## Chinese Knitwear Brands

## The need for creative design to result in global business success

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## by

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#### Abstract

Chinese cashmere knitwear companies have become suppliers of international fashion brands because of their technological excellence, advantages of raw materials and competitive prices. However, their in-house brands are steadily declining. In the past 15 years, Chinese cashmere brands have progressively lost their market share to Chinese and Western fashion brands, with a few notable exceptions. Their brands lack differentiation from other Chinese competitors, causing low price competition, which contributes to sustainability issues such as unsold stock and material/manpower waste. The decline is likely to continue as the brands serve only an ageing market, rather than attracting younger generations to their products. Chinese cashmere companies invest little in design, which is a significant limitation for improving the brands' opportunity to become successful and sustainable businesses.

This study looks for solutions from the design perspective. The research aimed to investigate what design can do to help deal with the current problems of the Chinese knitwear brands to improve their prospects for future business success. The objectives of the study were to enquire into the challenges and opportunities facing the Chinese knitwear sector, to evaluate current design practice in knitwear brands, to understand how design and brand management can be integrated to generate a sustainable brand.

Research questions were developed to explore the brand and design problems, the role of design and organisational structure, what the barriers and enablers for a thriving design culture were alongside possible solutions for design improvement. A pragmatic philosophy underpinned research design, guiding the adoption of methods in response to research questions. Interviews with stakeholders from both the knitwear industry and design education were undertaken. In addition, a case study using design action research with immersive field research was developed for investigating the knitwear brand issues; furthermore, a knitwear collection was created using western design approaches to demonstrate an exemplar design


process for the sector and to illustrate the differences to current Chinese design methods.

The study argues the obstacles to design culture enrichment in Chinese knitwear brands was caused by their design context, lack of brand positioning, limited understanding of their consumers and business models that are not fit for purpose. An absence of experienced leadership creates unclear design direction, instead of collections centred around a theme; Chinese brands sell unconnected designs. Brands lack the distinct brand characteristics that distinguish them from their competitors.

The contribution to knowledge made by this study includes the identification of the reasons for the decline in Chinese cashmere brands, an understanding of their barriers to design culture to developing good designs and it also highlights the lack of awareness of sustainability issues in the sector. The study sheds new light on the rarely acknowledged issue of how to upgrade these brands as modern business for younger consumers, and how to enrich the design culture for brand business growth within sustainable contexts. The thesis analyses in depth the causes for the decline in these brands and makes recommendations for how design can make a contribution to reversing the brands' decline and increasing their sustainability.

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## Dedication

I dedicate this thesis to my dearest family, my husband Richard, my bother Linjun, my sister Xiaolin and my parents Yuxiang and Zhenming. Thanks for their love, support, and encouragement during this long journey of PhD study.

## Acronyms

BA: Bachelor of Arts<br>CAD: Computer Aided Design<br>CCBWP: Chinese Cashmere Brand White Paper<br>CEO: Chief Executive Officer<br>CNY: China Yuan<br>CO: Company Owner<br>DAR: Design Action Research<br>DD: Design Director<br>DEO: Design Executive Officer<br>DDL: Danish Design Ladder<br>DLI: Design-Led Innovation<br>DLS: Design-Led Strategy<br>DM: Design Manager<br>DS: Design Student<br>DT: Design Teacher<br>FDD: Fabric Design Director<br>KD: Knitwear Designer<br>KDD: Knitwear Design Director<br>KT: Knitwear Technician<br>KTM: Knitwear Technician Manager<br>MA: Master of Arts<br>MIS: Manufacturing Instruction Sheet<br>MM: Marketing Manager<br>PM: Product Manager<br>RQ: Research Question<br>RQS: Research Questions<br>RTA: Reflexive Thematic Analysis<br>SA: Sale Assistant<br>TDM: Technical Design Manager<br>UN: United Nations<br>UNESCO: United Nations Educational, Scientific and Cultural Organization<br>USP: Unique Selling Points<br>VGM: Vice-General Manager<br>WTO: World Trade Organisation

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## Chapter 1: Introduction

Cashmere products are luxury goods with the advantage of fineness, lightness, and softness. The market for cashmere products is steadily growing in western developed countries (Grand View Research, 2019) benefiting from prices becoming affordable by moving the supply chains into developing countries. China produces over $75 \%$ of the world's cashmere products (Yang, 2009). The Chinese produce high-quality cashmere products with reasonable prices for international brands. However, their own cashmere brands, for the Chinese market, have shown an opposite trend in the last decade. These brands have gradually lost their market share in big cities and fashion centres, and most of their retail stores can only be found in smaller and more provincial cities. Their market share is declining, and their profits margin is also shrinking. These Chinese knitwear brands are in trouble, despite excellent quality. This thesis looks at the role design can play in supporting Chinese brands by analysing how design processes work and can be improved in Chinese companies.

Current western debates on fashion are dominated by sustainability, in particular the unsustainability of overconsumption and fast fashion. Overconsumption is also an issue in the Chinese cashmere industry fuelled by discounting unsold and overproduced stock. Yet there is little evidence that Chinese cashmere companies are aware of the issues. Interestingly, the ageing consumers of Chinese cashmere are themselves following sustainable principles.

The study adopts the United Nation's (UN) three-pillar concept of sustainability that focuses on environmental, social, and economic development (Purvis, Mao and Robinson, 2019). Occasionally, a fourth pillar of sustainability is added, such as human development (Future Learn 2021), or culture (Throsby, 1997; New Zealand's Ministry for Culture and Heritage, 2006). The importance of culture has been discussed by the UN (UN, 2015). In light of the recent Covid experience, UNESCO has decided to add culture as a new pillar of sustainability during the World Conference on Cultural Policies and Sustainable Development -'Mondiacult 2022' in Mexico, September 2022 (UNESCO, 2022). There is a need to keep a balance
among with these four aspects. But the three-pillars model will be the main focus in this thesis, because they are more pertinent to the study.

### 1.1. Rationale of the research

Most traditional knitwear brands in China have been gradually losing their market shares in the past decade. There is fierce competition between Chinese and international brands in the Chinese fashion market, especially since China became a member of the World Trade Organization (WTO) at the end of 2001 (WTO, 2016). While Chinese consumers' requirements have changed, the way knitwear brands are run has changed little since they were established in the 1990s. For new and existing customers, their product designs and brand images have become unattractive (Zhang, Gale, and Eckert, 2018 (Appendix1-1)).

Traditionally, most Chinese knitwear companies operate under two main business models: as suppliers for international or national fashion brands and as own label companies. China is a major supplier of knitwear to the world. In 2014, nearly 89\% of cotton sweaters, $90 \%$ of woollen sweaters and $79 \%$ of man-made fibre sweaters imported into the USA were made in China (Weinswig, 2015).

Over $75 \%$ of cashmere products consumed globally come from Chinese manufacturers and most of them are sold under the guise of foreign brands (Yang, 2009).

Chinese in-house knitwear brands were growing in the 1990s with a peak in the 2000s. Since 2010, these brands have seen a dramatic decline (Jiao, 2021), while at this time, international fashion brands entered the Chinese market and began increasing their market share. During this period, many Chinese fashion brands for womenswear and menswear grew and improved their ability to run brands, design products, and have a better understanding, this included lifestyle brands, offering multiple types of garments for different situations. Multiple product offerings and choices led to changes in the fashion market as well as consumers' tastes and consumption habits. In contrast, the traditional knitwear brands have not adapted in a similar way. They still offer only traditional cashmere products, such as jumpers or
scarves in conservative designs. This led to brands losing their market share to both international and local fashion brands.

This thesis concentrates on the design and branding problems of the Chinese knitwear sector. It builds on a multi-method study of cashmere knitwear brands, including a design action research project (DAR), a case study in a representative cashmere brand and interviews with experts from different cashmere companies and universities. The thesis explores the reasons for the problems associated with designing garments and creating a brand identify and proposes potential solutions. It takes a design lens to focus on the barriers in design organisations and practice in Chinese knitwear companies.

For a modern business, design can play an important role and add value to it. The right design can attract new customers, promote a positive work environment and culture, and improve the brand. (Micheli, 2014). For fashion businesses, designs play a significant role to increase business success, because of rapid cycles of change in fashions (Easey, 2009; Svendsen, 2006).

The thesis draws on the author's background with over 10 years' experience as a knitwear designer and design director in the Chinese knitwear industry. She studied in both a Chinese university (undergraduate) and a British university (postgraduate). The thesis investigates the problems through the lens of design and asks how design can contribute to addressing the problems.

### 1.2. The context of China

The Chinese Knitwear industry has rapidly developed with a complete industrial chain from animal breeding, raw materials processing, yarn and knitwear production, retail markets, consumption, and disposal since China opened and reformed in 1979. The industrialisation process led to economic growth and improved Chinese people's life standards. Most people moved out of poverty, small groups of people became very rich, and the middle class has grown rapidly. This fast change, within a short period, has led to a large number of cultural, social and environmental issues. It
reflects the systemic and interconnected nature of the model from the three pillars of sustainable development, disruption to one pillar impacts on others.

- Cultural aspects: Globalisation and consumerism shook Chinese traditional Confucianism concepts and frugality values. To make businesses grow, people are encouraged to buy and use more than their real needs. That is the opposite of the traditional culture (Chen, 2021). Harmony between man and nature was the main concept of Chinese traditional culture rooted in Confucianism and Daoist philosophies for over two thousand years (Kang, 2007; Yu and Liao, 2019). People and nature's harmonious coexistence were the mainstream of cultural and moral outlooks, although it was not called 'sustainability'. After new China was established in 1949, this traditional culture emphasised thrift, opposed waste and resisted corruption as the main concept of Mao Zedong's thought that led to the government policy and mainstream culture of the socialists (Niu, 2014). The concept has similar moral principles compared to other societies' groups, such as western religions (Chen, 2021). Interestingly, the undeveloped economics was challenged by growth in the populations' basic requirements that led to the change, opening and reform in China.
- Social behaviours of clothing consumption: Traditionally, most Chinese people use their clothes until they wear out. For most, recycling and upcycling were part of people's normal lives before the 1990s, and in a middle-class family, most children only had new clothes for the Chinese New Year in 1970s and 1980s. Clothes from older children were reused by their younger siblings until the end of the garments' lifecycle. Damaged clothes were recycled as material to make shoes. Even a small piece of old fabric can be reused by being glued and sewn together as the inner layers of the soles of shoes. Worn-out adults' clothes were cut into fabric and the good parts used for making their children clothes, and the damaged parts sewn together for dusting in their rooms. Almost all clothes' lifecycles were finished within the family. It was merely a traditional way of valuing and respecting materials, and nature given the reality of undeveloped economics (Zhou, 2013). Yet, influenced by fast
fashion culture, western modern lifestyles and social media, many young people now embrace the consumerist culture as their own lifestyles (Gerth, 2010). That reflects fashion by changing clothes frequently to show off their fashion tastes and personalities. And the traditional thrift and harmony culture is believed by some people no longer suitable for their modern lifestyles. Plenty of clothes are only used a few times then thrown into the waste system. The consequence is that only a small percentage of old clothes are recycled and reused, limited by awareness and techniques. The recycle and reuse systems are not well developed, so cannot deal with large amounts of old clothes so far (Zhang, Cui and Liu., 2014). Most of them become waste and that needs to be addressed.
- Environmental aspects: Sustainability issues have gradually appeared along with the high-speed economic development in the recent two decades in China. The problems related to the knitwear industry includes grassland degradation, water and land overuse and pollution, over production and consumption. Sustainable awareness and related solutions are still in the exploration and research stage, compared with western developed countries, because these issues have appeared much later in China. Chinese people lived with scarcity before the 1980s. It had fewer environmental issues, but people suffered with poverty and even hunger. This implies a trade-off, where the advantages of economics were prioritised, and environmental issues not recognised or considered until the environmental problems gradually appeared and drew attention from Chinese academics (He, 2012; Gao, 2015, Zhao, 2016) and the government in the 2000s. There is an emerging understanding that economic development and environmental sustainability should go hand in hand. Subsequently, environmental policies were gradually introduced, e.g. China 12th and 13th, five-years plans (Government of China, 2011).

Recently, most of Chinese societies' sustainable awareness has grown but it is still early compared with experienced developed countries. There were many discussions and arguments for carrying forward the traditional thrifty culture to balance economic development to deal with sustainability issues in

China (Chen, 2021, Niu, 2014; Huang, 2011; Yao, 2014). Unfortunately, there is unbalanced economic development in different areas in China. Less developed areas are still more concerned about economic growth. Solutions for sustainability research is more focused on business sustainability (Bai, 2019). There is some focus on the directly visible impact factors of environmental issues (Du, 2016; Zhang, Qin, Wu, 2015), e.g. research shows that most Chinese citizens are aware of the need for environmental conservation and are willing to support projects such as 'grain for green', to convert redundant farmland to forestry (Cao, Chen and Liu, 2009). But they have little awareness of circular design (Zhen, 2021). Circular design is a concept of the sustainable design approach that follows natural systems to avoid waste. This considers 'the right speed for each garment within specific lifecycle stages' of fast and slow fashion. It is a 'concept of systems thinking' with different sized fashion cycles operating at different speeds (Goldsworthy, Earley and Politowicz, 2018).

The cultural values of sustainability do exist in China although they are stronger in older generations. But sustainability as a concept is missing. The knowledge of sustainability has not developed to the same level as in the West. High levels of awareness and concern about the wasteful nature of fast fashion, and the role of the consumer in driving unsustainable demand for products, have emerged in the West in recent years. Price pressure in western countries led to a globalisation of supply chains. This has brought opportunities for economic development for these developing countries, but also led to the emergence of the fast fashion culture, where consumers got used to clothes as fast-moving goods (Black, 2008, 2012; Fletcher 2008, 2010, Brown, 2013). This has gone on to influence the rest of the world, including China. In the last few decades, younger Chinese consumers and the richer groups now follow similar lifestyles to western consumers (Zhang, 2013).

### 1.3. The Chinese cashmere brands

Traditional Chinese knitwear brands have been segmented by different materials that are used for making the products. There were two main groups with around over a hundred brands in Chinese retail channels in the 1990s and 2000s. The first group was of cashmere brands. Luxury products were offered in old department stores with retail prices of around $£ 200$, or above, for one piece. These prices were high in the context of the average Chinese employees earning in private companies at around $£ 573$, and in non-private enterprises at around £967, per month (National Bureau of Statistics, China, 2021a, 2021b).

The second group was mid-ranged Merino wool knitwear brands. They were another important group of the knitwear section in department stores in their peak time, with their product prices around $£ 50$ to $£ 100$ per unit. For instance, in 2008 , there were 718 Merino woollen knitwear brands with $2.6 \%$ of salerooms and 295 cashmere knitwear brands with $8 \%$ of salerooms in Beijing's fashion market (Anon, 2009). There were also some lower priced products, mainly including cotton, wool blended yarns, or polyester sweaters. They may have had a label but were normally sold as non-brands for selling in wholesale markets for individual shop owners. They may be displayed mixed with other non-brand products together in some online shops.

This study focuses on Chinese knitwear brands, who produce knitwear and sell it under their own label. This does not include general knitwear products sold in wholesale markets for small retail shops, because these products do not sell with stable brand names, nor does it include low-price cotton, wool blended, or polyester knitwear. Furthermore, the Merino wool brands have totally lost their old retail channels in department stores and also exist just in the wholesale market. Cashmere brands are selected as the representative Chinese knitwear brands for this study, because they are the only group left in Chinese main retail channels.
1.3.1. The main problems of the Chinese cashmere brands

According to a Chinese Cashmere Brand White Paper (CCBWP) (China Wool and Textile Association, 2008), Chinese cashmere brands were found as the top brand group in the Chinese knitwear section. In 2008, the CCBWP reported the main problem of the cashmere brands was to find a way to improve them to be outstanding brands in the future. The CCBWP believed that the Chinese cashmere industry should be the only segment that is less pressurised by international brands compared with other fashion brands; there is a potential market share that can be increased because both the best materials and manufacturers are in China. Even though cashmere itself has incomparable advantages, most Chinese cashmere brands became a 'sunset industry', because these brands are lacking both design and brand awareness skills (China Wool and Textile Association, 2008). The CCBWP pointed out that the main problems of the cashmere brands were 'Dan' (single) and 'Hui' (too similar) and needed to be turned into 'Duo' (various) and 'Cai' (distinctive). Compared with general Chinese womenswear or menswear, cashmere brands are more behind both in product design, brand building and marketing.

Table 1-1: Comparison between Chinee cashmere brands and Chinese menswear brands (China Wool and Textile Association, 2008)

|  | Chinese cashmere brands |  | Chinese menswear brands |  |
| :---: | :---: | :---: | :---: | :---: |
| Products | Only for cold seasons | 'Simple' | All season products. Sell with detailed plans | 'Various' |
|  | Simple: colours/designs, category/ match |  | Complete structure for chain stores, multiple seasons, areas, and product types |  |
| Retail markets | Department stores, group purchasing |  | Department stores, chain stores and more |  |
|  | Lack of brand culture in product images Products display basic, boring |  | Uniform images, normative displays |  |
|  | Lack of sales guidance, no matchable items and aftersales services |  | Professional shopping guide, with service systems |  |
| Operation | Simple structure of companies Lack of planning and marketing |  | Both the companies and franchisers operate with complete business running structures |  |
|  | No uniform retail prices |  | Clear and strict pricing system |  |
|  | Only two purchasing meetings per year, the delivery cycling is long with stressful production |  | Multi-purchasing meetings, distribution +order +off the shelf, flexible ways to deliver products to markets |  |
| Products | Too similar each other, serious product homogenisation | $\begin{aligned} & \text { 'Too } \\ & \text { similar' } \end{aligned}$ | Brands care about own product differentiation | 'Distinctive' |
| Consumers | Narrow group, mainly 40-55 year olds |  | Mainly 25-60 year olds, winter consumers |  |
| Retail channels | Declining channels, gradually shrinking, the sale areas are marginalised |  | Multiple channels, cover more markets, big brands with large flagship stores |  |
| Capacity of the market | Market squeezed by local womenswear, menswear brands and international brands |  | Market extending, start segment different market in details, e.g. sport, and outdoor |  |
| Branding | Manufacture products, lack of culture |  | Care about brand building |  |

Table 1-1 explains the problems of Chinese cashmere brands from different angles, compared with Chinese menswear brands. The following aspects need to be improved:

- products are only for cold seasons
- designs are plain and uninteresting
- with single sales channel, retail channels are declining
- poor product displays and shop images
- their franchisers have simple management processes
- they do not have uniformed retail prices
- product delivery and production cycle are too long
- the products were 'too similar' to each other
- consumer groups are too narrow
- market share squeezed by other fashion brands
- the brands have not been effectively built (cwta.org.cn)

The CCBWP have emphasised the importance of designing and branding for these cashmere brands' improvements. It offered a right but rough direction for these brands as the CCBWP was a report and industry guidance document. It did not offer details for how to make this improvement in these related aspects. This study investigates the underlying causes; it will explore the problems and argue for answers for how to improve these brands by design.

The CCBWP's information offered a basic understanding of the problems. The narrow consumer group itself may not be a challenge for brand development, rather the ageing consumers narrow the customer base. Menswear brands might not be a good point of comparison for knitwear brands because Chinese menswear also suffers from product homogenisations, over-expansion, and lack of distinction from each other.

These problems still need to be faced by most knitwear brands after these were pointed out by CCBWP 14 years ago. Some brands went out of business. Others have tried to improve but without success. This thesis will argue that design abilities and brand running experience might have been a major contributing factor.

### 1.4. Problem statement

Chinese cashmere knitwear companies have become suppliers of international fashion brands because of their technological excellence and advantages of raw materials. They have invested heavily in development and machinery. The Challenge is their in-house brands are continually declining. In the past 15 years, Chinese brands have steadily lost market share to Chinese local fashion and western brands, with a few notable exceptions. The product designs are conservative and unpopular in the market. Their products are not organised and designed in a way that allows building a clear brand character for long-term brand development (Zhang, et. al, 2018 (Appendix 1-2)). Chinese cashmere brands lacked differentiation from other Chinese competitors and that led to competition on price and created sustainability issues such as over production, material, and manpower waste. The decline is likely to continue as the brands serve only an ageing market and do not attract younger generations to their products. Within this context, the companies are investing little into design, which could be a major barrier to becoming successful sustainable businesses.

### 1.5. Research aims and objectives

This study looks for solutions for sustainable brand development from the design perspective.

Research aim: The aim of the research was to investigate how design can help Chinese knitwear brands to survive and prosper in a sustainable way.

For achieving the research aim, following research objectives were developed:

## Objectives:

1. to investigate the challenges and opportunities facing the Chinese knitwear sector 2. to evaluate current design practice in knitwear brands
2. to understand how design can be embedded in the wider organisational context as part of effective brand management
3. to explore how design and brand management can be improved in a sustainable way.

### 1.6. Research question

Driven by the research aim and objectives, the research was designed to answer following research questions:

RQ 1: What are the barriers and enablers for knitwear brands in the Chinese knitwear industry?

RQ 1.1 - What role does design play in assuring a sustainable future for Chinese knitwear brands?

RQ 1.2 - What role does the organisational set up or structure play in enabling and hindering Chinese knitwear brands?
RQ 1.3 - How can the design culture in Chinese fashion brands be improved?

The first research question is the overarching direction of the study. It will help to comprehensively understand the brands through deep research of the knitwear industry. The industry is contextualised with a study of the disadvantages and shortcomings. This will link with many related study areas including branding, designing, consumers, knitwear industry history and development, and their sales systems and business attitudes.

Based on RQ 1, three sub-questions were developed for answering the question from different angles. The first sub-research question, RQ 1.1, looks for the design roles for these brand improvements under sustainable contexts. This is to examine the problems of the design process and their products offerings.

The second sub-research question, RQ 1.2, examines the organisational structures and their current business models. It is based on a case study with the representative brand, King Deer, to look at its brand's main drivers, the buying and selling systems, and to analyse the strengths and barriers in organisational and brand levels.

The third sub-research question, RQ 1.3, focuses on design culture in these brands. It is divided into two main parts. The first part is to understand the design culture in these brands by examining the design organisation and practice in the brands and
their support systems. The design culture understanding is based on RQ 1.1 for design processes to build collections, and with RQ 1.2 for business model and management system development. The second part evaluates the design culture of the brands to find their problems and then suggests possible solutions to improve these businesses into suitable brands.

### 1.7. Structure of the thesis

Sustainability is the overall direction for enabling these brands long-term' survival. The brand needs to balance brand development, environmental impacts, design quality and products lifecycles, along with the cultural influence of the brands with their social responsibilities. To achieve this goal, they need to deal with the brand problems in design first. The thesis has been divided into nine chapters to answer the research problems that are affecting the Chinese knitwear sector (see Figure 1 $-1)$.


Figure 1-1: The structure of the thesis and the relationships between chapters and the research questions

The second chapter is the literature review. In this chapter, the research landscape is explored to establish the context of the study. It examines the requirements of the fashion sector in brand identity and markets. The chapter considers the importance of having the proper design culture and reflects on relevant sustainability issues. This chapter provides the theoretical foundation of the whole study to explore answers for RQ 1. It explains the main research theories including definitions, research context, and then concentrates on the focused areas. Importantly, it locates the research position and clarifies the research lacunae of the study.

The third chapter is the research methodology. The aim was to understand Chinese knitwear brands. An interdisciplinary methodology, based on a pragmatic philosophical research position was designed for the research. It consists of grounded theory, qualitative, quantitative and design action research methods. In this chapter, the different research methods and data collection processes will be presented. Furthermore, it will introduce the data analysis methods for the different types of data.

The fourth chapter identifies the context of the Chinese knitwear brands that form part of the research results. The first aspect is how design education has influenced the development of the knitwear sector. Secondly, the development history of the knitwear brands, retail systems and trends will be introduced. Different segments of Chinese consumers, their demographics, lifestyles, and consumption habits, (including luxury and cashmere) are investigated. Through secondary research of current literature, and primary research from industry and design education interviews, a clear map of Chinese knitwear brands has been built in this chapter.

The fifth chapter presents the design action research (DAR). This is an essential research method for this study. DAR serves as a research tool; it helped the author to immerse herself into the design culture of the case study brand, to understand their design process and to explore the answer of sub-RQ 1.1. Having established the credentials as a design professional, this enabled facilitating the opening of the conversation about design with company representatives. The design collection is a small-scale project, more similar to a student project, implemented within the case
study brand, King Deer, such that the company is capable of adapting to this approach.

The sixth chapter describes the main findings to understand the design roles of the Chinese traditional knitwear brands to answer RQ 1.1. This is based on the case study brand and includes the Chinese knitwear brands systems' and business models, the organisational context for design, their design processes, and how these are different from the author's design process (with western design thinking and methods). In addition, it considers the problems in their processes, the main drivers of current design processes, and the sustainable issues of the brand. It presents part of the main results of the research findings, namely, the design culture evaluation, analysis, and validation, that help to understand the general problems of the industry. These results not only answer the research questions, but also offer significant evidence for supporting the main research arguments in Chapter 7.

The seventh chapter focuses on sustainability development in the brands, RQ 1.2. The research findings focused on the challenges of sustainable brand development and leadership structures. This was divided into five main parts for discussion. The first part investigates a second case study company as a successful example of brand upgrading for how they dealt with similar problems and made their brands successful for different markets. Secondly, it considers the recent changes for the first case study brand, and their improvements and challenges. It will discuss the main design aspects for a thriving design culture for these two brands. The third part examines how brand understanding supports design. Fourthly, it focuses on design leadership issues in fashion/knitwear brands in China. The final aspect explores brands and sustainability in the Chinese knitwear brands context with environmental, economic, design, and cultural aspects. These findings are based on data analysis from the research case study, interviews from the knitwear industry, design higher education, and the design action research.

The eighth chapter answers RQ 1.3. by presenting recommendations and suggestions for how design culture in Chinese fashion brands can be improved. It identifies solutions at three different levels namely: the business and brand, in design, and the products. These will allow for brand upgrading for younger markets
and lead to the improvement of design education issues. There are four types of change that need to be made across the three stages. (1) One-off switches of how a company runs its business at the organisational level and who oversees the different levels. This includes clarifying the business, brand, design, and products' directions. Improvement in the organisational structure can be made by putting appropriate people into the important positions in these three levels. (2) Seasonal activities that need to be carried out for each collection and continuously monitored. (3) Operational changes to practice that need encouragement and reward by the company. (4) Activities that need to be periodically reviewed and questioned, to keep the activities in the right direction with effective improvement to achieve sustainable brands. In addition, it is suggested to improve design education in China with a focus on three main elements to increase design students' creativity, design abilities and awareness of sustainability.

The ninth chapter presents the conclusions of the thesis. It summarises the research outcomes, including the answers to the research questions, to fulfil the research aims and objectives. The original contribution to knowledge, to meet the research lacunae of the study, which highlights the role that design can play in terms of developing the brand's position and hence the sustainability of the knitwear companies, will be presented. The limitations of the research, and recommendations for future research are outlined, and the chapter ends with concluding remarks.

## Chapter 2: Literature Review

This chapter discusses the main issues that surround the thesis topic in order to set the context that enables the identification of the research gaps in the subject. It recognises the need to understand how a brand should be developed and what it can do. The selected areas are based on the research questions:

RQ 1: What are the barriers and enablers for knitwear brands in the Chinese knitwear industry?

This builds the overarching direction and theoretical scope of the study. The purpose is to understand the advantages and disadvantages of the focused brands. This considers, fashion and knitwear in designing, branding, consumers, and sustainability.

- RQ 1.1. What role does design play in assuring a sustainable future for Chinese knitwear brands?

A design lens has been taken to explore the problems and solution of Chinese knitwear brands in this study, which narrows the research to design aspects, and makes deep explorations in design understanding, design thinking and process, design management and team working to make the brand develop into sustainable business.

- RQ1.2. What role does the organisational set-up, or structure, play in enabling and hindering Chinese brands?

Organisational structure and their business set-up is a key influencing factor for fashion brands. How they build and manage their brands, how they sell their products are important for making the brand a success or not.

- RQ 1.3. How can the design culture in Chinese fashion brands be improved?

This considers design culture in Chinese knitwear brands. It has located a specific position using design to improve knitwear brands and therefore increase their market share.


Figure 2-1: The relationship between the main research fields and research questions

Figure 2-1 shows the relationship between each research question and their main related fields: branding, design culture and sustainability are identified as the main focused fields of the study. Literature from business/branding and design are complementary, but they do not link well. Branding here is a precondition of design, it directly influences design directions and outcomes. Designers need to understand the brand market setting, their main features, and differences. They need to understand their target consumers, then they can make the appropriate products for the brands. Design is the core perspective of the study; design culture is focused on design and its surroundings. Consideration needs to be given to: where is the position of design in the organisations? What are their constraints? How do design teams work together? How do they create products? These are all important and need to be reviewed in the literature to help to understand the challenges. Sustainability is the context of both design and brand development, sustainability issues in cashmere, luxury and fashion areas, need to be investigated. In addition, knitwear related research needs to be understood as the context of where the study
is situated. Therefore, these closely related fields (branding, design culture, sustainability and knitwear) will be examined in the following sections.

### 2.1. Brand building and management

Luxury brands are accomplished better at maintaining their outstanding positions in the markets than high street brands (Okonkwo, 2007). Understanding the brand principles and key aspects for building successful brands is necessary for improving the fate of Chinese cashmere brands.

For fashion products purchasing decisions are often based on brand choice because consumers are overwhelmed by product diversity (Okonkwo, 2007). Fashion businesses with successful brands can increase product value and obtain long-term growth of the market share. Companies with strong brands can be valued in a stock market 4 to 20 times the worth of their net assets, higher than less known organisations (Okonkwo, 2007). Well-known brands can also achieve higher prices, e.g. $40 \%$ higher than ordinary products or services (Neumeier, 2003).

### 2.1.1. Definition of brand

The word 'brand' comes from the Old Norse 'brandr', which means to 'burn' (Clifton, and Simmons, 2003). It was a method to stamp people's livestock in order to distinguish them from others (Hameide, 2011). Differentiation can be understood as a basic principle of branding. Luxury fashion companies have succeeded in building well-recognised brands to obtain consumers' trust and loyalty through differentiation and 'emotional appeal' (Aaker, 1997; Sweeney and Brandon, 2006; Okonkwo, 2007).

## a. Brands differentiation

Differentiation is seen as one of the significant points for branding (Pappu, Quester and Cooksey, 2005, Bridson and Evans, 2004, and Keller, Aperia and Georgson, 2011). Individual brands have their own unique understanding of their products, services, or companies with the focus on what is different from others (Neumeier, 2005). Brands need to manage the difference as they appear in the minds of people not as they occur on balance sheets (Neumeier, 2005). Branding is a comprehensive business strategy to express the relationship between different economic values,
which includes quality, utility, symbolism and cultural worth (Power and Hauge, 2008). Companies cannot totally control how their brands are perceived in people's minds, but they can study, measure, manage and influence consumers towards a direction they want.
b. Brand as a promise

For the modern business, brand plays a key role for market success. People live in an era of information overload but are time-poor to test and compare products.
Purchasing decisions rely on a degree of trust in products or services rather than the benefits from the product itself. Brands help influence people to make choices for what they could buy to save time and energy (Neumeier, 2005). In this level, brand is a promise of certain qualities, services, product features, styles, and uniqueness.

