf tourism economies cannot be understated anymore (Lazarow, & Nelson, 2007).

## 3.1.1 Surf culture

Surfing, for most of the practitioners, is not just a sport, but a complex form of living and the lifestyle around it can be defined in several different ways depending on the community, location and density of people cultivating the sport. This means that the surf culture is a broad topic with environmental, political and religious flavors. Surf culture is highly related to the nature, being in harmony with one self and the surrounding sea. Many surfers seek for the so-called stoke, sensation of surfing that keeps them practicing and going back to the water. Surfers are seen as relentless and devoted people to their sport. Especially earlier when it was a self-taught sport, where beginners observed the professionals and learned after them. It is characteristic, as to any other specific group, that surfers also carry their own language, words, music genres, beliefs, legends, iconic places and people and certain spirit (Wilson, & Hansen, 2014).



Figure 15. Artwave team building together a surf city out of containers.

With the increasing popularity of surfing, world surfing spots are getting intensively overcrowded and there is scarcity of surfable waves. This leads unfortunately to the dark side of the surf culture where locals are often set against the new comers. The friction comes up when new comers don't know how to obey the unwritten rules of the culture, for instance stealing the waves when they are not supposed to drop-in. Nevertheless this virtue is highly appreciated and the experienced surfers can help the beginners, if they show respect. With other words, there is a mild level of hierarchy in surf culture (Taylor, 2007). Artificial surf set ups can imitate these manners to create more authentic and better functioning service design.

Surfing is an extreme sport and risk taking is part of gaining the sensation in it. Surfers undertake this endeavor knowing the dangers of death or severe injury. Drowning, collisions with rocks and seabed, marine life and rip currents are the most common causes by injury or in worst cases even death. This is still considered as part of the thrill of the sport by extremists and hobbyists.

The adrenaline rush makes surfers to challenge themselves, to pursuit even bigger waves to reach stoke. This keeps the surfers from the beginner to pros paddle to water time after time.

## 3.1.2 Surf culture side effects

Now surfing is gaining increasing popularity globally and has turned into a multi-billion dollar industry, especially in clothing and fashion markets. Clothing is somewhat standardized in surfing and several non-surfers have adopted and mimicked the styles and ideologies. This is one reason to the significant growth of surf apparel business.

The increase of surf tourism inspires as well other businesses such as surf-schools, cafes, bars and restaurants. People who have adopted the style but not yet the sport buy the same products and hang around in culturally similar places. This raises the whole value of surfing to even higher level of economical importance and to a multi-million business that it already is. The hang-arounds and followers increase the amount of users in the additional surf services (Barbier & Sotomayor, 2013).

## 3.1.3 Surf tourism

The popularity of recreational surfing is increasing significantly and growing number of people try and starts to do surfing with varying regularity. New group of surf tourists has born and they travel domestically and globally to hunt the best spots to catch the waves at the best time of the year when the most suitable swells come. Well-known surf beaches are getting crowded and the number of participants only keeps increasing (Dolnicar, & Fluker, 2003).

The surf tourists are divided into five categories: price-conscious safety seekers, luxury surfers, price-conscious adventurers, and ambivalent and radical adventurers. The price-conscious safety seekers and the luxury surfers are the two most lucrative segments and should be considered as the key target group, if one aims to the highest possible profits in surf business (Dolnicar, & Fluker, 2003).



Figure 16. Surf tourists in Gold Coast California biking from beach to beach.

### 3 BACKGROUND

There is a thin line between serious leisure and serious leisure career and similar subcultural studies have been done in other sports as well with similar results. Serious leisure career follows the next shared experiential stages: the nurtured stage, the possible competitive stage, the serious leisure traveller stage, the responsible stage, and the legends stage. These people travel to best beaches around the year to practice and enjoy the surf representing the surf tourists according the development stage they are. These steps reflect as well the ideologies behind the surf culture (Beaumont, & Brown, 2014; Silva, & Ferreira, 2014).



Figure 17. Surfers climbing down cliffs to get into water.

# 3.2 RECREATIONAL SPORT AREAS IN CHINESE CITIES

Parks in China have long history and many of the famous parks go back in the time several dynasties. Parks have played important role in recreational life where for example taiji has been practiced. Parks provide both spiritual peace and nature to perform the sports. At the daytime senior citizens fill the parks by having day strolls and taking their grandchildren out. At the early morning small groups and individuals practice taiji and qigong that are considered morning sports. At the evening younger generation may be seen to running or exercising there. Many housing compounds even provide outdoor fitness devices.

In addition to the squares and parks it is common to use facilities meant for sports, like running tracks, tennis courts or basketball and football fields. At the streets mainly pensioners play board games and passer-byers can stop and take a look. Working age people rarely have time for this kind of activities. At the evenings elderly people dancing and playing in groups crowd the city squares.

### 3.2.1 Seashore activities

The seashore culture spread through media to Chinese customers during the 1920s and 1930s. Hotels, amusement parks, little stores and restaurants were built next to the waterlines and people started to visit iconic beaches, such as Beidaihe, that were now open for public during holidays. The rise of Chinese beach, bathing and swimming culture had started and new leisure sports got mixed with fashion and military realities of the era. Even many beach goers still don't know how to swim the growing interest is there.

Today beaches get overcrowded during holidays seasons due to the increasing popularity to enjoy the bathing culture and increasing will to experience and explore new things. Several recreational activities nowadays can provide excitement, thrill and joy to the visitors. The main activity still is sea bathing and swimming itself. Additional activities are accommodation facilities, restaurants, beach sports like volley ball, paragliding or drafting behind the towing boat and sunbathing, though not tanning (Gao, 2012).



Figure 18.Chinese people crowding the beach (picture from Wechat Beach Promotion, 2015)

### 3.2.2 Chinese seashore culture

The beach culture, in the beginning, was mainly reserved for the elite and even after several summer vacation areas opened for public they remained as higher-class recreation spots. It is also worth of noting that especially for Chinese girls avoiding to get tanned and protect the skin from sunlight is important, even today. It is common to see parasols and big hats used, but from the western point of view even more interesting phenomenon are the whole body swimsuits. The strong will to avoid direct sunlight characterizes the Chinese beach culture, but has not slowed it down.

Growing number of population is getting wealthier and middle class people have more time and money in their hands. Still the biggest part of the time in life has been used for studying and working and a lot of experiences are left never experienced. This new novelty seeking generation wants to see the world and try things their parent did not have opportunity to do. Globalization brings new winds also to the recreational beach culture and the proof of the popularity is obvious. In Hainan Island, there is already for example small community of surfers who instead of fancy hotels stay next to the seashore in tents to live the surf lifestyle and catch the best waves.



Figure 19. Chinese swimmers avoiding getting tanned (picture DailyMail, 20.08.2015)

# 3.2.3 Seashore implications

Beach lifestyle is obviously a growing stream in China. Water sports provide good opportunity to take care of health and psychological wellbeing and more practitioners join every year. Cities provide recreational areas, such as parks, city squares, malls and sport fields for people to meet up and do sports. Still there are people who haven t yet found their way to enjoy the training and are looking for new novel ideas to get excitement into their lives.

Artificial surfing opportunities could provide healthy and exiting way to stay fit, meet people and belong to somewhere. Surf has not yet made a breakthrough in China and it may or may not, be majority sport in future. Guaranteed is that similar board sports such as skateboarding and snow boarding have gained a certain place already in the extreme sport lovers hearts. Artificial surfing could bring urbanized people closer to the nature and provide fresh experiences with the surf stoke, thrill of succeeding to stand first time on the board or catch the wave after long training. Chinese people like to combine spirituality and physicality in their lives and surf is combination of this two. Environmental issues, such as water quality, are still a big problem in China and to en-

sure the good experience the surrounding nature should be clean. Growing awareness of surf as a sport might help to race attention to these issues and slowly show the value of maintaining the natural water resources.

## 3.3 ENVIRONMENTAL ISSUES

In China environmental issues are tense and well notified by global media. Energy efficiency, increasing population, pollution accelerating climate change, deforestation, desertification, coastal reclamation and water quality are the main issues to pay attention. The rapid industrialization, population growth and lax tracking of set environmental requirements has lead to the fact that 16 out of the 20 most polluted cities in the world are in China (The Guardian, 2005). NGOs and government have tried to dig into the problem, but mostly the efforts have been inadequate and this has raised criticism also from the side of the citizens coping with the consequences. Local governments are



Figure 20. Polluted sky over the beachline near Shanghai, 2014.



Figure 21. Alga growing in polluted water.

more economic than environment focused and the long-term effects are not considered. The environmental education is lacking from schools and so cannot grow to the industry level. This thesis work will pay attention to the general water quality in costal areas due to the importance of those areas for the recreational surfing.

Water quality has become important conversation topic after several revealed scandals related to it have come to daylight. China has severe water quantity shortage and severe water pollution problem. As well as in the general level, also on water quality level, the increasing population and quick economic growth have increased the water demand and thus pollution too. According to the Chinese Government 59.6% of ground water sites were poor quality in 2014. In marine areas polluted water from rivers fall into the sea and compounds with other polluting factors, such as heavy industry, agriculture, aquaculture, landfills and big cities at the coastal area. Yellow Sea and South China Sea are considered to be the most damaged marine areas in the world. 65% of tidal wetlands around Yellow Sea coastline have been destroyed in the past 50 years (The Guardian, 2005).

### 3 BACKGROUND

# 3.3.1 Implications

Polluted water doesn't attract surfers or any beach activity and so some other temporary solutions should be made. Artificial surf development could raise the awareness of healthy living and connection to the nature. In China the manifest could be to bring the machinery first into pools near the water lands to raise environmental awareness and then finally transform the service to the natural waters. Bringing the people to the seaside and making them to understand the economical and psychical value of the area is the only way to raise the awareness of coastal environment.



## 4.1 METHODOLOGY

In this thesis work three different methods were used to achieve the best possible results: semi-structured expert and service provider interviews, observation based on own experiences in benchmarking, observation during three years living in China and service path prototyping with potential user feedbacks. The first two methods, interviews and observation, provided the information to conduct the last method, prototyping that was fundamental base for the final concept, suggestion to meet the needs of the service provider and manufacturer.

Qualitative research methods were chosen since those allow significantly better to catch the rich insights of company founders and leaders. The insights could be obtained directly from born global firms and service providers. Empirical qualitative data was gathered through personal experiences and future user feedbacks that cannot be measured with certain set of questions.

# 4.1.1 Expert interviews

The three expert interviews were performed with high-class professionals from three different born global companies, Design<sub>2</sub>Gather, DTS8 Coffee Co. and Ming Labs, doing cross continental business and currently based in Shanghai. All of these companies had deep understanding of the design methods and businesses and they had been actively in business for the last 3 years. The companies were independent, SMEs with global vision. They combined design strongly in their actions and kept it as one of the key directors. The global vision included cross continental actions in Europe, North America and Asia, where mainly in Germany, Netherlands, Canada and China. The indi-

viduals interviewed had all key positions in the company as founder, CEO or executive manager. Four founders and one executive manager were interviewed as BG experts for the research.

The interviews followed semi-structured interview pattern where interviewer and the interviewee have more flexibility to free conversation outside of the planned questions. The purpose of the questions was to lead and keep the conversation on right tracks and provoke the important topics in the conversation. The freedom to derogate from the questions again gave the opportunity to gain information that were not considered to be focal points but showed to be relevant for the topic.