### 2.1.2. Brand positioning and market segment

The literature mainly comes from business scholars. It has a wide range of applications in modern business since it was proposed in the 1970s by Ries and Trout (1972). In the beginning, it was a concept for advertising products, and then it was explored as a key factor for business strategy that involved the whole business plan and products (Crawford, 1985). After the 1990s, researchers focused on brand positioning and system theories, for example, Aaker (1991) in brand equity, Kotler (2001) in marketing strategy, and Keller (2003) in brand building and management.

Brand management is the most important strategy of business success. It includes design, marketing and activities to establish, evaluate and improve brand equity (Keller and Swaminathan, 2019). They identified four main steps of this management process:

1. brand positioning reinforces competitive advantage of the brand
2. builds a strong relationship with their target consumers
3. builds a system to evaluate the brand equity and to manage
4. adjusts processes for long-term development.

Full brand management is an involved iterative process within a complex system, which is not the main area of this study. Here, the focus is on brand positioning and understanding of consumers that closely influence design.


Figure 2-2: Brand positioning and its related key elements (Keller, Aperia and Georgson, 2011)

Brand positioning helps to clarify the meaning of the brand, the uniqueness of the brand and the similarity and difference with competitors (Keller, Aperia and Georgson, 2011), (Figure 2-2). Keller (2003) considers brand positioning a precondition of brand building and success. Brand building combines tangible and intangible elements. The tangible aspects include visual elements, such as brand logo, name, the product design, and packaging (De Chernatony and Riley, 1998). The intangible (symbolic elements) is brand personality. A brand must address user needs and have clearly defined target customers or groups. Marketing principles have established various segmentation criteria, such as demographic (age, income, or gender), geographic, psychographic, lifestyle, and usage habit, as the basis of choosing and targeting markets and potential users (Hameide, 2011). At the product level, a brand is positioned according to the products and its attributes, while at brand level, positioning is based on the brand identity, brand personality and its emotional value (Hameide, 2011). Brand positioning is also a method of creating
specific preferences and major differences for its products at a specific time and in a specific market (Kapferer, 2008).

Brand positioning is a key for both newly developed brands and upgrading existing ones. For example, when Burberry was suffering from being outdated and at risk from market loss, its brand was rebuilt. Burberry successfully repositioned the brand in the luxury market and changed their target consumers to the younger generation with creative designs and new brand images. This was a successful market strategy and management helped to rebuild it as a successful luxury brand (Moore and Birtwistle, 2004). For an existing brand, brand positioning specifies the product's niche to grow their market share at the expense of the competition.

Companies and designer teams need to understand their brand's positioning, which is an important constraint and driver for product design in this study. Designers need to understand what kind of products are required, who their consumers are, who their competitors are, and what are the main identifiers of their brands that they need to build throughout the design process. Many brands and retailers look at demographics (see Blackwell, Miniard and Engel, 2001), or population characteristics for basic consumer research (Koumbis, 2018). Market researchers conduct complex demographic and psychological surveys to divide the population into different consumer groups and market segments based on consumers' age, lifestyle, living area, education level, and ethnic background (Fringes, 2007).

Demographics can help retailers to get the right products, choose store locations and implement various customer service plans to help maintain customer loyalty, and hope to introduce new consumers to the brand (Koumbis, 2018). Large companies often work with consumer research companies to help them collect and analyse demographic data (Koumbis, 2018, Frings, 2007). Consumer demographics is typified using four specific elements to define a group including: age, income, education and ethnicity as purchasing decisions are related to these (Frings, 2007, Koumbis, 2018, Solomon and Rabolt, 2009, Yurchisn and Johnson, 2010). For example, most men and women have different consumption behaviours as do people from different social classes based on age difference. Western researchers divided their market segments around the 'grey market' (people born before 1945),
'baby boom' (1946-1964), 'generation X' (1965-1979), 'generation Y' (1977-1993) and 'generation Z' (after 1993 ) (Frings, 2007, Yurchisin and Johnson, 2010) Lifestyle assessment is another significant method for consumer market research, as lifestyle affects consumption patterns (Vyncke, 2002). Lifestyle reflects people's values, interests, and demographic characteristics (Blackwell, Miniard and Engel, 2001). In the same demographic groups, people will have different tastes and preferences in their fashion consumption (Frings, 2007) as well as lifestyles and aspirations (Solomon and Rabolt, 2009).

Demographic and lifestyle segments are combined for most brands. Chinese consumers, as the main audience for the Chinese knitwear brands, need to be understood in the study. Further information will be introduced in Chapter 4 with the context of the Chinese knitwear industry.

### 2.2. Design culture

For modern business, design plays a hugely significant role. Companies using design as a driving force for business strategy have obtained greater advantage and value than those who use it only for developing products (Lee and Joo, 2015, Micheli, 2014). Design has been identified as an important impetus that can directly and significantly improve sales performance, increase profits and turnover (Design Council, 2007). In the early 2000s, the Danish and British Design Councils undertook surveys and analysed the value of design for their national firms. It was identified that companies with advanced design have a competitive advantage over others. Interestingly, design can help reduce competition on price. For instance, over twothirds of businesses that do not use design compete on price compared to less than half of the companies where design is integral to the business. Design-led companies achieve stock market values up to $200 \%$ higher than the market. Similarly, design was identified as one of the main economic growth areas in Denmark (Danish Design Centre, 2003). These examples indicate that design adds value, and good design adds even more value. However, design has other benefits, such as considering the users' needs, improving product functionality and desirability.

In the fashion industry, design plays a significant role for achieving several goals, e.g. to increase business success, to create long-lasting stylish products for sustainability, to offer design collections in fashion for enhancing brand attractiveness, and to build and maintain brand reputation for increased consumer loyalty. This is because most fashion products need frequent and rapid updating (Ruppert-Stroescu and Hawley, 2014; Wenting, 2004). However, making design successful does not only relate to the product itself, it also depends on how designers think, the design development process and how all the related supporting systems interact (Eckert and Stacey, 2003). The company culture needs to support design, although there is little literature on design culture in fashion (Julier, 2007; Manzini, 2016).

Design culture is the cultural environment in which design takes place. In recent years important elements of design culture, such as design/designerly thinking, have been explored (Cross, 2006; Lawson 2005; Dunne and Martin, 2006). From the design perspective, design culture is explained as what designers do in the context of what is all around them (Julier, 2007). For example, design culture can be the relationship among designers and the whole systems of designing, producing and consuming (Julier, 2007). Similarly, design culture is based on knowledge, values, visions, and quality standards resulting from the conversations or the other ways of interacting between various actors and cultures in various designs areas (Manzini, 2016). Design culture infuses all aspects of material culture and beyond.

From the business perspective, design culture can be linked to organisational strategy and is seen as an essential pathway to increase business success (Hertenstein and Platt, 1997). Embedding design culture into organisational culture was identified as an effective way to enhance the influence and advantage of design (Lee and Joo, 2015). The effectiveness of using design thinking tools in organisations depends on how much the organisational cultures support and reinforce the use of such tools (Elsbach and Stigliani, 2018). However, embedding design culture into organisational culture can be hindered by managers who do not see design as an important means to maximise their shareholders' value (Turner, 2016). Designers themselves may lack influence in their positions within the company despite the potential for design in organisational culture (Lee and Joo,
2015). According to Turner (2016) design is often seen by managers as either a thing rather than a process; a service rather than a strategic resource or costly superficial changes rather than investment returns. These preconceptions of design could stop organisations embedding design into the business agenda.

Design is not limited to the process of making products but permeates across whole systems; companies also benefit from designerly ways of thinking. The challenge to embed design into organisational activities is common to companies in terms of:

- to access and start new design approaches
- to connect and coordinate design/business
- to foster design communication
- to creatively absorb, support, test, and intervene
- to anchor strategy and stretch design
- to capture and protect design assets and values (Jevnaker, 2010).


### 2.2.1. Design-led and market-led

There are two viewpoints from which to approach the issue of what to design, produce and sell: a traditional marketing-led approach, which looks at current and past sales; and a design-led approach that tries new ideas in the market.

Design-led is an approach to embed design thinking into projects, business, or organisations. The design-led approach is a viable alternative to traditional business models that rely on technology improvements and gradual product progression (Kyffin and Gardien, 2009). To understand both market/marketing-led and design-led are necessary for this study, because both business models are related to the fashion industry.

The market/marketing-led approach has dominated over the past half-century (Hart, Tzokas and Saren, 1999). For the business communities, marketing-led means relying on marketing with a focus on the 'four Ps' that consist of 'the product,' 'its price,' 'promotion' and 'place’ (Doyle, 2003). The market-led model is driven by marketing objectives based on a target market segment and marketing plan (Doyle, 2003). However, the traditional marketing-led business is challenged by the changes
in the market environment during the last two decades. Then market-led was redefined as a replacement of traditional marketing-led approach (Piercy, 2016). Compared with marketing-led, the market-led focuses on 'the process of going to market' and how it is designed and managed, rather than relying on a marketing department. It is a set of value-defining/creating /delivering activities to consumers, through understanding consumers and market change, developing market/marketing strategy, and implementation (Piercy, 2016). In the market-led approach, traditional marketing activities like new product development, branding, pricing, distribution, marketing communications (Baker, 2003) still play a vital part, but the business is no longer controlled by the marketing department.

Traditional marketing-led business focused on 'persuasion' (Maciver, 2016). Since the 1950s, as production technology developed, more products became available and were often similar in function, so competition is increased (Candi, 2010). Subsequently, mass media, advertising, and marketing became more important selling points than the product themselves (Forty, 2005). Consumers were persuaded to buy based on visual advertisement. Marketers made decisions about what products should be made and how to sell them (Bruce and Bessant, 2002).

In design-led business, design not only supports new product development, but is a strategy driver for business growth (Bucolo and Matthews, 2011a). According to the Danish Design Ladder (DDL) design evolves in four stages of design involvement: no design, design for styling, design as a process, and strategic design (Kretzschmar, 2003, Knight Daymond and Paroutis, 2020). Design-led is the highest level in the of DDL. The design-led approach is the utilisation of design thinking in organisations as both a research perspective and process (Wrigley, 2017; Knight, Daymond and Peroutis, 2020). The literature related to 'design led' discusses two directions: design-led strategy (DLS) and design-led innovation (DLI). DLS is concerned with bringing design thinking into organisational strategy (Knight, Daymond and Peroutis, 2020; Seidel, 2000) which is similar to design thinking methods that are considered in Section 2.2.4. A DLS is normally required in order for there to be DLI in the organisations.

Design-led Innovation is a promising direction for modern business improvement (Kyffin and Gardien, 2009; Bucolo and Matthews, 2011a; Bucolo, Wrigley and Matthews, 2012; Wrigley, 2017). DLI requires three components (user needs, technology and business model) for an outcome to be considered innovative (Bucolo and Matthews, 2011b). It is different to design thinking that mainly focuses on value creation (Beckman and Barry, 2007). Although DLI is popular as a research domain and perspective in academia, as a nascent field its purpose, methods and implementation need further investigation (Wrigley, 2017). DLI requires a deep understanding of consumers' real needs, a system change of business model, organisational structures and culture. It is an iterative process, needing long-term, and full-time engagement of the whole system. It requires fast prototyping and needs to see failure as part of the process, as it creates opportunities for more ideas. It needs building a platform for radical thinking, gives space for making change, breaking rules, and breaking boundaries to make design be design, in order to find the right answers for the problems of organisations (Wrigley, 2017). In this position, a deep systemic change based on deep design understanding is needed. However, most of these requirements are not easy to achieve in organisations, especially for those with traditional business models (Bolton, 2009).

The goal of both the market/marketing-led and design/designer-led approach is to maintain or increase profits, although starting from different points. The marketingled approach relies on structural analysis of trends in the present and the past to explore unexploited opportunities in an efficient and profitable way. It tries to persuade customers through communicating advantages, rather than the intrinsic benefits of the product itself (Johne,1994). Whereas the designer-led approach focuses on sensing and understanding future needs and improvement of existing situations (Maciver, 2016). Marketing-led systems carry the risk of not adapting to a fast-changing world. The designer-led route relies on a designer's intuition. A balance of these two approaches can be an effective way to address new business contexts (Maciver, 2016).

In the fashion industry, most commercial fashion brands are marketing-led, relying on trends and sales data to forecast following season's needs. However, many products are not popular, or too many related products are offered by different
brands. A design-led model can offer unique products to avoid homogenization but can be difficult to introduce. A hybrid model that combines both marketing-led and design-led may be a balance for these brands, because even advanced design also needs successful promotions through marketing systems. Design should be valued as a driving force for product innovation, organisational strategy improvement, business sustainability and success. Design here is not claimed to deal with all problems, but it should be effectively used for its potential to improve brands potential for sustainable growth.

Design can be a 'differentiator,' 'coordinator' and 'transformer' (Borja De Mozata, 2003). For fashion companies, design creates value by upgrading aspects of the brand and business, including the products, the work processes, more profit spaces and increased skills in the organisation (Aspers, 2010). Design drives fashion styles for continual revision (Pesendorfer, 1995).

Many companies may mainly focus design value on finance, but the value of design is widely ignored. In fact, design does not just create economic value but can be seen in terms of achieving intangible benefits associated with psychological, aesthetic and societal and visual values, e.g. joy and enjoyment, durability and inclusivity, sustainability, trust, and new social lifestyles. For fashion or knitwear brands, good design can upgrade a brand's reputation and business. It can increase product durability and therefore help to achieve sustainability goals. Good design can make users happy, e.g. by building emotional relationships with users (Shaw, 2009). Normally, a fashion product only needs to focus on its target consumers; it does not need to suit everyone beyond the relevant brand market setting and segment.

### 2.2.2. Constraints

Constraints set up conditions that influence choice in the creative process. They can be seen as conceptual boundaries for the creative process (Negus and Pickering, 2004). This is because creative products are believed to have a characteristic called 'fundamental indeterminacy', which depends on a series of routine and unusual choices among available possibilities to give every creative product its character (Becker, 2006). Constraints are considered in many aspects of design:

Arts and design (Becker, 2006; Hospers, 1985); design education (Clinton and Hokanson, 2012); engineering design (Hatchuel and Chen, 2017), fashion design (Eckert and Stacey, 2001); cultural production (Moeran, 2009).

Constraints frame clear conditions as creativity is more possible to happen within it (Stokes, 2005; Nelson and Stolterman, 2003; Onarheim, 2012). These conceptual boundaries can define and achieve direction. Designers know where the limit of scope is and have to be creative to stay within it or be creative in the way to shift the boundaries. Therefore, a space or a container will be built where creativity can happen (Collins and Amabile,1999). While too many limitations and pressure will obstruct the creative ideas (Collins and Amabile, 1999; Hatchuel and Chen, 2017), and the reverse is also true. Too many freedoms will also be an obstruction of creativity (Stokes, 2005). Setting a reasonable number of limitations and constraints can stimulate creative work (Collins and Amabile,1999; Noeran, 2009; Hatchuel and Chen, 2017). Setting suitable constraints is a key influencing factor for creativity.

For most products, constraints arise from the effects of material, the techniques used, time, place, people, aesthetics, legalities and money (Moeran, 2009). However, constraint is also important for the design process itself, not only for the product (Hoegl, Gibbert and Mazursky, 2008).

In the fashion industry, knitwear designers were identified as needing to conceptualise design problems in order to achieve the results they expected.
Compared with architects and engineers working with hard constraints, knitwear designers had much softer constraints on their designs. These constraints were not limited to fit and basic wearing functions but focused and framed visuospatial and aesthetic concepts (Eckert and Stacey, 2001). Most fashion designers work with trend forecasting to define fashion trends, to use sources of inspirations controlling design context and directions (Seivewright, 2012; Renfrew and Lynn, 2021; Eckert and Stacey, 2003). Creativity in garment design is not only for idea generation, but also involves a novel appreciation of the position of acceptable garments and an evaluation of perceptions of acceptability (Eckert and Stacey, 2001). In addition, other constraints will influence both creative outcomes and the design process. In a
fashion company the role of designers and the nature of design leadership also constrain the process.

### 2.2.3. Leadership

Design leadership can be seen as a constraint for the design process and the outcomes for the fashion brands. It influences who can facilitate design effectively in organisations to maximise the design advantage.

Turner (2016) argues that design leadership defines the organisation's future direction through the following activities.

1. Envisioning design understanding of the organisations to make sure design can play a key role.
2. Establishing 'strategic intent' and linking the decisions from the boardroom with everyday activities in the organisations.
3. 'Directing design investment' to maximise the return from these investments.
4. Enhancing corporate reputation by using design to deliver appropriate experiences to consumers.
5. Inventing in a modern environment to make innovation successful by developing a strong brand or building a strong brand to add value.
6. Training and organising for design leadership to assure that design becomes a 'normal mainstream activity' in the organisation.

Turner's perspective comes from being a design leader with consultancy experiences from large projects in services design, with the goal to maximise the full potential of design in business (Turner, 2016). It may be unrealistic for most fashion contexts. Many design companies have a Design Executive Officer (DEO) leadership role to bring more design benefit than traditional Chief Executive Officer (CEO) management. Design leaders can benefit the companies both on the organisational and individual levels. Lee and Joo (2015) considered the visionary leadership (DEO) better at communicating than a rewarding or empowering leadership (CEO). Design leaders can help organisations set trends for the design approach and styles and can be at the forefront in design practice and performance. The design leader's expertise can reinforce design achievement (Lee and Joo, 2015). Where design was
directly managed by higher positions in organisations, their products obtained higher design qualities that can lead to business improvement (Hertenstein and Platt, 1997).

The challenge is however that many designers do not have business knowledge and therefore have fewer opportunities to be involved in the senior leadership positions. In fact, some firms, may not have design leaders. Here, business leaders manage design, without the necessary design training background. Some design teams have good support in the organisations, but others have only limited space for their design activities, due to limited design understanding and visions by CEOs (Lee and Joo, 2015). It is a common issue that companies' leaders and design teams have conflict because business executives and managers have different thinking methods to designers.

Fashion brands need creative designer leaders to define and lead design direction, maintain the brand's feature and refresh products seasonally. However, there appears to be little research on the roles of design leaders, even though it is a common practice in industry. Leading designers are important for most fashion brands. Fashion is an industry with fierce competitive and short product life cycles. Their profits rely on product differentiations built on brand image, and products' styles can be quickly imitated (Richardson, 1996). For fashion products, creative change might not involve product functions and the production processes (Bianchi and Bortolotti, 1996). These innovations depend more on intangible factors like aesthetics, imagination and taste, artistic creativity, and less on technology and engineering (Bianchi and Bortolotti, 1996). Fashion companies are forced to update quickly, which prevents them from obtaining a lasting advantage (Wenting, 2004). In this context, leading designers are the key to competitive advantage and make market success by continually innovating design.

A suitable design leader is an enabler of product success in fashion brands. Creative leaders influence design results by their creative abilities, sense of aesthetic, vision, taste, understanding of the world and personal experiences (Shaw, 2009). In most design text books, design and creative ability are highlighted as crucial targets for design students' training, to cultivate new designers who can create the latest
brands, or leading a brand, or working as a designer in the fashion industry (McKelvey and Munslow, 2003; Hopkins, 2012; Sorger and Seivewright, 2021). Design proactive training from design universities and the design approach from key design books on design creativity, design process and thinking methods can be seen as an indispensable resource for every good and leading designer.

Leading designers for fashion brands need to achieve two things:

- balance design creativity and business needs (Malem, 2008)
- create a design direction and lead design teams towards the same direction.


### 2.2.4. Designerly thinking

Design thinking and designerly thinking have been discussed separately but with close relationships. Designerly thinking is rooted in the design academic field considering professional designers' practice skills and competence and linked to design theory and practice. Design thinking refers to design practice and competence used beyond the design context. It is a simplified version of designerly thinking and is use in academic and management aspects (Johansson-Skoldberg, Woolilla and Cetinkaya, 2013).

Design thinking has been addressed from different perspectives. In the early stage, researchers explored design cognition as a combination of analytical and instinctive thinking (Martin, 2009). But analytical thinking often misses new things that change the environment and thinking on instinct could lead to mistakes (Martin and Euchner, 2012). Design thinking is related to designers' thinking and learning. It was believed difficult to teach and study, because design thinking reflects the designer's complex processes of conducting, exploring, learning, and making decisions in a system environment, often having to work with teams in a social process (Dym, et al., 2005). Design cognition covers the approaches designers use to solve problems; the approaches they take and the mental actions of how inspiration is used to create new ideas. Designerly ways of knowing was identified by Nigel Cross (1982, 2006, 2011) in four aspects.

1. Designers deal with ill-defined problems.
2. Designers are solution-focused rather than problem-focused.
3. Designerly thinking is constructive, which invents value for new things that do not exist.
4. Designers rely on a non-verbal code in the material culture, to translate conceptual requirements into physical artefacts (e.g. using mood boards, developing visual language in fashion design), which involve both design process and product design (Cross, 1982).

Cross (1982) researched designerly thinking through design practice experiences and observations. According to Johansson-Skoldberg, Woolilla, and Cetinkaya's (2013) review: design and designerly thinking were explained as problems-solving activities (Buchanan, 1992); reflective practice (Schon, 2016), as practice-based activity and approach to the understanding of things (Lawson, 2005; Cross 2011). Designerly thinking was identified as a method to deal with 'wicked problems' (Rittel and Webber, 1973) that need creativity support to explore solutions. In addition, from a philosophical perspective, designerly thinking was also suggested to be the creation of meaning of an object rather than the creation of the object itself (Krippendorff, 2005).

Based on research on design cognition in the 1990s, design thinking became popular for user engagement projects. Design thinking is a human-centred method targeted at innovation (Kelley and Littman, 2001, 2005; Brown, 2008, 2009; Brown and Wyatt, 2010). Design thinking is seen as a creative human-centric discovery process followed by cycles of prototyping, testing and improvement (Brown, 2008). Design thinking as a user-engagement process is not usually deployed in the fashion industry where designers and customers typically have little direct contact.


Figure 2-3: Double Diamond design process model (Design Council 2019)

Design cognition is characterised by a mixture of divergent and convergent thinking (Design Council, 2019). The Design Council developed the world-renowned Double Diamond model (Figure 2-3) of the design process in 2004. The design principles of the Double Diamond model illustrate that design is not a liner process. It supports learning and discovering more than underlying problems. It is an iterative process until a suitable solution is reached. Importantly, the model and its principles and methods can help companies to build an ideal working culture and help them achieve meaningful and long-lasting change (Design Council, 2019). Design processes are typically collective processes involving multiple stake holders.

### 2.2.5. Teamworking

Teamwork is recognised to bring an important competitive advantage and lead to organisational innovation (Hirst, Van Knippenberg, and Zhou, 2009; Kianto, Vanhala and Heilmann 2016; Sharifirad, 2016). The literature on teamworking comes from multiple disciplines, including management (Benders and Van Hootegem, 1999), organisational culture (De Sitter, Den Hertog and Dankbaar, 1997; Mueller, Procter and Buchanan, 2000), business process (Hammer and Champy, 1993), and design and production (Zaglago, Chapman and Shah, 2013). All contain the core principles of teamworking and indicate important links with organisational performance (Katzenbach and Smith 1993; Heinemann and Zeiss, 2002). Team performance is influenced by various input factors, such as the professionalism, leadership support and the cultural nature of the team (Heinemann and Zeiss, 2002). Team culture (knowledge sharing and team emotional intelligence) was identified with strong association and positive impacts on team performance (Jamshed and Majeed, 2018). This links to attitudes, behaviours, and organisational structure that influences the effectiveness of teamwork, with positive links to both organisational and financial outcomes (Delarue, et al., 2008).

Design teamworking is important for product development and business growth. Collaboration, co-creation and communication were emphasised as two of four important design principles in the Double Diamond Model (Drew, 2019) (see Figure $2-3$, section 2.2.2.). Teamworking plays a significant role because most designs involve multi-disciplinary teams (Tucker and Abbasi, 2016). In the design community, developing trust was identified as a central part of establishing a design knowledge sharing culture (Zaglago, Chapman and Shah, 2013; Takeuchi, 1995). Collaborative designs are based on the team members' expertise and their knowledge-sharing and knowledge-integration skills (Kleinsmann, et al., 2011). A healthy design team culture requires trust where innovation is stimulated with stable emotions and a positive atmosphere (Ribiere and Sitar, 2003). This principle can be found in most visionary and innovative team cultures, employees share knowledge and work together to build an environment with trust and cooperation (Casimir, Lee and Loon, 2012; Intezari, Taskin and Pauleen, 2017; Johansson-Skoldberg, Woolilla and Cetinkaya, 2013; Jamshed and Majeed, 2018).

Fashion products are created by teamworking. Typical roles in a design studio or a design department (in organisations) include designers, pattern cutters, sample cutters, sample machinists, studio manger, and product developer (Renfrew and Renfrew, 2016). For a knitwear company, it may need a larger team because knitwear includes both textiles and the garment making process where more knowledge and process are required. For example, knitwear products need a finishing process to ensure the texture and size (through professional washing, ironing and shaping) are right for ideal conditions. They may not need a pattern cutter but need a technician who oversees both fabric making technical skills and shaped pieces for knitwear making (equivalently pattern cutting). Sample makers include knitting and sewing technicians. In addition, the finishing process needs a professional washing technician and staff for garment quality checking and repair. A healthy studio culture brings out of the best in individuals by recognising and developing complementary skills and allowing mistake and learning from them.

### 2.2.6. Collections

Renfrew and Renfrew (2016) describe collections as composed of a selection of clothing, accessories, or products that come together to tell a specific story. In the fashion industry, a design collection is an evolving series of products linked with a design philosophy, conceived, designed, discharged, and promoted, for a particular season by a fashion company (Calderin, 2013). A collection is not simply a set of items, it needs an overall direction and pieces should work together as a group (Gehlhar, 2008). Designers and brands use collections to express their aesthetic views, fashion taste, design concepts, and claim their difference from others (Renfrew and Renfrew, 2016; Gehlhar, 2008). A successful collection not only has good performance in the market but can help build brand differentiations to help the brand develop (Deserti, 2014). A signature style is important and necessary for a fashion collection, which make the brands recognisable and help them excel in a highly competitive market (Tsolova, 2021). Therefore, from these descriptions, a successful collection can help brands update products for freshness and keep their recognisable features to maintain their market shares (Tsolova, 2021).

In fashion design, collections play an essential role in a brand's image for obtaining market shares. A design collection, rather than a solitary product, reflects brand identity, management, and drives the brand expressions in the fashion field (Deserti, 2014).

For fashion brands and consumers, selling collections are normally better than selling with individual designs. A collection can offer different choices for how to wear and match each different look. Consumers will then buy more than one piece if they find matchable clothes they prefer and will continue to have the emotional connection to the brand.

### 2.2.7. Design process in the fashion industry

Understanding the design process is a vital step to improving it. Table 2-1 describes the overall stages of the fashion design process based on three sources. Two are textbooks by McKelvey and Munslow (2003) and Calderin (2013), and the third is from an empirical study with commercial knitwear design process from Eckert and Stacey (2003).

The process from McKelvey and Munslow (2003) includes 'design brief', 'research', 'design', 'prototyping', choose 'range or collection' and 'promotion'. These six steps are the basic process for many fashions design projects (McKelvey and Munslow, 2003). In Calderin (2013), the design process is divided into five main parts: 'research', 'edit', 'design', 'construct', and 'connect'. It seems different because of alternative phases, but the logic and design activities are similar to the first one. In Eckert and Stacey (2003), from commercial knitwear design the approach considers: 'inspiration source hunting', 'fashion research', 'theme selection', 'yarn selection' 'design framework', ‘swatch sampling', ‘shape/garment/detail design', 'prototyping', and 'communicating with buyers'. It includes more details and longer processes because knitwear design combines textile and fashion design together, with more steps for yarn selection and fabric design and testing. Comparing the three design processes in Table 2-1, what emerges is: despite different details in their research, all have common processes including 'research', 'design', 'prototyping', 'selection' and 'promotion'.

Table 2-1: Design process from three fashion/knitwear literature. (McKelvey and Munslow, 2003, Galderin, 2013, Eckert and Stacey, 2003)
$\left.\begin{array}{|l|l|l|l|}\hline \begin{array}{l}\text { Design } \\ \text { process }\end{array} & \begin{array}{l}\text { Basic design process } \\ \text { (McKelvey and } \\ \text { Munslow,2003) }\end{array} & \begin{array}{l}\text { Fashion design process } \\ \text { (Galderin, 2013) }\end{array} & \begin{array}{l}\text { Commercial } \\ \text { knitwear design } \\ \text { process } \\ \text { (Eckert and Stacey, } \\ \text { 2003) }\end{array} \\ \hline \text { Brief } & \text { Design brief } & & \text { Themes form buyers } \\ \hline \text { Research } & \begin{array}{l}\text { Research inspiration } \\ \text { Research direction } \\ \text { Market research }\end{array} & \begin{array}{l}\text { Research } \\ \text { Fashion intelligence } \\ \text { Self-examination } \\ \text { Vocabulary development } \\ \text { Forecasting techniques }\end{array} & \begin{array}{l}\text { Inspiration source } \\ \text { hunting } \\ \text { Fashion research } \\ \text { Market research } \\ \text { Forecasting/theme/colo } \\ \text { ur/style/Shopping trips } \\ \text { Theme selection } \\ \text { Yarn selection }\end{array} \\ \hline \text { Framework } & & \begin{array}{l}\text { 'Edit' } \\ \text { Refining concepts } \\ \text { Collects/reviews/prepares/a }\end{array} & \begin{array}{l}\text { Design framework } \\ \text { Conceptual design }\end{array} \\ \text { rranges research } \\ \text { Range or collection plan } \\ \text { Expressed with } \\ \text { Cheme/mood board } \\ \text { Fixstructing mood board } \\ \text { Studying consumer profiles }\end{array}\right\}$

The above four steps, research, design, prototyping and promotion, were identified to develop design collections. Designers typically start their new collections by creating an inspiration or mood board to build the initial direction of the theme for the new collections (Renfrew and Lynn, 2021; Eckert and Stacey, 2003). To build a tight collection it is necessary to 'edit, balance and focus' it (Gehlhar, 2008; Calderin, 2013; Hopkins, 2012, Renfrew and Renfrew, 2016; Raebild, 2015). In the design of a fashion collection many activities are done for the benefit of the entire collection whereas others are focused at specific garments. Table 2-2 shows activities that are shared and those that are required for specific garments and the entire collection.

Table 2-2: Design process comparison between individual designs and a fashion collection

| Design process | Individual design | Design for collection |
| :---: | :---: | :---: |
| Research | Trend market analysis/Fabric/yarn/material section |  |
|  | Inspiration research | Deep visual inspiration research |
|  | Mood boards |  |
|  | Overall design direction |  |
|  |  | Design structure |
| Design developing | Developing design ideas |  |
|  | Shape/form/silhouette/cut/construction/appearance |  |
|  | Colour/texture/pattern/surface decoration |  |
|  | Aesthetics/proportion/handle/rhythm/movement |  |
|  | Garment design /skitch /colour drawing /technical drawing |  |
| Sampling | Prototype |  |
|  | Testing /revisions /evaluation |  |
| Manage/edit collection |  | Discard designs that are not appropriate for the collection |
|  |  | Make overall direction coherent |
|  |  | Fit collection structure |
|  |  | Clarifying the role of each design |
|  |  | Present range/collection |
|  |  | Balance ranges and linkages (control more details for different deliveries, for keeping design images in shops) |
| Promotion | Styling/photo shoot/display |  |
|  | Catwalk show/fashion fair/purchasing meeting |  |
|  |  | Selling of range/collection |
|  |  | Delivery of range |
|  |  | Sale of range/collection in shops |

- Inspirations

Looking for inspiration was a starting point for both approaches in Table 2-2.
Sources of inspiration were related to cultural, historical, political, and environmental factors in most western brands and designers' collections (Renfrew and Renfrew, 2016). Fashion photographs, artefacts and nature were frequently used as design inspirations in knitwear brands (Eckert and Stacey, 2003). While there was no standard process for selecting sources of inspiration, how inspirations are used and translated into design is the key for design success.

- Deep research and mood boards

Research is important for fashion products and collections. Normally, most designers engage in market research and trend research, and may collect some sources as inspiration. This is often superficial, and a deep engagement with the underlying ideas of the visual research is ignored by many commercial brands, although it is an important method/step for designing and managing an original collection. This research investigates why building that is important for original design ideas. It provides the viewer with an insight into the thinking and creative vision of the designers (Seivewright, 2012). The results of the research process are usually displayed as mood boards, which represent a selection of possible clothing with images and sketches that define parts of the collection (Eckert and Stacey, 2001). That helps the direction and holds the designers towards the same objective to provide coherence in the collection (Eckert and Stacey, 2001, Raebild, 2015; Calderin, 2013; Hopkins, 2012). Mood boards are a common tool in western brands because most designers are trained in using them at universities. The functions of mood boards include:

- design communication tools
- offering overall direction of collection
- mapping out a space of 'legitimate’ design
- creating coherence between assorted designs (ranges, collection)
- visual foundation for design decision making (e.g. colour setting and using in new ways)
- creating atmosphere and cultural connotations (Eckert and Stacey, 2001; Raebild, 2015)
- Developing design ideas

The next stage considered is the development of design ideas. Visual research and mood boards offer overall design directions, which is important to make the collection coherent. How deep designers engage depends on the design culture, i.e. the designer's creative abilities, their personal design approach and their market settings, but also on the time they have available. Normally, the deeper and wider the research stage, the more designers can generate original design ideas to achieve innovation in aesthetic, taste, and artistic creativity (Seivewright, 2012).

- Sampling

Sampling occurs throughout the design process. Garment sampling allows for prototyping design ideas as real garments. Many designers require several iterations until the design can be finalised selected or discarded. Compared with individual designs, the collection needs to consider how to fit multiple products under the theme and into the structure of the collection. There are also many important samplings such as patterns designs, yarns stitch, colours, textures, and printing for testing different design ideas.

- Collection managing and editing

For a collection, it is important to edit and manage selected pieces to achieve a coherent direction. A successful collection needs to tie all the design elements together. A technique used is called 'hanging a collection' to control colour balance, patterns and what the collection will appear like when they go to market (Raebild, 2015). Editing ranges or collections by displaying them together is a common method in fashion brands (Renfrew and Renfrew, 2016). However, in practice this can be difficult as designs are ready at different times.

## - Promotion

The last step, Table 2-2 is how to promote the collection. While promotion is often the responsibility of marketeers, how it is carried out can be an influence on designers. Big brands and influential designers have catwalk shows in fashion weeks for their new collections (Renfrew and Renfrew, 2016; Hopkins, 2012). However, not
all brands or designers can afford a catwalk show at these events. New brands or small designer brands prefer to display their collections in showrooms in fashion weeks, to meet new buyers. They may also hold purchasing meetings. Big brands with good control for brand images can deliver their planned design ranges/collections in different sale periods, editing and dropping their products into retail stores when required (Renfrew and Renfrew, 2016) e.g. most luxury brands display their products as a tight collection across whole seasons.

These five steps/methods from Table 2-2 represent a western design approach for fashion collections. This will be used as a standard for comparison with the design action research (DAR) collection in Chapter 5 and the Chinese knitwear brands case study brand, King Deer, in Chapter 6.

### 2.2.8. A conceptualisation of design culture

In this study, design culture can be seen as part of the organisational culture. It values design, understands the position of designers in the organisations, design thinking, design process, management and evaluation. The human resources of the company are all interlinked, including design teams, their leadership, and other related departments. Design culture should reflect all design related activities from organisational strategy to design support, management, supply system, design processing, design thinking and decision making, the production, and promotion.

If design is understood and valued, design teams receive more support from their leadership. Literature shows that high investment in design is a prerequisite for advancing products and increasing business competitiveness. If the company leaders give more space, time and money to support their design teams, the rate of design success could increase. For the designers themselves, good design understanding can help to improve their design ability by supporting design thinking and full design development processes. To enrich their design culture, most fashion companies should consider:
For the organisations:

- respect and value designers (design centred)
- give the designer enough space to explore ideas (divergent thinking)
- the evaluation of designers is trusted (respect-recognising 'right' design)
- encourage designers to push boundaries, allow to prototype and iteration (design innovation)
- no blame for lack of success for particular designs
- give time and resources to analyse the market
- designers are both supported and challenged (extend designers' potential)
- manage all the relevant departments to support designs (support system)
- give time for inspiration and exposure to other designs
- support teamworking, nurturing design teams not just individual designers.

For the designers:

- design with a broad set of inspiration/sources (inspirations)
- design basic deep research to generate original ideas (primary generation based on market and trend understandings)
- designers develop mood board with themes (overall direction)
- designers are immersed in wider fashion contexts (context setting)
- designers push themselves for the best designs (iteration)
- designers understand the target consumers (user centred design)
- designers follow a process to select designs (design funnel)
- create desirable products to meet consumers' potential needs (design led)
- designers know the place for their design in a market sector (positioning)
- designers work together and challenge each other (teamwork)
- have an ability to arrange tight design collection(s) for brand differentiation (leading designers).

To sum up, these twenty-one points are the reflections of preferred design cultures in organisations. These points will be used as a standard of the ideal design culture in this study. These can be rules for analysing and exploring the shapes and forms of design culture within the Chinese knitwear brands to be explored in Chapter 6 of this thesis.

### 2.3. Sustainability

Sustainability has become a widely used concept since it was published as a guideline for development and the environment in the Brundtland Report from UN World Commission in 1987 (United Nations, 1987). Purvis, Mao and Robinson, (2019) summarised the 'three -pillar conception' of sustainability as focused on environmental, social, and economic development (Figure 2-4). In addition, there is the four-pillar sustainability model (Figure 2-4), which adds human dimensions to sustainability (Future Learn, 2017). The understanding of sustainability has evolved over time culminating in the United Nations Sustainable Development Goals for balancing economic development and social and ecological problems (United Nations, 2015). The social pillar considers broad topics including communities and culture. Culture is also an important aspect in the human pillar.


Figure 2-4: Three-pillar concepts of sustainability (Purvis, Mao and Robinson, 2018, futurelearn.com)

Culture was not mentioned as one of the elements of sustainability in the original Brundtland Report (United Nations, 1987). Throsby (1997) identified cultural sustainability in relation to the consideration of 'intergenerational equity' as a foundation and core value needed for sustainability. Ethics and culture were recognised as crucial elements in the same way as the environment and natural resources (Throsby, 1997). For example, in New Zealand, community well-being includes cultural, environmental, social, and economic elements (New Zealand's Ministry for Culture and Heritage, 2006). Duxbury and Jeannotte (2010) reviewed most of the sustainable culture literature and summarised that cultural sustainability
was related to society, policy making and communities, but it was still developing. One particular gap identified of relevance to this study was apparent weakness between concepts underpinning links between sustainability and culture.

Throsby (1997) developed the concept of 'cultural capital' to explain cultural sustainability with principles of intergenerational equity in both tangible and intangible forms. The tangible ones are artefacts, such as buildings or art works. The intangible ones consist of 'ideas, practice, beliefs and values' as intellectual capital shared by a group. Throsby (1995) believed that exploring the interaction between culture and an economic system should be a helpful way to achieve sustainable development goals. Packalen (2010) saw culture as a key element that can shape a desirable future of sustainable development through culture influenced by arts, education and policies to improve the public's awareness, the understanding of complex problems and therefore to position and explore sustainable solutions. After COVID-19, culture has been emphasised and discussed and will add as a new pillar of sustainability in September 2022 (UNESCO, 2022).

For the fashion field, cultural sustainability is related to policy, education, and art design (Packalen, 2010). It can be linked with business, and consumers (Throsby, 1995). Consumer culture reflects changes in consumption behaviours, values, and fashion altitudes.

### 2.3.1. Sustainability issues for cashmere

Issues of cashmere include three aspects: raw materials, industry production and cashmere products. Goat breeding for raw cashmere has led to environmental problems of overgrazing, leading to soil erosion and desertification (Chen, 2015; Mandakh, D, 2015). Research has developed programmes to balance farmers' needs and ecological balance (Wang, et al., 2018). Zhang (2017) described the use of barns for goats and crop planting for livestock feed. However, Wu (2019) identified challenges through the traditions of poorly educated elderly farmers in transforming the industry. In contrast, Cheng (2011) argued that cashmere goats being called the 'grassland killer' was not fair. Indeed, cashmere goats are the only animals to easily
survive in the local environment. She believed cashmere breeding within ecological systems can balance social, economic benefit and environment protection.

In industrial production, cashmere dyeing produces large volumes of toxic effluent harmful to the environment and people's health (Wu, Han and Sarina, 2007). Because the demands of low-priced goods in global markets, cashmere products have been described as having a 'catastrophic cost' to the environment (Gerth, 2010). Therefore, Chinese National Textile Products Basic Safety Technical Specifications enacted a new law with updated standards for textile related products in 2005 (wenkebaidu.com, 2005). However, progress in ecologically benign dyes is still at the research stage or has been used for limited colours (Li and Dai, 2019; Wu, Han and Sarina, 2007). Similarly, some eco-dye methods are not ideal due to costs. Reactive dyes can offer bright colours, but the dye fixation rate is lower than traditional acid dyes and will waste $20 \%$ to $50 \%$ of the colour in the process. This will increase the cost for both usage of dyestuff and for decolorising wastewater afterwards (Yan, Wang and Zhou, 2012).

For cashmere products, overproduction and overconsumption has similar problems to other fashion items. The rapid expansion and developments of fashion businesses has caused many negative effects on both people's lifestyles and the environment. There are many harmful impacts from the luxury fashion supply chain (Carrigan, Moraes and McEacherm, 2013), such as water contaminations from textile printing and dyeing, and workforce's health hazard from chemical poisoning and noise pollution. For this study, extending products' lifecycles and desirability is a suggested goal for design and systemic improvement. The next section considers the effects of luxury products, such as cashmere, on the environment.

### 2.3.2. Luxury and sustainability

Luxury cannot be ignored in the fashion field. There are only a few hundred fashion brands that can be referred to as luxury brands, but their annual combined market turnover is over US\$100 billion and their influence is extensive (Ogilvy, 2007). In most consumers' minds, luxury is synonymous with top quality, uniqueness, and being beyond needs (Athwal, et al., 2019). Luxury goods often show craftsmanship, aesthetics, history and durability (Kapferer and Bastien, 2009; Dubois and Laurent

1994; Heine and Berghaus, 2014). Research on the luxury sector focuses either on branding and marketing of luxury goods (Okonkwo, 2007; Kapferer and MichautDenizeau, 2015; Cavender and Kincade, 2014; Atwal and Williams, 2017; Fionda and Moore, 2009) or on the consumption of luxury goods (e.g. Husic-Mehmedovic and Cicici, 2009; Wiedmann, Hennigs and Siebels, 2009; Wong and Ahuvia, 1998). However, under the glamorous surface, luxury industries are often found to be involved in unsustainable and unethical practices in their supply chains (Davies, Lee and Ahonkhai, 2012), compared with mid-market fashion companies (Polonsky, Carlson and Fry, 2003; Carrigan, et al., 2017). For example, raw materials like gold and diamonds are sometimes produced illegally while damaging natural habitats. In addition, luxury companies are sometimes accused of little concern for animal welfare, e.g. when fur or animal skin is used. This raises the question of how luxury can be continually supplied from nature and wildlife (Cherny-Scanlon, 2017). Luxury is linked to ostentatious overconsumption, overproduction, and personal pleasure, so that many researchers see an incompatibility between luxury and sustainability (Kapferer and Michaut-Denizeau, 2015; Davies and Streit, 2013; Henninger, Alevizou and Oates, 2016). The increasing body of research on sustainability of luxury has mainly focused on 'consumer concerns and practice', 'organisational concerns and practice', and 'international and cross-cultural issues' (Athwal, et al., 2019).
'Real luxury' can be durable, which fits sustainable value (Kapferer, 2010). The value of luxury (raw materials, craftsmanship) comes from its rarity, where high prices can limit demand, which can balance the resource use in the future. However, luxury fashion brands promote a high-class image but expand their business to mass production and fast fashion cycles, which have strong impacts in both production and consumption patterns (Choi, 2014; Ogilvy, 2007). Luxury lifestyles are believed to be one of main reasons that led to the development of fast fashion brands and thus greater consumerism (Fletcher, 2008; Guiltinan, 2009).

Luxury brands have more recently realised being sustainable is necessary to maintain competitiveness (Kapferer, 2014; Bendell and Thomas, 2013).

Sustainability matters is now included in some luxury companies' websites and annual reports, but the effects are unclear due to lack of monitoring (Athwal, Wells
and Carrigan, 2017). Sustainability has been used in advertising strategies (Steinhart, Ayalon and Puterman, 2013). Some luxury brands promote eco-friendly values to make their brand successful but still encourage consumption. Some brands may design a range of sustainable products but not as their mainstream collections.

So far research has mainly focused on western consumers with little appreciation of differences with other cultures, such as collectivist social pressures on face saving in China (Athwal et al., 2019; Kunz, May, and Schmidt, 2020). Chinese consumers are the largest market for luxury, which will be introduced in Chapter 4.

### 2.3.3. Sustainability in fashion

Clothing and textiles are one of the biggest industry sectors in the world with extensive influences on people's lives, culture, and the environment. With progress in globalization, fashion related industries have become the second biggest user of water as well as a major polluter. Land and water are used to grow textile materials, which takes away resources from food production, or provide drinking water. For example, around 93 billion cubic metres of water are used every year for textile production. Producing a conventional cotton t-shirt uses around 2,700 liters of water, the equivalent amount a person would drink over three years (Chapagain, et al., 2005). Discharges of toxic chemicals from the dyeing and washing industry process waste pollute water and soil, threatening the health of animals, humans, and vegetation. The fashion industry accounts for $4 \%$ of global $\mathrm{CO}_{2}$ emissions (McKinsey \& Company, 2020). In fashion supply chains, existing problems such as unfair wages, inequalities, unsafe working conditions and poor health care became exacerbated during the COVID-19 pandemic (LeBaron et al, 2021; Black, 2020).

In the last two decades, researchers have begun to reflect and rethink the current fashion systems and tried to explore possibilities to change to a more sustainable fashion system. Sustainable development in clothing and textiles promotes 'ecological integrity', ‘social quality’ and human prosperity through products, activities, relationships, and usage habits (Fletcher, 2014). Fletcher (2010, 2014, 2016) looked at the relationships between fashion, the textile industry and sustainability, and suggested the sector needs radical change. Her studies offered a coherent sustainable fashion perspective with a holistic view of fashion cycles from
creating, using, degrading, and re-using. Black $(2008,2012)$ argues that sustainability is a complex issue where fashion plays a key role in culture and economics related to the supply industries, designers, brands, retailers, and consumers (Black, 2020). Fashion and its supply industries offer abundant employment, which improves people's livelihoods, bringing better food, health care and education especially for people from developing countries. At the same time, ethical problems such as child labour, low wages, and harmful working environments for the manufacturing workers, exist. Sustainable fashion design needs to consider whole lifecycles from production to consumption and final disposal, a process where improvements in sustainability can be made at each step (Black, 2008). However, there is an underlying paradox at the heart of fashion between the need of renewal and the unsustainability of selling more products that supports employment and livelihoods for millions of people in the various parts of the supply chain. To help progress sustainability the following three perspectives are suggested.

- Textile and apparel industries need to transfer to using clean energy to replace and reduce CO 2 emissions by $50 \%$ by 2030 to slow down global warming (McKinsey \& Company, 2020). For human well-being, fair wages, safe working conditions, decent jobs, health care and equalities need to improve, especially in developing countries (LeBaron,et al., 2021).
- Designers can increase the lifecycle of products and materials (Gwilt, 2020). Design of garments, the business model, and the whole design system plays a significant role in sustainable fashion (Fletcher and Grose 2012; Gardetti and Torres, 2017; Black, 2012; Fletcher, 2010; Gardetti and Torres, 2017; Rissanen and Mcquillan, 2016). More sustainable, innovative materials are researched, such a pineapple leather created by Dr Carmen Hijosa (Ananas Anam, 2017). Another trend is fabric recycling and reuse in textile and fashion design (Wang, 2006; Lee and Xu, 2017). Sustainable fashion design concepts include zero waste in the garment making process (Rissanen and Mcquillan, 2016; Gwilt, 2020), such as seamless knitwear (Shaw, 2009). Clothes recycling and upcycling are popular ideas to reduce waste (Brown, 2013). Recently, products made from recycled materials can be found in both luxury
brands and high street brands. The idea of 'slow fashion' is a new concept to improve the fashion system aiming to slow the speed of fashion change while challenging the value placed on infinite economic growth (Fletcher, 2010). Offering good designs that consumers use longer is a way towards fashion sustainability (Fletcher, 2010; Shaw, 2009).
- Consumers also need to change their habits (Cline, 2013; Blanchard, 2008, Fletcher, 2016). Low-cost fast fashion encourages people to buy more while the lifecycles of fashion products become shorter. People's shopping and consumption behaviours have changed from thrift to over consumption (Black, 2012). Low price fast fashion brands can wear out quickly due to poor design and quality. Blanchard (2008) and Fletcher (2016) therefore advocate to prolong clothes' lifecycle by using good materials with superior design.


### 2.4. Related research

Compared to other areas of design, such as engineering, software or architecture, there has not been a lot of empirical research on the fashion industry. However, there has been some research, which is particularly relevant to this Ph.D. This section summarised research on knitwear and on the fashion industry in China.

### 2.4.1 Knitwear design

Knitwear is one of the important categories of fashion clothing. The distinct characteristic of knitted garments is the elasticity in the fabric structure. The loop structure holds air and can keep the body warm while ventilating (Caplin, 1927). The technical development in knitting machinery enabled knitwear to become fashion products that combine functionality and fashion. The modern manufacturing approach allows for knitwear to be part of the realm of fashion requirements with seasonal changes that follow fashion trends (Pitimaneeyakul, 2001).

Compared with clothing made from woven fabric, knitwear combines clothes design and textile making processes. Thus, knitwear products often take longer to manufacture than those made from clothes with woven fabric. A knitted garment is among the most complex of textile products. The fabric and shape are created at the
same time (Eckert, 1997). Technology has played an important role in the development of knitwear products. Knitting industry innovations include new machinery, new fibres, new materials and new fabric structures (Pitimaneeyakul, 2001). For the designers, knitwear is one of the few design disciplines where they can fully control the process from designing to the final manufacturing process; first knitting the yarn into fabric, and then using the fabric or fabric panel to create the final garments (Udale, 2014).

Traditionally, people knitted garments to keep warm and to express their own style. The traditional knitting handicraft had a big decline in the 1980s when it was replaced by fast fashion and machine knitted garments (Elliott, 2015). After people's lifestyles and modes of transportation developed, knitwear was no longer just about keeping warm in winter. Knitwear has evolved to produce into popular fashion items throughout the year (Udale, 2014). Knitwear occupies an important sector in the fashion field. Most fashion brands offer knitwear products as part of their seasonal collections. In addition, some brands have knitwear as their main products. For example, the Italian brand Missoni provides innovative, wearable, exciting and luxurious knitwear all year round (Udale, 2014).

While knitwear is a large sector, there is little academic research in English or Chinese journals compared with fashion research. The available research has focused on the development of ways of knitting and knitwear design, especially in the context of computer aided design (CAD) systems and advanced machinery for knitwear design innovation and industry production.

Eckert (1997) and Pitimaneeyakul (2001) both completed PhD projects about CAD systems for the improvement of the knitwear industry. Eckert (2001) identified a 'communication bottleneck' between knitwear designers and technicians and developed a solution with a CAD system for dealing with problems in the knitwear design process. Pitimaneeyakul, BaBat and De Long, (2004), focused on whole product development process improvement, including market survey, user research, product quality, CAD system for design support and management software use.

Recent research has concentrated on the possibilities of 3D knitting. Taylor (2015) identified, similar to Eckert's work, communication problems between designer and technicians, and focused on the new challenge of technical skill development for the designer and design team associated with seamless knitwear. Shaw (2009) explored design practice in 'whole-garment' design and highlighted the shift of cost from manufacture to design and the relationship between design process, the role of designer, craft, and technique. Similarly, Yang (2010) focused on seamless knitwear design both in industry use and education training. Black (2012) addressed design innovation in seamless knitwear. Haffenden (2012) and Guy (2001) both concentrated on knitwear technique with different knitting machines and examined 3D shaping techniques and the use 3D body measurements.

In addition, there has been research to explore well-being and the meaning of handmade knitwear in culture and society (Holroyd, 2014). Similarly, knitwear can be a link to communicate with others or express 'design aesthetic' and 'political statements' through hand knitting groups or social networking (Elliott, 2015). Some of these researchers have also been involved in design sustainability, such as Holroyd's handknitting knitwear, Eckert's (1997) knitwear design supporting systems and Shaw's (2009) and Taylor's (2015) zero waste seamless knitwear design research.

### 2.5. Fashion industry in China

There has been over 5,000 years of clothing and textile history in China.
Traditionally, most people bought fabrics to make clothing themselves or asked local tailors to help. The first Chinese fashion company was founded in 1917 in Shanghai (Tsui, 2010). However, most Chinese fashion and sub-industries were developed and expanded post-1978. Zhao (2013) described the evolution of Chinese clothing styles in contemporary China consisting of four main periods including 'the late Qing', 'Republican China', the 'radical socialist period' (1949-1978), and the 'reform era'. The evolution of these four clothing styles was closely related to the political and social dynamics of each historical period (Zhao, 2013). For example, in the Maoist period from 1949 to 1978, the fashion style in China was dominated by the ubiquitous unisex Zhongshanzhuang (the Mao suit) (Zhao, 2013) (see Figure 2-5).

Because clothing trends were based on political and social dynamics, they changed quickly between one period to another. This is a special case compared with other countries.


Figure 2-5: The development of Chinese fashion and Mao suit style (Zhao, 2013)
Since 1978, China decided to shift the national focus from political propaganda and struggle to economic reforms. China became more modern and globalised and has become a rising nation in military, political and economic fields (Zhao, 2013). The Chinese fashion industry developed rapidly through the last few decades after China opened and reformed. For example, since 1994, China has become the world's largest exporter of textiles and clothing (Zhao, 2013). According to Fashion United data industry statistics, in 2012, with almost US\$225 billion in exports, China is the 'undisputed textile and garment export champion' of the world. In 2020, China produced $31 \%$ of the world's garments (Statista, 2021).

Meanwhile, with the development of the economy, and a 1.4 billion population, China has become one of the biggest markets in the world in recent years. In 2021, over $20 \%$ of world consumer spending on luxury goods took place in China, with a value of $\$ 74.4$ billion (Bain \& Company, 2022). Many Chinese national brands gradually developed from the 1980s to the 1990s (Li, 2004). During 1988 and until 1996, domestic designer brands appeared in China. Most of them obtained well-known reputations with significant success in the market (Wang, 2014). China's apparel industry is huge, with more than 100,000 manufacturers and over 10 million
employees. In 2020, China produced 22.37 billion garments, worth around $\$ 4,429$ million (HKTDC Research, 2021). In contrast, there were just 104 Chinese domestic fashion companies with a total value of over 680 billion Chinese Yuan (CNY), or 105 billion US dollars, value in 2017 (xinhuanet.com, 2017).

Little research can be found into the Chinese knitwear industry, which was a challenge for this study. It was also a challenge to understand the research for the thesis readers. In order to address this challenge, more information about the Chinese knitwear industry will be introduced in Chapter 4, which considers experiences from working in the sector along with industry interviews and observations.

### 2.6. Research gaps

There is a general lack of empirical studies of the fashion industry, and in particular in the knitwear industry, with a few notable exceptions. The studies that do exist have concentrated on Western companies with little research addressing processes in China or considering the specific nature of the Chinese knitwear industry. While there is research in different areas on brand development, there is again an absence of this around the development of knitwear brands. There is also a large body of knowledge on design processes and principles, however these have not been used to illuminate the challenges of knitwear practice. This thesis is particularly interested in the role that design plays to rejuvenate or develop a knitwear brand, which has so far not been researched. In the context of Chinese knitwear companies, there is a particular gap around sustainable brands, culture for creative design, leadership, and the role of design collections.

### 2.7. Conclusion

This chapter has reviewed the literature to help contextualise the research problem and has identified a series of themes to support the need for this investigation. The review has identified a number of research lacunae in the current literature. These gaps enabled the construction of the research questions that set the objectives of this thesis. The next chapter introduces the research methods undertaken in this study.

## Chapter 3: Methodology

### 3.1. Introduction

This chapter explores the development of the research methods to support the objectives of the study. The literature review has identified lacunae in the research. Compared to other fields, there is limited research into knitwear design, as discussed in Chapter 2; few are involved in design practice, such as Shaw's (2009) research in whole garment knitting technology and Haffenden's (2012) study for flat-bed weft knitting for individual body shapes. These studies considered knitting techniques for design improvement alongside innovative designs.

The numerous challenges require different methods to answer the research questions. It should be noted the study commenced in 2014. COVID-19 impacted the economics of the fashion sector during lockdowns starting in 2020, but these changes are not addressed in this thesis.

This chapter explores the research philosophy, followed by the rationale for the choice of methods, the methods used and types of analysis to be performed.

### 3.2. Positioning the research



Figure 3-1: The 'research onion' (Saunders, Lewis and Thornhill, 2018)

Figure 3-1 is a 'research onion' model (Saunders, Lewis and Thornhill, 2018) that has been used to position the study in terms of its methodological approach. The outer four layers explain the methodological decisions taken. The outermost layer describes the five different research philosophies for the management of research, which consist of positivism, critical realism, interpretivism, postmodernism and pragmatism (Saunders, Lewis and Thornhill, 2018). The approach chosen here is discussed in the section that follows.

### 3.2.1. Research philosophy

This study adopts pragmatism as its philosophical position. Pragmatism allows the researcher to combine different approaches, and methodological choices are based on the needs of research questions rather than on a single underlying ideological position (Saunders, Lewis and Thornhill, 2018). Normally, pragmatists start their research with a problem with the aim to identify practical solutions that inform future practice. It is worth noting a researcher's values drive the self-reflection of inquiry. This may begin with doubt or a sense that something is wrong. In turn, this means there is a problem that needs to be solved (Elkjaer and Simpson, 2011). This study is driven by research questions that emerged as a result of the author's professional experience and knowledge; the problems of sustainability of Chinese knitwear brands, which the study seeks to address. Research questions will emphasise practical outcomes (RQ 1: understand the barrier and enabler of the knitwear brands; RQ 1.1: the role of design, RQ 1.2: the role of organisational structure; RQ 1.3: design culture influence), and this approach corresponds with a pragmatic philosophy.

### 3.2.2. Logical approach

The second layer of the 'research onion' describes the approach through which the theorical contribution was developed (Figure 3-1). Abductive, inductive and deductive reasoning was employed in the study as it was influenced by the pragmatic position. Abductive reasoning combines elements of both inductive and deductive reasoning (Suddaby, 2006). An inductive approach works bottom up from data to theory, or from specific instances to generalised explanations. A deductive approach is top down from theory to data testing general hypotheses. Abductive research draws on both, as it searches for an explanation that fills in gaps in current knowledge. However, it was difficult to only rely on a single type of logic approach to explore all the issues in this study. Therefore, these three different logic approaches (see Table 3-1) were used across different elements.

Table 3-1: Deduction, induction, and abduction: from reason to research (Source: Saunders, Lewis and Thornhill, 2018)

|  | Deduction | induction | Abduction |
| :--- | :--- | :--- | :--- |
| Logic | In a deductive <br> inference, when the <br> premises are true, <br> the conclusion must <br> also be true | In an inductive <br> inference, known <br> premises are used to <br> generate untested <br> conclusions | In an abductive inference, <br> known arguments are used to <br> generate testable conclusions |
| Generalisability | Generalising from <br> the general to the <br> specific | Generalising from the <br> specific to the general | Generalising from interactions <br> between the specific and the <br> general |
| Use of data | Data collection is <br> used to evaluate <br> propositions or <br> hypotheses related <br> to an existing <br> theory | Data collection is used <br> to explore a <br> phenomenon, identify <br> themes and patterns, <br> and create a conceptual <br> framework | Data collection is used to <br> explore a phenomenon, <br> identify themes and patterns, <br> locate these in a conceptual <br> framework and test this <br> through subsequent data <br> collection and so forth |
| Theory | Theory falsification <br> or verification | Theory generation and <br> building | Theory generation or <br> modification; incorporating <br> existing theory where <br> appropriate, to build new <br> theory or modify existing <br> theory |

## Inductive logic:

An inductive approach was followed for qualitative data analysis in this study. Data collection was used to explore patterns of behaviour in the industry. Thematic analysis used primary data to inductively identify common themes and patterns. For example, the interviews revealed the business model of the industry, which was analysed to show that the incentivisation structure directed the design focus towards very safe designs. Inductive reasoning generated the insight that (contrary to first impressions) the company's designers were working in an entirely rational way, even though that did not operate in the best interests of the company in the long run.

## Deductive logic:

A deductive approach was adopted, when looking for evidence of how theory (from the literature) played out in the data. For instance, using publications to look for differences between western and Chinese knitwear brands in the design process. This revealed the effects of mood boards not being used by these Chinese knitwear brands, even though their importance is clearly demonstrated in the literature.

However, the interviewed designers attached little importance to them in their design process because they did not use them.

## Abductive logic:

An abductive approach was key to the study, particularly when the author postulated that a western design process might work in the project and applied this process in a DAR collection.

For the whole study, the research findings were based on comparative analysis of different contexts combined with the author's professional experience, literature describing processes in western brands, primary data from the case study brand, and additional data from interviews in other Chinese knitwear brands. It combined abductive, deductive, and inductive approaches as a sense-making process of working with the range of data collected. The approach was pragmatic, in that approaches were selected according to the stages of the project and the problems presented. The thesis was an attempt to make sense of something that seemed at first sight to be quite illogical. It was only with further investigation that it turned out to be a rational response to the incentivisation structure.