To secure the quality of the interviews all the interviews were recorded, with the permission of the interviewee, to enable the interviewer to go back to the data to ensure certain facts later in the process, also manual notes were taken and further clarifications asked through e-mail if needed. The questions asked were first reviewed by two academic professionals with high level of experience in conducting interviews. The two professionals were also selected so that one of them came from China and another one from Finland. This ensured the fact that no false cultural interpretations could slip in and that both Finnish and Chinese academic norms were followed in qualitative interviews. After these steps the questions were modified and the interviews accomplished with the three companies in the field of BGs. Each of the interviews lasted from 1 to 2 hours and was transcribed afterwards (Bjørnholt, & Farstad, 2012).

# 4.1.2 Service provider interviews

The service providers were as well interviewed with semi-structured interview model, the same method as the expert interviews. Six Shanghai based sport service providers were selected and five of the six interviews were carried out at the location of the provided service to support the information flow during the interview and to give better understanding for the interviewer of the place and service provided. One of the interviews were conducted through Skype with the US located founder and CEO, but the sport service location were visited before to ensure understanding to the topic.

The criteria for the service provider interviews to extract and gain the best and most congruous information to develop further the final service proposal were formed in following way.

- A. The service provider should operate a sport related service in China
- B. The service provider should have unique components in their strategy or services
- C. The service provider should have more than 3 years experience on the field
- D. The interviewed service provider should have key position, in terms of the service, in the company in order to be able to provide holistic understanding of the company's policies, strategies, products and future development.
- E. The interviewee must represent a company that could represent Artwave's future customers or like-minded sport service.

Six sport service providers were interviewed that filled the set of requirements. The providers were from rock climbing (RockDacing Climbing Center), University sports (Tongji University), ashtanga yoga (Red Door Yoga), skateboarding (Iconx), Mountain biking (Bohdi Adventures) and gym (Tera Wellness). All the interviews were recorded, notes were taken and clarifications asked through e-mail if needed. The same two academic professionals from China and Finland, who reviewed the expert interview questionnaires, verified also the service professional interviews. After the comments and modifications from these professionals, the interviews were conducted with the six China based service providers.

# 4.1.3 Observation and personal experiences

The observations were conducted in two ways in BGs and service providers business locations and during the every day life in two Chinese cities, Shanghai and Beijing, during fair three years. In observation all the senses were used to feel the atmosphere, sounds, colors, odors and feelings. Talking to people gathered some valuable extra information for this work and gave some perspective of the life in two completely different cultures, Western and Asian.

When visiting the service locations, places were documented with video clips and pictures that captured the main points of the services and companies working methods. This material was later filed according the date and location to be used later and to recall the experience. The six interviewed services were also tested to have proficient information. In general nothing is better way to gain understanding than doing it in real life (Kosso, 2011).



Figure 22. Bike trip to Jinhua (picture, Bohi Adventures, 2014)

## 4.1.4 Prototyping the service path

The service path prototyping followed the service prototyping methods. Key stake-holders were identified, their roles clarified and the initial touch points defined, meaning the points when the members involved into the service have some kind of direct or indirect communication with each other. From this, a service blue print was created showing the map of the communication links between the different individuals and companies, from manufacturer to service provider until the end user. Different service scenarios were made and the possible bottlenecks and opportunities identified. The requirements for the service were defined in order to create logical structure. Finally the initial service path was designed that shows the journey of a customer. This service path was compared to the service path created for the Finnish customer service path to identify the observation points requiring special attention in China.

Brainstorming techniques were used to tempt out the best ideas. After ideation all the suitable ideas and points were ranked and the best ones took forward. This path was prototyped using post-it notes in order to illustrate all the components and make it understandable, editable and visible for the creator. When seeing the components in visual form eases the understanding significantly and improves the quality of the final result. It also makes it considerably easier to communicate the concept forward over cultural and language borders to the customers and researchers in order to receive feedback (Blomkvist, 2014).

# 4.1.5 Service path feedback session

Service path feedback session was held with the six interviewed service providers after conducting the interviews. In the beginning of the session participants were introduced to the idea of the artificial surf innovation start-up, Artwave, and they got to view videos and Artwave in nutshell flyer to support visually the understanding. After ensuring that the participants understood the context, first prototype of the service path made out of post-it notes was given for them to review. Each participant was guided through the structure of the path and allowed to ask freely questions. Finally participants provided



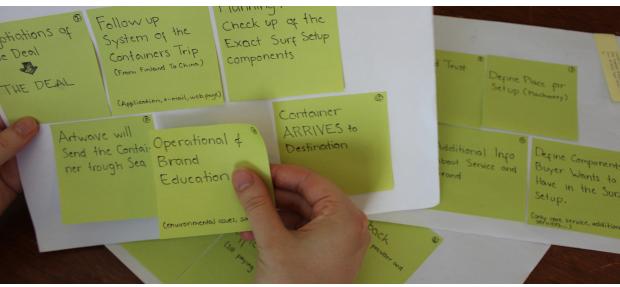


Figure 23. and Figure 24. Prototyping the service path:
Above, ideation session
Below, arranging best ideas in chronological order.

their own opinions on the planned service and re-arranged and prototyped the path according their suggestions. Tools used were different markers, papers, post-its and stickers. The selected location, outdoors cafeteria in Campus Park ensured peaceful and ventilated atmosphere to work.

## 4.1.6 Limitations of the Methods

Language, culture and resources brought challenges to the work when interviewing and arranging the design sessions with the interviewees, but initial language skills and cultural knowledge eased the communication and flow to run the meetings enough. Culturally Chinese people may be less straightforward in their feedback and comments and this challenges the interviewer to use all the senses to observe the rightful information. Interviewees were in every session encouraged to speak freely and their identity secured from i.e. photos according personal preferences. This kind of methods created less stressful and more open conversation.

The work is qualitative by nature and so cannot present accurately entire sample of future users and sport fields. However the sample size and selected fields and individuals should be enough to cover the needed information to construct future service path and map out the possible opportunities. The interview results are based on opinions of the interviewed individuals and on the selected sample. All the interviews were planned before hand and interviewees selected through certain criteria and so they should reflect sufficiently enough the required standards.

# 4.2 RESULTS AND ANALYSIS

## 4.2.1 Expert interviews

"China is full of opportunities; there is no two days similar."

- Expert interviewee

In this section the results and analysis of the expert interviews are presented based on the three BG companies management level interviews conducted in their natural work environment located in China, Shanghai.

## 4.2.1.1 Results of the expert interviews

The selected companies revealed several useful elements for the research. The key findings were related to BG thinking, role of design, cultural differences and customer behavior (Figure 26, on page 66). The company culture was highly similar to entrepreneurial and BG ideology as presented in the literature review. Companies did global, cross-continental and international business in more than two countries. At least one of their head quarters was located in Shanghai, China, where main functions of the company operations took place. Also the work force was in the BG firms largely multinational and multidisciplinary. They had adopted the global thinking methodology from the beginning and set the business from the very preliminary stage to aim to the global markets. This could be seen for example in the placement of offices in several different countries and hiring people not only from the local and origin country, but everywhere in the world to be able to meet the challenges of globalization better. This makes the selected companies truly international and globalized.

"We started the business same time in Canada and in China and we have had two equally powerful main headquarters since then."

The large variety of workers nationality and background ensured the wide range of idea generation and innovation. When employees came from multiple backgrounds everybody could bring their own cultural and professional knowledge to the table and it would be shared and mixed with other assumptions and knowledge. This method and openness echoed from the practiced design thinking and ensured that everybody stayed more or less updated and minimized the risks of misinterpretation. The interviewed CEOs reflected the ideology of the whole company and had consistent experience on working and living in multiple countries including China and at least one of the western countries. This valuable experience with the adopted design thinking had helped them to receive the cultural differences in working methodologies, to recognize the occurring situations and handle them with the best possible manner. One of the interviewees stated:

"Different combinations of herbs will create new flavors. This means when we have multiple talents and cultures combined we can achieve new innovations."

Flat hierarchy enabled everybody to communicate with everyone needed and the smaller company size made it as well easier to know the co-workers around. Also the transparency in projects was highly supported and weekly meetings held to keep everybody updated. Regular working hours existed but were often flexible and turned into the shape preferred by the worker.

The differences of Eastern and Western culture were well acknowledged in both companies and rather turned into an opportunity than a problem that should be solved. In China the challenges to keep the customer happy were different compared to Western clients. In China the customer, especially in business-to-business context, wanted to see tangible proofs of the concept in function and ensure how fast the invested money could be returned through revenue streams, after that came the interest to expand revenue. Chinese customers were also more skeptical contracted to the western counterparts. On the other hand one of the interviewees stated:

"After the hard process of convincing the client there is a bigger chance to surprise them positively, when with western clients this happens more rarely.

The difference might be that the companies worked design as their key asset and to employ high-class design as rivalry and innovation benefiter is already better adopted in European companies. This provides opportunity to surprise skeptical clients whit quality design.



Figure 25. Map pinned on the wall shows the connections Design2Gather has.

The difference might be that the companies worked design as their key asset and to employ high-class design as rivalry and innovation benefiter is already better adopted in European companies. This provides opportunity to surprise skeptical clients with quality design.

All the interviewed companies considered design as their main advantage and differentiator. They whether tried to involve more young designers to learn in real life projects or used design methodology to re-model business plans and strategies. User experience (UX) and user interface (UI) design was strongly used and these relatively newer forms of design in China were obviously needed to support business and engineering. These same strategies are reflected also in Artwave. Designers have integrated into the other fields to create together with different disciplines something unprecedented.

#### **KEY FINDINGS OF THE EXPERT INTERVIEWS:**

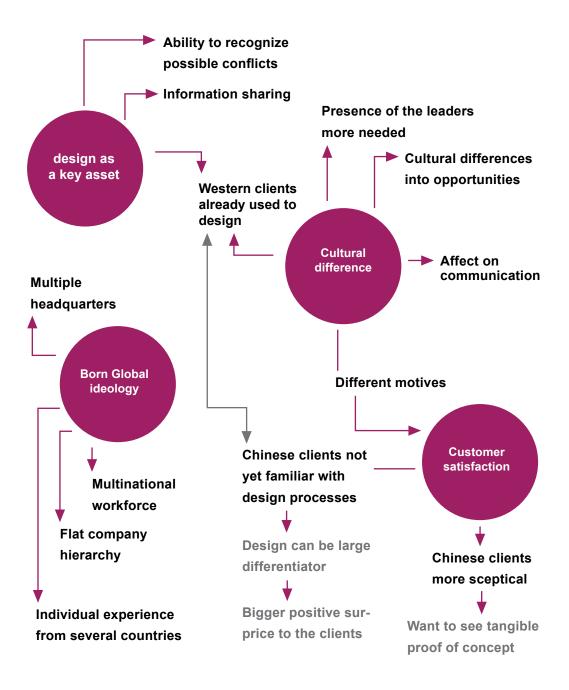


Figure 26. Key findings of the expert interviews and the relations of the findings.

# 4.2.1.2 Conclusions and analysis of the expert Interviews

"China is the best environment now to create a company"

– Expert interviewee

The expert interviews provided a lot of valuable information that could not have been extracted anywhere else. The biggest insights consider the globalization process and how to function in a foreign country. These startups carried clearly entrepreneurial features and design methodologies that had guided their success and accelerated it as in the BG literature discussed. Differences in business and lifestyle affected the firm operations and this opened the data about how to manage customers and employees. Company culture played big role and last but not least the importance of design came up several times and the benefits were discussed further.