### 3.2.3. Strategies

The third and fourth layer of the 'research onion' (Figure 3-1) are about the methodological choices and strategies. The study has developed a hybrid methodological approach using observation, grounded theory, design practice and action research. The rationale for the nature of this hybrid will be discussed later. The study developed an approach that maximised opportunities to learn from the author's professional experience alongside tried and tested methods, such as interviews and surveys. This was to achieve balance between being responsive/alert to the changing nature of the project and maintaining rigour. The study focusses on the knitwear industry in the Chinese context, in an approach that drew on ethnography without being an actual ethnographic study. Research questions came from industry understanding that benefited from grounded theory analysis. The design practice and action were combined to collect data, observe their design process of the industry, and build a bridge (the design collection) to compare
western and current design methods. The details of the method selection will be explored in the following section.

### 3.2.4. Strategies guided by research questions (RQs)

The research strategies were driven by the project's aim, which was to explore the barriers and enablers for knitwear brands in the Chinese knitwear industry. A lens of design associated with the author's personal training and working experiences in the field was applied and because of this designer knowledge, the study has been able to engage with professionals, share design experiences and approaches with industry peers, undertake the field visits with the design project and action research. Active involvement was critical to the project. Rather than seeking to achieve objectivity, assumptions and biases are acknowledged and accounted for through an ongoing process of reflection.

### 3.3. Overview of strategies

This section reviews how the methods have been used in combination. There is an overlap between the different pragmatic methodologies. Therefore, they lend themselves to the creation of a hybrid approach.

### 3.3.1. Observations

Participant observation is a form of ethnography (Saunders, Lewis and Thornhill, 2018). Ethnography involves researchers observing participants in their real-life environment to understand their experiences, viewpoints, and daily practices, which can give in-depth vision into a specific society or culture (UK Health Security Agency, 2020). It involves observing what is occurring, listening to what is said, enquiring through informal and formal channels, as well as collecting documents or artefacts (Hammersley and Atkinson, 2007).

### 3.3.2. Design practice

Design practice uses design approaches to explore issues and find solutions. A form of practice research, which Vear, Candy and Edmonds, (2021), described as a principled approach to research by means of practice in which the research and the
practice operate as interdependent and complementary processes leading to new and original forms of knowledge.

### 3.3.3. Action research

Action research has a cyclical process that involves some kind of action and is a collective endeavour or involves a researcher partnership of one kind or another, with requirements to plan, act, observe, and reflect in each cycle (Altrichter, et al., 2002). Normally it is used to create improvement in practice, particularly within organisations, and to establish knowledge and understanding through the involvement of stakeholders, e.g. staff or users.

### 3.3.4. Grounded theory as a means of analysis

Grounded theory methods are a logical set of data collection and analytical methods aimed at developing a theory. The purpose is to offer a set of strategies for undertaking rigorous qualitative research (Charmaz, 1996). Based on the theories from Charmaz (1983, 1990), Glaser (1978, 1992), Glaser and Strauss (2017) explained that grounded theory simply means using data to generate theory. Boultwood (2003), considered grounded theory to occur through the 'experience of a phenomenon' and generated from data that has been methodically gathered and evaluated. Birks and Mills (2015) believe the position of the researchers' philosophical stance should be the first step for grounded theory.

Grounded theory provides a systematic framework for collecting and analysing data interactively, which helps the researcher to develop the core insights of their study and to build theory based on these perceptions (Charmaz, 2014), which useful for this study when theory is not available or incomplete. The research questions were developed with a field of study where this approach was adopted and follows the data guide to understand the problem details. The iterations of grounded theory analysis were helpful to understand the field during the research process, although the main theories in the study were generated based on thematic analysis combined with author professional experiences in the field together with related research from scholars. A thorough grounded theory is complex and highly structured, and not necessarily appropriate for this study, where a broader approach was preferred.

Nevertheless, some helpful elements (iterative, inductive) were borrowed within a research design that was informed by grounded theory.

### 3.4. Rationale for strategies

This section explains the reasons for undertaking the research using the different pragmatic methodologies.

### 3.4.1. Candidate methods - hybrid approach

Drawing on elements of all four approaches explored above, a hybrid approach was designed for this study, to understand the problems and answer the research questions. It was helpful working closely with the companies, and at times being embedded within the organisation, to develop understanding of the culture and discover issues that were not anticipated. This involved elements of observation, design practice and action research. Working with stakeholders identified barriers/enablers and recommended changes. Rather than any change to the design processes being implemented by the teams themselves within the companies, new approaches were suggested and modelled by the author. An iterative strategy was used for collecting and analysing data, in which initial scoping interviews were then followed by additional cycles of data gathering. Interviews, surveys, case studies, and design action research were the methods employed to fill any omissions, and new areas of interest that opened-up (borrowed from grounded theory). Qualitative aspects involve a range of methods (Boultwood, 2003). These will be discussed below.

- Interviews

Interviews are one of the major approaches to collect data in qualitative research (Kvale, 2007). To understand Chinese knitwear brands, the most effective way was to visit companies and speak with their staff, who work in the relevant areas. For the industry aspects, designers and their working processes and design methods needed to be investigated; business running methods, and brand management also needed to be understood. Furthermore, visiting design universities and talking with teachers and students was a way to collect useful information on whether this has a bearing on industrial brand and design cultures. Interviews were adopted as one of
the main methods for collecting primary data, both from the knitwear industry and design higher education.

- Survey

Surveys are questions designed to obtain specific information from people and widely used in many research fields as they can be targeted to different audiences. They are a cost-effective method of inquiry but are limited by the depth of questioning that can be asked (DeCarlo, 2018). While survey was not a significant element of the research design, it provided insight that helped in decision making for the design direction of the knitwear collection in the research process. Thus, surveys were employed for collecting potential consumers' dressing habits and their expectations of cashmere products design.

- Case Study

A case study is a practical inquiry about a particular activity or phenomenon, hence the case. Typically, this would be set in the context of a real-world experience (Yin, 2009). The case in question can be a person, organisation, event, behavioural condition, or some other social phenomenon (Yin, 2012). Feagin, Orum, and Sjoberg (1991) considered the case study as an in-depth, multi-layered analysis of a single social phenomenon using qualitative methods. This is one perception as elements of a quantitative investigation may be included, for example figures showing sales trends. For this study, to deeply understand the knitwear industry, an effective way is to select a representative knitwear company as a 'case’ for a comprehensive investigation.

- Design action research

Design action research (DAR) was another significant research strategy for this investigation. It can be seen as hybrid research activity that mixed elements of design research and action research. DAR is a research process built from both design research and action research for different needs in research projects (Cole et al., 2005). Edelson (2002) considered that design research had a particular quality that eliminated the boundary between research and design. Design research is an important approach, which generates theories throughout the whole design process rather than isolated analysis of the design results. It is an irreplaceable mechanism with its own value (Edelson, 2002). For the hybrid research, Sein et. al. (2011) developed it as action design research that emphasises the influence of correlation
cycles by providing clear guidance that combines building, intervention, and evaluation in a coordinated research effort.

While DAR is created using design practice to lead the action research for this study, it is an effective method that can make the design method and reflection process visible. It is a collaborative procedure that involves all the participators of the design process from planning, acting, observing, and reflecting (Swann, 2002). Importantly, DAR emphasises self-evaluation, self-reflection, and self-learning from designing and making mistakes in the research cycles (Swann, 2002, Sein, et al., 2011). The next section shows the stages of the methods and their outcomes.

### 3.4.2. The research timeline and process

The timeline, methods and outcomes of the research are shown in Table 3-2.
Table 3-2: The research timeline and process

| Start data /periods | Data collection method | Activity | Outcomes |
| :---: | :---: | :---: | :---: |
| 2014-2022 | Literature review | Research context, gap analysis, research purpose | Literature review, Chapter 2, research problems development, Chapter1 |
| $\begin{aligned} & 2015 \text { to } \\ & 2016 \end{aligned}$ | Interviews, online surveys | Industry visits: China (interviews with company owners, designers, product managers, marketing managers), university visit: UK, China, Italy (interviews with design students, design teachers), surveys (with Chinese and western consumers) | Brands' history and trajectory, Chapter 4, Research methods, Chapter 3, consumer understanding, Chapter 5 |
| 2016 | Interviews, design research, note taking | Case study: King Deer, industry visits, DAR, China <br> Exhibition of DAR collection in King Deer, fashion show with Tsinghua University, China | The role of design, Chapter 6 <br> Importance of rigorous design process/ design direction and possibilities, Chapter 5 |
| 2017 to 2018 | Survey, industry note, industry data analysis | Exhibition of DAR collection in Birmingham City University, fashion shows in the UK | Design direction and possibility, Chapter 5 |
| 2018 to 2019 | Data analysis |  | Barrier and enablers for brand development, Chapter 6, Chapter 7 Influence for design ability and methods, Chapter 3, Chapter 8 |
| 2020 | Online research | Case study: Erdos online Remote case study to study progress within King Deer | Barriers and enablers for brand upgrading Chapter 7 |
| 2021 | Evaluation, analysis, and validation | Design culture evaluation and analysis | Design culture evaluation, validation of barriers, Chapter 6 And possible solutions, Chapter 8 |

Figure 3-2 below shows the hybrid approach and the relationship with different research methods. The main data were collected from qualitative method and the DAR. The quantitative methods (surveys) only offered supportive data for making decisions in the design collection within the DAR process. There is an overlapping area between the qualitative method and the DAR case study. The grounded theory analysis methods are used to analyse data from these three data collecting methods (see Appendix 4-6). The final theories of the study were generated mainly through thematic analysis, but the iteratively analyses from grounded theory have supported the study research process. The details will be introduced in following sections.


Figure 3-2: The hybrid approach of the different methods in the study

### 3.5. Reflection on own experience in industry

The author studied fashion design in both China and the UK; four years at a vocational college plus two years for a university diploma in China. After graduation, she was employed as a knitwear designer for two years, and then a fashion brand design director for four years, thereafter, spending eight years working as a design director in a knitwear/fashion brand before studying for a master's degree in the UK, followed by PhD research. With 20 years' professional experience and having kept up to date in understanding the Chinese market and knitwear/fashion design, the author was in an excellent position to develop the lines of research inquiry.

For this study, the author's own experiences were a rich source of insight. Being the researcher, and a designer, was critical to how the research material was developed and how the practice was undertaken in the design environment (Shaw 2009). There are challenges for carrying out research in a field where one is proficient that are shown below.

- Accounting for experience within a research project is not straightforward, as insights drawn from experience need to be evidenced and validated.
- The experience spans a number of years; it might be dated. It could be argued that this is less of an issue here, given the rather stagnant nature of the domestic cashmere market.
- The industry data were mainly collected from 2015 to 2016; it may be different with the current situation. The author was alert to how the field has changed; the first case-study company, King Deer, was followed up when they had changes, e.g. in 2019 they held their first fashion show. Erdos was added as the second case-study company after they upgraded their business model. Both of these two companies were followed up and online research analysed their current products (in 2021). Their changes were analysed and are discussed in Chapter 7, in order to ensure the knowledge is updated.

The author's experience as a design practitioner enabled greater interaction with participants. For example, most interviews lasted longer (around one hour, or longer) than the planned times of around 30 to 40 minutes. This was because more conversations developed during the interviews with the knowledge and experience
as a professional designer. Industry peers were happy to spend time, both in their work and after work, because they also saw it as an opportunity to study something new. Design idea exchanges benefited both parties, e.g. designers, and technicians from case-study brand. In addition, the quality of the knitwear design collection from DAR relied on pre-existing design expertise.

- Professional knowledge and experiences were helpful to support the assumptions made in the research practice.
- Rigour was maximised by maintaining field notes throughout the lifecycle of the project, and insights and reflections were gleaned from these.


### 3.6. Qualitative research

The aim of qualitative research was to test or generate theory and make a contribution to knowledge. Several different approaches exist within the wider framework of this type of research, but most of these have the same aim: 'to understand the social reality of individuals, groups and cultures' (Holloway, 1997). Normally, qualitative methods include a range of processes. These may include interviews, focus groups, questionnaires, observation and immersion, analysis text or visual materials, and spoken history (Crossman, 2017). From this it can be seen that qualitative research often involved multiple methods (Shaw, 2009).

In this research, qualitative methodology has been employed as one of the important approaches for data collection. This research employed face-to-face interviewing and case-study research methods (Figure 3-3).


Figure 3-3: Qualitative research and the triangulation of data

Figure 3-3 shows the data collecting approach within the qualitative methods in the study. Face-to-face interviews collected data from two groups (knitwear industry and higher design education). A case study is used to collect data from the knitwear industry with a selected knitwear brand as the case. Therefore, these three groups of data can be a triangulation to compare and analyse together. The data collecting methods will be introduced with following sections.

### 3.6.1. Interviews

Face-to-face interviews were designed as one of the major methods for generating and collecting data, from the knitwear industry (Group1) and design education systems (Group 2), (Figure 3-3). Kvale (2007) interview steps (Table 3-3) were employed for this study.

- The 'thematising' was used before the interview question design to make plans and decisions for interview themes.
- A 'designing' step was used for creating the five main interview schedules with semi-structured interview questions designed under each theme.
- Interview lists were made to contact people, followed by visiting and interviewing them (permissions for taking notes and voice recording for each interview was obtained).
- After the interviews, transcribing into text was carried out. (Original language along with the interview).
- The next step was analysing the data. The 'verifying' step was combined with 'analysing' in the process for examining the data's reliability and generalizability. This involved examining the data for common results from different interviewees, and make sure the investigation covered the interview schedules.
- The last step, reporting, was used for individual reports for each interview, because the text data can be used to highlight key information. All the used data for the thesis followed ethical procedures.

Table 3-3: The seven steps of interview and their aims. (Kvale, 2007)

| Interview inquiry steps | Aims |
| :--- | :--- |
| Thematising | Purpose of an investigation/concept of the theme clarified prior <br> to interviews |
| Designing | Obtaining the intended knowledge/considering moral <br> implications of the study |
| Interviewing | Conduct the interviews with a reflective approach on the <br> knowledge sought and the interpersonal relation of the <br> interview situation |
| Transcribing | Transcribe from oral speech to written text to Prepare for <br> analysis |
| Analysing | Decide on suitable modes of analysis, based on purpose and <br> the nature of the material |
| Rerifying | Ascertain the validity, reliability and generalizability of the <br> interview findings. Consider how consistent the results are and <br> whether the study investigated what was intended |
| Reporting | Communicate the findings of the study and the methods <br> applied with the results in a readable product. Ensure this <br> follows the appropriate ethical requirements |

To understand designers' design methods, thinking methods, influential factors and the knitwear industries' situations, interviews were designed for both knitwear companies and fashion, textile, and knitwear design education systems.
a. Knitwear industry interview with Group 1

- Interview preparations

Prior to the interviews, there were three main steps for the interview preparations.

- Shortlisting companies: Make decisions about the anticipated list of interview companies. Based on the research proposal, to understand Chinese knitwear brands' development and their problems of design, selecting the most representative companies was a significant step for this part of the research. To find the common issues of the industry, the interview list should cover different scales of companies. The targeted interview list consisted of two or three cashmere brands from the Chinese top ten cashmere brands, plus a few middle- and small-sized knitwear companies. Networking was done through emails, letters and phone calls to communicate with the selected companies. Simultaneously, industry peers were asked to help to build links to gain access to the targeted interview companies.
- Selecting companies: After approximately six months of communication and arrangements, three of the top five cashmere brands in China, two middlescale brands, one small-scale brand, and two knitwear designer studios, were selected. Furthermore, three different semi-structured interview questionnaires were designed for knitwear designers, product managers and marketing managers in Chinese and English. Concurrently, an interview invitation was designed for knitwear industries both in Chinese and English. - Arranging interviews: The third step was to contact these target companies to determine certain interviewees from these selected companies. There were limitations on visit time, company agreements and supporting attitudes, the contact methods, linked relationships, and networking. Fortunately, successful relationships were made with most of the targeted companies.
- Interview processes and outcomes

The key relevant individuals from nine knitwear design companies (eight of them were the main focused brands and one was to collect extra information for comparison) were interviewed during 2015 and 2016. For the knitwear industry:

- Erdos Co. Ltd., the largest cashmere group in China, was visited and their designer, product manager and marketing manager interviewed in the autumn of 2015 .
- The second biggest cashmere company, King Deer, was the main collaboration knitwear brand for the research. The company was visited twice, for a total of 10 weeks, in the summer and the winter of 2016. Interviews were undertaken, a case study, and design action research case study, with this company. Both these two Chinese companies represent the large-scale Chinese knitwear brands.
- In addition, Zhenbei, another large-scale cashmere company was contacted, and interviews carried out.
- Two middle-scale and one small-scale Chinese knitwear brands, and two knitwear designer studios, were visited in Beijing and Hohhot from 2015 to 2016.

Combining different company scales and geographic regions for the interview companies aimed to give a representation of Chinese knitwear brands. A total of 24 interviews (with 23 people) for the knitwear industry were undertaken. These interviews were used to collect data from knitwear design directors (KDD), knitwear designers (KD), product and marketing managers (PM and MM), knitwear technician (KT) and sales assistant (SA). The companies' leaderships included the knitwear company owner (CO), vice general managers (VGM) and technical design managers (TDM). Details of the interviews can be found in Table 3-4.

Table 3-4: Interview list from knitwear industry

| Interviews | Occupations | Date of interview | Location | Fields |
| :---: | :---: | :---: | :---: | :---: |
| KDD 1 | Design Director | 11 Sept. 2015 | Beijing, China | Erdos Cashmere Group Corp. Inner Mongolia Erdos fashion Co. Ltd. |
| KDD 2 | Exclusive Designer | 21Mar. 2016 | Birmingham, UK | Crystal Martion/Crystal group |
| KDD 3 | Designer Director and company owner | 30 May 2016 | Beijing, China | Beijing CLSELF Fashion Co. Ltd. |
| KDD 4 | Design Director/Owner | 11 Jun. 2016 | Hohhot, China | Yunpin Design studio |
| KDD 5 | Design Director | 21 Jun. and 29 Jun. 2016 | Baotou, China | Inner Mongolia King Deer Cashmere Co. Ltd. |
| KDD 6 | Middle Level Designer | 22 Jun. 2016 |  |  |
| FDD 7 | Design Director of Fabric and Scarf | 22 Jun. 2016 |  |  |
| KD 8 | Junior Designer | 23 Jun. 2016 |  |  |
| KD 9 | Senior Designer | 27 Jun. 2016 |  |  |
| KTM 10 | Knitwear Technician Manager | 28 Jun. 2016 |  |  |
| DM 11 | Manager of Design Department | 4 Nov. 2016 |  |  |
| KT 12 | Technician and Designer | 3 Jul. 2016 | Beijing, China | Beijing Chunxue Cashmere Co. Ltd. |
| DD 13 | Design Director | 15 Aug. 2016 | Online/ UK (social media) | Huzhou Zhenbei Cashmere Product Co. Ltd. |
| Interview list of product managers in knitwear companies |  |  |  |  |
| PM 1 | Product Manager | 15 Sept. 2015 | Beijing, China | Beijing Erdos fashion Co. Ltd. |
| Interview list of marketing managers in knitwear |  |  |  |  |
| MM 1 | Marketing Manager | 24 Aug. 2015 | Hohhot, China | Inner Mongolia Cashmere Corp., Ltd. |
| MM 2 | Marketing Manager | 15 Sept. 2015 | Beijing, China | Erdos Cashmere Group Corp. <br> Inner Mongolia Erdos fashion Co., Ltd. |
| SA 1 | Sales Assistant | 24 Jun. 2016 | Baotou, China | Inner Mongolia King Deer Cashmere co. Ltd. |
| SA 2 |  |  |  |  |
| Interview list of leaderships of knitwear companies |  |  |  |  |
| CO 1 | Company Owner | 6 Jun. 2016 | Hohhot, China | Inner Mongolia Duolanna Cashmere Co. Ltd. |
| CO 2 | Company Owner | 24 Aug. 2015 |  | Inner Mongolia Cashmere Corp., Ltd. |
| VGM 1 | Vice General <br> Manager of National Market | 20 Jun. 2016 | Baotou, China | Inner Mongolia King Deer Cashmere co. Ltd. |
| VGM 2 | Vice General Manager of Japanese/Korean Markets | 25 Jun. 2016 |  |  |
| VGM3/TDM1 | Vice General <br> Manager and <br> Technical Developing Manager | 28 Jun. 2016 |  |  |

The interview questions included themes on:
a) brand designs and images
b) design and management processes
c) brand and company culture and history
d) design management and communications
e) consumers and markets
f) designer's education and working environments
g) product management and communications
h) brand culture and identity
i) consumer feedback systems
j) brand promoting systems
k) sales systems and markets management

See Appendix 2 for the interview questions. Most themes were shared with different interview groups, but some were designed to collect specific aspects on their roles, e.g. the themes a-f were asked to knitwear designers, themes g , e and h were for product managers, and themes $\mathrm{a}, \mathrm{i}, \mathrm{j}, \mathrm{k}$, were asked to marketing managers.
b. Academia Interview with Group 2

- Interview preparations

For the design education aspects, the interview questions were designed under the following themes:
a. curriculum structure and educational system
b. teaching experiences and methods
c. educational concept (for design teachers)
and :
d. courses and education systems
e. future and career plans
f. study methods
g. creativity in design (for design students)

This was to understand how fashion students are taught, how they study and what their courses were designed with. The interview list was developed to contain three
to five British design universities and a similar number of top Chinese design universities, who were contacted, and links built. The final list also included an Italian university. The purpose was to explore the differences between Chinese and western design education styles and results.

- Interview processes and outcomes

For the academia interviews, design students and teachers from 14 design universities were interviewed from 2015 to 2016. In total, 24 interviews (with 27 people) were undertaken, including 10 interviews of design students (DS) and 14 interviews of design teachers (DT) from China, the UK and Italy. Full details of the academic interviews can be found in Table 3-5. The interview list for the universities was based on three criteria. First, identify the universities that influenced knitwear design in China, or in the world, which included Central Saint Martin's Art and Design College, Hong Kong Polytechnic University, Nottingham Trent University, Royal College of Art and Beijing Institute of Clothing Technology. Second, select influential universities in fashion and textile design in China, which included Academy of Art \& Design, Tsinghua University, China Central Academy of Fine Arts and Guangzhou Academy of Fine Arts. Third, identify some general universities' design programmes to collect more relevant data, which consisted of Birmingham City University, Sichuan University, Dalian Polytechnic University, Northeast Forestry University and Instituto Marangoni.

For the interviewed people, design students were mainly BA second year and third year students, because they are gradually building their own study methods and design styles. In addition, MA students were interviewed to explore their study and design methods both from their MA and BA stages. For the teacher interviews, the main interviewed group were fashion or knitwear design teachers, as well as a few technicians. This enabled the examination of the teaching methods, educational concepts, curriculum structures and education systems, being undertaken. For the design students, the data was collected on course and educational systems, future and career expectations, study methods and culture background, and the attitudes to design creativity.

Table 3-5: Interview list from design universities
Interview list of design students

| Interviews | Fields | Occupations | Date of <br> interview | Location |
| :--- | :--- | :--- | :--- | :--- |
| DS 1 | Central Saint Martin's Art <br> and Design College | $3^{\text {rd }}$ year BA <br> Knitwear Design | 29 May 2015 | London, UK |
| DS 2 | Birmingham City <br> University | $2^{\text {nd }}$ year BA <br> Textile Design | 25 Jun. 2015 | Birmingham, UK |
| DS 3 |  <br> Design, Tsinghua <br> University | $2^{\text {nd }}$ year MA <br> Fashion Design | 9 Sept. 2015 | Beijing, China |
| DS 4 | China Central Academy <br> of Fine Arts (2 students) | $2^{\text {nd } y e a r ~ F a s h i o n ~}$ <br> Design (2 <br> students) | 10 Sept. 2015 | Beijing, China |
| DS 5 | Hong Kong Polytechnic <br> University <br> (3 Students) | $3^{\text {rd }}$ year BA <br> Knitwear Design <br> (3 students) | 30 Oct. 2015 | Hong Kong |
| DS 6 | Instituto Marangoni | MA Fashion <br> Design | 30 Jan. 2016 | Milan, Italy |
| DS 7 | Instituto Marangoni | MA Fashion <br> Buyer | 31 Jan.2016 | Milan, Italy |
| DS 8 | Nottingham Trent <br> University | MA knitwear <br> design | 24 Feb. 2016 | Nottingham, UK |
| DS 9 | Royal College of Art | $2^{\text {nd } y e a r ~ M A ~}$ <br> Textile Design | 15 Mar. 2016 | London, UK |
| DS10 | Beijing Institute of <br> Clothing Technology | $3^{\text {rd } y e a r ~ B A ~}$ <br> Knitwear Design | 30 Sept. 2015 | Online/UK |
| Inty |  |  |  |  |

Interview list of design university teachers

| DT 1 | Birmingham City <br> University | Technician | 3 Jun. 2015 | Birmingham, UK |
| :--- | :--- | :--- | :--- | :--- |
| DT 2 | Guangzhou Academy of <br> Fine Arts | Fashion Design <br> teacher | $31^{\text {st }}$ Aug. 2015 | Guangzhou, <br> China |
| DT 3 |  <br> Design, Tsinghua <br> University | Fashion Design <br> Teacher | 7 Sept. 2015 | Beijing, China |
| DT 4 | China Central Academy <br> of Fine Arts | Pattern Cutting <br> Teacher | 10 Sept. 2015 | Beijing, China |
| DT 5 | Beijing Institute of <br> Clothing Technology | Fashion Design <br> Teacher | 14 Sept. 2015 | Beijing, China |
| DT 6 | Beijing Institute of <br> Clothing Technology | Knitwear Design <br> Teacher | 15 Sept. 2015 | Beijing, China <br> (telephone <br> interview) |
| DT 7 | Hong Kong Polytechnic <br> University | Fashion Textile <br> Teacher | 29 Oct. 2015 | Hong Kong |
| DT 8 | Nottingham Trent <br> University | Knitwear <br> Technician | 24 Feb. 2016 | Nottingham, UK |
| DT 9 | Sichuan University | Design Teacher | 29 Feb. 2016 | Birmingham, UK |
| DT 10 | Northeast Forestry <br> University | Design Teacher | 1 Mar. 2016 | Birmingham, UK |
| DT 11 | Birmingham City <br> University | Fashion <br> Teacher | 4 Mar. 2016 | Birmingham, UK |
| DT 12 | Royal College of Art | Fashion <br> Teacher | 15 Mar. 2016 | London, UK |
| DT 13 | Birmingham City <br> University | Fashion <br> Teacher | 21 Mar. 2016 | Birmingham, UK |
| DT 14 | Dalian Polytechnic <br> University | Design Teacher | 24 Nov. 2015 | Birmingham, UK |

All the interviews were recorded with notes and digital records. Subsequently, all of the 48 interviews were transcribed, (Tables 3-4 and 3-5). For an example of the transcriptions, see Appendix 4-2.

Chinese interviews were translated so that the key findings, including keywords, could be tabulated to associate the different answers with each question. The data collection was designed to use thematic analysis methods with both data and researcher-driven approach (which will be introduced in the later analysis section with details). These interviews generated primary data for the research. The interviewees were briefed as to the nature of the research being carried out and agreed to participate as anonymised individuals. The next section explores the development of the case study.

### 3.6.2. Case study

The research focuses on the common problems of the Chinese knitwear brands. To support this, evidence from the industry has been collected using interviews and observation to develop the case study. A case study with a Chinese knitwear brand has been designed as a part of the qualitative methodology of the research.

The representative knitwear company selection was based on the criteria shown in Figure 3-4. The selected company's development, history and business model need to reflect the broad knitwear industry. It needed to have its own designer teams with retail channels under its own brand name and with a middle and above business scale. This would help this study by focusing on the problems in both designing and branding and to exclude other influencing factors such as a lack of sales channels and insufficient funds, which happen in new brands and small companies.

The case study aimed to help develop the deep understanding of Chinese knitwear brands. There were three companies identified in the list meeting the criteria for selection. It depended on the networking and whether there was interest to collaborate or not. Finally, King Deer was selected and became the case-study brand for this research, including undertaking the DAR.


Figure 3-4: The representative company selection criteria

The following five aspects were the main considerations of the case selection.

1) King Deer is a well-known cashmere brand in China; its sale performances place it in the top 10 group in the Chinese knitwear market (CNPP, 2022).
2) The company was established in 1985 and its development period and processes were similar to other large cashmere companies (King Deer, 2022).
3) Its market share covers most of China's cities and regions.
4) The company has its own design team and manufactures the whole process of knitwear making; all the products are produced by their own systems.
5) The company was interested in the research and can support the research process as a cooperating brand for the case study and the subsequent DAR.

The case study was undertaken over 16 days, visiting its company headquarters in Baotou City, Inner Mongolia, in the summer of 2016. Afterwards, the case study carried on with the DAR project for a deep exploration of design culture during winter 2016. In the case study, the data collected has mainly qualitative approaches which
include immersion and observation, open ended interviews and investigating company records (Yin, 2012).

- A total of 12 , face-to-face, semi-structured open-ended interviews were undertaken during that period, (Table 3-4).
- The author was based at the design department with other designers during the case-study period. Its designers were observed and there were conversations and interviews with these designers, plus managers and company leaders. Their showrooms were visited to observe their product structure for the new seasons. The factory was also visited, including the spinning mill, dying laboratory, knitting workshops, weaving workshop, finishing plant and packing workshop.
- In addition, there were some organisation documents collected during the case study (Figure 3-3), The details of these documents and their contribution of the overall understanding can be found in Table 3-6.

Table 3-6: Documents examined in the case study brand and their contribution to the overall understanding of this research.

| Types of <br> documents | Source | Content | Function of the research |
| :--- | :--- | :--- | :--- |
| The company <br> introduction | The Design <br> Director | Organisation structure <br> - of the company <br> of the national trade <br> company <br> of the design centre | identify the positioning of <br> design within the <br> organisation |
|  |  | Marketing networks and areas <br> - National market <br> networks <br> organisational <br> structure of branch <br> companies (internal <br> buyers of the brand) <br> export business <br> system | Understand who their <br> internal buyers were |


| Design <br> procedure | The Design <br> Director | Design processes since 2007 | Understand what steps are <br> missing in their design <br> process |
| :--- | :--- | :--- | :--- |
| Products <br> images | Public domain | Images of their products | Analyse images to <br> understand their current <br> design and collections |
| A design <br> proposal | The Design <br> Director's <br> planning <br> document <br> (2016 summer <br> during the <br> case study <br> period) | Design plan and trend analysis <br> for A/W 2016 | Understand how the design <br> team start their seasonal <br> collection, to examine usage <br> of sources of inspiration and <br> mood board |

The study examined the company's documents, five sources, to help to understand the current structures and design processes. The first three documents were provided by the Design Director to support the research. The company allowed for the information to be used but did not want it shared. The documents included:

- The company introduction (company promotion documents). This included the organisation structures (in company, domestic business section, and design centre levels); Marketing networks including both the national business (the brand) and their international business (export business as a suppler); the company background, business scales; and organisational structure of their manufacture system. These were helpful to understand the position of design in the company, the role of internal buyers in the brand, the main business and strengths of the brand, and their production capacity.
- The rules for the evaluation of designers documentation included the designers' tasks, their reward system and management rules. The information was helpful to understand the designers' creative space and their main concerns. It reflects part of design culture of the brand.
- The design procedure of the brand was a simple diagram of their design process, to explain their design methods. It was used with interview data to examine which steps were missing in the design team.
- Products images were collected from the company's online shop. These were useful to understand their product structure, use of colour, and collection coherence or lack of.
- A design proposal was reviewed with the Design Director together on her computer during the case study period when the author visited the company in 2016. It was an example of how they plan their design and develop design
ideas when the author was interviewing the Design Director. It was helpful to understand their design process and discuss details like source of inspiration and mood board. These examinations offered more angles and details of information that was necessary to better understand how the company ran their brand and why.

During the case-study visit, the author took industry notes for recording observations of the processes, conversations, related information and her thoughts. The collected data offered a deep understanding of the research questions. More data with boarder aspects in design management, branding and strategies, marketing and consumer understandings of Chinese knitwear brands were undertaken. These data were developed and analysed by thematic methods, together with the interview data.

### 3.7. Quantitative research

Quantitative research was employed to collect consumers' information to support the design research. For this consumers' information, data needed to be collected from a number of people, and then statistics were used to show the trends. Generally, quantitative data provides an overall understanding, which appears from examining the responses of a large number of people to a few key variables (Creswell and Plano-Clark, 2017). Data collected through questionnaires, and surveys can be analysed by quantitative methods to highlight specific measurements (Babbie, 2010). The main aim of these surveys was to help the understanding of the field at an early stage. Like Shaw (2009), the quantitative element only made up a small part of this research. For background analysis, they did not contribute to key outcomes of the study. The survey processes are described in the next section.

### 3.7.1. Online surveys

An online survey method was designed to collect consumer data, in order to understand Chinese and UK knitwear consumers and their preferences for knitwear design. Two surveys using closed-ended questions were designed in 2015 and 2016.

The first survey was designed to collect adult female consumers' dressing habits and knitwear consumption preferences, both in China and the UK. These questions were
inspired from the reflections of consumers' understanding in the Chinese knitwear industry during the interviews. Many people from the Chinese knitwear industry claimed that Chinese consumers had old-fashioned tastes and special dress habits, which caused their brands to offer conservative designs for meeting the consumers' needs. These opinions were challenged, and the questionnaires created with the same 18 closed-ended questions in both the Chinese and English versions. To clarify Chinese consumers' dress habits and consumption trends, the survey was designed to use international consumers as a comparative reference for the study. The information from these 18 questions was divided into three main parts including dressing habits, consumption habit preferences, lifestyle and personal background. The Chinese version used the online survey website called WJX.CN to collect feedback, and the English version used Survey Monkey (Appendix 3-1). In order to obtain more responses, the English version was linked with the author's Facebook page to ask female followers to help complete the survey. The Chinese version was linked to the social media app, WeChat, to ask friends to pass it on to their friends in order to help with the response rate, which added the snowball sampling strategy to this case. A total of 583 responses were collected in the first survey consisting of 450 Chinese and 133 international consumers in 2015.

The second survey was designed to collect consumers' purchasing habits and expectations of cashmere knitwear. The survey consisted of 27 questions (see Appendix 3-2) with four main parts, which included shopping style and habits, dressing style and preferences, cashmere knowledge and brand preferences, and personal background and lifestyles. The same WJX.CN website as the first survey was used for Chinese consumers' responses and 300 replies from women were collected.

The respondents were based on the availability of the snowball networking of the author herself and so the representation may cover fewer types of potential consumers of cashmere products. The surveys are helpful as evidence for supporting assumptions, such as, consumers still wear cashmere products, and Chinese consumers are not all conservative. Both the surveys used the online survey websites' tools that offered visualisation of data analysis results, which helped to understand the different habits between Chinese consumers and
international consumers in knitwear purchasing. In the second survey, the data helped to understand what Chinese female consumers expected in cashmere knitwear products (Appendix 3-2). The next stage of the research was the design collection.

### 3.8. Design action research case study

The design action research (DAR) was developed to explore the design culture in the case-study brand. The DAR consisted of creating a knitwear collection by design practice, with observations, reflection and learning (action research). The DAR was carried out at King Deer.

### 3.8.1. Aims and objectives

The aim of the DAR was to develop solutions to the problems that the company and sector were having, in order to understand the design culture and their main influencing factors for brand development.

The research objectives included:

- Creating a design collection that serves as a point of comparison with current methods in order to understand barriers and enablers.

Coherent collections play important roles to build brand identity, see section 2.2.6. Following industry interviews, shops visits and observation, it was found there was a lack of coherent collections in these brands. Thus, the DAR designed and developed a collection as an example of what a coherent collection would be and how to build it with a western design approach.

- Eliciting conversations about design and design culture with the professionals within the company.

The DAR was a bridge that opened a conversation about design with the case-study brand in three aspects: discussions with the technicians on detail of each design; conversations with the design director about design and fashion; feedback on the DAR knitwear collection by company staff including managers, technicians,
designers and others who were interested in the products or involved in the production process. The DAR is explored in detail in Chapter 5.

### 3.8.2. Immersive experience

To deeply understand a brand's design culture, an effective way is to work with them and experience the design process over time. The DAR was a means of collecting primary data on the design culture. The DAR offered immersion in three aspects: First, during the DAR period, the designers shared their office, and this offered an opportunity for close observation of their design process. Second, the company helped to make all the design samples of the knitwear collection, which meant working with their technicians. Third, the author's designs were managed in the same process as their own designers, so there was involvement in the process from designing to packaging. Notes were taken about the processes and discussions with designers, technicians, managers, visits to their shops and during the collection exhibition.

## Note taking

Through the process of making the samples for the DAR fields, notes were taken on different kinds of interactions including interviews, observations, workplace discourse, conversations in relaxing time or after work, and exhibitions. The following field notes were taken:
a. Summaries of interesting conversations during the design process. During the DAR period, 22 conversations were recorded (for example Appendix 4-1), in addition, there was an interview with the new design manager:

- Exchange of ideas between the author and technicians on detail design challenges.
- Exchange design ideas with the design directors, such as colour selection, matching clothes and how to select inspirations and design methods.
- Conversations with designers in a social setting.
b. Notes taken visiting the brand's retail shops including conversations with shop assistants during visits to two shops, the annual sales event and a city centre shop in the mall.
c. Notes of comments made during the three-day exhibition of the author's knitwear collection at King Deer.


### 3.8.3. Reflection and learning

Reflection and learning are specific steps employed for this design action research. (Cole et al., 2005) developed a four-stage model for mixed action research and design research, which included 'problem identification, intervention, evaluation, reflection and learning'. In this model, the first step identifies the problem, with the second stage being the research. The third stage is evaluation, to 'incorporate the criteria' from both approaches. The last step is reflection and learning that 'would abstract knowledge to make practical and theoretical contribution to the field' (Cole et. al. 2005).

For this study, the last two stages of Cole et al's (2005) model were combined as the final step of the DAR. This consisted of self-evaluation, reflection, and learning, through re-thinking and review of the design process and the outcomes. The design practice was as a strategy to collect data, to identify problems in the design process from the current system. The reflections from both the design process and the knitwear collection were collected. The DAR research and design culture in the casestudy brand were evaluated. Analysis of the advantages and disadvantages of the study were undertaken. Importantly, knowledge contributed through the DAR identified the role of design in the knitwear industry. In addition, the practical contribution in design styles and the possibilities for future design direction, were evaluated. Field notes were maintained throughout the DAR with insights drawn on iterative development as the DAR progressed. The methods for the analysis of the generated data are now considered.

### 3.9. Ethical considerations

Following the research timeline (see table 3-2), the data collection from the Chinese knitwear industry and fashion design education focused on three overlapping components:

1. interviews with professionals in multiple companies (including King Deer, Erdos and others (see table 3-4)), and universities (for design education systems (see table 3-5)).
2. two case studies (King Deer using primary data, Erdos drawing on interviews supplemented with information in the public domain).
3. design action research (DAR).

Doing research in the 'right' way was important. Ethical acceptability went as a basic principle through the whole research process. Ethical principles and best practice in social research were studied during the research period including, anonymity, confidentiality, informed consent, beneficence and non-maleficence, the researcher's integrity, role conflict, and cultural variations (Behi and Nolan, 1995; Farrimond, 2013). These principles had a significant influence for data collection, participant recruitment, data usage, and design action. The researcher made a commitment that the study would be undertaken in the spirit of understanding of the motivations and behaviour of those involved and presenting these in as fair and non-judgemental a light as possible.

For this study, the following ethical aspects were considered when collecting and analysing data during the thesis writing process. First, this study itself contributed knowledge in an under-researched area, which can benefit other researchers who are interested in the related areas. The main industry problems and possibilities of solutions will be useful when the fashion/ knitwear industry tries to deal with similar problems. It will be especially beneficial for the Chinese knitwear industry. Secondly, all the participants (interviewees) of the study were informed before they took part in the interviews about how and where their data may be used in the PhD research, related research papers and PhD thesis. Potential sensitivities were discussed before the interviews, and participants were given the possibility of opting out of responding, if they were uncomfortable answering particular questions.

When carrying out the initial interviews with professionals in industry and academia within stage 1, all research conversations were recorded after asking the individual interviewee's agreement and their oral permissions in the interview processes. All the data was managed to meet ethical principles of privacy, anonymity, and confidentiality. To achieve these ethical aspects, all the interview records were transcribed by the author herself, making her the only person that listened to the original recordings. After transcription, the interview texts were kept in a passwordprotected home computer for data analysis.

All interviewees were anonymised and managed by job title and a number as codes (e.g. interviewee KD2, PM1 etc, see table 3-4 and table 3-5.) In the thesis, some parts of data translations were used under these codes. There was a small risk of participants could be identified by individual who knew the company well, but care was taken to only use direct quotations in the thesis where they would avoid compromising the participants involved in the study. In addition, the lapsed time (around 6 years) between the data collection and the thesis publication reduced the possibility of these potential impacts. However, all the interviewees were informed of these risks, and if they were concerned about any potential impacts on their careers or feelings, they had the choice to not be involved. This was an option taken by one of the managers who was in charge of export business in the case study company who did not want to be part of the interview when invited by the author.

When negotiating the case study at King Deer (in stage 2), this was based on the principles of transparency (informing the company of potential risks) and sensitivity to their business. The initial approach was made through professional networks, and once on-site it was possible to establish rapport with members of the management team, who realised the timely nature of the project. The main research aims (to explore barriers and enablers of Chinese knitwear brands) and data collection methods (interviews, observations, and review of brand documents) was explained, and how the data for the study was to be used was discussed with these leaders. Permissions /agreements from these leaders was obtained before the researcher was allowed to visit and spend time with their designers (16 days case study in summer 2016), and the later research part of the DAR ((stage 3) winter 2016). These
agreements drew on King Deer's existing policy of supporting student projects. They regarded the PhD as just another student project that they could support through their provision of access and information. Therefore, the company did not ask any extra promise or direct benefits to them from supporting this study. The possibilities of future design collaborations for brand upgrading were discussed a few times during the case study, which reflected the company's search for opportunities for brand growth. At the designer level, most designers do not mind a short time visitor who does not pose a potential risk of taking their places but may bring information or ideas from outside to their design world. Therefore, interviews were supported by their designers and other staff, and the observations of their working process were allowed.

For usage of the case study data, potential ethical issues such as the possibility of impact for the company reputations, their business, and the careers of these designers, were considered.

When engaged in DAR within stage 3 (there was overlap with stage 1 (a few more interviews) and stage 2 (more observations) ). The author engaged in wide ranging discussions with a broad range of employees. The presence of a researcher was widely discussed within the company and potential participants knew and understood the nature of her work. Importantly, the information they offered did not include sensitive information, only their common process for brand management, their design process, and market reflections. Some of them brought their opinions and ideas for brand improvement. All the interviewees participated in the research to help to explore solutions for their companies rather than for complaint or to damage their companies' reputation. At the same time, it was mentioned most interviewees saw the interviews as a study opportunity with a professional designer and researcher in the process.

### 3.10. Analysis of the data

The data analysis investigated text data with reflexive thematic analysis, and survey data visualisation for helping to understand the information and analyse trends.

### 3.10.1. Thematic analysis for textual data

Thematic analysis is a process of examining qualitative data and identifying patterns or themes within it (Maguire and Delahunt, 2017). Themes are coded to enable analysis. Boyatzis, (1998) used a structured and fixed code book to measure the reliability of code. In this approach, code reliability was the most important factor. This examines the same codes from different coders because researcher subjectivity is believed as a potential risk that needs to be controlled and avoided (Braun and Clarke, 2013). Another option is the code book approach consisting of framework analysis, template analysis and matrix analysis. Both code reliability and code book approaches involved early theme development. Some or all of the themes were developed prior to coding (Braun and Clarke, 2013). In these approaches, themes and codes have not been distinguished clearly from each other, and the terms are frequently used interchangeably.

Reflexive thematic analysis (RTA) is a different approach that does not need a code book. Coding is a development process and not fixed. It can be changed in the process, using the code to generate themes, and then build theory (Braun and Clarke, 2013). RTA has been employed for qualitative data analysis in this study based on the six-phase model to analyse qualitative data (Braun and Clarke, 2013). The author had practised with Boyastzis' code reliability approach, but it caused confusion in the analysis process, and the analysis results present a superficial summary of data. RTA allowed for developing structure organised with central concept or ideas, rather than confused code books and mis-matched codes, themes, and topics. Compared with these two traditional approaches, RTA is the best way to explore the data for analysis in the study. Braun and Clarke (2013) identified thematic analysis as an analytic method, rather than methodology, (Table 3-7).

Table 3-7: Six phases of thematic analysis. (Brun and Clarke, 2013)

1. Familiarisation with the data: It requires researcher immerse in their data, become intimately familiar with their data, make note for any initial analytic observation
2. Coding: Generating pithy labels for important features of the data of relevance to the (broad) research questions guiding the analysis. Coding is not simply a method of data reduction, it is also an analytic process, so codes capture both a semantic and conceptual reading of the data. the researcher codes very data item and ends this phase by collating all their codes and relevant data extracts.
3. Searching for themes: A theme is a coherent and meaningful pattern in the data relevant to the research questions. Ends this phase by collating all the coded data relevant to each theme.
4. Reviewing themes: Involves checking that the themes' work' in relation to both the coded extracts and the full dataset. The research should reflect on whether the themes tell a convincing and compelling story about the data and begin to define the nature of each individual theme, and the relationship between themes. It may be necessary to collapse two themes together or to split a theme into two or more themes, or to discard the candidate themes altogether and begin again to process of theme development
5. Defining and naming themes: To conduct and write a detailed analysis of each theme (should ask 'what story does this theme tell?' and ' how does this theme fit into the overall story about data?), identifying the 'essence' of each theme and constructing a concise, punchy and informative name for each theme.
6. Writing up: Involves weaving together the analytic narrative and data extracts to tell the reader a coherent and persuasive story about the data and contextualising it in relation to existing literature.

In this research, qualitative information was collected from 48 face-to-face interviews and the observations in the case study and design practice action processes. The author has notes and audio recordings (around eighty hours) of the interviews and took industry notes for the observations. After finishing the interview, all the audio recordings were transcribed to text in the interviewee's original languages, English or Chinese (Appendix 4-2). The next step was to read through the raw information and highlight the key information in Microsoft Word documents, and then to manage the similar information and translate them into English. Table 3-8 shows an example of transcribed data and parts of key information (with yellow highlights) was translated. After all these preparation steps were completed, it was necessary to re-read the data to be familiar with the second analysis step - the data coding.

Table 3－8：An example of transcribed interview and translation of key information from the data

This is part of one of the Chinese knitwear designer interviews；it is transcribed in Chinese In the left column，the black words are the designer＇s response，and the brown words are the authors＇ questions．The yellow highlights are the key relevant information．And the right side is this key information translated into English．

1．公司的风格是不是你个人比较喜欢的？
不是我个人喜欢的风格，那么按你个人的感受，你觉得我们这个牌子在设计或风格上那些方面需要改进，如何改进会更好？我觉得就是太传统和经典的东西多了一些。时尚元素的东西少了一些。总之就是传统的东西太多了，这不是我最喜欢的东西。那这个比例你可以调整吗？我在做设计和产品企划的时候，这个比例我是可以调的。而且我每年都在调整，但是最终上了市，在这个订货会上，这个比例马上就失调了。就不是你最后想要的东西。那就是代理商他们比较主观？怎么讲呢？我也理解他们。因为现在本身市场不好做，一个代理商呢，是自己拿钱买货买断的，这是一部分，再一个呢，就是，直营公司是公司派人自己做的，但是这块呢，对他们有很多指标进行考核。他们也不愿意去承担那么多的风险。因为新的东西，会有一些风险的。所以他们不敢，因为牵扯到他们自己的利益还有整个团队的利益，所以他们不敢。所以呢，永远这些东西呢，滞后于市场。那关于滞后这个问题，他们有什么认识吗？没有。最后慢慢就形成了设计师呢，投其所好，被市场绑架，你需要什么样的，你喜欢吃这道菜我就给你做这道菜。你喜欢穿那样的衣服，我就给你做那样的衣服。大家都往这个方向上走
了，其实说来说去还是中国的一个社会现象，什么样的东西好，大家就一窝风的去做这样的东西。你标新立异或着有创意的东西的话，那个市场，那个土壤就不存在。就是说到了中间这个环节，设计师前面开发了，到订货会就结束了？而且慢慢的，其实你再给这个比例给设计师做的时候。设计师还有自己的想法。因为这个设计师呢，他们也有提成的。他们也有个人利益呀，再一个还有面子，声誉问题，因为我们每年定完货都会有个排名。谁的订的好，谁的订的不好，这个很直观的。最后你就让我做那种稍个性一点，或稍创意一点的，还不敢做的怎么样呢，那些东西大家就不愿意接受。不接受订单量就少了，那我排名就靠后了。先不说钱窝拿的多与少，但我的面子不好看呀。我怎么就排最后呢？其实我自己的实力还不是这样的．

1．How do you feel about the style of your brand？ Do you think the knitwear products from your company are creative？Do you feel excited by the design process and why？
It is not the style I like．Too many traditional styles， and lack of fashionable designs．it is not my style as well．
Do you allowed to manage and improve the designs？
Yes，（as a design director）I can change the percentage（of the products structure）in the design plan．I try to improve them every year．But after the purchasing meeting，the product percentage （structure）will become imbalanced every year．
is their franchisors＇reason？
（Yes），I quite understand them．The market is not good，they pay to buy the products without return and exchange．We have another channel which is our own company shops，but they also have many sales targets and requirements．So，all of them do not want to take risks．Because new designs come with unknown risks．They are afraid to try because it impacts their own and their team＇s income．So， they worry（if the new designs are unsuccessful）． Thus，ultimately，the products are lagging behind the market every year．
Do they know they pick some products that are lagging behind the market？
I don＇t think so．Year after year，designers try to cater to their pleasure，but are restrained to only follow the franchisors market．And in this environment，designers are also not happy to consider developing an improvement in the design plan，because they do not design something that cannot be used．It is also related to their personal benefits，their＇face＇，their reputation，because we have a rank for designers＇performance after purchasing meetings．New designs that nobody buys mean everybody knows how many of each designers＇sale quantities are made．That is a big stress，and they will feel embarrassed（if they are in the bottom of rank），even if they do not think about their bonus．

The research has taken both data－driven and researcher－driven approaches in the coding process．Taken from Braun and Clarke（2013），data analysis should be a deep understanding and exploration process．Both bottom－up or theory－leading pathways should be supporting tools that can be flexibly used depending on the research needs，rather than using them dogmatically as limited rules．

Table 3-9: An example of data coding


Coding is an important step that is a process of generating codes from data. It is an analysing process, understanding, and interpreting relevant data with semantic and conceptual reading. It is also a process that can be adjusted, managed, checked, and collated so the right codes go to the right groups or phrases (Appendix 4-3).

Table 3-9 shows an example of coding of a knitwear designer interview data, and part of themes generated with the codes from reading the data.

The third step, shown in Table 3-10 was to identify and review themes for consideration (grey highlight): Do these themes make sense? Are they supported with data? Are they distinct from each other? Do they contain sub-themes? Are there other themes within the data? Do the themes overlap, do they need to be built together or kept separately? Did the author herself try too fit these themes to much? (Appendix 4-3).

Table 3-10: An example of extract of data collated for theme development

| Theme candidate <br> (extract of data) | KDD 5 (codes) | KDD6 (codes) |
| :--- | :--- | :--- |
| Current design needs <br> to improve | Don't like the styles <br> Too traditional <br> Too old fashion <br> Design improvement <br> unsuccessful | Lack of fashionable design <br> Lack of support system (for <br> design improvement) <br> Design needs to improve |
|  | Too traditional <br> Too old fashion <br> Limited by our consumers needs <br> Consumers don't like younger styles <br> Only transitional design can be ordered <br> Product without structure <br> Only have ordered design in shops <br> Market preference not good |  |
|  |  | Top 50 (ordered) with old designs <br> Design with problems |
|  |  | Difficult to change <br> People know the problems <br> No improvement |

During the theme review process, all theme candidates were gradually checked and adjusted. The fourth step, Table 3-11, was to make sure all the themes were relevant to the research questions (blue highlight) and made sense, so as to tell stories of the data, with codes support (Appendix 4-4).

Table 3-11: An example of themes after data review and collation

| Current design needs to improve <br> Too traditional <br> Too old fashion <br> Lack of fashionable design <br> Don't like the styles <br> Design needs to improve <br> Product without structure <br> Market preference not good <br> Design with problems <br> the orders) Lagging behind the market | Design improvement unsuccessful <br> Difficult to change <br> No improvement <br> Only have ordered designs in shops <br> Only transitional design can be ordered <br> Top 50 (ordered) with old designs <br> Limited by our consumers needs <br> Subthemes: the reasons of unsuccessful improvement <br> Lack of support system (for design improvement) <br> Don't want spend money for design Do not pay enough attention to design Designers with stress for new design |
| :---: | :---: |
| The company do not encourage new designs <br> Seen new designs as risks <br> Pursue big sell quantity <br> Less or no order new design <br> Small quantity orders= cancel believe new designs (small quantity, high cost, low profits) are no worth to make <br> Focus on short-term business <br> Subtheme: only one standard of good designs <br> Good design=sell more <br> Designer rank with sell quantities <br> Only one standard for design evaluation | Conservative attitude (whole system) <br> Resellers refuse try new designs <br> Don't or less order for new design <br> Consumers don't like younger styles <br> Company less support design improvement <br> Subtheme: Limitation of design space <br> Old facility cannot achieve some new effects <br> Only allow change design details (Surface decoration) |
| Lack of comprehensive design <br> Plan (designer side) <br> Mixed colours (old and new) <br> Patterns are freedom to design <br> With a team for design fabric texture (for knitwear) <br> On Design, only follow the resellers' opinions <br> Design something resellers want <br> Not try to lead markets | Sell products to franchisors <br> Reseller taking full invest risks <br> Own channel under stress of sell target and requirements <br> Sell products to resellers rather than consumers <br> Only produce ordered products <br> Subtheme: lack of support policy <br> Lack of support policy form the company <br> Seen new design as a risk <br> Not return and exchange support <br> Own channel with similar satiation |
| The strengths of the company <br> Dig technician team for technique support Facilities support, most design ideas can be made <br> Extra team for design fabric textures for knitwear | The reasons of resellers (don't buy new designs) <br> Do not want to take risks <br> Seen new design as a risk <br> Don't realize their real risks (buying/selling old designs) <br> Only basic sales experiences make it difficult to order new designs <br> Order safe products <br> No trends forward-looking <br> Resellers claim not new designs <br> Impact own or team incomes <br> Safe product=already popular in markets <br> Want products already tested by markets |


| Company not satisfying designs | Lack of design understanding |
| :--- | :--- |
| Managers complain design not good | Keen to blame designers when poor sales |
| Believe design not enough new | Less support for design improvement |
| Design structure is not good | Don't know designers need a support |
| Not satisfying design and designers | system |
| Do not value and support design | Believe designers not good enough |
| Designers are not strong enough for brand | Focus on short-term business |
| Sell individually products not complect as a brand | Only produce ordered designs (don't care |
| Lack of beliefs for current design team | structure and brand image in the market) |
|  |  |

The fifth step was to identify themes. It was a final refinement in this process. What the themes are saying? What are their relationships? All the sub-themes were checked to make sure they fitted with their main themes. The theme headings were finalised and the thematic map developed to show their relationships (Appendix 4-5). For example, the sub-theme 'only one standard of good design', changed to 'only one standard for design evaluation'. Thematic maps have developed as patterns, which can help to tell stories and show the relationships with each related theme (Figure 3-5 and 3-6).


Figure 3-5: Example of thematic map


Figure 3-6: Another example of a thematic map

Figures 3-5 and 3-6 are two examples of thematic maps. It is a pattern of data. In these figures, the codes are explained with different layers, to explore how they relate to each other. The maps are helpful to understand the industry, and offered early points for the final analysis, see Chapters 6 and 7.

The final step of the thematic analysis is writing up. These six steps are not a linear model as the process is iterative (Braun and Clarke, 2013). So, the evaluation could be progressed gradually and carefully from one stage to the next. Some steps were rebuilt when new ideas to improve them emerged. It is an iterative process, until the analysis was complete. Writing up followed each step. This was developed with reviews, adjustments and improvements.

### 3.11. Methodology Conclusion

A hybrid approach was developed as a pragmatic response to problem solving within the under-researched field of scholarship. The methods were borrowed from grounded theory, design practice and action research. Data was collected through face-to-face interviews, close observation, case study and design practice with learning and reflection cycles. It created a range of overlapping and iterative methods that allowed the use professional experience while maintaining the rigour needed to answer research questions. Chapter 4 will explore in detail the context of the knitwear industry in China.

## Chapter 4: The Context of the Chinese Knitwear Industry

The Chinese knitwear industry has been identified as an under-researched area in section 2.6. Most of the information presented in this chapter is based on observations, interviews and case studies during industry visits. The chapter begins with a brief discussion of design education in China, which has a profound effect on the designers companies can hire. The history of commercial cashmere companies, as outlined in this chapter is relatively brief, but has been faced with significant changes in the nature of sales channels as well as consumers and consumption habits.

### 4.1. Chinese design education

In the Chinese fashion field, most designers graduate from design universities or advanced training schools. Design education plays a crucial role for the fashion industry's development. The Chinese knitwear industry faces the particular challenge is that there are not enough skilled knitwear designers available to support the development of the industry. Only a few design universities offer knitwear courses in China. Most new designers are trained in fashion design rather than knitwear design, which suggests they need more time to become familiar with knitwear techniques to work in knitwear companies.

The education concepts and curriculum design also pose a major challenge. Most new designers' skills do not meet the industry expectations and require, according to the industry interviews, around one to two years to become familiar with the industry environment. Consequently, brands prefer to recruit designers with over two years of work experience.

As part of the study interviews were carried out at both western and Chinese design universities to understand the main influences on designers. According to Drew, et al. (2002), design students in UK universities are typically trained in four different approaches:

- Product-focused technical skills training,
- Product-focused strategy for design process development,
- A process-focused strategy to develop design processes,
- Concept-focused strategy to develop personal design concepts.

Students study professional skills through design project modules that lead them to obtain knowledge and skills through intensive practices. During their studies, the students develop their own methods and identify personal interests and experiences for creating coherent collections with original ideas.

Chinese design university courses have different systems. There is a focus on theoretical knowledge with time spent on general education, which is common for all Chinese undergraduate courses. This differs significantly from western universities. British universities use student centred concepts and are keen to explore students' strength and potential rather than aim for homogeneous standards. Chinese students only spend around one-third of four years studying fashion related skills.

In professional courses in fashion design in China students are taught different courses by different teachers, e.g. one teacher for fashion design, another teacher for pattern design, another for pattern cutting, and so on. This leads to a limited coherence in the programme as students learn different skills separately rather than in an integrated way around design projects. There are design projects, but these are few and only occupy a short part of the degree. The process of designing is not a focus, and student design skills are not developed through their courses in the Chinese system. This makes students less able to develop their personal interests and creative skills for systemic thinking. Students may develop a few small collections during their study, but how their design ideas develop and how they carry out research is not normally taught to them. As most students cannot develop their own design approach, they lack confidence when working in the industry and the industry shows concern about their abilities.

### 4.2. The history of the knitwear industry in China

Most traditional Chinese knitwear companies have a similar history influenced by national economic policy and development strategies. In the 1960s, cashmere knitwear was only sold in a few department stores. During this period sales were restricted to non-natives. According to a Chinese Cashmere Brand White Paper (China Wool and Textile Association, 2008), most Chinese people were struggling to dress warmly and eat due to poverty. Chinese fashion and knitwear companies launched after 1978 and have developed and declined with similar time frames.

### 4.2.1. Chinese knitwear industry and cashmere brands

The Chinese knitwear industry began in the late 1970s and became established in the 1980s and early 1990s. For example, the biggest woollen yarn company registered Hengyuanxiang as its trademark in 1989 and began to run its knitwear brand as a franchise in 1991 (Hengyuanxiang, 2019). The largest cashmere brand, Erdos, established their knitwear business in 1980 (1980erdos, 2019). The casestudy knitwear brand, King Deer, started its knitwear business in 1985 (King Deer, 2022). The knitwear companies sold their products in the domestic market (China Wool and Textile Association, 2008). The 1990s to early 2000s were the main development and growth periods for the sector. At the time, there were 52 cashmere companies from Inner Mongolia alone with over one million China Yuan (CNY) of annual income. Eight had over a hundred million CNY annual income ( $\mathrm{He}, 2015$ ).

Three cashmere zones were developed: Inner Mongolia with companies Erdos, King Deer, Zhaojun, Zejiang, the Huzhou area with Mihuang, Zhenbei and other brands, and finally, the Shenzhen area with Baykal, Sungod and other brands (China Wool and Textile Association, 2008). At their peak, these brands occupied most of the national market. For example, according to the research interviews (KDD1, PM1, MM2 see Table 3-4) Erdos had around 2,000 stores and King Deer 600 in the first decade of the twenty-first century.

### 4.3. The sales channel

Traditionally, the Chinese fashion market operated through department stores or shopping malls, independent street stores and wholesale markets. Online shopping is a rising trend in China as Internet use widened in Chinese society (Zhang, 2016).

### 4.3.1. Outline of sale channels of knitwear brands

In the Chinese fashion and knitwear market, department stores were the only mode of sales for fashion goods prior to 1980 (Table 4-1). It was still popular during the 1980s to the 1990s (Lu, 2005). However, department stores have shown a decline in sales performance recently because of competition from shopping malls and online shopping. The effect on the department stores has led to lower profits and risks to survival (Anon, 2013). The imbalance between higher operating cost and lower retained profits ( $2 \%-3 \%$ ) has caused many department stores to lose their ability to operate (Lin, 2012). Between 2012 and 2014, 201 department stores in China closed (Situ, 2015). In this situation, most knitwear brands also found it hard to retain their sale areas.