"Every country has its own working methods. In China we need more physical presence, giving advices, its more time consuming. On the other hand working here can be more fun."

#### Design empowering globalization process

According the expert interviews following conclusions can be drawn. SMEs expanding their territories to new countries should employ design to help the globalization process. Through design methodologies companies can better avoid cultural conflicts and familiarizing themselves to local industry using user-centered approach.

Outside of the box thinking was said to be the key to the innovative thinking. Companies should have multidisciplinary and cultural combinations to accelerate this process by different individuals challenging each other and showing different opinions. This can lead to unique combinations of information and innovation. Also the flexibility in work tasks and hours seemed to help the information exchange and mix the work and pleasure. The individuals must enjoy their time at the office so that they are willing to spend

time together, share information and create something new. One of the companies told that they follow the play hard, work hard —methodology to both get the best results out and to appreciate the effort.

"We arrange every Friday drink and story session, where every time one of us will tell a funny or interesting story, this brings us together and sometimes it turns into idea generation session."

Designers can help to identify the essential problems and suggest the solutions in understandable way to the customer. Design is not some feature to add into the project but the leading force to guide the project through the challenges and opportunities, identifying and communicating those most efficiently. This way companies will have individuals to step outside of the comfort zones and view things from the new angle; this enables also others to venture the innovation processes. It would be good in growing BG firms to combine designers, as well as other employees, with different backgrounds and nationalities to make them to mix their ideas and get inspired.

"We are bringing designers from all over the world together. These designer carry different experiences and so can provide new solutions together."

#### **Born Global features**

Management and founder level people in the interviewed companies had cross continental experience that had helped them to adapt the business into the location countries. To employ skilled and culturally experienced managers helps to understand the customers and employees and through that create better working atmosphere, improve the satisfaction and enhance the outcome of the the work. To manage the cultural differences minimized the risks of conflict and ensures the better concentration on the main goals of the firms.

Company culture affects how the brand is perceived and how it achieves global success. Visualized transparent and flat methods can make communication significantly easier. It is key to the information sharing when working in multinational and cultural atmosphere. It helps if most of the company employees are familiar and used to the in-

ternational atmosphere and challenges, but the newcomers, especially in China, should be properly educated to understand the preferred work style. Most efficient is to have a tutoring person from the firm for guidance and learn by doing.

"When we have a new member in our group we let him to taste the different coffees to know the difference."

#### **Cultural differences to benefits**

Customer satisfaction and motives in China often spring from different sources compared to western countries. Living in Shanghai helps to understand life, needs and demands. If the company operates in one culture with more or less homogenous employees it is likely to encounter less problems, misinterpretations and culture crashes. The working environment will carry higher level of similarity in mindsets and similar thinking, problem solving will be easier and less communication is needed to explain the basics. In China the companies should use more workshops and time physically with the co-workers to overcome the cultural differences and educate the new workers to accept the more westernized company culture. The exact differences are sometimes difficult to track since China is the country of contradictions, skyscrapers and farmers, flexibility and stiffness, humble behavior and show offs. People are eagerly looking for new innovations and in particular European and American products are considered high quality.

#### **Customer satisfaction and motives**

The fourth key conclusion from the expert interviews was differences between customers, customer behavior and how to deal those situations. Mainly the Chinese customers in business-to-business cases seemed to be more skeptical. This means that companies should show tangible real life examples and prototypes to convince the customer for the first time to listen the further plans. For example, in networking websites were good support, but the actual connection had to happen in human-to-human context. After seeing the examples customers trusted the company better and the next steps could be taken. In this process to physically present business plans, processes and concepts designer can play the key role, to communicate the ideas between two parties. The steps, especially in China, should not be too big in order to give customers the required time to digest the information and not to make them feel rushed.

"About 70% of the communication in China, according to the interviews, goes to building relationship with the customer and 30% for making business. In Western countries this seems to be opposite."

Also in the west the concepts are sold more through stories and feelings, what the provider and end customers could have through this product, when in comparison Chinese customers let the raw numbers to speak. From this the conclusion of the need of customization can be done. Products that are designed for European market should be tested and modified for the Asian market. For example one of the interviewees described:

"When developing a sports app, westerners wanted to compete in the application and gain best profits. In China it was more important for the customers to be regarded as part of the team, one of the application users."

This kind of features must be observed and used as a positive resource in the business. If one customer segment prefers some other motives, the concept should be presented to them through that reasoning.

"Chinese users adopted the app only after we changed some feature such as grading system to favor group activity. After this both user groups were equally active, they just needed different reasoning and some adjustments."

In general China seemed now to be a good place to be present, create business, learn to know the local users and pursuit after new markets, since a lot of the manufacturing and valuable relationships to those are in China and achievable only through being physically present. In China the relationships are friendships and trust based even in business and must be built with time and patience rather than the straight forward as firm business relationships practiced in West. In China there is a vast range of opportunities due to the constant change the whole country and especially the main tier cities are going through.

One important notion from this to take is that the main tier cities, that grow fastest, especially Shanghai, are not the same as the rest of the China and if products are launched and accepted in Shanghai it does not necessarily mean that the rest of the country would yet be ready to adopt them. As one of the interviewees described:

"China is changing constantly. If you are in China you must get used to the constant change and same time the change is only sure thing that is not changing here."

# 4.2.2 Service provider interviews

"Rock climbing is an emotional extreme sport. Most customers come to the rock climbing center to experience the charm of it. As a matter of fact, climbing is a way of life that keeps you healthy."

— Service provider interviewee

In this section the results and analysis of the service provider interviews are presented based on the six service provider interviews made with different sport service providers located in China, Shanghai. The interviewed service providers were all working on the sport service fields such as rock climbing, yoga, skateboarding, mountain biking and swimming. All the interviewed providers had several years experience, shared the common interest towards sports and the will to practice the particular sport on their free time. These service providers can also be considered as lead users at the time they started to practice the specific sport. They could be also future clients and lead users of the artificial surf setup.

# 4.2.2.1 Results of the service service provider interviews

Common for the companies were that the sports selected to the interviews were emerging sports in China about 10 years ago and still are more or less establishing stabilized place on the market. Results are illustrated in figure 27, page 75. Now the popularity of these exercise and leisure time activities is growing steadily. For example one interviewee told:

"2005 here in Shanghai was two rock-climbing centers, but today the number is already 11. More and more people come here."

"Rock climbing is still developing in China. We can learn from the European countries good business philosophy and rock climbing technology to improve ours."

This goes with the other sports as well and another special feature is that these sports are still considered relatively new. All the service providers described their customers to be mostly young Chinese people from 16 to 40. In the past decade the amount of foreigners has increased as well even to 50-50 numbers, excluding the gym that described oppositely. The amount of Chinese people using the gym had increased to nearly same level as the foreign users.

Innovation and creativity seemed to come up in the interviews and it is said that the Chinese government is putting effort to grow these skills in future. This reflects also to the sports that are one channel to incorporate these skills. In some of the sports coaches directly aimed to develop the students to take more initiative and explore, especially with young practitioners. For instance downhill biking and climbing practitioners had to be imaginative to find new passable paths while concentrating on the techniques. Some of the sports also combined intelligently features from different sports. For example skateboarding has borrowed a lot from gymnastics in past, to teach everything motion after motion. As mentioned in the interview:

"In gymnastics the first lesson is to taught the right position of standing, then how to take steps, walking and finally the jumps. Everything happens gradually. Some happens with skate boarding. First you learn to stand on the board, then kick and finally to do some tricks."

The teaching curve in skateboarding emphasizes self-learning methods. This makes the sport very flexible and teaches young people independent, proactive thinking. This is very common to see when Western children and youngsters are playing around, but until now it has lacked from the Chinese education and childhood opportunities. This may be one reason why these sports have gained so fast vast popularity in Western countries but not yet in China. Also the fact that most of these sports immigrate to China over the borders has its own effect to popularity. For example, China has traditionally based its sports education to master-student relationship, but these sports provide opportunity to independent learning.

Every service provider had different kind of packages to offer for the customers. Both group and individual classes were possible to take and the service could be slightly customized. Gym had opportunities for swimming, individual training, coaches, and group classes such as zumba, spinning, dancing and yoga. Skateboarding company had a newly built indoor skateboard park where they had open skateboarding sessions for children and adults and additional events such as demos, school visits and birthday parties. The school sports happened mainly inside campus and offered students an opportunity to explore yoga, exercises to improve the yoga skills and listen lectures about sport anatomic. The Ashtanga yoga provided most hard-core yoga lessons for beginners and professionals. Mountain biking took place out side of the city on hills and arranged mainly trips for all the ages. Climbing center had both outdoor and indoor walls to climb and to bolder. Besides the core service of coached wall climbing, they also offered weekend trips to actual nature sites to explore the cliffs outside of Shanghai. To the activities centers provided different kind of memberships and single tickets. Common for these services were the coaches, who seemed to be the key value of the customers side. Gym services seemed to be still high priced compared to local standards. Though this was not an issue for the other interviewed sport services. One of the service providers described it flowingly:

#### **4 DESIGN DEVELOPMENT**

"Few want membership cards to gym in China, so it is expensive to buy it. In western countries it is much cheaper since there is more users. Despite this we still have people coming."

Interviews revealed that the health and environmental issues are a big topic in China and this may have effected also to the participation of indoor sports.

"We can not go out when it is very polluted. It is better to have indoor places to do sports."

Health has risen to be one concern when most of the citizens work in the offices with minimum amount of exercise. According to the interviews customers started to do sports because they wanted to improve their health, meet other people, look good, be part of some community and have some excitement in their lives. The information to join these activities was spread through social media, specialized genres websites and mouth-to-mouth information. One interviewee described the differences of the Chinese customers:

"People come here to meet each other, sometimes that is for them even more important than the sport itself. I have seen westerners to socialize much less here."

"They take pictures of them selves in the yoga positions and post the pictures to Wiebo and Weixin (Chinese social media). This don't really follow the ideology, but we have meny of these clients."

Safety was highly considered in all of the four sport services and ensured with high quality and well tested gear from abroad and China. Some of the providers imported their products directly from abroad and the manufacturers contacted some of them and they made the decision according the results of comparison. Also in safety issues the role of the coach played important role. They ensured every time that all the equipment was in good condition and that the possible protections were worn correctly.

#### **KEY FINDINGS OF THE SERVICE PROVIDER INTERVIEWS:**

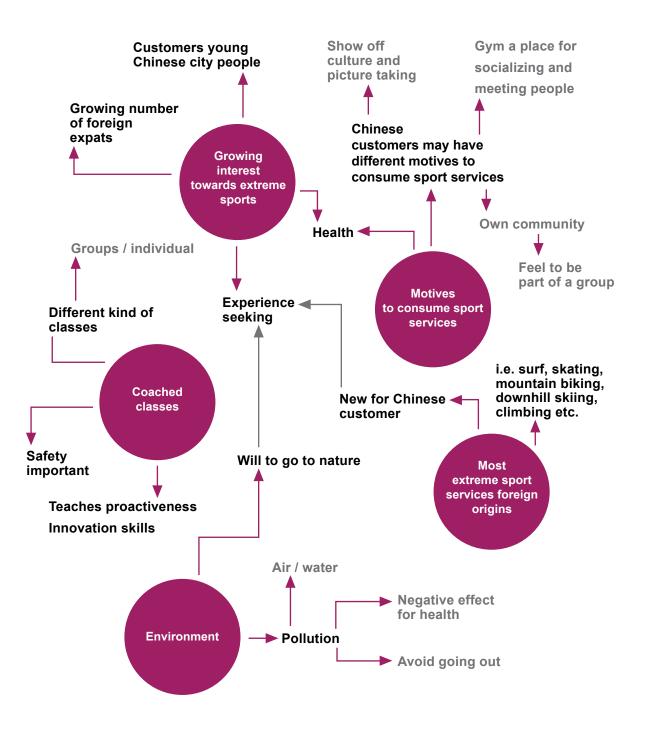


Figure 27. Key findings of the service provider interviews and the relations of the findings.

# 4.2.2.2 Conclusions and analysis of the Service provider interviews

"I love yoga, my whole family does it every day, even the kids."

- Service provider interviewee

After the raise in the standard of living people are now seeking for adventure and excitement. Something seems to be missing from the lives and this gap can be filled with extreme sports. Sports can provide health, socialization, community and good stories to tell the others. Also the numbers show that the popularity of extreme sports has grown and it is gaining acceptance from the masses. Especially in China lead users can play an important role to gain the attention of the crowds i.e. in media. Sports are becoming a new trendy way of living and the ones who can find the most special sport are the coolest individuals gaining admiration from other individuals.

The reasoning to go to gym for instance differs from the people going to gym in western countries. For example social values come up clearly compared to the western more individualistic culture, even Chinese city life is now more individualistic than ever before. This could be considered in the design processes as well. For example one of the service providers reasons customers choice of their place like this.

"People choose this place out of other competitors due to the fact that our owner is a famous former singer in China."

The celebrity endorsement is one way for the service to gain more customers due to the fact that customers still trust to higher authority. The sports venue can also be designed to be a place for socializing, to show off to others and to belong somewhere, naturally the health is considered as well and it is equally essential to doing sports as to show to others the healthy lifestyle. In Chinese culture mind and body should function together and people carry this ideology despite the city lifestyle.

"Everyone needs sports to stay healthy and more people are going to realize this even they live busy life here in Shanghai." "People don't necessarily enjoy the tough beginning of starting sports, the pain in muscles and being the last one, but the sensation comes when learning happens and the person can overcome own limits and get out as a personal winner. Extreme sports are all about this also."

"You must climb high enough to know what is climbing. There up you will win yourself and get the sensational feeling."

For the students purely studying and working their whole lives is not any more enough and they are seeking for new ways to spend time. This provides new customer segment for service providers, who often work based on their own passion and will to introduce the sport to new people. When expanding to this kind of segments life style fans can appear, that leads usually to more business. In surf and skateboarding this is globally noticeable. These life style fans are important messengers, especially when the marketing is based to mouth-to-mouth word and social media.

China has been unfortunately infamous of copying, but the times are changing. As the interviews showed The Chinese government has now developed a program to increase the creativity and sports that inspire children to spontaneous thinking. These activities can teach kids real life lessons that cannot be thought anywhere else. The goal is to rise a new independent innovative generation of Chinese adults. Skateboarding is definitely one of these sports, but some other suitable sports should also realize the opportunity. For example artificial surfing could expand to multiple cities and pick the most talented kids to training programs and towards international fame. Suitably, China has also been always good in individual sports despite the strong sense of community.

# "People learn through bitter experiences. In sports we must fall to learn."

The upcoming trends on the field seemed to be concentrating on children and their parents, in particular the mothers who seem to make the important educational decisions in the family. Children are tightly fostered and sometimes overly pampered from dangers but simultaneously a lot of pressure and activities are loaded on their shoulders. Some of the key reasons for mothers to bring their children to the sport activities were to educate them independence, healthy life styles and through international coaches predispose them to English language. It seems that the parents as well carry high peer





Figure 28. and Figure 29. Pictures from RockDancing rock climbing club in Shanghai.

Above: Cimbing center coach checks the ropes.

Below: Father brings his son to wall climbing lesson.

pressure to sign their kids to as many activities as possible and show it to other parents to make sure that they have provided their child as good premises as possible to face the future life. In a bit older generation girls seemed to be the weakest in general condition.

The cultural background might as well affect this, where girls are not traditionally to do hard sports. As a sport provider it is smart to give attention to children and parents.

"Some of the parents bring their kids here to learn English. Our coaches are the soul of our service and we choose them carefully."

# 4.2.3 Analysis of the feedback session

The feedback session showed significant help and a lot of eye opening information. Local social media, targeted meeting websites, Artwave's own websites in local language, demonstrations and mouth-to-mouth information seem the most sufficient channels to advertise new ideas. Also the connections of local sport providers and their networks should be harnessed to be one communication and advertisement channel. To build the trust, take them out and give plenty of information and show tangible prototype in action should be done. The leaders and managers who make actual decisions should be treated and some special events arranged to keep them favorable towards the new business. It was also mentioned that closing the deal might take more time in China and could not be limited to be just one post-it or dot on the map. Same way the importance of the relationships was underlined. Even the business networks can be considered family like ties and one cannot just shut it down after the business part is done. If taken care well, this can provide fruitful future relationship both in personal life and in business. One participant stated:

"If you (Artwave) don't take care of your reputation and relationships, it may be difficult or impossible to create successful business. You must have many connections and nurture those."

When hiring work force people should be selected carefully and right attitudes appreciated highly since they might be difficult to find in China. There should be team-building events and workers should receive proper attention. This is because the boss in China is sometimes seen more as a fatherly figure that takes care of his descendants. This can bee seen in the following comment:

# "Workers are more trustworthy if they receive attention and security from the boss."

As a sport, surf can provide a lot: spirituality, physical health, community, excitement and endless opportunities to develop variety of skills. The location of the machine should be strategically in center where passer-by can see it and young people can find it, followed by all the age groups. Kids and their parents should be considered as one of the key customer segment when planning the packages and additional services. The only problem still is the water quality and could be solved with the pools, still the main goal would be to raise awareness, get seashores cleaned some day and be able to surf in natural waters, even in the middle of Shanghai in Huangpu River.



Figure 30. Feedback session, one of the service providers drawing a scenario picture.

Surfing in China was seen comparable to other extreme sports such as rock climbing and skateboarding. Still it has not yet reached big popularity among local Chinese people. The feedback session showed interest towards the new sport and possibility to fill the gaps people are seeking to fill in city life. Still several questions rose to surface. The water quality is clear issue and cannot be ignored when planning a water sport. The service should either happen in a pool or very clear waters. Also as in other sports new

customers wanted to see the place and environment where the exercises are going to happen and so also the surf set up in future should look appealing and clean. Other valuable point that came up was the swimming sufficiency. Not as many people in China can swim as in Western countries, but this number is clearly increasing and can be seen for example in the amount of gym members using the pool. Still it is good to note that extreme sports such as wall climbing and skateboarding do not require additional skills to start the sport.

# 4.2.4 Analysis of the observation

When doing design or business in China as a foreigner it is immensely important to know the local culture. People familiar with the both case cultures, in this case European and Chinese, are crucial help when interpreting situations and deals. The Chinese culture cannot be evaluated with the same basis as Finnish culture for example and two seemingly same things in opposite cultures can mean totally different things. For example the point when a Finnish person thinks that the deal is closed is only a starting point to the Chinese counter part. Also the Chinese people tend to react differently to emotional situations and the true emotions may not be showed to the other parties. This makes it highly difficult to read the situation, if the person lacks cultural experience.

There is a big cultural gap between cities and countryside in China and even the cities differ from one and another. For example, person who has lived in Shanghai may not know the actual state of the Chinese culture but may be professional about the life in an international metropolis. When the business partners come from different regions it is recommended to have a bit broader viewpoint. Also if the company aims to the whole China market it may not be enough to test the product just in one or two of the main cities. In China the amount of opportunities is endless, but to manage to take advantage of one requires experience, vision and good connections.

When visiting the service providers sport venues, everybody was very welcoming and the facts shared in the interviews truly hold the truth. The service culture is said to be common in China, but it might still be difficult to find good service. Skillfully planned and designed services are already absolute value itself and positive appearance can make customers come again.

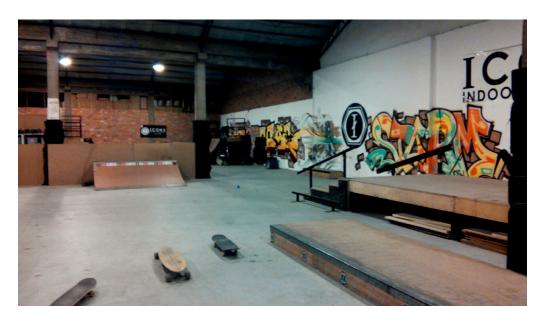


Figure 31. Iconx indoor skatepark.



Figure 32. First ever adult skating lesson in Shanghai.



# 5 GENERATING THE CONCEPT

The interviews and feedback gave insight to design a service for Chinese customer with Western-Asian background and enlightened what challenges and opportunities the entry have brought to the service providers and global companies. In addition to the interviews and collected feedback, research included also benchmarking at the sport service venues, Internet search, personal experiences gained in China, literature review, pre-research done in Finland and the practical experience of building the surf machine set up in Finland. Building the following concept challenges, concept drivers and final concept is fundamentally based on the information sourced from these methods.

The service concept creation process was created according the double diamond design process created by McNabola (2007) and UK Design Council. In the end general viewpoints and suggestions to enter China market with artificial surf machinery were provided to Artwave and possible other sport experience manufacturers from Europe.

#### 5.1 DESIGN DRIVERS

One of the key design drivers was to create a service that looks trustworthy and appealing to Chinese service providers and investors. The other one was to through this example case to demonstrate the values of design in entrepreneurial globalization process. To visualize the service path can ease the communication with the potential future customers and make it easier and faster to understand where the core elements are. On the contrary, if the concept is challenging to understand, it is immerse difficult to get the other party interested and close the deal. This is why this work aims to bring concrete concepts into negotiation processes and embody the virtues of design.

# 5.1.1 Double diamond design process

The process to carve out the final service path concept followed the double diamond design process model developed by UK Design Council and McNabola (2007). The process is presented in Fig. 33. In the *discover* phase the whole surf and sport culture was researched and also initial research done about different opportunities and cultural differences. This phase opened all the possible doors and diverged to take in the relevant information without restrictions. Testing, benchmarking, exploring, literature review, observations and living in china experiences were brought together into a big pool of information.

In the next definition phase interview companies were selected and preliminary questions were formed. After finalizing the interview questions expert and service provider interviews were conducted and analyzed. Also more specific benchmarking was done at the sport provider's service locations. The research question and scope of the work got focused and defined string the work to its percent direction. This phase narrowed down the case and gave direction to the future concept. In the developing phase the initial concept was created using brainstorming and concept creation methods. The useful information was extracted from the data collected from the interviews according the scope of the research and used to improve the service model. Also a feedback session of the service model was held to get opinions of the work from possible future customers. The concept drivers and challenges were defined and finalized, information evaluated and analyzed and concept improvements done. This phase diverged the process a bit in order to find the best possible solutions for the final concept. In the final deliver phase the ultimate service path concept for Artwave was created and visualized. The best solutions were picked up and selected for the final concept according the given feedback, personal experiences and research.