Shopping malls or centres are the twentieth-century adaptation of the historical marketplace, where different brand and independent retail stores come together with lifestyle establishments such as restaurants, cinemas, travel agents and banks. Car parks are ubiquitous. Shopping centres appeared in China in the early 2000s (Lu, 2005) and are replacing department stores to become the main shopping areas in Chinese fashion markets in particular for many Chinese and global luxury brands (Yu, 2006). There are different types of shopping malls, depending on size and location (Gan, 2012). Young consumers to go to a shopping mall to socialise (Matthews, et al., 2000). Most fashion brands develop chain stores as their main approach for selling in China. They also have commercial agents with franchise rights (Huang and Zhang, 2012). For fashion business, retail chain stores are important as a core competitive method for fashion companies (Lu, 2005). Brand chain stores present the company personality and are strategically positioned in shopping malls on commercial streets or public areas such as airports and hotels. Shopping malls select brand stores that attract consumers.

Online shopping began in the USA in the 1980s (Lu, 2005) and developed in China following the establishment of the e-commerce platform, Taobao in 2003 (Zhang, 2016). Online shopping has developed in China with $97 \%$ of city consumers searching online shops primarily (Anon, 2013). Surplus inventory is sold using thirdparty e-commerce platforms in place of traditional discount stores (Zhang, 2016). Traditional fashion stores have been combined with online systems (Wang, 2014) in response to the fierce competition in the Chinese fashion market, particularly after many global brands have arrived in China. Low transportation costs led to online stores becoming a mainstream shopping practice for many consumers in China. Some new brands now depend entirely on online channels for the sale of their goods (Zhang, 2016).

Wholesale involves the manufacturers selling their products to commercial agents, who sell the products to retailers rather than consumers (Tan, 2007). The agents and the retailer take the financial risk, making sales through intermediaries attractive to small manufacturers and as a means of testing the market (Tan, 2007). The first fashion wholesale markets appeared in 1984 in Guangzhou at an outdoor night market and the first specific clothing wholesale market building was built there in 1991, which at its height sold almost one-third of the clothing products for the Chinese fashion market (Huang and Gao, 2007). Wholesale markets are no longer popular as customers moved to online alternatives (Huang and Gao, 2007).

Traditionally, community stores in China consisted of a supermarket, grocery stores, ironmongery and a small department store with discount products. It was also the place where discount counters developed (Yu, 2006). For a fashion or knitwear company, community stores have become their main channel for selling surplus inventory goods to recoup some income (Yang, 2014).

There are examples of successful discount department stores to sell inventory goods. For example, American discount retailer, TJX company, had developed over 40 years with 3,800 stores in 9 countries, and $\$ 33.2$ billion sales in 2017 (tjx.com, 2018). Outlet stores began in 2002 in China. By 2011 there were 200 in China (Zhou, 2011). Some Chinese knitwear brands have their own factory outlet stores, located close to their factories.

Numerous general supermarkets have had clothing areas in China since the mid1990s (Lu, 2005), but most of them mainly sell basic clothes, which were not popular for fashion-minded consumers. Some higher-class Chinese supermarkets, such as Jusco in Guangzhou City have medium- and higher-class fashion brands.

## Table 4-1: Summaries of the retail options for Chinese knitwear brands

| Sale channels | Sale methods | Start/ popular periods | Developing trends | Suitability for cashmere brands |
| :---: | :---: | :---: | :---: | :---: |
| Department stores | Sale by categories rather than brands | Popular in 1990s to 2000s | Decline after 2010s | Used to be the main channel of Knitwear brands |
| Shopping malls/ fashion centre | Sale by brands | From 2000s | Popular | Ideal channel, but difficult to get in |
| Brand chain stores | Sale by brands/street stores | After 2000s | Increase | Depends on locations and management |
| Community store and outlets | Sale with discount | From 2000s | For surplus inventory | Need to sell surplus stock |
| Online stores | Mix of new and unsold inventory | From 2010s | Online platforms | Own websites need to be built |
| Wholesale market | Sale of no brands/low prices | 1990s to 2000s | Decline after 2010s | No longer suitable |
| Supermarket | Low price products | Since 1990s | Increase trend | Only high-end |

Retail channels of the knitwear brands are changing. Department stores had been the main channels for most traditional Merino wool and cashmere knitwear brands, but their decline led to many knitwear brands losing their retail channels. The Merino wool brands had to turn their business to local wholesale markets in this current decade. Knitwear wholesale markets are now also declining. Shopping malls and brand chain stores and some high-class supermarkets are raising in popularity. Only a few large knitwear companies sell their products in shopping malls, because malls require all year-round sales. Cashmere brands need to aim to gain prominent spots in malls through improving their product design and brand images. Clothing in supermarkets is rising because of convenience. Most knitwear brands have their own online stores even though most find it difficult to make profits.

### 4.4. The Chinese knitwear consumers

Understanding consumers and market segments with their demographics and lifestyles is vital element of brand positioning as presented in section 2.1.2.

### 4.4.1. Consumer segmentation

Chinese consumers' lifestyles have changed in the last few decades after living standards and income improved. Based on the series of Euromonitor International's annual reports (Euromonitor International, 2013), of consumer lifestyles in China, consumer segmentation related to this research of fashion markets can be drawn along the following age groups. The age groups may no longer perfectly fit the segment names (e.g. part of 'young adults' may turn to 'middle youth') since it was created nearly ten years ago:

- 'Young adults' consist of older consumers in Generation Z (born from 19952009) and younger Millennials (born form 1980-1994). This generation have a greater sense of individual identity than earlier generations; they prefer to build a quality life based on their personal choices to express their individual traits.
- 'Middle youth' include consumers in Generation X (born form 1965-1979) and older Millennials (born form 1980-1994). This age group cares about the balance between work and life more than earlier generations. They value job satisfaction and following one's passions rather than being wealthy. In this generation, men need to have their own house before they get married, and women are under pressure from societies if they are not married by the time they are thirty years old.
- The 'Mid-lifers' group comprise older members of Generation X (born 19651979) and Baby Boomers (born 1946-1964). This group is still frugal, despite often having significant spending power. They invest in property or save money. This segment is the main contributor to the luxury market while caring about health and wellbeing. Women are keen to invest their money to 'microfinancing platforms', and cosmetic surgery is popular with men.
- 'Later-lifers' include old Baby Boomers (born from 1946-1964) and the Swing Generation (born from 1925-1945). This generation have lived through 'the turbulent years of the Cultural Revolution and nearly all have
experienced both significant poverty and dramatic social change'. Health and healthcare are their greatest priority. They have disposable income and a focus on the quality of life. People in this segment have often been given the stereotype of being overly frugal. Retirees normally spend money on healthy lifestyles and rewarding experiences, and they regularly attend sports and outdoor activities.

The 2017 Euromonitor International (2017) also segmented consumers by lifestyle habits, preferences and attitudes about social status identified. They proposed for the Chinese consumers' lifestyle the following five main types of consumers including: ‘Undaunted Striver (11\%),' 'Cautious Planner (19\%)', 'Secure Traditionalist (31\%)', 'Balanced Optimist (15\%)' and 'Inspired Adventurer (26\%). In 2021, Euromonitor International (2021) republished a revised classification considering the effects of Covid:

- 'Undaunted strivers' (29\%) like to be actively involved in brands, they have enthusiasm for technology, and care about their own images with high incomes and prefer spending more than saving. They try to have a positive impact on the environment through their daily actions but have a passion in fashion and new trends and styles.
- The 'impulsive spender' (21\%) is usually younger, interested in the latest trends and endeavours to keep up with them through social media activities and brand engagement. Shopping both online and offline and purchasing is driven by low prices.
- The 'minimalist seeker' (17\%) lives a simple lifestyle and cares about sustainability. They plan and purchase with shopping lists and only buy necessary products. They pay higher prices for quality products, for longevity. They do not follow the latest fashion trends and brands.
- 'Conservative homebody' (16\%) they are frugal, do not seek famous brands, and only buy essential products. They enjoy the shopping experience if there are generous discount promotions and may lead to occasional impulse purchases.
- The 'balanced optimists' (11\%), focus on their own life and care less about sustainability. They value quality rather than quantity in strong brands and
premium products but compare prices. They are optimistic and believe in a bright future.
- The 'secure traditionalists' (7\%) usually have lower incomes, caring less about image, plan any necessary purchases, and hope their money obtains the best value. They do not believe the environment is impacted by their actions. Their use of technology and online platforms has increased, especially after COVID-19.

Between 2017 and 2021 a sixth type called the 'conservative homebody' has appeared. The 'Cautious Planner' from 2017 was renamed the 'minimalist seeker'. Other types did not change, but their relative size changed, e.g. Secure Traditionalist was $31 \%$ in 2017, but dropped dramatically to $7 \%$ in 2021. The differences may be mainly influenced by the data collecting areas as the data in 2021 was collected in Shanghai, but for 2017 other areas were covered.

Chinese fashion consumers can also be divided based on five tiers of cities with different development levels (Table 4-2). Generally, people living in the first-tier cities are more influenced by cultural globalisation and are quicker to follow international trends, while people in third-tier cities or remote areas are more conservative. For example, many Shanghai people prefer to buy fashion products when they travel to other countries (Ye, 2013), which mean their fashion tastes are closer to international brands.

Table 4-2: Chinese city development classification (Yu, 2021)

| City classification | Development levels | Representative cities/areas |
| :--- | :--- | :--- |
| First-tier cities <br> (Total of 4) | Important culture <br> centres and developed <br> cities | Shanghai, Beijing, Guangzhou, Shenzhen, |
| New first-tier cities <br> (15 cities) | More possible to grow <br> into first-tier city in the <br> near future | Chengdu, Hangzhou, Chongqing, <br> Xian, ,Suzhou, Wuhan, Nanjing, Tianjin, |
| Second-tier cities (30 <br> in total) | Provincial capital cities <br> from economic <br> developed areas | Dalian, Harbin, Taiyuan <br> Nanning, Kunming, Wenzhou, Zhuhai, |
| Third-tier cities (70 in <br> total) | Provincial capital cities <br> and others | Urumchi, Tangshan, Hohhot, Haikou, <br> Guilin, Yinchuan, Zhuzhou, |
| Fourth-tier cites (90 <br> in total | Local developing cities | Baotou, Dali, Guilin, Datong, Kaifeng, <br> Yanan, Zhangjiakou, |
| Fifth-tier cites (128 in <br> total) | Less developed areas | Lijiang, Changshu, Tianshui, Hanzhong, |

China has 56 different ethnic groups in different regions with their own fashion cultures and aesthetical standards. This is reflected in their clothes choices and lifestyles and different preferences in styles and colours. For example, one knitwear brand has always sold clothes with different colours in different provinces in China.

In the fashion industry more and more brands use both demographics and psychographics for their consumer studies and market segments. This applies especially to successful luxury brands, who sell not only fashion products, but also related products like cosmetics or home furnishings. They can be seen as not only sell products but lifestyles.

### 4.4.2. Consumption history and trend in China

Until the 1940s, as in many other parts of the world, most Chinese people made their own clothes rather than buying in retail stores (Tsui, 2009). After the Revolution in 1911, the fashion consumption turned from traditional Chinese silk Qipao and Tang Suits to new styles. Most traditional Chinese tailors began to make Western-style suits and Zhong-shan suits (Tsui, 2009). After the Liberation War (1945-1949), New China attempted to restore the industrial infrastructure and the economy. Due to shortages of materials a Coupon System, based on family size was introduced to ensure equitable availability of resources. This lasted 30 years from 1954 until 1984. Coupons covered basics such as food, fabrics and home furniture (Tsui, 2009).

Influenced by political reasons, from the 1950s to the 1970s, three kinds of uniforms became popular trends for Chinese people. First was the Mao-suit, succeeded by the Lenin suit, and finally a green military uniform worn for around ten years during the Culture Revolution (Tsui, 2009).

In 1979, China began the reform and opening policy, and the planned economic system was changed to a market-oriented economic system in 1992. After that, many Chinese industries rapidly developed, including the fashion industry. Chinese consumers' fashion consumption gradually changed after the economic improvement and multi-market development. Influenced by an era of material scarcity, people's clothing was limited to few types of choices for a long time. The Chinese people were accustomed to wearing only single colour clothes made of cotton. As people's
income gradually increased, they became more familiar with fashion, western designers and brands. Their lifestyles, fashion tastes and aesthetic demands also changed (texindex.com.cn, 2011). In May 1993, the China International Clothes and Accessory Fair was launched. Many international brands have since entered the Chinese fashion market and luxury fashion brands are a significant fashion trend in China. In 2013, China became the biggest luxury market in the world (Sun, 2014). Euromonitor International (2017) reported on five trends in Chinese consumer behaviour in 2016.
(1). More people support Chinese brands, seen as a patriotic act and made in China is seen as a quality mark.
(2). Chinese consumers prefer the latest technological trend, with faster adoption of new technology than other societies.
(3) China is becoming a cashless society, and over $51 \%$ of consumers are already regularly using third-party mobile payments, compared to a $14 \%$ global average.
(4) Consumption culture is mature, and consumers hope they can become more individual and independent. Many younger and affluent consumers lost appetite for luxury brands, and smaller multi-brand boutiques gain in prominence online and in bricks and mortar stores.
(5) Consumers focus on eating and living healthy lifestyles.

### 4.4.3. Luxury consumption in China

Chinese luxury fashion consumption needs to be mentioned here. Not only because Chinese consumers are one of the largest groups of luxury shoppers in the world, but because luxury consumption is an important aspect of Chinese cashmere knitwear consumption.

With the biggest population and a rapidly growing economy, the Chinese luxury fashion market has become more dynamic since the 1990s. In China, over 250 million consumers could afford luxury goods in 2010, and this number had a 12\% annual growth rate (Gerth, 2010). There is a fast-growing middle-class who will become potential consumers of luxury products with rising purchasing powers. According to Mckinsey's report (Bu et al., 2017), spending by wealthy Chinese
households on luxury goods grew from 12\% of global luxury spending in 2008 to $32 \%$ in 2016, and it will continue grow to around 44\% in 2025.

Many luxury brands have obtained success in the Chinese fashion market since 1990s. High-end retail stores can be found in first- and second-tier cities. There is a board agreement that consumers purchasing luxury fashion products are both influenced by their psychological value and social needs. For the psychological aspects, shopping in luxury brands is an enjoyable, joyful experience. Consumers appreciate the design innovations, high quality and good service that are offered by luxury brands. They also enjoy the high-class atmosphere and environment when they are shopping in the luxury stores and the uniqueness of the products, which can help express their individuality and personal taste (Gao, 2009. Zhan and He, 2012. Li, Li and Kambele, 2012, Sun, 2011). Wearing and using luxury fashion products can display people's wealth and social status (Xu, 2013, Zhang and Zhao, 2019, Gao, 2009) and conspicuous consumption is a significant phenomenon for many Chinese luxury fashion consumers (Tsai, Tang and Liu, 2013). Some aspects of traditional Chinese culture, such as face consciousness and social comparison play an important role for luxury consumption (Zhang and Zhao, 2019). Similarly social influencing or social media can be reasons for consumers buying luxury products (Zhan and He, 2012), because they want to fit in with their peer groups, for instance in the middle-class consumer groups (Xu, 2013).

In contrast there are increasing groups of Chinese consumers who are keen on inconspicuous consumption of luxury goods, where there are no clear distinguishable designs and features, to avoid displaying their social status and wealth (Wu. et al., 2017). Similarly, research on young Chinese consumers showed that many young people purchase and use luxury fashion products mainly to express their individualities and fashion taste, rather than blend in with their peers (Sun, 2011). These consumption habits may meet sustainable goals unconsciously or unintentionally. They only buy products that really fit them, with good designs and quality (luxury products) that can be used longer.

There has recently been an increasing trend for counterfeit luxury consumption. Unlike the extremely affluent, who can afford any brands they wish, some
consumers, for example middle-class or lower-class, cannot always afford luxury products. They may purchase some counterfeits, helping them to express their higher status in their social lives (Yang, 2012). They may be under pressure from rich peers, based on the Chinese traditional culture of face consciousness. They are keen on social comparisons with their friends or colleague, although, there is an imbalance between their social needs and real their incomes, for example young white-collar worker groups (Yang, 2012). Some consumers buy high quality counterfeits as substitute goods of luxury, not only for social reasons, but also because they like the look and feel (Jiang and Shan, 2016). Because of the illegal nature of counterfeit, some people see counterfeit purchasing as an opportunity for a fun, enjoyable adventure (Jiang and Cova, 2012).

### 4.4.4. Cashmere as gift

In Chinese society people buy gifts for their family members or friends for some traditional festivals or important events. Many expensive items, such as cashmere knitwear, are used as gifts. Some customers do not select the cashmere knitwear for themselves. That is a different consumption pattern than that of people who buy clothes for themselves. According to the industry interviews in this study, cashmere scarves and tops are popular products as gifts in most cashmere brands. Most people choose products in safe designs and colours, for example many people select Chinese red for New Year gifts. People are often more conservative when choosing gifts rather than for their own use. These presents may not meet the final users' personal preferences. The receiver may be happy to keep them as valuable gifts, but they may not use them if the present does not match their style. This will be discussed as a sustainability issue in Chapter 7.

### 4.4.5. Ageing consumers

The main consumers of Chinese knitwear brands are middle-aged and older, as identified in Chapter 1 (China Wool Textile Association, 2008). As will be argued later most Chinese knitwear brands do not build strong links and feedback systems with their consumers; and have little understanding of who their target consumers are.

In China, fashion brands focus on younger generations who are living in cities, because they are a large proportion of fashion consumers. Research is more related to these groups, e.g. for fashion product consumers born in the 1970s, 1980s and 1990s (Wang,2014). The fashion consumption behaviour of younger female consumers from Shanghai City was researched by Tian (2008). Middle-aged fashion consumer groups are less studied. The fashion brands aiming explicitly at middleaged groups only occupy a small percentage in Chinese fashion markets. Typically, there are two opposite types of brands that can be found for middle-aged groups (45 to 59 years old). One is offering old-fashioned clothes with low qualities and prices; another is offering higher quality with expensive prices (e.g. cashmere brands). There are few choices for middle-aged consumers for fashionable clothes with reasonable prices in Chinese fashion markets (Yu, 2015). There are even fewer brands for old people than for the middle-aged people and offering for both groups is mixed in traditional department stores. Research on older consumer is limited.

Influenced by rapid society change, the younger Chinese consumers have different fashion tastes from middle-aged and older groups. The middle-aged consumers who are currently the main consumer group of cashmere brands, grew up during the radical period in the 1960s to early 1970s in China. For political reasons they have not naturally developed their personal fashion sense and tastes in the same way as later generations or western consumers, because they were asked to wear Mao suits and military uniforms in their teenager or young adult years. Instead, they have developed a special fashion taste in adulthood. For example, they prefer fresh, multicolour designs with big flowers or highly decorated garments, which may offset the deficiency of colour choice and lack of decorations in their earlier years. They do prefer similar styles to their peers' rather than to express individuality. This is despised as outmoded or 'village styles' by most of the younger generation. This group were the main consumers of Chinese knitwear brands since the 1980s and were a very important target customers for the cashmere sector. In addition, most owners of Chinese knitwear brand are from the same age groups, which makes it difficult for them to understand the needs of younger generation in fashion and style. Indeed, it could be argued they also lack fashion sense for the same reasons. The challenge for Chinese knitwear brands is how to secure the current consumers groups and also attract new generations to join as consumers.

### 4.5. Conclusions

Throughout the review of the literature for the knitwear industry and their related areas, it has become clear that there has been a steady business decline since the late 2000s. Market competition within the Chinese fashion retail sector is fierce. Chinese companies need to understand their customers and position themselves clearly.

## Chapter 5: Design Action Research Case Study

This chapter reports on the design action research (DAR) developed to answer research question (RQ 1.) and sub-research question (RQ 1.1.). The DAR was a combination of design research and action research. It was conceived with design experimental research that comes from design practice research, observations, reflection and learning that borrowed from action research as the three main parts of the DAR (section 3.2.1.). The research was undertaken in conjunction with a representative Chinese knitwear brand, King Deer (see section 3.6.2. for the rationale to select the company). Before the DAR, the company was visited for sixteen days as part of the case study research. The DAR was undertaken four months later, with around seven weeks based at King Deer in Baotou City, Inner Mongolia, China.

The core of the DAR was the development for a knitwear collection. King Deer produced the collection but did not plan to sell the garments as part of the King Deer brand, as they did not know whether design ideas suited their brand and could not gauge the author's design ability. As Chapter 6 will argue, these misgivings were unwarranted. The company offered technical support for making all the samples of the collection and gave feedback, but the author needed to pay the cost for their materials and the sample making fee. The copyright belongs to the author for her research or any future usage.

The aim of the DAR was to investigate the problems that the company was having. The research objective was to create a design collection that serves as a point of comparison with current methods in order to understand barriers and enablers, and to elicit conversations about design and design culture with the professionals within the company.

### 5.1. The difference between the DAR and a commercial collection design process

The DAR collection followed a typical western design process to create and manage a one-off collection. It started with the selection of a theme and the sources of inspiration within the theme. All designs were created and managed within the theme. The collection was managed through a visual research portfolio to achieve coherence across all designs.
The DAR was research and not a business collection, which led to certain differences:

- The DAR collection did not have brand heritage to follow for brand continuity.
- The DAR collection focused on the research theme and design idea development. Commercial brands spend less time on research, however many luxury brands put effort in this process to create original products.
- The DAR collection was not based on market feedback or require sale targets.
- The DAR collection was a one-off process rather than for a brand whose collections evolve over time.

The DAR collection was tailored for the traditional knitwear brands who want to upgrade their brands but have confusion regarding design direction and brand improvement through design. This collection was not conceptualised as a sustainable design collection, but adhered to some sustainable principles:

- Selecting existing, coloured yarns from company leftovers to avoid waste (in water, dyestuff, yarns use) from dying new colours.
- Cashmere knitwear involves production of 2D panels, which has the effect of limiting waste.
- The uniqueness of the design collection aimed to extend product lifecycles.


### 5.2. Timeline of the DAR collection development

The DAR process was partially carried out in the UK and partially in China. After the design research, the author developed the design idea and the garment designs in the UK between July and September 2016. She then went to King Deer to produce the collection from October 2016. The timetable and the processes are shown in Table 5-1.

Table 5-1: Timeline of the practice design research processes

| Timeline/subjects | Research | Location |
| :---: | :---: | :---: |
| Oct-Dec. 2015 /Preliminary investigation | Knitwear design research and analysis with design photographs from other brands' websites and online stores | UK |
| Jun. 2016. /Select design themes and inspirations | DAR confirmed with King Deer | China |
|  | Design inspiration selected |  |
|  | Yarn sample and colour samples collected from King Deer |  |
| Jul-Sept. 2016 /design preparation with design research and development | Inspiration and theme research | UK |
|  | Design ideas development |  |
|  | Colour development |  |
|  | Patterns, silhouettes, stitches development |  |
|  | Send example jacquard patterns and stitches to test by email |  |
|  | Garment design sketches with outfits |  |
|  | Technical sketches for individual garments |  |
|  | Pattern cuttings for difficult parts of clothes |  |
| Oct-Dec. 2016 Sample making process | Checking all selected colour quantities | China |
|  | Make Manufacturing Instruction Sheet (MIS) with design styles, size details and accessory requirements |  |
|  | Communicated with technicians |  |
|  | Pattern cuttings for some difficult designs |  |
|  | Patterns stitches on clothes size paper |  |
|  | Production process follow up for time and qualities |  |
|  | Communicated with all the relevant staff and deal with problems |  |
| Dec. 2016/ Exhibitions | Three days exhibition in King Deer company | China |
|  | Fashion show with Tsinghua University |  |
| Jun-Jul. 2017 exhibitions | Fashion show in Birmingham | UK |
|  | Fashion show in West Midlands |  |
|  | Three-day exhibition at Birmingham City University with survey |  |
| Aug-Sept. 2017/ Data analysis | Analysis feedback from the design processes, survey and the exhibitions | UK |

### 5.3. Understanding the market context

Before starting the DAR, a market trend survey, and two online surveys of Chinese consumers, were carried out. From industry interviews, it was suggested that the scope for design and brand improvement was limited, as the following quotes indicate:

- Cashmere is inherently old fashioned:
'Cashmere can only be designed with conservative directions. People no longer wear cashmere because cashmere means old fashion' Interviewee KDD5 (see Table 3-4).
- Cashmere consumers are conservative:
'Chinese consumers are more conservative than western people. They do not accept stylish products in cashmere. The brands have to follow these consumers' fashion taste. That makes the brands stick in the current direction.' Interviewee FDD7 (see Table 3-4).

In 2015, a preliminary investigation of cashmere designs was carried out to understand the trends in knitwear styles. Photographs of 1,000 pieces of $100 \%$ cashmere knitwear offered in shops and online, by 30 different brands around the world, were reviewed. This included online retail stores like Marks \& Spencer (marksandspencer.com), shopping websites like Matches Fashion, (matchesfashion.com) and Mytheresa (mytheresa.com), as well as the websites of some cashmere brands, such as the Italian brand, Loro Piana (loropiana.com) and the Scottish brand Pringle (pringlescotland.com). These cashmere products had different price ranges from below $£ 100$ to over $£ 1,000$ per piece. Two-hundred photographs of garments from luxury fashion brands, and middle and high-class cashmere brands, were analysed to understand how price, design and function were related. Brand value and design value were analysed in more detail by comparing both similar basic garments and unique designs from different brands by looking at design elements and the relationship between design and prices.

This examination revealed that the knitwear prices were influenced by the following aspects:

- The direct costs, such as manufacturing time, materials quantity and quality, and other costs for running the business.
- Design quality, the aesthetic feeling and attractiveness, is an influencing factor for selling at a higher price.
- Design creativity is a major reason for keeping consumers' attention and adds value to brand equities.
- The different functionalities of the knitwear cause different prices, for example, outer coats and dresses are always more expensive than others.

Finally, brand value accounts for the price different between the same basic garments made with the same materials (see Figure 5-1).


Figure 5-1: The relationship between brands and prices

Figure 5-1 shows the price range for six basic cashmere garments from Marks \& Spencer, Cosy Cashmere, Vince, Sport Max, Chloe and The Row. There is a large price difference between the top and bottom one. These knitwear designs may vary slightly in detail, but the main factor influencing prices is brand value. If Chinese knitwear brands want to improve their brand competitiveness with higher profit margins, then they need to improve both the design value and the brand value at the same time (Zhang, Gale and Eckert, 2015;(Appendix 1-3); Zhang, Gale and Eckert, 2018 (Appendix 1-1); Zhang, et. al. 2018 (Appendix 1-2)).

Figure 5-2 shows unique knitwear items from Loro Piana, Eskandar, Donna Karan New York, Tomas Maier, The Row, Litertine and Pringle. They illustrate that design creativity enables companies to set higher price points. For example, the Donna Karan New York, Tomas Maier and The Row garments have unique silhouettes. The oversize top from Eskandar and the coat from Loro Piana have highly unusual stitch structures and textures, while being easy to match with other clothes and timeless designs.

The analysis was based on the author's personal experience and understanding. For each of these garments it is hard to determine which aspects have more influence on the products values. The two surveys described in Chapter 3 were conducted to inform the direction of the DAR collection. The aim was to give the author insight rather than as a rigorous contribution to knowledge.


Figure 5-2: The added value of design in knitwear

The following results helped to understand the market potential of cashmere products.

- Design style is the first choice for Chinese consumers. Based on the data from online survey 2, Chinese consumers have high expectations for design aesthetics in knitwear.
- Chinese consumers were happy to wear cashmere products. Over $90 \%$ of respondents have cashmere knitwear, and $57 \%$ consumers have over 3 pieces of cashmere knitwear, $22 \%$ of them with over 5 pieces, and $11 \%$ had over 8 pieces cashmere knitwear.
- Most respondents were not attracted by traditional brands and their designs. Over $85 \%$ of consumers never visit the Chinese knitwear brands. While 15\% consumers have products from these brands, only $2 \%$ described themselves as loyal brand consumers (Appendix 3).

The price points of the DAR collection will be aiming for high-class /light luxury or luxury market. The companies aligned with Allude, Pringle, Max Mara, and Loro Piana. The main retail price range would be between $£ 300$ to $£ 800$, but few flagship pieces between $£ 1,000$ to $£ 2,000$. It needs to achieve a balanced collection to achieve targeted price points.

### 5.4. The DAR collection design and development processes

The importance of collection and design processes was set out in section 2.2.6. The DAR collection followed a standard western design processes for creating a coherent knitwear collection.

### 5.4.1. Setting constraints

Constraints were discussed in section 2.2.2. as a boundary for creative process (Negus and Pickering, 2004). The following constraints have been set for the DAR collection:

- The target consumers are 20-40 years old, urban female consumers, the age group most traditional Chinese knitwear brands want to reach. The target consumers are middle class, love arts and nature, and aspire to a sustainable lifestyle.
- The material is cashmere silk blended yarns, a staple for many Chinese cashmere brands.
- The styes are timeless, modern, elegant with attention to details and a luxury feel.
- The use is day wear or office wear.

The design plan and design ideas development took around three months from July to September 2016. Limited by budgeting and resources, it was designed as a single category collection (only knitwear), which consisted of different functional cashmere knitwear that can match each other as integrated looks and outfits. In a good design collection 'the pieces should be able to be worn together or fit in as accent items that can be sold alone' (Gehlhar, 2008).

### 5.4.2. Source of inspiration

Chinese tea culture was selected as an inspiration of the knitwear collection (Figure 5-3). The author had received a fashion show invitation from Tsinghua University for their annual tea culture art and design event. She was attracted to the theme of Chinese tea because it was a cultural symbol in history, which linked western and eastern societies and has influenced many people's lifestyles, until now. In addition, selecting a Chinese culture theme helped to develop a distinct Chinese design style in this study. In addition, the author was interested in research about creating a contemporary take on a traditional Chinese heritage theme of tea culture.


Figure 5-3: The design concept and inspiration

### 5.4.3. Research

Approximately two months were spent researching Chinese tea culture and developing ideas for the designs. First, the history of tea culture and its development was researched, (Figure 5-4). Many related arts and subcultures like tea ceremonies and tea flower arrangements were found. The tea culture began in the Tang Dynasty (618-907 AD) and flourished in the Song (960-1279 AD) and Ming Dynasties (13681644 AD). It declined in the Qing Dynasty (1644-1911 AD). It was related to Buddhist culture because it was the Tang period monks who first drank tea; tea was the main drink consumed when monks meditated. There were plenty of tea art activities in tea ceremonies and social life in the history of China. Some famous Chinese paintings such as Turning Piano and Sipping Tea (Zhou, ca. 1766-1800), (Figure 5-5), shows scenes of tea ceremony and activities.


Figure 5-4: The research notes of inspiration for Chinese tea culture (6 pages from the research portfolio)


Figure 5-5: The painting of Tuning the Piano and Sipping Tea (Zhou, Ca. 1766-1800)

Following the tea culture research, the author was attracted by one of the oldest Chinese paintings called Lu Tong Boiling Tea (Qian, 1785). This was used as the colour inspiration of the designs, (Figure 5-6 and 5-7).


Figure 5-6: Inspiration picture and selected colours of the collection


Figure 5-7: Chinese painting, Lu Tong Boiling Tea (Qian, 1785) Design idea developing process

Historically, the Chinese tea ceremony linked tea tasting with arts and philosophies to cultivate people's moral and ethical character. To achieve spiritual enjoyment, the ceremonies took place in cultured environments. People enjoyed tea outside in beautiful natural environments, or in some buildings with clean and elegant surroundings like reading rooms, temples, art galleries, or pavilions. Specially designed spaces for the tea ceremonies with works of art, paintings, flower arrangements, miniature gardens, antiques, and stationery accessories for calligraphy creations, chanting poetries and painting pictures were used (Baidu 2016). In the research process, the author became attracted to the tea flower arrangements. Thus, many pictures from tea flower arrangements were combined in the design ideas because of their quietness, elegance, plain and natural styles with simple flowers, leaves and rough porcelain.


Figure 5-8: The colour match proportions development

Two porcelain vessels for flower arranging, with unique colours and textured surfaces, were used for the colours and textures of the collection, (Figure 5-8). Other textures were based on Rattan tea strainers, (Figure 5-9).


Figure 5-9: The inspiration of texture and knitting stitches structure development


Figure 5-10: The colour pattern development and inspiration

Ideas based on the four main tea flowers, jasmine, rose, chrysanthemum and mint, were considered as colour jacquard pattern for the collection. Finally, chrysanthemum was selected, (Figure 5-10). The other three tea flowers could be alternative choices for the design if it was extended to a larger collection.


Figure 5-11: Ideas for silhouettes

The pattern cutting and garments silhouettes were combined from 'circle' and 'rectangular' shapes in the collection, (Figure 5-11). These two elements were both meaningful in tea culture and Chinese Daoist culture. The author selected to use unusual silhouettes to express the design uniqueness of this collection.

### 5.4.4. Garment design and decisions

The collection was based on the following key inspirational design characteristics and styles, (Figure 5-12).

- The colour tones were mainly natural colours in brown and green. A smaller percentage of red and blue colours were added in the collection to make it more dynamic. Light brown and khaki were the main tones of the collection for brightness.
- The design characteristic is clear and expressed with combinations of rounded and rectangle silhouettes.
- Special chrysanthemum jacquard patterns and bespoke texture stitches were used.

All these elements were related to tea culture. A collection should have direction and not be a random selection of great items. All pieces should work together as a coherent group (Gehlhar, 2008).


Figure 5-12: Grouping the design elements for the collection

A total of 21 outfits, consisting of 55 unique pieces, were created for the knitwear collection in the autumn of 2016, (Figure 5-12). The main features of the collection were:

- All designs come with complete outfits rather than individual garments, and the items are matchable for different new looks.
- Five small design groups were gradually developed with common design features in each group, e.g. group 1 developed with a two-tone tiny grade pattern and texture design. The three looks included a 'rectangular' shaped outfit (the right one), a 'round' shaped dress (the middle one), and both mixed silhouettes were used for the oversized trousers and coat (the left one of group 1).
- Many common design features were shared across different groups, e.g. pattern-linked design groups 1, 2, 3 and 5. Colour-match, style and proportion shared across design groups 3 and 5 . Design details with gradually changing colours between design groups 4 and 5 . Colours and silhouettes were shared in all groups.


Figure 5-13: An example of design iteration

There were many iteration cycles in the design process. An example of part of the DAR iteration can be seen in figure 5-13. The main iteration cycles included:

- design concepts and selection (for fitting theme, outlines, structure of the collection, and the role of the design in the collection)
- garments designs (e.g. in the dress, the outlines of the sleeve, pattern use proportions, colours matching were developed between the first and third design iteration)
- design details and sampling
- Placement and use of the flower pattern. The pattern flows across the body and two sleeves, which need to be knitted with shapes and perfectly align. These kind of unusual design details are a challenge to both technicians and designers.


### 5.4.5. Sampling process

Sample making took seven weeks. The author worked in the design department with other designers during this period (section 5.1). The production process and time arrangements were managed by the design director, in the same way as for the designers employed in the company.


Figure 5-14: The knitwear sample management process in the King Deer company

The sample making for each design was divided into three different main parts (blue, orange, and green) with seven stages, (Figure 5-14):

1. Preparations of the Manufacturing Instruction Sheet (MIS): design details and materials are decided for every single design. After checking and confirming the quantities of the selected coloured yarns, a Manufacture Introduction Sheet (MIS) is made with a technical drawing and detailed sizes, (Figure 5-15).
2. Sign off and management of the MIS: The MIS was signed by the design director to sign and manage before being sent to the planning department to schedule when the sample is made. As the company did not have a sampling department under designer management, the designers have to make samples on production machinery.
3. MIS processes: When the technicians receive the design MIS they usually contact the designer to discuss and confirm the design details and deal with any confusion. As the author had not worked with the technicians before, they had to learn each other's working styles and methods, which required close interaction to finish all the samples on time.

针织产品设计单


Figure 5－15：An example of a Manufacturing Instruction Sheet for the collection

As experimental design research，there were many inescapable difficulties in the sample making process．Communication with the technicians required time and energy to explain the designer＇s ideas and requirements．This is a common problem in the knitwear industry that happens between designers and technicians because knitwear is difficult to describe（Eckert，1997）．As some of the selected yarn colours were used up by other designers＇samples，a few colours were slightly different from the original ideas in the finished collection．Some key issues were：
－Most of the computer knitting machinery was more than 20 years old．This limited the range of stitch structures and shapes by the machines，even though the technicians knew how to deal with some innovative design ideas． This required some compromises in the design details．
－There were a few samples where technicians made a mistake in the details or size on the first samples．Limited by time and the workshop＇s tasks，it was not possible to remake them and fix the errors．
－All the garments were made with the first samples．Many swatches were knitted beforehand to sample textures，patterns，and other details．However，
the whole assembled garments needed adjustments to be made to get all the details right.

- Due to time restrictions the iteration was limited. Some garment samples were adjusted by replacing parts of the garment. Collars or sleeves were remade, and hand stitched for achieving the required effect.

King Deer has around 40 people in the technical department. These divide into shape technicians, who developed the detail design of the garments including the fabric, shape and sizing, and the computer-aided design (CAD) technicians, who programme the CAD system and optimise the knitting process. In King Deer, garments require the input of both groups of technicians. This might be unusual as normally one technician can handle both aspects.

Around 10 technicians were involved in sampling this DAR collection. Even experienced technicians were challenged by styles that had both an uncommon shape and unusual stitches. As the author knew from experience that unconventional shapes are difficult for knitted garments, she made cutting patterns for all the shapes, and provided samples made from basic fabric to help the technicians to understand the design requirements, size and details calculation, (Figures 5-16 and 5-17). It was an efficient way to deal with the knitwear shapes and potential problems, although, it was not a common process in the company. The knitwear designers in the company do not help technicians in the same way. Collaboration with the CAD technicians was most challenging, as they had different understandings and vocabulary from the designer. As aesthetic properties are hard to describe, the different ways of thinking and experiences caused more problems that had to be discussed in the processes.

Many discussions and negotiations were needed every day to encourage the technicians to challenge their skills and equipment to achieve new effects. Some design details were not achieved. One unusual collar was made three times with different technical ideas and ultimately it was still not finished to the expected detail. The technicians were pushed to stand out from their comfort zones and they tried their best; this was a co-creation process, and sometimes the technicians came up with something better.


Figure 5-16: The design and pattern cutting


Figure 5-17: The design and manufacturing process with body-size pattern cuttings and colour/pattern matching

### 5.4.6. Design outcomes

The collection, with 21 original outfits and 55 pieces in total, included outer coats, tops, skirts, cardigans, trousers, socks, gloves, and scarves, (Figure 5-18). It was ready in December 2016. All the clothes can be matched with others for new outfits, (Figure 5-19). During the final photo shoot there were some new outfits/looks put together by a cooperative creative team, which included the author, stylist Anita, five models (Sanya, Liv Forsbrook, Amy Field, Uche Anita and Lauren Alice-Suzanne Clarke), and a photographer, Martin Francis. The photographs were created in spring of 2017, (Figure 5-20 to 5-22).


Figure 5-18: Some design outcomes and details


Figure 5-19: An example of matching ability across different looks in the DAR collection


Figure 5-20: Part of the looks from the collection


Figure 5-21: Example of design details from the DAR collection


Figure 5-22: Second example of design details from the DAR collection

### 5.5. Feedback and reflections on the collections

### 5.5.1. Reflections on the development process

A total of seven weeks' full-time working was spent with the staff of King Deer allowing the author to build good relations with the design team and the design director. This was with an immersive observation (see section 3.6) of the company and its design and sample making processes. At the same time, the designers from the company were also creating their new designs for autumn and winter for the following year. Fortunately, it was a great chance to see their whole design process for a season during that period. This provided insights into issues that will be picked up in the following section:

- how the design team works.
- how they plan the design for their new seasons.
- what kinds of methods their designers are using to develop their ideas.
- how they manage and organise their collections.
- are designers encouraged and supported with innovative spaces.
- how design support and management systems influenced their design outcomes.

Making knitwear samples in King Deer involved around six company departments: design, planning, technical, knitting, finishing, and the dying laboratory. They managed and stored the small quantity of coloured yarns for sample making use. There is a mature management system supporting King Deer as a highly respected international supplier. Regrettably, the manufacturing process and management do not really support developing and testing experimental design ideas. Every step of the sample making process needs attention:

- The knitting or sewing technicians seemed bored by their repetitive jobs and required supervision and encouragement to achieve the desired effects in the first samples.
- Some knitting technicians were not keen to support more complex designs because they needed more time to knit it. They left these to the end when all
the other samples were finished in the collection. Only after a meeting between their managers and the design director did they finish the sampling.

Notably, there was a lot of support for the DAR. The finishing procedures were a long process. After knitting and sewing, the garments need to be washed, ironed, and checked for quality. If problems were found, repair was needed. They managed the collection on time. The finishing department liked the collection and staff tried on the designs.

### 5.5.2. The reflections from the design team on the DAR process

The design director needed to approve the author's designs and samples prior to the sampling process and knew all the designs and details of the collection. Numerous conversations followed as she was interested in the author's way of designing because they have developed their designs in different ways. She asked many questions about design, for example:

- How to arrange the whole collection?
- How to choose the right colours?
- How to make sure all the designs match each other?

To her, some of the designs did not look designed. She thought some garments were too simple and too basic in texture because the design collection was more focused on unique silhouette and outlines. It was difficult to see effects at the MIS stage. Unlike the Chinese traditional knitwear designs, the DAR combined new stitch structures and innovative shapes. The Chinese design typically uses new stitch structures and surface decoration (embroidery, rhinestones, pearls) and standard shapes. She was not familiar with how to design different silhouettes and update standard ones in response to changing fashions. They also do not experiment with different fits on the body, e.g. oversized garments. As they design individual garments rather than outfits, they were also not familiar with how to design complete outfits or garments so that they looked equal in different combinations. The individual designs were not linked through common themes.

Other designers were wondering why the author designed the entire collection herself and why she created novel shapes that required her to make cutting patterns and fabric mock-ups. The author also hand finished her garments with embroidery, a task which is usually given to workers in the factory. This raised interesting questions about the division of labour in the company.

### 5.5.3. The reflections from technicians

During the sampling process the attitude of the technicians gradually changed. In the beginning they resisted challenging themselves and just told the author the ideas were hard to achieve. When they saw some finished garments their respect and support for the parts of design still to be created increased. Finally, when the collection was put together for a three-day exhibition in their showroom, all the technicians who participated in the sample making were proud. One of technicians told the author, 'you are a real authentic designer, with clear design ideas and clearly know what you want and what the result should be. We are really excited to be part of your project'. (Feedback of TN1 [record in the industry notes]).

Some technicians told the author they appreciated the author's working style because they liked being given clear instructions. They were happy to spend time dealing with some difficulties and details because it enabled them to learn. Some technicians believed that their designers lacked clear ideas for their own designs. The designers often gave the technicians a photograph and asked technicians for ideas to finish the designs. Thus, some technicians questioned the designers' abilities and did not respect their expertise. In this situation, if designers want to try some experimental ideas, it would be difficult to get support from the technicians.

### 5.5.4. Reflection on the collection within King Deer

The design director showed personal interest of the collection, even trying on items. When the whole collection was displayed in their showroom, she commented to the design manager: 'the design collection is really creative, and the designer has good design ability, but the collection was only suitable for a small population who have good tastes in fashion'.

She believed the collection would be hard to use straightaway in their brand for their ordinary consumer groups.

The technicians had little idea of what would be popular in the Chinese market. They saw that the collection was different compared with their brand and believed the collection looked young and attractive. Some technicians liked the DAR styles and they claimed they were interested to wear some of the designs.

In the final exhibition, the manager from the finishing department asked to buy one coat she wanted to wear. They thought the design could be sold in high-class shopping malls in cities in China, but were not sure if this collection was suitable for their current customer groups.

### 5.5.5. Feedback from the exhibitions

In order to collect feedback from different people, two, three-day exhibitions, were organised in 2016 in China and in 2017 in the UK, (Table 5-2). The collection was also presented at three fashion shows both in China and the UK. There were around 110 visitors for the two exhibitions, including knitwear industry peers, academic researchers, media, design teachers and students, and designers. There were around 500 people in the audience who watched the knitwear collection in the three fashion shows.

Table 5-2: The exhibitions and fashion shows of the DRA collection in China and UK

| Date | Event | Feedback (keywords) | Participants |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 5 \text { to } 7 \text { Dec. } \\ & 2016 \\ & \text { Baotou, } \\ & \text { China } \end{aligned}$ | Exhibition in King Deer showroom | - good designs <br> - not suitable to current consumers in the brand <br> - proud to have co-created the collection <br> - suitable for Japanese market <br> - desire for future collaboration | King Deer company designers, technicians, managers (around 60 people) |
| $\begin{aligned} & \hline 16 \text { Dec. } \\ & 2016, \\ & \text { Shenzhen, } \\ & \text { China } \end{aligned}$ | Fashion show with Tsinghua university | Design teacher and research student (3 years' research for a master's degree): <br> - the collection has a good level of designs and is attractive <br> - the styles are suitable for a much younger customer group than current Chinese cashmere brands | Design teacher, Fashion MA (research) students Designers from industry Academics (around 20 people gave feedback) |
|  |  | An audience member contacted the author asking how and where she can buy some clothes from the collection | Around 200 audience of theshow (but not possible to talk with anyone as the author was backstage) |
| ```3 to 5 July 2017, Birmingham UK``` | Exhibition at Birmingham City University | 37 questionnaires returned (with 82\% female $/ 18 \%$ male responders) <br> - suitable 20-40-year age group <br> - single material used lack of contrast of the texture. <br> - patterns and silhouettes were creative <br> - colours and Chinese culture in modern style <br> - luxurious feel | University teacher, academic, PhD students, staff (50 people) |
| 23 June 2017, <br> Birmingham <br> UK | Birmingham <br> Fashion <br> Festival <br> (fashion <br> show) | Interest in buying garments from the collection | Designers, media, models. (Talk with around 25 people backstage) |
| 2 July 2017, Cannock, UK | Midland <br> Fashion <br> Week | Positive feedback informal of the collection | Designers, models (Talk with around 15 people) |

(For photographs see Appendix 5)
The industry feedback was mostly from the King Deer brand. One vice general manager hoped they can sell these designs in Japanese markets, which he covered as a supplier. The design manager discussed the possibilities of consulting the author if they make the decision to improve the brand in the future. Graduate Chinese designers at the Tsinghua University believed the collection had market potential for young and mid-aged consumers in big cities in China.

Academic feedback from design teachers, and research students was collected from Tsinghua University and Birmingham City University. Most feedback was positive but based on their personal interests; they were not familiar with the Chinese knitwear industry. Most feedback focused on the garment design and details and will be helpful for reflection on future design directions.

### 5.6. Concluding reflections by author

The DAR included three aspects: the process, the outcomes and its effectiveness as a means of data collection. The design process is an example of how a coherent collection could be designed in Chinese context.

As an outcome, the collection demonstrated possible future design directions. It is a coherent collection with common features including silhouettes, outlines, patterns, colours, textures, and around a common theme. The garments have different roles with flagship pieces and basic pieces. The collection has the following limitations:

- only uses one type of cashmere yarn, the same as King Deer
- the collection is more like a student project with more freedom than design teams working for brands have:
- no brand heritage or brand identity to follow.
- no sale pressure, with more freedom to achieve designers' goals than industry.
- it was designed by a single designer.

DAR is an important research methodology for this study. It provided:

- immersive experiences of the design culture in the brand.
- close observations of the design process in the brand.
- enabling the exchange of ideas with Chinese knitwear designers.


## Chapter 6: The Role of Design in Chinese Knitwear Companies

This research looked at the challenges that Chinese knitwear companies are facing. Chapter 5 has shown that it is entirely possible to produce a beautiful collection within a Chinese knitwear company. However, most of the Chinese knitwear companies were not doing this. The chapter is an analysis of the case-study brand, King Deer's, design process, in order to understand the design problems in Chinese traditional knitwear brands and the reasons behind them.

It was discussed, in section 3.6.2. that King Deer had been selected as a representative Chinese knitwear brand for the case study in this research. King Deer is one of the top five cashmere brands in China, it is a typical knitwear business that is manufacture based and mainly sells cashmere knitted products for their own label (See Chapter 4).

Design culture in King Deer will be investigated in this chapter. Design culture was defined as the cultural environment of design in an organisation, (section 2.2.8). This chapter will look at design and its main influencing aspects: the organisational structure, business model, design process and their product offering. The design process was built on research interviews and immersive observations carried out in conjunction with design action research (DAR). This was to explore what is the brand business system, how they run the brand, and how they design their products.

The DAR collection will be used as a bridge for comparing and analysing for the main differences between the King Deer process and western design approaches. In addition, the DAR collection will offer an opportunity for 'looking under the bonnet' of what is going on in these Chinese companies and try to find the underlying reasons why they are struggling.

The design problems of King Deer will then be discussed with the 6 themes of design culture and 21 elements for the enrichment of design culture, see section 2.2. for details. To validate the findings of the study, the analysis results from industry interviews (with six other Chinese companies) will be used to compare with King

Deer. The following section will start with the design context of the King Deer company.

### 6.1. The technical strength

Most knitwear brands grew into large conglomerates from small manufactories since they began their businesses from the 1980s to the 2000s. They had their peak time around the late 1990s and early 2000s (section 4.2.1). These successes were brought about by their high-quality products, with integrated manufacturing processes from raw materials to products with:

- high-quality yarns
- high technical skills
- integrated manufacturing

The main strengths are discussed in the following sections.

### 6.1.1. Luxury raw materials and yarns

Most Chinese cashmere companies offer high-quality products with luxury yarns made from fine cashmere fibre. Both raw materials and yarns are available from local farmlands or spinners. The big companies invested in machinery equipment and improved technical skills in knitting, weaving, and spinning because they believed valuable yarns and good quality were their unique selling points (USP). For instance, the King Deer cashmere company undertakes their spinning, dyeing, and finishing system for their yarn production. They buy raw cashmere from local cashmere famers in Inner Mongolia and produce all the pure cashmere and cashmere blended yarns for their own kitting and weaving factory use. It was discussed in Chapter 2 that Inner Mongolia, provides most of the top-quality raw cashmere in the world. Many local cashmere yarn and knitwear companies developed due to this advantage in China. Some well-known Chinese brands are from this area, including Erdos, King Deer and Tianshan. China produced 15,437 tonnes of cashmere in 2019 (The Schneider Group 2020).

### 6.1.2. Valuing quality and technical development

Generally, larger cashmere companies have their own technical development branch or department. They pay attention to yarn research for producing exclusive yarns that support their manufactured products. They do not sell yarns but have controlled the whole production process of their knitting and weaving products. They have successfully addressed the natural defects of cashmere yarns, for example easy pilling and moth problems. Chinese cashmere companies aim to achieve stable performance, durability, and comfort in their cashmere yarns. This benefits their supplier business and obtains certain national market shares, because they are not only knitting manufacturers but also have exclusive yarns for their products.

These large cashmere companies offer high-quality products with competitive prices. Their products are good in materials, technical manufacturing, and craftsman skills. They have strong technician teams both in textiles and knitting. Thus, even if they do not run their brands well, their high-quality products can make these companies have business opportunities as knitwear suppliers to international clients.

The following interviewee VGM3 told the author about their technical advances:

> 'Our technical department is in charge of materials and technique, yarns research and development. We use cotton, linen, silk and materials to blend cashmere, in order to create new yarns with good functions and to reduce the cost. Cashmere is a top material, but expensive. So, we need to create some blending yarns for different needs. It is a study and research job, needing testing many times, and the successful yarns can be used in design and products. We have large team with over 200 people. We buy raw materials from suppliers, and then we do the spinning in our own manufactory. The yarns can only be used in our own manufactory, we do not sell our yarns. All the yarns have high standards and good qualities. Thus, many clients are with our company over 20 years for their knitwear processing. We create yarns for supporting all the business in our company, including a supplying business for international clients (European, American, Japanese, and Korean) and our own brand for the national market. International brands use cashmere blend yarns more, and national markets prefer pure cashmere than blended yarns.'
> from interviewee VGM3, 2016 (see Table 3-4)

King Deer produces their own yarns with different grade sizes for different knitting or weaving products. It is common that most cashmere knitwear brands only use a few types of yarns for their products whether they have their own yarn factory or not.

### 6.1.3. Advantages of own manufacturing facilities

These traditional knitwear companies also have large-scale production facilities, long experience and low labour costs. They can offer good quality products on time for their own brands because of this. This gives them a good competitive position for both their supplier business and own brands. Even though there are declining trends, for their own brands, for example King Deer and Erdos, they still obtain billions of Chinese Yuan (CNY) in annual sales, The large-scale integrated manufacturing makes these companies part of the important cashmere knitwear suppliers to the world.

### 6.2. The business model of Chinese manufacturers own brands

Manufacture-based companies are running their in-house brands with a different business model compared with most western fashion brands. For their own in-house labels there is a simple buying or ordering system in most Chinese knitwear brands. It is a business model between wholesale and fashion chain brands. Knitwear brands may have their own retail stores, but most of their products are sold and managed by franchisers who are given exclusive rights for specified areas, running shops under the brand name.

### 6.2.1. The buying and ordering process

Franchisers as external buyers are normally in charge of retail stores in a specific city or area where they are permitted to sell their products under the brand's name. For the small brands, they may have few retail stores in their company's local areas, but they mainly rely on their external buyers for running the business. That is dependent on the brand sales and their strategy. For the large companies, they have their own retail stores in important cities. For example, the King Deer brand has their own retail stores that belong to a separate branch of companies who order the products independently of the parent brand. These 'internal' buyers operate in the same way as the franchisers.


Figure 6-1: The buyers and their selling systems

The brands hold annual purchasing meetings in spring to sell their products to both their external and internal buyers (Figure 6-1), then manufacturing items in the summer. After that, their franchisers can sell their products to their sub-franchisers' retail shops or sell them in their own retail stores in the autumn and winter. The branch owned companies also operate in a similar way.

### 6.2.1.1. The buying system limits brand building

The business model in the company is that all the buyers have a minimum order volume. These may differ for each buyer depending on the market size and the area's economic development. The brands offer design ranges in their purchasing meetings and the buyers order products within the collections. Afterwards, the brand companies produce all the ordered goods and delivers them to the buyers on time at the beginning of the selling season.

The business model was successful during their brand developing process in 1990s and 2000s. But, when the knitwear brands began declining in the last decade, this model itself became a limitation to brand building and development.

In this business model, both internal and external buyers need to select and order enough products that they will sell in their stores. Generally, knitwear needs a longer production process than woven fabric clothes, which means adding extra seasonal orders is less possible. Thus, buyers need to order enough products to meet their whole season's (autumn/winter) demand. For cashmere products, the costs are
higher than most other types of knitwear. The buyers need a significant budget to run their businesses. At pre-order, they need to select the 'right' styles with the 'right' quantity for maximising their profits. Otherwise, they may have inventory risks (if they select unpopular designs) or run out of product (if the design is right but not enough were ordered). Under these stresses, the buyers are very careful when they select products in purchasing meetings, because the risk is devolved to the buyers.

The brand companies suffer with low profits because they have shared their revenues with their secondary dealers (franchisers) or even third dealers (the retailers under the franchisers). In order to reduce business risks, most knitwear brands sell their products to their franchisers without the possibility of exchange or refund, even with lower prices. They need to give the franchisers freedom for selecting all the products they want to buy and not limit the design ranges or structures (if they have them). Selecting what they like means the ordered products are not in a coherent range. The consequences are that the selected products in the retail market are made up of items that may or may not be popular to sell. Importantly, these picked products are without a design plan and structures, that are difficult to build into a uniformed brand image.


Figure 6-2: The marketing network and organisations in the King Deer brand

The internal buyers are independent branches of the companies (Figure 6-2). They are not asked to pay for their orders like external buyers, but they are separate divisions. They must take responsibilities for their own selling target and inventory risks. Like the franchisers, they select individual products that they believe have market potential rather than order products with ranges or collection requirements. That means the brand images are out of control in the retail stores as well.

### 6.2.1.2. The buying system as a driver for conservative designs

Most franchisers have conservative business attitudes when selecting styles for controlling inventory risks. They may not trust the salespeople and designers' suggestions preferring their own sales experiences. They select certain designs that
were similar to the popular products from their own sales experience or from other shops in the markets.

For their own retail branches, they have a similar method to the external buyers when they select products in the purchasing meetings. Most leaders from branches take their sales assistants to the purchasing meetings and ask them to pick the products for next season. They believe sales assistants more closely understand consumers' needs, with sale experiences for what types of styles were popular in the markets. It makes sense that a salesperson has more understanding of market needs, but sales assistants base their experience from their own or other shops they know. They have not trained like designers who can balance market experiences and trend forecasting.

The purchasing system affects the designer's behaviours in the design process. In order to achieve the order requirement and sales tasks, most designers produce something for the buyers for success in purchasing meetings rather than to create new designs to make products and develop stronger brand competitiveness. For these companies, the buyers are stable with almost no change in personnel taking place each year. Designers clearly know what their main buyers' preferences are. In this system, designers are influenced by these buyers' tastes when they design products. Design creativity is diminished when the company's evaluation system only focusses on sales quantities.
6.2.2. Selling products to franchisees rather than directly to consumers

In this system, the brand holds annual purchasing meetings in their headquarters in Baotou City around the end of April or early May every year. All the franchisers and buyers need to visit for buying for the following autumn and winter. In the purchasing meetings, all the design samples are displayed in their large showroom. Franchisers have the freedom to pick products they prefer within these displayed samples. They need to make decisions in a few days for how many of which designs and colours they will buy. Normally, a purchasing meeting in a fashion company is around three days in length. The company will then produce these products based on the orders and deliver them to the buyers around August before the coming cold season. In the
current system, the companies did not control which products will go out in the retail markets. Thus, it appears difficult to control the brand images and character as well. For the knitwear companies, there was no opportunity to build direct links with their consumers, although a lack of contact with consumers is a general problem for many businesses. But these brands sell their product directly to franchisees rather than consumers.

There is a difference between consumer preference and franchisees or internal buyers' selections. In this business model, it always happens that buyers' choices lag behind the market demands and consumers' real needs. The consequences of this are high product homogenisations that makes the brand old fashioned. Importantly, franchisers have a short-term view; they focus on single season sales. Despite a long-standing engagement with the company, they do not take a long-term development vision and absorb the cost of building up a brand. The company has been unable to make the franchisers take a collection or offer a coherent offering from which the franchisers pick a consistent subset. To do this, the company needs more support both in product design and their buying systems, e.g. offering coherent collections and allowing for a small percentage (e.g. 5\%) of products that can be returned or exchanged.

### 6.3. Design in the organisational context

In King Dear, design does not feature prominently in the company structure. There were only fragmented design teams.


Figure 6-3: Organisational structure of the case study company focused on the domestic knitwear business

Figure 6-3 shows the organisational structure of the King Deer company, based on company documentation. The in-house brand belongs to the domestic trade centre. It is one of five important departments of the company (first layer of the figure). The design centre is one of six sub-departments of the domestic trade centre (second layer of the figure). The inner design department (green parts) is the focus area of the study. It is the real centre of the design department in the company. The other two departments (yellow colour) now no longer exist.

The organisational hierarchy show that the inner design department is in the lowest position (third layer of the figure) of the organisation. It is managed by the domestic trade centre. It seems their business, technique, production, accounts (all in the first layer of the figure) are all more important than design in the company. Where design is located in higher positions in companies, they can gain more advantages, see section 2.2.3. In this organisational structure, both 'design' and 'brand' are in the lowest position of the company. This implies a manufacture centred model rather
than design. It is a sensible structure for a business that sees itself primarily as a supplier, but for their own brands, design seems to play less of a role than it should.

It was interesting to note the design functions were in separate arms of the organisation and separate from sampling and production. Based on the author's working experience, fashion companies who emphasise the value of design often have a few technicians to support designers for testing design ideas and making samples. Some of them may also support manufacturing when they are not busy, but they are managed by a design department with priority of design samples rather than manufacturing.

### 6.4. The King Deer Design process

This section details the important steps in the King Deer design process based on the observations during the design action research (DAR) period and 24 industry interviews.

First, the design tasks' timeframe will be introduced via a Gannt chart, to provide an overall outline of the design process for an example autumn and winter collection. Following this, the product structures, yarns, inspiration, design sourcing and themes, colours, and design 'collection' will be presented.


Figure 6-4: Reinforcement loops in design and buyer systems

There is a reinforcement loop in these franchisees' business models (Figure 6-4). In these systems, both brand companies and their buyers make the business less competitive in the markets. Buyers look backwards wanting 'safe' products and refuse new designs, because new designs may come with high risks in the market. Their 'safe' products are tested by their own or others in previous seasons. However, for fashion products, they always need to have new items. To only have old, 'safe' design styles will make new risks when consumers are expecting the latest designs. It happens that many safe products will become remaining surplus. Under this stress, buyers are more careful about what to order for the subsequent seasons. In the short term this is a rational structure, but it is not for the long run, that is why the brands have gradually become old fashioned.

From the brands' side, if buyers refuse to order new designs, business managers will question their designers' design abilities. Design management and evaluation are based on this. Designers' rewards are assessed by their design sales quantity performance. Under this stress, designers are pushed into being conservative, by following the buyers' wishes, because items sold to buyers means design success in this system. As buyers take the full risk if these products do not sell, most new designs do not have the chance to appear in the marketplace. Therein, designers lose the passion to create something new. Due to this, knitwear brands become very similar fashion groups, with comparable design styles crowded in the same market. This compresses their profits and development spaces leading to increased business survival risk.