#### The 'double diamond' design process model:

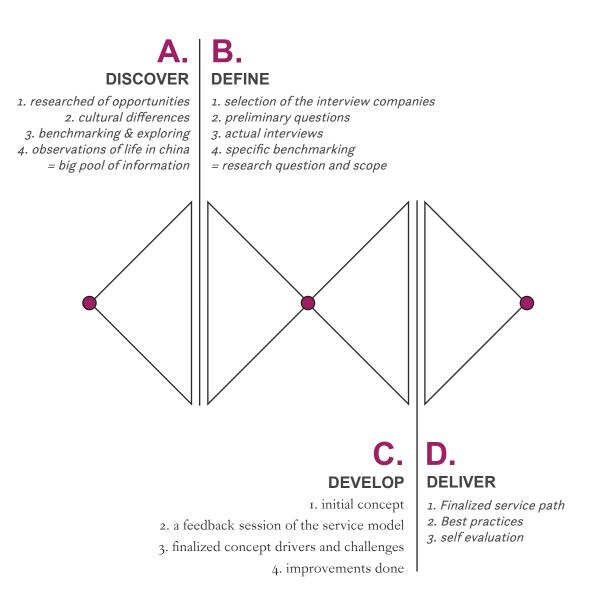


Figure 33. The "double diamond" design process model used to generate the final service concept.

# 5.1.2 Principles of the design drivers

Principles of the design drivers were formed to guide the concept towards its final form in the definition phase. When determining the drivers, companys ideologies and cultural challenges were held in mind. The following principles were selected to be the principles of this work.

#### **5 GENERATING THE CONCEPT**

- A. Provide easy guideline to develop and sell surf service in china
- B. Point out the main differences in the culture
- C. Raise awareness of surfing
- D. Provide new field of business
- E. Show the opportunities in surf business
- F. Enhance awareness of healthy living
- G. Enhance awareness of environment

This work should help the surf service machinery manufacturer Artwave to easily understand what are the point of references to pay attention when entering China market, what does that mean for service in B2B context and how understanding the B2C can help to create the B2B relationship. The guideline should be constrained to be free and lax, not consuming too much time or effort to get the main idea. In China surfing is still relatively unknown form of sport and Artwave could have a great opportunity to be the first one to enter the market of natural waters artificial surf experience. This can mean a big role in educating the customers of this field. Artwave could be one of the first to light the fire of a new trend. This naturally requires ability to reach out to the customers and get in touch with them. For sport providers and investors this is a new opportunity to create businesses and provide work.

# 5.1.3 Governmental support

The Chinese government has launched a program against obesity and surf could be part of this program in cities to promote healthy lifestyle and importance of sports. Surf is strongly related to be, not just a hobby, but also a good way of living. As the interviews showed many young people lack the physical exercises in their routines and are weak in body, especially girls. Another thing in city life is the lack of connection to nature and therein the lack of knowledge to protect and nurture it.

Chinese government has also started a fight against the merely production and copying culture and aims now to support activities that educate children to be more innovative, take initiative and pursue almost entrepreneurial skills. Sport innovations that can deploy this into their designs can have grater change to satisfy the decision makers. A foreign company should always have something to provide for the government and the

presented plan should show how the company is going to contribute for the Chinese country or its people.

# 5.2 DEFINING THE DESIGN CHALLENGE

The concept challenges define the most important points to pay attention in the concept creation process. Concept challenges are sourced from the expert and sport service provider interviews, benchmarking, service path prototype feedback session and living experiences in two continents. Several challenges came up during the research process and the most often mentioned and observed ones were picked to be the core challenges of this work

#### 5.2.1 Cultural differences

Most obvious and important factor defined was the cultural differences that stretch over most of the other concept challenges. Chinese people behave and do things differently compared to Westerners and even inside the China borders there is a lot variation. Big cities and countryside have a big gap in-between. This means that the product must be planned according who is the target group. For example, if the concept wants to reach the most fashionable and trendy young city people, then front tier cities are perfect choice. Cultures vary globally and within a country and affect how to find and reach the target groups. The behavior of Chinese people both from end users and service provider s side is more constrained and less straightforward. On the other hand excitement and child like curiosity to life is shown openly and sometimes transmitted to other people around.

The services need to define the differences and be planned accordingly. Exactly the same product or service will unlikely adapt fully into China market without modification to local culture. Since the western and Chinese *logics are based on different ideologies*, the person designing the services and market entry, must know well the entry markets culture. *Communicational challenges* occur easily. Especially in the negotiations, it is crucial to manage that the provided information is received as wanted.

# 5.2.2 Networks and "guanxi"

Also business cultures differ from one another. In China relationships are considered deeper and long lasting. If the opposite counter part is not aware of this or don't know the tools to build the essential trust it might cause great difficulties. The business is of course based on numbers but a great deal is relationships and in much bigger extent than in European countries. Every leader or investor in China has most likely spent most of the time to build their networks and these networks, guanxi, are the valuable assets when entering new markets. To be able to be part of good networks require a lot of time and sometimes money. Even the change is very fast in China; to make business can take time. On the other hand when things start to happen they can happen with the power of tidal wave.

#### 5.2.3 How to reach the customers

There is several new markets emerging China and there is a challenge how to reach and make the customers interested. This means that the challenge actually is how to educate the new consumers to like, accept and buy the newly launched service or product. Same works for to service providers. They want to know the facts, how fast they can return the revenue of their investments, but rarely the story or ideology behind the concept. These emotional merits can still in the future bring and attract new customers and so this thinking should be transmitted from manufacturers to the providers. This further leads to the challenge of knowing the end customers and how they should be noticed already in the manufacturing level. In new business the challenge is to find the right people with cultural experience to reach the customers. Surf is not yet well known in China, but it has high level of excitement, physical benefits and mental balance with the body and mind. To communicate this in totally new market to new customer group is challenging process and may take a lot of time.

#### 5.2.4 Communication

One challenge is to manage to communicate the concept to the buyers. The language, culture, visual, technological and behavioral barriers can reduce the efficiency. Terms and goals should be defined and the ways to communicate those should be planned. Design can enhance this process and help the project from falling into cultural and communicational difficulties. Cultural difference sets the communication outside of the customary behavior.

#### 5.2.5 Environmental issues

Lastly there are challenges related to health and environmental issues. The manufacturer, with the nature related product, entering the market must think beforehand what are the brand standards and how to deal the possible problem situations. In China for example, the water quality is a big issue and should be managed well in order to maintain the brand image. Is it best to avoid the contaminated areas and raise the awareness on this matter. People may be highly interested in water sports, but they may not be willing to exercise outdoors or in real nature due to the water and air quality issues.

#### 5.3 SERVICE PATH CONCEPT FOR CHINA

This service path concept is designed and planned to fit the Chinese environment. It aims to take into account cultural differences harnessing those into advantages rather than disabilities. The concept shows the initial touch points of different stake holders, bottlenecks and suggestions how to overcome those challenges. In the final guidelines the key learnings are presented and some suggestion given for the future steps.

The service path presented here shows Artwave, as a manufacturer, and the service providers path from the first contact point to the future co-operation. Due to the length of the path, it is divided into five main segments according the five stages in the decision

#### **5 GENERATING THE CONCEPT**

innovation process. Decision part in the middle is the dividing factor whether the process continues or it will stop to that point, depending whether the customer decides to invest or not. In this work we assume that the product is accepted in the decision phase.

# 5.3.1 Overview of the concept

Figure 34. demonstrates the five stages in the decision innovation process adapted to artificial surf machinery manufacturers service path concept. It shows the overview of the complete path in more compact from enabling viewer to get quick and holistic picture how the service is going to function.

#### Service Path over view:

#### KNOWLEDGE PERSUASION DECISION IMPLEMENTATION CONFIRMATION

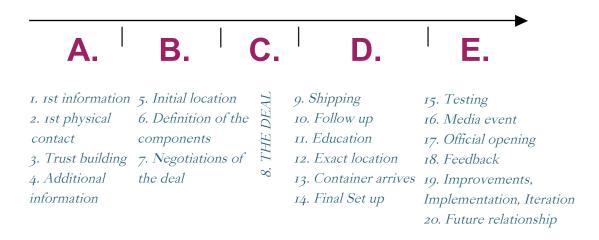


Figure 34. The overview of the service path.

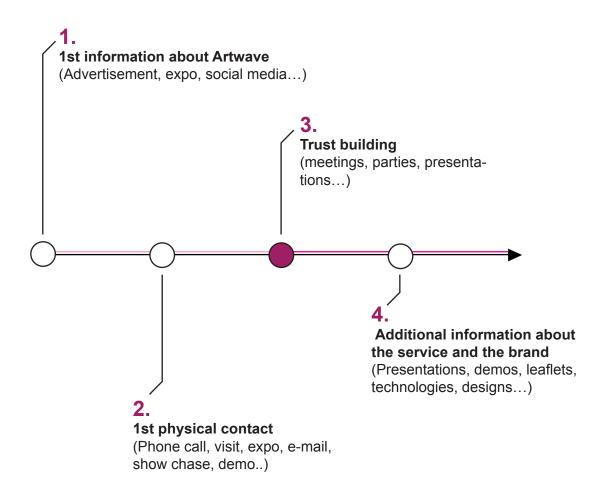
# 5.3.2 The knowledge phase

The section A. of the service path shows the very first contact of a service provider and the manufacturer, Artwave, and how they gain more information about each others. Simultaneously the path shows the means and order when and where the manufacturer, provides the information and in what extent (figure 34). Important in the beginning is to arouse interest and make the first contact to happen. This can be for example advertisement, mouth-to-mouth information, exhibition or social media. If the initial information comes through Internet or friend the second step underlines the importance of physical meet up. Best way would be to meet the actual person since most of the Chines investors can be skeptical, but if this is not possible, phones, video calls and even e-mail can be used. In the first stage it is important to spread the word about the service as broad as possible and make it recognized in all user groups. Investors are more into topics that already have some recognition.

In the third step the interest is obvious and the customer has shown will to learn more. The most crucial part of the journey begins: to build mutual trust with the customer. In China, this is one of the most important things to emphasize. Several factors affect the mutual trust starting from individual compatibility to shareholder management. This trust building is continuous process and starts actually already when the customer gets the first impression of the brand. In step three the serious trust building starts and continues through the whole path until the very end. It should not be forgotten in any upcoming phase and especially in china fostered and paid extra attention.

Fourth step on the path provides additional information. By now the potential investor has gained the understanding of the general concept and knows what artificial surfing is, where the product comes from, how it is manufactured and what are the benefits of this concept over the competitors. The additional information could come in form of presentations, demos, show cases of surfing with the artificial wave machine, videos and information leaflets, technological facts and design and brand standards.

#### A. KNOWLEDGE



Emphasized / Special attention in China

Figure 34. Part A. Knowledge of the service path.

#### **B. PERSUASION & C. DECISION**

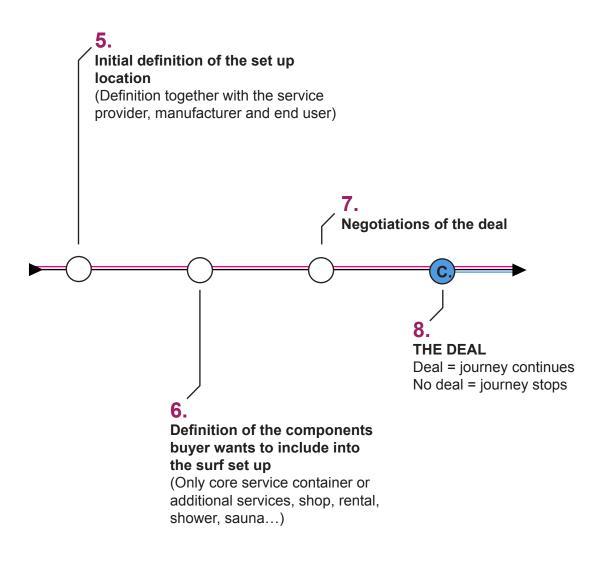


Figure 35.Part B. and C. of the service path.

= Emphasized / Special attention in China

## 5.3.3 Persuasion and decision phase

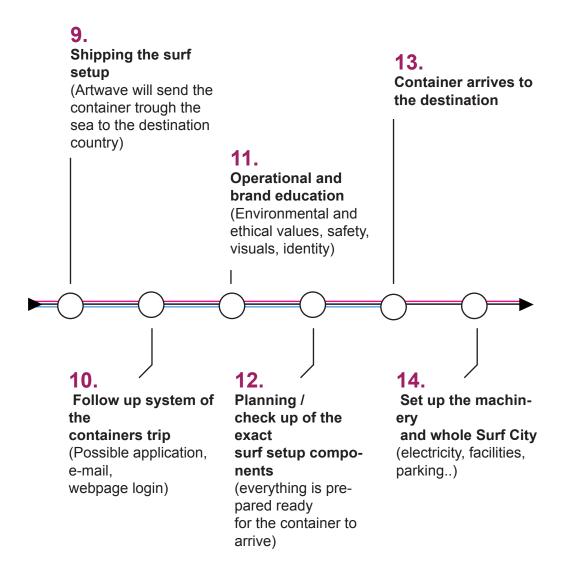
The section B. and C. shows the persuasion path that leads to the final decision (Figure 35.). In this phase the initial will to purchase the artificial surf set up has formed and the parties are in mutual understanding to move forward, to evaluate the potential location of the set up and define, from the provided components, which ones would be included to the surf machinery package. It is important to define these things before moving to the final negotiations and concrete decisions, since general assumptions and quality standards may vary. After this, parties are ready move forward to the negotiation phase and making the deal. In this part the cultures differ most dramatically and both of the parties must make it very clear what are their expectations and definitions of the contract, what does it include and what is everybody's role in it. Finally at the step eight the terms and conditions are cleared out and the final contract itself can be done. The potential investor turns into actual investor and potential manufacturer into the agreed product developer. In China sometimes the deal is seen just as a starting point for negotiations, when in Western, especially in Nordic countries it is seen as the final dot to deliver, this is important to note in the service path when closing the deal.

# 5.3.4 Implementation phase

The next phase (Figure 36) presents the implementation process and what does it hold for manufacturer and service provider/investor. After the deal is set, the container, holding all the required components to build the surf set up, is sent through the sea to the destination country, in this case China. This step activates the follow up system to track the journey of the investment. The journey could be monitored with Artwave specific application, webpage login or other more primitive messaging systems.

While the container is on its way, it gives time for the manufacturer to educate the service provider and share important information. The brand specific ideologies and ethics, environmental values, safety and identity will be discussed and required education given. To follow the quality standards, when setting up the machinery ready for the service, is veritable eminent. In the phase three the exact locations of the different components will be double-checked at the selected location. In this way everything should be pre-

#### D. IMPLEMENTATION



= Emphasized / Special attention in China

Figure 36. Part D. of the service path.

pared for the arriving container. When the container arrives to the harbor all parties will be informed through the agreed system and everyone relevant for the process will be updated. The actual machinery can be set up in its location. In this process Artwave will provide their help to ensure everything is done as supposed regarding electricity, logistics, safety, design and brand image.

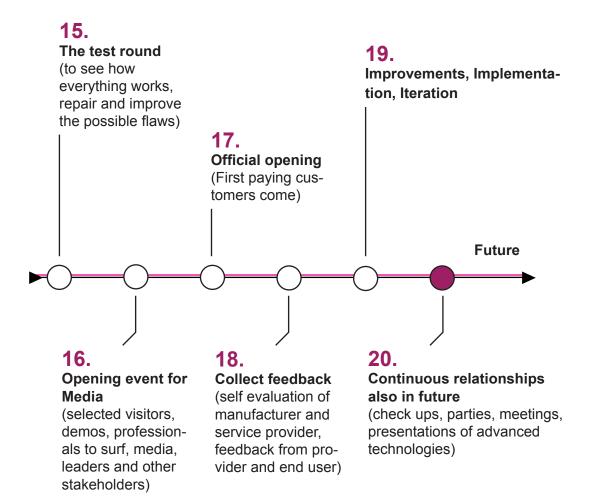
# 5.3.5 Confirmation phase

At the last confirmation phase (figure 37) the set up is already built and the confirmation that the service can be functional will be done. Important in a new partnership in China is that Artwave will be providing their help and instructions as part of the package and as a part of the service providers surf team family. This will also give worthy opportunity for Artwave to gain the field experience and see the parts to pay attention in future. The step 15. is the test round on the service path and first step on this section. In the test round the machinery is fully built and will be run for the first time. This part doesn t involve yet any surfers, just technicians, manufacturer and the surf service provider. The machinery and functions will be observed and all the possible flaws will be repaired and needed improvements done.

After everything is running smoothly and safely first opening event can be planned and held. This is a media event for selected visitors, media representatives, leaders and stakeholders. Demos of professional surfers can be shown and additional amusement provided such as short films, galleries and other suitable or related entertainment. This event is to raise hype and awareness of the upcoming service. After this is the official opening to first paying customers. The additional amusement can be also provided in this event for example the demos to inspire the beginners. End users get the first touch to what it is actually to surf and they can sign in to additional services such as surf and swimming schools. The Media and final opening can also be emerged into one event, but for the clarity is here presented as two separate events.

After the opening it is important to collect feedback. The service provider and manufacturer can self-evaluate the provided service, also the machinery and technical functions

#### **E. CONFIRMATION**



= Emphasized / Special attention in China

Figure 37. Part E. of the service path.

#### **5 GENERATING THE CONCEPT**

and features supporting the brand image should be evaluated. Feedback from the new surf service provider and the end users should also be gathered. The information from the end users is valuable for the manufacturer since they also provide additional container packages, such as containers for dressing room, shower, equipment rental, caf\(\text{\supportion}\)/ bar, patio and sand box for training to the core surf set up. After this the feedback and evaluations should be analyzed and improvements done accordingly to the machinery and service path. These feedback loops should be repeated regularly, more frequently in the beginning and later for example annually to keep the development going forward and satisfaction up. When dealing globally the documentation has bigger value as an information transmitter.

Especially in China it is important to remember that the relationship with the service provider does not end after the machine is delivered and the education given once. It is good to keep up the annual check-ups and ensure that the standards are followed and that there are no unspoken problems.

## 5.4 SERVICE PATH TOUCH POINT

This chapter demonstrates a blue print of the relationships between the most important stakeholders. The colored dots in the figure 38. show the action points and who are involved in which step of the process. The colored boxed in the lower part of the figure. show the change, how the action points can develop in the future and shift place. The line crossing the dot means that the action has moved away and a plus sign means that a new action point has appeared.

In the beginning Artwave as a manufacturer is involved into every single action presented, but in the future, when continuing the relationship with the same service provider, some of the shared responsibilities can be transformed fully or partly to other involved parties. For example if the same surf service provider wants to set up another surf city to another location, it may not be necessary for Artwave to be so intensely involved again. Depending on the reliability of the service provider some of the shared set up planning responsibilities can be passed fully to the service provider. For instance opening event and collecting feedback can be trusted to the provider, but later naturally passed forward also to the manufacturer. The manufacturer must keep evolving, improving and being part of testing on regular basis. In China it is beneficial to be involved even more than in Western countries in the starting process. Subject to the service provider and the subcontractors, not all the regulations are necessarily followed according to the standards.

#### 5.5 THE SERVICE PATH CHALLENGES

The service path bottlenecks are the challenging parts in the concept and this section presents the main bottlenecks and gives suggestions how to overcome those. The points to emphasize can bee seen in figure 34. step 3 at page 93, figure 35 at page 94. step 8 and in figure 37. step 20 at page 98.

In the step three the challenge is to build trust with the Chinese customers. Traditionally and according to the interviews Chinese investors are highly skeptical and they

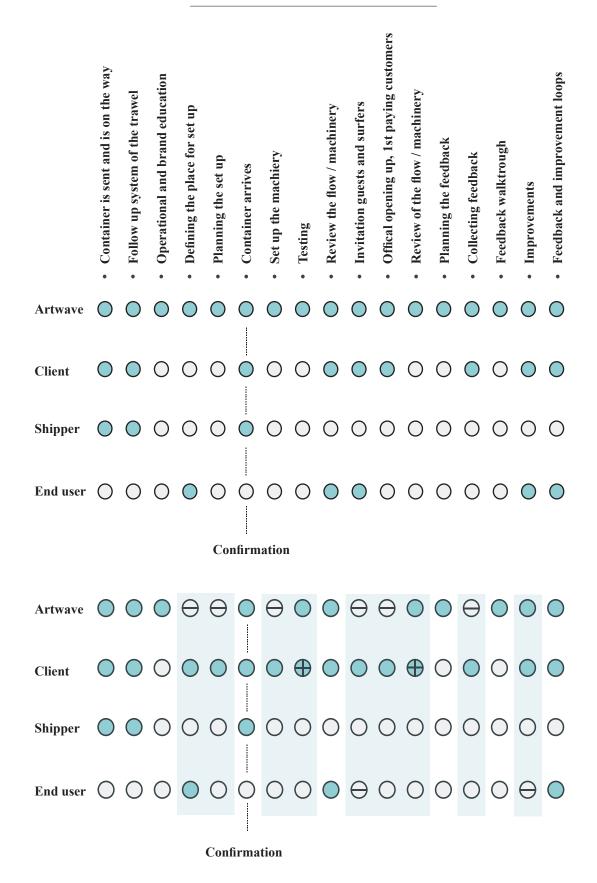


Figure 38. The service path touch points.

#### **5 GENERATING THE CONCEPT**

wont easily invest their money. In western world people are used to buy stories behind the brand before they go to raw facts, but the same don't apply in China. The important thing is to show the concrete product, explain patiently how it work, convince that the beneficial revenue stream exists and that the investor can quickly gain the invested money back if he is involved. Another way to convince the investor is to conduct surveys and show the numbers extracted from there. When building this trust the background should not be ignored. Nordic products are considered high quality and luxurious and when manufacturer has a product from there that fact should be used as an asset. To gain appreciation the manufacturer should show effort to adapt gracefully the product/service to the target market still maintaining the originality and transmit that to the Chinese concept version. This situation can naturally follow different path, if the investor in China is Western based.

In the step eight the deal is closed. Despite signing of the papers, this may not always mean that the deal is closed from a discussion for Chinese counterparts. Communicating everything extremely clearly can help, but to hire local contacts to interpret these situations is a good idea. The environment and situation of closing the deal can also differ from Western manners. While in Europe negotiations happen in a conference room, in China it may happen over a dinner party in a restaurant while toasting heavily. The person entering these negotiations should be prepared culture wise. For example table manners differ from European ones. If the person knows how to follow these, it may give better impression to the other party. In China the presented service path can be seen as a primer to the whole new relationship and the business in general is seen more through friendships than merely business. If the communication is not nurtured properly the service provider may feel neglected and end the contract.

Other challenges are the language barriers, being a foreigner in the strange market, finding the right connections, maintaining the connections and keeping constantly improving in the changing environment.

## 5.6 COMMUNICATING THE CONCEPT

This concept is communicated to manufacturers, service providers and readers through visualization. The goal has been to present the concept easily and provide viewers effortless understanding of the service path. So far globalization processes have been mainly presented through other means and this work attempts to bring something new to market entry planning. When crossing country borders to new cultures, written and spoken words are not always enough and picture, videos and symbols can break the language barriers.

In addition to communicate the concept through visualization verbal language should be also considered. Especially in Chinese this is a compelling opportunity to play with the characters, where one character can have several meanings. Catchy name can help to race better the interest. Companies such as Coca-Cola, 可口可乐 (drink the good taste) and KFC, 肯德基 (basically good taste) have names that are easy to remember and include the product descriptive parts. Characters form almost picture like patterns and the most creative people combine all the time new ones. When a company or person has a Chinese name it is easier for locals to talk about it as well. For instance Artwave could have also a Chinese name that would help the entry.

#### THE WAVE MAKER



zao4 lang4

Figure 39. Chinese name suggestions for Artwave.

#### 5.7 THE FINAL GUIDELINE

This part adds some practical advices for the companies with Nordic background planning to enter China market with new sport innovation products. These guidelines support the use of the created service path providing some additional useful practices to follow.

# 5.7.1 Key findings

Six key findings from the research were defined (figure 40. and figure 41.). First it came clear during the research that surfing may not yet be popular in China but it is mostly due to the fact that most of the people have never heard of surfing. There is a *potential for new sports* and especially the seashore culture has lifted its head, despite environmental issues. Costal areas provide cooler environment to spend hot summers and more and more people have *time and money* to spend on free time. Chinese have been always good at individual sports and surf surely could fit to the competitive mindset.

Surf can also provide *new field of business* and new segment in the extreme sports. Through the surf city setups side services can be created. For instance surf and swimming schools, restaurants and cafeterias, apparel stores and equipment rental. These services can provide work and businesses, create new communities carrying the *ideology* that many surfers have and attract lifestyle fans to join the services and the core sport.

Western and local media spreads pictures of swimming wear fashion, people are interested in to take care of their health and show others their active life style. This is a huge potential for new sport innovation startups to enter market where people are eager to *try and learn* something new and ready to fill the emptiness of city life caused by disconnecting them from nature and its dangers. This leads to excitement seeking and surf is a perfect way to stay physically healthy, give a purpose and provide the thrill and stoke.

Healthy lifestyle should shine through all the services related to the core sport. This goes as well with the environmental issues that can hinder the expansion, if not managed well. Optional solutions to survive in polluted areas should be considered and the related challenges overcome. Cultural differences color also the service and the main differences were related to communication, negotiations, customer and client behavior, encourages to do things, business culture, family values, copying and showing off to other people.

#### PART A: KEY FINDINGS OF THE SERVICE PROVIDER INTERVIEWS:

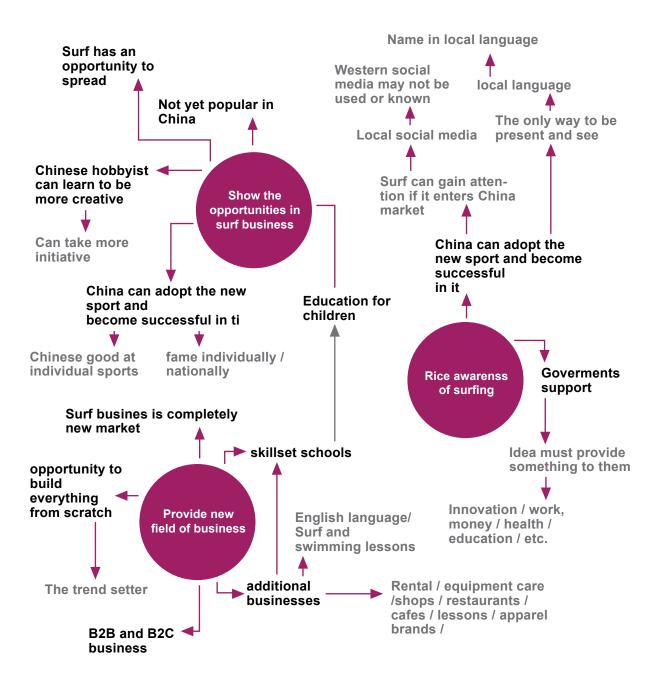


Figure 40. Part A. Illustration of the key findings.

#### PART B: KEY FINDINGS OF THE SERVICE PROVIDER INTERVIEWS:

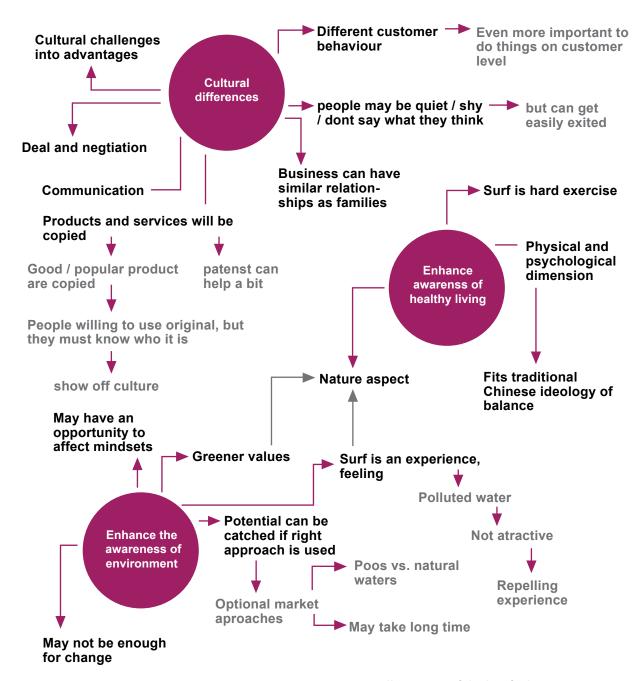


Figure 41. Part B. Illustration of the key findings.

## 5.7.2 Best practices

Since surfing is not yet a popular mass sport in China and it might take long time to come to that point due to the water quality issues, Artwave can have two options to go for: provide the surf service in the pools, that is more expensive and less authentic option or to enter the market to educate the local consumers and service providers to consider the water quality issues and maybe start form less focal locations, where water is still relatively clean. The latter option may be slower but more authentic solution. One option could be as well to build pools close to the seashore and so gradually with time move into actual waters using for example some cleaning systems regionally. This could enable central locations in main cities, where the target groups are. The price-conscious safety seekers and the luxury surfers are the two most lucrative segments and should be considered, if one aims to the highest possible profits in surf business (Dolnicar, & Fluker, 2003).

The key is to modify the core service to the local market. The modifications don't necessarily need to be radical, but just enough to be appealing. Several start-ups have failed their launch at this point to this particular reason. To prevent this from happening this work provides a service path to support the entry.

Another thing that has not yet fully landed to China is the design methodologies. Product design is well known and educated profession, but all the other forms remain fairly unknown and unused. This is easy to spot in everyday life and street scene as well as when talking to people. To use design in business can be the key asset especially when other firms have not yet employed it into their strategies. Clear visualizations, good flow of the service and design management are still lacking in the country and this should be seen as an advantage for Nordic design led SMEs.

The transparent processes and direct communication methods to service providers and end users reflect the Nordic working ideology and same time educate the local partner to implement suitable design processes into the business. This naturally goes both ways and for example the service path provides clear steps to take to consideration the Chinese counter part. In the hierarchical culture end user is not necessarily include to the design session even they carry valuable data that cannot be sourced any elsewhere and so should be included to the user innovation process.

#### **5 GENERATING THE CONCEPT**

In deals and negotiations different cultures encounter and it is a good idea to meet in the middle, entertain the Chinese business partner a little and i.e. take them to dinner. If the partnerships don't get enough attention the other party might feel neglected and it might damage the mutual trust. Trust is another important issue to keep always in mind. Every communication and action should aim to strengthen this relationship.

To invest big amounts of money is not an issue in China, the bigger issue is to convince the buyer to invest in the first place. The path to get the investments goes through the networks and building relationships and this procedure requires time and patience. Best way would be to meet the actual person since most of the Chinese investors can be skeptical, but if this is not possible, phones, video calls, e-mail and even social media can be used. In china the local social media is much more powerful tool than western and so more preferable. Users may not be familiar with the western sites or those might be banned in China such as Facebook, Youtube, Google and several blog pages.

Since the operations in this example case take place in China, it is important to remember the power of the government and how to please them. Company entering the market should always have something to provide and contribute for the country itself. In this case it could be, not just healthy lifestyle and new jobs, but the education for children to be more innovative. Language schools can be combined with the swimming and surf schools and kids can practice speaking English.

#### 5.8 EVALUATING THE CONCEPT

The concept gives holistic view to the service actions in a clear and a visualized way. The path was divided into parts in aim to be able to create logical order and ease the readability. This helped to rhythm the large number of information.

The challenge was to manage to transform the *Nordic quality service* to the Chinese adaptation. This required that a service concept for Nordic countries were created first and the compared with the Chinese lifestyle and then modified to the existing version. The Nordic design carries high value globally and to make sure that this was visible in the service had to be planned. Service path shows how customer is considered, how they are guided by the manufacture tough whole setting up process, when feedback is collected and improvements made. The communication is planned to be flat and open so that end users can also give their impact and this is something that reflect the Nordic values of design and technical innovations.

Key finding and suggested best practices together with the service path provide an easy guideline to bring a Nordic sport innovation to the Chinese service providers. If this works it will automatically raisee the visibility of recreational surf that was one of the goals. This in turn provokes new businesses. The key findings reveal that there is actually a grooving interest to extreme sports in China and builds good foundation to take the service path towards real life testing. I would be good to make iteration rounds involving real surf service providers as soon as possible with the prototype. This will be a definite next step for the future research and this work can provide the foundation for it.

The world and each country are under constant change and, if for example surfing becomes popular sport in China or the water quality improves, the design drivers will change. This logically means that the process is always changing and evolving and when updating the service after certain time period or when moving to new country the concept drivers should be evaluated again to see whether they still keep up with the company's ideologies and target country's features.

#### 5.9 FUTURE STEPS

Future steps with the concept would be to take it into digitalized form where clients, stakeholders and manufacturer could form and edit the services together to make those as good as possible and as satisfactory as it can be for all the parties. The core would be the synchronized webpage and application where for example tracking of the container could be handled. The customer would receive messages directly to the phone and show how many days to the arrival is left. Simultaneously a checklist of related arrangements could be displayed, chronologically fulfilled and reminders sent accordingly. This would minimize the chance of forgetting something important.

In the application and webpage end users could have their own forum to share the videos, photos, comments, advices and hype the experiences. Same way it would work for service provider as a channel to advertise events and increase the interest towards the service. The feedback would be also easiest to collect online. The results could be fast analysed and reach everyone globally. Basically the webpage and application would provide a platform for an artificial surf society. In China the local media should be used, for example Wechat, Renren and Weibo.

When expanding to more countries the core model of the service path could be used to modify the service again suitable to new location. The service path would provide ready root to start to negotiate and simultaneously add wanted features in it. For example in New York additional opening event could be added to the service and safety extra emphasized.



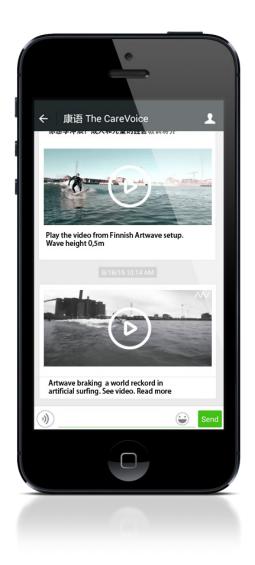
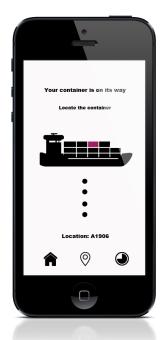


Figure 42. Local social media is a powerful tool to communicate, wectat page on the pictue



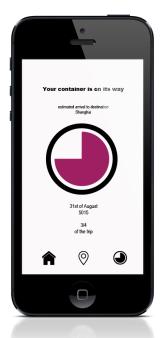






Figure 43. Personalized application for Artwave could improve the communication between stake holders.



# 6 DISCUSSION AND CONCLUSIONS

There is not many globalization processes involving design methodologies as a key asset. Companies entering new markets to could update their strategies and incorporate design. SMEs and BG firms are spreading fast and strong to new zones. This work has aimed to combine design methodologies to the methods used in globalization process. This in future could help startups to accelerate their businesses and expand to global markets. In this research design thinking and user innovation are key factors when working with extreme sport services and manufacturing.

In this chapter the process and outcomes will be evaluated and the concept implications will be summarized to give the compact picture of this works benefits for the reader.

#### 6.1 OUTCOMES

In this work design and business meet each other in the context of Nordic sports innovation globalization process. Nordic innovations seem to be appealing to Chinese customers and if the manufacturer manages to convince the investor the money is not a problem. This work aims to provide those means to convince and communicate the machinery and service related to it. The Nordic design is considered to be high quality, reliable and these expectations should be always met to maintain the reputation.

Service path points out the most crucial things to pay attention and eases the process to negotiate, close deals and manage projects targeted to China market. If the service is implemented well, it will be accepted better, this will mean more customers and this equals to the investors trust to the business opportunity. It is challenging to get the first service provider, but after that it is less constraining to convince new investors. In addition to the service path key findings, best practices and future development provide valuable information and tips to execute the entry to new market.

One hoped outcome of this work is also to show the value of design in traditional business planning and globalization process. Especially when starting the thesis at Tongji University, School of Economics and Management, design combined with business was seen very alien.

In the academic world only little research is done in cross-disciplinary manners. There is a lot of research about the benefits and how the multidisciplinary work is done but limited information for example design affecting on business processes. One goal of this thesis work was to show the relevance of communication and blur the disciplinary borders.

#### 6.2 DESIGN IMPLICATIONS

The service path presented with the following key findings and suggestions could be implemented and used also when entering other courtiers. This naturally requires suitable modification and reasonable platform to do it, but there is a potential to use this same path as a root or base of the service and transform it every time new target country has been selected.

Besides the emerging business and design methods to enhance sport innovation design-businesses trade, there is an underlying message to promote the value of combining two things together. It is known that design methodologies can help people and so companies to step out of the box and think differently, this further leads to new ways of thinking, new ideas and new innovations. To stimulate people to take steps outside of their comfort zones can be done through design and sports. Design methods are not yet widely known yet but should be promoted. Digital forms of the path in webpages and application would support strongly the usability.

China is changing and everything changes with a rapid speed that may be even difficult to realize. This change is constant and design should develop with the same phase and enter new professional fields. People in China have the hunger and curiosity towards new things in much larger scale than in Europe and if a trend manages to break through nothing will stop it. Now sports, leisure time and innovations are hot topics and artificial surfing could fit in all these categories. Through design methodologies in China could also gain better foothold.

#### 6.3 EVALUATION OF THE PROCESS

This thesis project was conducted in fairly short and restricted time frame and managed to meet the goals well considering all the limitations schedule and resource wise. Language barriers, foreign culture and combination of two subjects added extra challenge to the work. Still initial language skills and previous experience of multidisciplinary projects helped immensely.

The qualitative research methods were selected to get the best possible insights from service providers and BG companies. Semi-structured interviews provide the best opportunity to guide the conversation into right tracks, but left enough freedom to go into interesting topics when those come up. The interviews provided profitable and first class information for the concept and it could not have been modified to China compatible version without this information. To select and find the interviewees was a true challenge as a foreigner in China, where local language is still often the only spoken language. In this process all the contacts from university and personal life were used as well as direct contacts through information found from Internet. Surprisingly many startups answered the call and the intermediate level Chinese proficiency helped to break the ice in some cases, otherwise the interviewees spoke sufficient level of English. The selection of the start-ups was difficult and shifted during the process from purely BG interviews to service providers, shifting the BGs to expert interviews. Also the number of the interviews was dependent on how many startups answered to the interview request and presents just a sample of the service providers. However the interviews provided so much useful information and similar to one and other that the amount seems sufficient enough.

Based on the earlier experiences living in China and working for the artificial surf machinery startup Artwave, initial concept planning of the service path was started simultaneously with the literature review. Feedback, collected from the sessions with service providers, was analyzed and the implementations to the path made, also list of important notions what it means to enter the China market with new innovation was summed up from the used sources. The final concept was formed with 20 service path steps and cleaned from supernumerary ones. In the future this concept should be tested in the

#### 6 DISCUSSION AND CONCLUSIONS

real life and the modifications made according the feedback from service providers and end users.

The challenge when creating the China compatible service path was to maintain the Nordic, high quality, identity. In this the ideology from GB firms was implemented and a core service path was first created and then modified to China form. The Nordic spirit reflects in the flat and straightforward communication both with service provider and end user and in the safety and quality check ups.

The process in general managed to combine two disciplines and provide something new and valuable for the collaboration company.

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## **APPENDIX**

- Expert interview questions
- Service provider questions
- Artwave in nutshell, brouchure
- Suggestions of the Chinese name

### **Questionnaire for Gorn Global Start-ups:**

- I. What does your startup/project do?
- 2. How would you describe your startup/project?
- 3. Of who does your start up/project consist of? (Nationalities, expertise)
- 4. Do you have connections to other countries except the country you are physically based on now? What kind of activities?
- 5. Are your services/product specified to the target country? How?
- 6. What kind of challenges have you encountered when getting global?
- 7. What has gone smoothly/ surprised you when getting global?
- 8. Have you used different methodologies or formulas to globalize?
- 9. Have you designers in your team? What is their role in the process?
- 10. Have you used other design thinking methods or are you familiar with those?
- 11. What would you do differently in terms of getting global?
- 12. Anything you would like to add or tell?

#### **Interview for Service Providers:**

#### **PERSONAL:**

Name of the interviewee:

Position in company:

Background:

#### **INTREVIEW**, part 1:

I. Where did the idea come to have this business? How was it to build it in China, compared to origin country?

- 2. What are the country specific features of the service, what to take into account? Compare other countries to the one in China?
- 3. To whom is the service targeted? What is the service mix you provide? Core service? Additional services? (Cafe/Bar/BD packages/caps/parents/beginners days)
- 4. What customers seek from this service? (Sensation/excitement/exercise/social)
- 5. What do you expect from the product developers?
- 6. How did your company launch the service? Was there hype/advertisement? How was it done? How people found the service?
- 7. How has the number of customers changed over time? More Chinese or Foreigners?
- 8. How do you improve your service? What kind of feedback do you get? How do you collect it?
- 9. How do you ensure the quality of the service and the safety of the customers here in China? (Where do you get your gear? How do you maintain it?)

#### **SUGGESTIONS**, part 2:

- A. Comment on the service path, and please share opinions and improvements for it:
- B. What would make you interested in to Artwave? What do you think is the future of surfing in China?



WE MAKE WAVES

# ARTWAVE IN A NUTSHELL

# **WE ARE:**

- a research and commercialization project in Aalto University,
   Department of Engineering Design and Production
- a team of 12 from various backgrounds in engineering, economics, design and surfing
- doing this thanks to Tekes, Aalto University, several warm-hearted partners and endless passion for the project

## **OUR AIMS:**

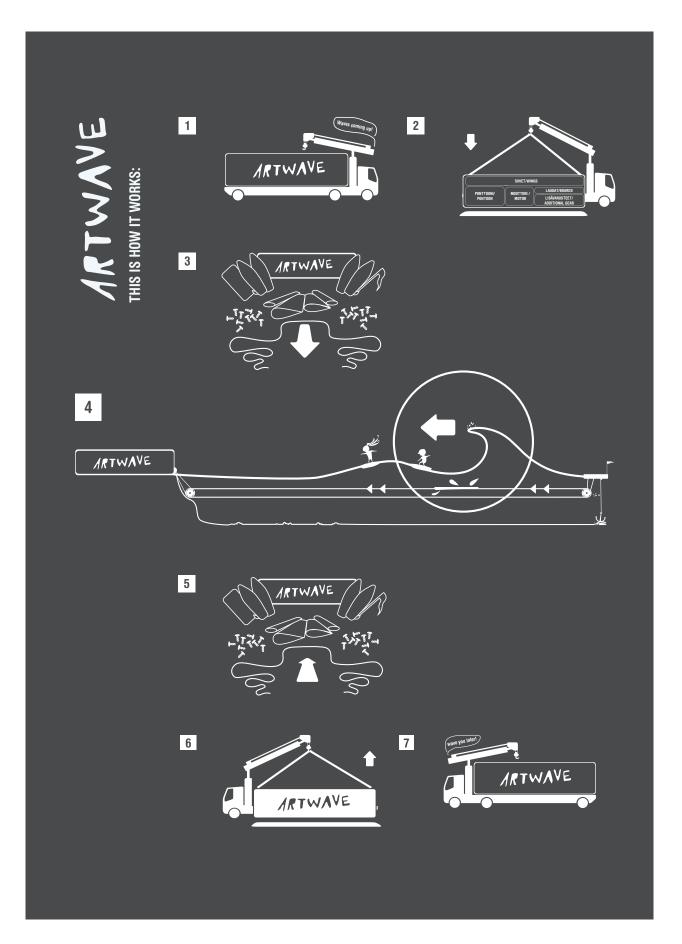
- surfing for everyone
- a new field of business for surfing service providers, resorts, cities etc. world-wide
- new opportunities for Finnish and European industry
- new challenges for academic research

 startup company to be the market leader in the field of artificial surfing solutions on 2020

### HOW?

- a new innovation from Aalto University
- mobile wave-generation solution which utilizes natural water areas
- close to natural surfing experience
   Technology:
- 250 kW towing machinery stationed on shore
- self-adjusting, passive wing structure producing wave as it is towed
- scalable with main limitations from electric supply and water depth

Website: www.artwavesurf.com





### Suggestions for Artwave of the Chinese name:

THE WAVE MAKER

THE WAVE MAKER

A SURFER

zao4 lang4

ren2 zao4 lang4

chong1 lang4

#### THE WAVE LOVER

1st character is love 2nd character means wave

#### THE WAVE LOVER

1st character has same in Chinese

#### SAILOR/BACH PLAYER

nowadays has also a meaning of a pronounciation as love leader of the era, someone who is very famous and important



ai4 lang4



ai4 lang4



long4/nong4 chao2

#### "ARTWAVE"

sound "hey, no deeper meaning, sounds like Artwave

SKILL, INTEREST/TASTE/ FLAVOUR/DELIGHT, **HARBOUR** 



a4 wei4

yi4 wei4 wu4

#### **WAVE**

it is possible to combine these cords into a name

zhi4

hui4

lang4

chao4

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# 一日 千里