The evidence can be found in the following industry interviews.

```
'We keep popular colours and design styles, if we have new designs, then we can
add some, but we don't need too many. The products become older and older,
consumer groups are older and older, and few new consumers groups join...'
    -from interviewee KDD5, 2016 (see table 3-4 )
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There is an issue of keeping old popular colour and styles for continuity or adding new designs to refresh and update. Both may be important, but how to make these balance is important for the brand.
'There are too many traditional or classical styles in our shops, and a lack of fashionable elements inside. (As a design director) I can change the percentage (of the products structure) in the design plan. I try to improve them every year. But after the purchasing meeting, the product percentage (structure) will become imbalanced each year.'
-from interviewee KDD5, 2016 (see table 3-4)

The design director tried to improve the brand images but was not supported by the system.
'(for the buyers)... The market is not good, they pay to buy the products without return and exchange. So, they worry (if the new designs are unsuccessful). Thus, ultimately, the products lag behind the market every year.'
-from interviewee KDD5, 2016 (see table 3-4)

Conservative buyers and the current buying system, make the brand old fashioned.
'Year after year, designers try to cater to their pleasure, but are restrained to only follow the franchisers market. And in this environment, designers are also not happy to consider developing an improvement in the design plan, because they do not design something that cannot be used. It is also related to their personal benefits, their 'face', their reputation We have to rank designers' preference after purchasing meetings. New designs, nobody buys. So, everybody knows how many of each designers' quantities are made and sold. That is a big stress, and they feel ashamed, and they do not even think about their bonus.'

- from interviewee KDD5, 2016 (see table 3-4)

Designers work in an easy way to make their efforts successful in the system as they are under stress from management and evaluation systems.

### 6.4.1. The design tasks and time

Figure 6-5 shows the approximate timetable for the designer team at King Deer. The designers begin to prepare for the new season from September and finish their design programme in April. Their main design period is from November to February for the following year's knitwear. The designers' tasks were to design products for the annual purchasing meeting to achieve annual sale targets made by the company for business growth and development.


Figure 6-5: The Gannt chart of the King Deer brand design process

The design process for a fashion collection was identified in the literature review, section 2.2.6. In the Gannt chart (Figure 6-5), different colours express different stages of the design activities. Orange conveys the design material collecting periods and yellow is the research time. Green colours are for product design time, blue for sample making, violet-blue is managing and editing periods and the purple colour is to express the promotion stage.

## Collection of design materials (orange)

Collecting design material here means the design styles and details collecting process. This is typically called the source of inspiration as a part of research in most literature. While design material collection here emphasises the slight difference from general source of inspiration; it is an early stage for design-style gathering, with a large number of photographs (mainly knitwear products) taken in shops (over thousands for each designer), which is different from normal source of inspirations. Importantly, the designers call these collections of design photographs 'design material' or 'design information' rather than a source of inspiration. Because in Mandarin, inspiration has a narrower meaning than it does in English. Inspiration called 'ling gan' in Chinese, in the art and design context, normally means designers are inspired by something they are interested in. Then new ideas created in a totally different form built by personal talent, sensitivity, and knowledge. It includes a transformation process between different forms that does not include copying. This is the use of inspiration in Mandarin. For example, a designer may introduce their new dress inspired by a building or a fine art piece. They seldom claim a dress is inspired from another similar dress, they will use the term 'study' or 'follow', rather than 'inspire' in the Mandarin context. The design materials can be use directly, while inspirations normally need to be transformed.

In this study, the difference between the collection of design material and research is that: design material collecting focuses on initial material preparing, and selecting a stage for design styles that might useful. Designers do not deeply engage yet. Research is more about exploring and evaluating to understand and select materials, information, or knowledge and generate something new. Discussing these two stages individually can help to frame the design methods in detail in this case. It may
be difficult to clearly separate these two parts technically, based on current theories, but based on the author's close observation of the design team and her expertise and sensitivity as a designer, there is a clear difference that is worth discussing in this study

Collecting design materials goes through most design periods in King Deer. In September, they start collecting design photographs from the main fashion weeks' shows around the world for new trends and design sources. In October, designers have a three-to-four week business trip they call a 'market survey' by visiting retail stores in three or four important large cities in China for domestic market information. This is for collecting further design styles for what they can use, and market information for what styles are popular in the retail markets. In early November, an inner group meeting occurs, to make decisions for what design sources they will use and who will use them for the new products. All designers will have clear design tasks and specific design sources adapted from the photographs and business trips. In December, a further business trip, of around two weeks takes place. Selection of new design material occurs for continuing the design process and may include internet resources for further design ideas.

## Research (yellow)

The research stage overlaps with design material collecting, and these can happen at the same time. For example, when the designers search online fashion photographs from fashion shows, they may look for both emerging trends and design details such as materials. When they visit retail markets, they mainly collect design materials, but may also take time to observe what products consumers are buying in these shops. It is a kind of market research.

A short research process for market and fashion trends is involved in the King Deer design team. They collect market information from sale feedbacks both from their own shops and others. The design director reviews trend forecasts from a website that they are subscribed to select colours for new season. Analysis of market feedback and trend information is the general research included in King Deer's approach. Designers collect design styles and patterns as general research to look
for design ideas for new seasons. Annual design proposals are made by the design director based on this research, which consists of new selected colours from trend forecasts, new design details like patterns, design tasks for each designer, design tasks for the whole season, and time plans.

## Garment design (green)

Design activities happen from November to February. Before the design starts, the design director makes a design proposal in September with colour plan, series size, designers' working tasks, time plans, and quantities required. As the yarns do not really change each year, it is simply selecting the colour and size to match designs, when design ideas are selected for making samples. Designers begin to create in early November, after managing and selecting the design sources, to follow the design task. Designers in different positions will have different design quantities' requirements. For example, senior designers need to design around 70 to 80 styles, middle-level designers around 50 to 60 styles, and finally junior designers have 30 to 40 styles. It seems a special management approach that may only happen in these traditional cashmere brands, because their boss worries the expensive yarns are wasted by inexperienced designers. It is an opposite way to western brands, where companies prefer to use lots of internships for creating fresh ideas for innovation (normally using basic, cheap materials), and the senior designers manage them (Stacey, Eckert and Wiley, 2002). It is also different from the author's experience in most Chinese fashion brands in Guangzhou city, where designers have the same chance to create products, they work as a design team, each designer does not have a hard personal task to achieve.

This is not only a design target, but also a limitation to avoid material and labour waste. The design director required all the designers to work on the same series at the same time, in order to manage and finish all series in planned periods. Designers were asked to submit design drafts to the design director every two weeks. Then they have a meeting to select designs together. This is a different approach when compared with some western designers. They design in bursts with continuous constraints (Stacey and Eckert, 2010). At King Deer there is no pressure on designers to be creative. The selected designs will then go to the next step of making; the MIS for sampling, with technical drawing and detailed sizes of each part
of the garments. The design activities mainly happen over a period of 17 weeks as shown in Figure 6-5. Of this around 11 to 12 weeks were spent on design.

## The garment sampling period (blue parts of the Gannt chart)

Before the garment sampling, swatches are made to try some patterns, texture, and jacquard to test effects. In King Deer, their swatches come from a few different ways.

- Source idea: patterns or texture found from business trips, magazines, or websites.
- Designers' ideas: for example, pattern design, colour matching effects that require a small sample before they decide to use it in the designs.
- Swatches from the technical teams: It was mentioned that King Deer have a technical development department for yarns. There were two yarn development staff who, when not designing new yarns, were able to develop different texture and pattern swatches for design support. They had freedom to create swatches from books, websites, or from their own ideas. They are not designers but understand knitting stitch and texture. They offer extra support if designers are interested to use any. They took over 200 swatches to the design department when the author stayed in the company for her DAR in winter 2016.

Each garment design normally only needs two samples to be made to achieve all the details in the case study company. From a positive angle, it can be understood that the benefits of experienced technicians and their good skills only require a small number of samples to be made. However, cashmere yarns are believed too expensive to waste for making further incorrect samples. Critically, the products may reflect the limited iterations in the process as well. It assumes that no improvements would be made through further iteration, and that using more yarn in samples is wasteful. Importantly, it seems there are fewer opportunities to push both design and technical boundaries, which reduces the chance for producing the best solutions. It is rooted in the influences from Chinese traditional Confucianism, most people respect each other's feelings to avoid conflicts (Keane, 2013), like technicians or designers when working together, they worry about hurting others' feelings or 'face'. They do
not like western designers who are critical of themselves and others for achieving innovative designs. After all the samples are finished, designs are selected to make full-colour samples for the purchasing meeting. This is typically three to four colours for each design. A few designs may need more, e.g. what they consider is a basic style may need around 10 colours for the consumers' needs.

## Managing and editing (violet-blue)

Evaluation takes place across almost all the sample making process. The design team examine the samples and preferred designs are selected or adjusted to make a second sample. Unselected samples may be replaced with new designs. This requires further evaluation of all the samples to reduce the risk of similarity. The process needs repeating again for the colour samples. Final adjustment selection will happen before the purchasing meeting, in order to select the best designs to maximise the ordering rate in purchasing meetings.

After the purchasing meeting, in May, the designers' job turns to adjusting the ordered design details to prepare for the manufacturing production. It takes around three months (June to August) to manufacture all the ordered products, both for their suppling business and own-brand chain stores. During that period, designers do not need to add new designs but support the production. They need to document the produced designs and support detail creations for all the changes required during the purchasing meetings. Designers need to oversee size gradings in King Deer, although in some companies this is a technicians' job.

## Promotion (purple)

In April, all the related staff focus on purchasing meetings with designers in charge of finishing the design styles' planned colours. Some styles (normally fashionable garments) will be selected by designers for photo shoots for advertising catalogues and promotion. Normally, catalogues are free but with a limited quantity for each buyer. They are a uniform advertising resource to support their business. The photographs are also freely available to buyers if they need to make posters in their local shops. The whole range is then displayed in the showroom prior to the purchasing meetings. It is also possible a buyer does not order any garments from
the catalogues but may still use the poster or catalogues to promote brand images for the new season.

In September, international clients will start to make their design samples in the factory. The home designers may start testing some new swatches, but the time to develop their design ideas for sample making is two months later, in November. Their final selection is in March, and delivery to shops is mid to late August.

### 6.4.2. The construction of product offering

Product range constructions are important for most commercially successful fashion brands. The designers need to work with them when they design a collection. Figure 6-6 was developed by adapting Okonkwo's (2007) structure model with 'length', 'breadth', depth', to describe the product structure of King Deer.


Figure 6-6: King Deer's product range construction

There are simple product range structures in most knitwear brands in China. The product length is quite short in King Deer. They offer three main categories: coats, knitwear, scarves and shawls. Looking at their product breadth, their coats are made from either pure or cashmere blends. Cashmere accessories also contain pure or blended scarves and shawls. The product depth describes more details, for example the length of coats, styles of knitwear and scarves.

The main points to note from this are:

- only cold season products are produced
- no suppliers for their brand
- their products cannot be worn together for complementary looks because they lack lower half-body items

Most Chinese knitwear brands with this manufactory model can only offer cashmere related products, which they can produce (Figure 6-7). This model is convenient and good for product quality control, which perfectly fits their old sales channel in department stores.

This has become a limitation for brand development when sales channels and consumers' shopping habits change. Because of the warming nature of cashmere, all the products are only for cold season use. Importantly, their designs are not like other fashion brands who offer matchable clothes that can be worn together as complete looks. The products here can match together, but they may not have planned complete looks for their shop displays. It is common for a luxury cashmere top and an expensive coat to be displayed with a cheap, non-matchable skirt on mannequins in their shops. It is also an issue of how the shops are set up. Some cashmere is being sold on the knitwear floor, which means less chance to sell with other categories in these shops.


Figure 6-7: King Deer's production pattern and product categories

### 6.4.3. The inspiration and design resources

It has been noted in 6.1.1. that King Deer did a lot of source hunting in the design process. Most designs were based on other brands in the market rather than trends and cultural events. Designers may collect design ideas and produce sketches earlier as well, but they wait to confirm that these existing designs perform in the current season and then use them to develop designs for new seasons. While it might not be a wrong way, other commercial brands also reported based on market surveys to define their fashion context (Eckert and Stacey, 2000). Only relying on market information seems too careful and conservative for creating new designs. They seem to lack confidence for their own design team. That may be the reason why they do not look at primary sources as inspiration to generate their own design ideas but wait to copy existing garments. It is a different approach to design-led businesses.


Figure 6-8: Design inspirations and planning in the case study company

Figure 6-8 shows the King Deer designer inspiration process. Every designer took or collected thousands of photographs from their business trips or fashion websites as their design sources. They then spent a few days to select photographs to prepare which can be used in their designs. Designers made rough design plans with selected sources and met with the design director to select photographs to avoid resources overlapping from different designers because they travelled on the same business trip together and used the same trend websites. Importantly, they know what kind of designs are more likely to be ordered by their resellers. After the photograph selection, designers began to make simple design plans.
Normally these design sources are used in two ways in the brand.

- Adapting the whole design: it is common to use existing designs as a start of their series.
- Regrouping of elements: the second way is to adapt part of the design elements from existing design styles and combine different elements together as a new design.

The first method is copying whole or part of designs from other brands. In this approach, the design outcomes still appear similar to other brands. In the second way, some products may not be attractive or still similar to others with too little change. Both these methods lack primary ideas of the main design elements and are not created by the designers themselves. The design process is more akin to copying exact styles from the retail markets. That is the reason why these knitwear brands offer highly similar products to their competitors. Another consequence is that these design elements come from different brands. They may only change colours and yarns, but that is not enough to make the collection coherent. There is no clear central theme and design direction developed by the design team.

### 6.4.4. The theme and storyline

Exploring and selecting themes is an important step for designing a collection, as discussed in section 2.2.6. When the King Deer showroom was visited during the case study time in June 2016, there were no recognisable clear themes or storylines in their collection. Most ordered garment samples for autumn and winter 2016 were there, except for a small number of samples that were being used for production at that moment. They had finished their annual purchasing meeting in April 2016. Around 200 of the knitwear designs would become new products and appear in the markets in the following autumn and winter. Although, most designs were basic tops of the same length with basic traditional collars. The design points were always in new patterns, stitches or decorations.

The design director introduced the collection with some presentational phrase as their design themes, e.g. 'mundane excellence', and 'luxury new life'. These were more like meta themes that western companies also have to balance the theme they are using. In the interviews and normal conversions with the author (during the case study and the design action research periods), more details emerged. The following information is from an interview about their annual design plan.
'I make a design proposal before the design starts. It consists of a design concept, design theme, colour plan, and how many percentages for each series. They are based on the sale targets of the domestic market and how many design styles are needed. Before making the proposal, we collect a lot of data to support it. First, we need to know the sale preference from last year, review the popular design styles, and the popular colours. We will continue to use them for the new year. The popular colours from brand history will become classical colours to keep. Then, looking at competitors' products, if we can find some sale data, it would be useful. We also look for some fashion brands if they are popular in the markets. We collect fashion trends from a trend website. Then all the information is combined with our popular styles, and the unmarketable styles to make a design plan for next year.'
-from interviewee KDD5, 2016 (see table 3-4)

The interview shows a design plan that was based on market research, their own sales data for which design styles and colours are needed to carry forward to the new collection. General research for fashion trends, and competitors' market performance are also required. It was a marketing-led business but apparently all the components were not completely set up yet (e.g. many sales channels were not satisfied by the company). The marketing-led approach was clarified in section 2.2.1. that relied on 'four Ps' (product, price, promotion and place) (Doyle, 1990).
'Based on the fashion trends, every year we will have an annual theme. Recently, we had a concept called 'luxury new life'. It is different to a luxury life with a big house, and luxury products. Our luxury life is meeting people face to face and going back to nature....so we use flowers, plants, and some animal patterns this year. We have had some element with deer...since 2010. The design brand logo and a pattern express the brand DNA. We use the logo as a pattern like other luxury brands. It's good, some small brands even copied our design with our logo patterns...that means people like it. At least, we have something to recognise the brand name.'
-interviewer KDD5, 2016, (see table 3-4)

A design concept, design themes and some design details were described in the interview. Notably, these did not develop into use in the design styles. There was a lack of recognisable elements in the design styles in the collection, even though the themes and concepts were described. The logo pattern was an imitating concept from other famous brands. Relying on a few garments using a logo as a pattern cannot create a systemic identity for the brand, see interview comments below.
'This year, we use a Galsang flower to make a design series. It was a photo taken by a client in the grassland. It is a beautiful strong flower, so I think it meaningful to express our strong vitality of the brand, when the economy is not good. It is a prominent series. Another important series we called 'modest luxury'. We use Swarovski crystal stones as decoration materials. This is our classical series. It can sell every year. But it's difficult create new designs, we are exhausted to find a novel idea about it. It is really hard to make it different from previous designs. Normally the cloth is not changed, only decorations to the surrounding collar... 'mundane excellence' is a series with texture designs to express the good quality of cashmere. It's simple in traditional silhouettes or sometimes unique unusual silhouettes. Fashionable style is only a tiny percentage, we made some knitwear with fabric patchwork. We try to cover all the market needs in our design. If we didn't design some styles, when the product sells in shops, it will be found our brand lacks some styles for sale. And another series we design every year are some sweaters for old mums, or grandmas. They are traditional styles, but we only offer few designs for this age group.'

- Interviewee KDD5, 2016 (see table 3-4)

The Galsang flower (a type of Cosmos) is more like a pattern design element rather than theme. There were only three or four tops that used this flower. Their products were designed for a wide target of consumers. They attempted to offer cashmere clothes for all age groups, men, and women.


Figure 6-9: An example of annual design plan for the case study brand

Based on this interview information, the design proposal with key elements that have been developed are highlighted in figure 6-9. A design concept (meta theme) is there in King Deer, but themes or storylines for leading the seasonal collection are missing, or have a name but were not used for arranging the collection in the knitwear brand, see figure 6-10.

The design themes were normally based on inspirations, developed for leading design directions seasonally. It was discussed that clear storylines and design themes were important for research when developing new design collections (Seivewright, 2012). But what will be selected is a personal choice. Designers personal interests and values will be evidenced in the design outcomes (Shaw, 2009). Normally, in western brands, design directors lead the creative directions, undertake research and carefully select design themes and storylines. This enables
the use of design-driven themes to lead the design teams to create new collections (Renfrew and Renfrew, 2016; Eckert and Stacey, 2003). Themes is a useful tool to help build a tight collection and express stories through styles, colours and the atmosphere in their retail stores to their resellers, merchandisers and consumers (see 2.2.7). A comparison between the author's knitwear collection and the King Deer approach will be discussed in section 6.5.


Figure 6-10: Example of the design themes used in the King Deer brand (photographs from King Deer online shop)


Figure 6-11: Examples of the design styles from the Autumn and Winter collection 2016 (photographs from the king Deer online shop)

The design styles in figure 6-11 are examples from the autumn and winter 2016 collection. The two flowers are the same design but in different colours, that is from 'Series 3 ' in figure 6-10 with classical styles. The green one is from 'Series 1 ' leisure style with a loose silhouette. The grey with white pattern is their 'Series 4' for brand features. The pattern is developed with their deer elements called Antler Lines. These example pieces demonstrate the design styles and the whole product line is not managed with a clear storyline and clear themes.

The design director told the author she attended a three-day course by a trend company for how to make a design plan for a new collection. There is a popular trend for training staff with a few days' expensive classes in Chinese industries. The author attended two similar courses when she was working in the fashion industry. Normally, these teachers are designers or design teachers. They travel around the world for important fashion fairs, e.g. Premiere Vision in Paris, and bring new trend information back to the industry, and then sell classes on how to use new trends in fashion brands. They claimed that their course can take design directors onto a new level in a short time, though, a three-day training course cannot make a design director different. There are many fashion brands in China, but only a few brands are happy to give their designers time and budgets to travel abroad to these important fairs. Therefore, there is a market for selling this second-hand information, although it is expensive with limited benefit. Normally, designers may only get some surface understanding for what it looks like in a professional creative plan for a new design collection, which can be found in many trend books or websites. A design process comparison between individual and collection design were discussed and listed in Chapter 2, Table 2-2, section 2.2.7. Most western companies rely on trend forecasting as well, but the difference is their designers have abilities to define fashion context and to adopt design themes for creating coherent collections.

Clearly, the design director lacks knowledge and skills for how to lead and manage a high-quality collection compared with western designers in similar positions. This comparison seems unfair for the Chinese design director and other related designers, because they were not trained with systematic design thinking and ideas development in their universities or in their workplaces. That cannot be compensated by a three-day training session.

### 6.4.5. The colours

The design director selects new colour forecasts for their products. But like most knitwear brands, there were no clear colour tones in their retail stores and their collection. Generally, there were too many disordered colours displayed together in an attempt to attract more people to their shops. The design director might have a colour plan at the beginning of the design, but the effects in their stores are not reflected in professional colour use. For example, in most cashmere brands, their coats use safe colours, such as dark blue or black. In their knitwear items, lots of colours were mixed for use in their patterns, and some traditional colours are always found, e.g. Chinese red, and some fresh colours. In their scarf section, many unrelated patterns were used in different scarves and then displayed together. This was the typical impression of cashmere knitwear brands in Chinese markets. King Deer had selected over 40 colours for their next collection during the author's second visit in 2016.

For colour use, different designers/design directors have different methods. On the one hand, it relies on the design directors' personal aesthetic perceptions and their understanding of their brands and markets. On the other hand, it is also influenced by their buyers' tastes, the company support, and business methods. For King Deer, they seem to select too many new colours and keep too many old colours together without a structure to the colour range in their business model. Both external and internal buyers have freedom to order any design styles and colours. That appears be an important reason to cause the products to look unbalanced in retail shops. The designers attempt to offer products for all consumer groups. The buyers may also want to offer more options for their consumers. The consequence is that the brand shows a blurry aesthetic view with noisy colours and styles in their stores.

For the designer aspects, it is important to select and manage all the colours in a balanced and harmonious way for the final collections. Most luxury brands and influential designers show their colour skills in their collections. In western brands colours are typically based on design inspirations and their selected themes, but the selected colour also influences how the theme is selected. Colour choices are intersections of the selected themes and trends. It should not be a random selection
only based on designers' preference or popularity from trend forecasting. The importance of systematic development with visual inspiration research, mood boards, and themes was discussed in section 2.2.7. Again, there are no limitations for how many colours should be used for a collection, but there are principles on how to select, manage and use them. How to arrange different colours as a harmonious group will influence whether the final design collection in successful or not, which depends on the leading designers' expertise and professional skills.

### 6.4.6. The yarn selection and use

Knitwear designers in these brands do not pay close attention to yarn trends and do not make yarn boards in their design process. Only a few designers were previously supported to visit world yarn fairs, such as Pitti Filati. This was because most companies believe that they do not need to be looking for new yarns. In these brands, all products contain cashmere, including coats and knitwear, with similar style yarns but with different percentages. For example, in King Deer, they mainly use $100 \%$ cashmere, and a yarn blend with $55 \%$ silk and $45 \%$ cashmere. They also have other blends, but these are not often used. All the yarns are good with expensive fine materials, but have similar types of texture, gloss and hand feeling. There was a lack of gradation in the products whereby there were no differences in the texture and materials used in the garments, such as silk threads or different grades of yarn. It is important to make the products look interesting and attractive. There was no iteration between yarn and garment design. There were no clear differences between old and new designs in retail stores. It may be safe, but lacks exciting and desirable features for consumers, new or old.

Many companies use a very limited range of yarn types in western brands as well. It appears to be a common approach in cashmere brands. Cashmere garments are usually classic designs that typically would be worn for long periods by affluent customers. There are also some brands who successfully make cashmere products looks more fashionable. For example, German cashmere brand, Allude, use fashion yarns mixed with cashmere to push the boundary of cashmere use (Udale, 2014). Allude also offers a repair service for cashmere to prolong the life of cashmere
garments. These after-sales services are also offered by big Chinese cashmere brands, e.g. King Deer and Erdos.

### 6.5. The difference between the King Deer process and the DAR process

This section will contrast the key design differences between King Deer's approach and the author's design process in her knitwear collection during DAR. The DAR knitwear collection was introduced and evaluated (section 5.4 and 5.5) following a western design approach (section 2.2.7). It is an example of knitwear design based on western design methods, although it may be a slightly different typical commercial process. The DAR collection was akin to a student project. There were three differences compared to commercial designs:

- all designs can be well controlled from beginning to the end
- the DAR collection was designed for research; design was more of a priority than costs
- the collection did not have a brand heritage and buyer requirement that had to be followed.

The DAR collection can be used as a bridge or medium that helps to improve comparability between the King Deer and western design approach. The following main steps will be examined in detail from inspiration, mood boards, themes, overall direction of collections, to the design ideas development process and the design styles roles. Importantly, design thinking and logic need to be looked at for the reasons behind these different design approaches.

Figure 6-12 shows the breakdown of tasks from the DAR showing reasonable linear/structured sequencing of tasks. Compared with figure 6-5 (section 6.4.1) it shows how the King Deer design process lacks a clear sense of structure.


Figure 6-12: Gannt chart from the author's design process for the DAR knitwear collection

### 6.5.1. Little interaction with primary sources

The comparison begins with the inspiration, research, and design process as the starting point. Importantly, there was a key difference between the King Deer approach and the author's method at these three stages with different degrees of iteration for primary sources and design ideas generation.

Observing the two Gannt charts (Figures 6-5 and 6-12) - the top left orange area and yellow area, King Deer has a much larger orange area (source hunting) than the author's DAR process, while the yellow area (research) shows the opposite. It shows a different design approach and logic, especially in design inspiration selection and use methods, and the design idea development process.

The King Deer design team heavily rely on others designs, with copying or part copying for their new season. Putting aside the copyright problem, the problems for
design itself here is their design elements do not match each other. Importantly, these secondary resources are directly used rather than as an inspiration for developing primary resources. The importance of primary research for creativity was clarified, in Section 2.2.7. as the nutrition of the original design idea generation. Comparing these two Gannt charts, in the garment design stage (green area), King Deer had a short development process that shows a flatter shape, while the DAR collection shows a deeper curve (green area). The King Deer designers adapted others design ideas, then used them to develop the design series. For example, if a knitwear was collected and used by a designer as an inspiration, normally, it will be copied or partly copied as the first sample. This was to see the effect with their own yarns and then make a few more colour matching swatches for the pattern. If the first sample effect was satisfied by the designer, then the design will extend for a small series to change forms that may include a cardigan, a v-neck top, a round-neck top, and maybe a dress or another cardigan with different neck and different body length.

It was a common method for many designers to use when the author was working in the Chinese fashion industry in the 2010s. Most designers did not have experience for systemic research in their universities, especially the early generations in the fashion field (educated in the 1990s and 2000s). This approach is simple and short. Select an inspiration, extract some related design elements, then use them in garment designs. Some designers do not use any inspirations, they just find some design elements from other clothes and use them in their designs. It is a simple, short process; the main design ideas rely on the secondary resources, and less iteration cycles are involved in this design approach.

The DAR collection shows an opposite way of inspiration development and use. First, a main inspiration (Chinese tea culture) was selected as a theme of the collection. Then, the DAR offers a deep and broad understanding of the inspiration, to build a foundation as a constraint of creative direction. This research process was reported in section 5.4.3. This type of engagement of inspiration research is important for primary resource development in design creativity. It is an essential skill for developing design logic that has been emphasised by British design universities for training design students in their BA and MA degrees. This stage can be easily found in design textbooks but reporting from industry related research is lacking. The
reason may be that the inspiration research stage is difficult to observe in commercial design. But it does not mean all designers give up this stage in commercial brands. Designers may develop this stage in their minds, they may take notes or make marks in their personal sketch books. It is a personal design thinking process different designers may engage with to a different degree in this stage. It should be noted that this is not the only way but is a useful approach to generate primary design resources.

The DAR collection had a long process for the design ideas generation with many iteration cycles. Before the garment design stage there were many research decisions made in the author's collection.

Another important element was to generate primary design ideas. The deep inspiration research developed a foundation and a context with lots of related elements collected. After comparing and evaluating all the elements, one famous Chinese printing of tea activity was selected for colour ideas for developing a visual start. Then a tea flower arrangement was adopted as an interesting point to develop primary design ideas. For example:

- the colours inspired by an antique Chinese printing of tea activities
- the clothes' shapes based on tea package
- the colour combination and proportion came from flower arrangement vases
- the texture developed with rattan plaited article tea packaging
- the jacquard patterns came from a tea flower, the chrysanthemum.

For the pattern design, another inspiration source was added in the middle of the design process for creating contemporary styles. More research for the new inspiration was then combined with the central one. This generated a totally fresh new pattern for the signature designs of the collection.

These design ideas were from different parts of tea culture but linked with the same root and design concept. They have gradually developed into a final collection through a long process. Examples of the design development details include a handdrawing design portfolio from the DAR knitwear collection as introduced in Chapter
5. It was an important step for generating original design ideas and to arrange such different elements together in a harmonious way.

The DAR collection has a similar approach with normal western processes in that it takes a longer time to make design ideas evolve. Western university education systems value originality and creativity of design in fashion courses. (Hopkins, 2012). This has influenced designers' practices in industries and in their societies. In contrast, there was a lack of encouragement for design creativity and original design in the case study context. The main approach was adaption and combination with few iterations and highly similar products sent to market. They may find an easy way for short-term business, but it is not good for long-term competitiveness.

### 6.5.2. No linking theme

Mood/theme or inspiration boards were identified in section 2.2.7 as useful tools in the design process for internal communications in design teams. Normally, mood boards, theme boards or inspiration boards are made at the beginning of the design process, and then kept up to date during the design process. That helps direction and holds the designers towards the same path to provide coherence in the collection (Eckert, 2001, Raebild, 2015). The functions were identified in Chapter 2 with:

- designing communication tools
- offering overall direction of collection
- mapping out a space of 'legitimate’ design
- creating coherence between different designs (ranges, collection)
- building a visual foundation for design decision making
- creating atmosphere and cultural connotations (Eckert and Stacey, 2000, Raebild, 2015)

Apart from mood boards, some companies are also making product boards that develop from mood boards when the design collection is finished. This is for communication with externally related parties, for example with merchandisers (Raebild, 2015, Cassidy, 2011).

For the DAR knitwear collection, the author did not make a mood or theme board. Instead, this was replaced by a research portfolio that included a design ideas development process with hand drawings and collage. Afterwards, garment design drafts were hand drawn with computer editing for colours and details. For this case, a design portfolio with design drafts can be a 'mobile' theme board. It was possible to display together on a big table for decision-making, structure controlling and collection editing during the design process. Importantly, it was easy for carrying from the UK to China. Another reason not to make a mood board was because the collection was designed by the author herself; there was only one designer involved so there was no need to communicate with other designers during the design process.

In King Deer, the design director made a design proposal when preparing new collections and presented it, using PowerPoint, to their designers. They did not use mood boards in their design process. Indeed, the design proposal is not an ideal replacement for mood boards. Compared with normal mood boards, the design proposal only offers design tasks and a rough direction for the collection. It can be a starting point but lacks visual research and ideas development processes and linked themes. It is important to narrow down the design direction and generate rich primary design sources. Mood/theme boards can offer a visual foundation for communications, design direction for colour, fabric, and proportion. It gives coherence to the collection. But if the company does not care for original design ideas and collection consistency, it seems a mood board is not a necessary tool for their design team as well. It reflects different design thinking methods and logics.

The King Deer design team has undertaken market research and spent time for design source hunting in the retail markets. However, their inspiration and themes were selected in a random way. The themes, colours and inspirations were not grown from the same roots. In the designer interviews, most knitwear designers said they did not use mood boards, or no longer used them (because it was useless). They may name an inspiration to express what they will do for the following season as an afterthought; they do not use it to manage the design collection and make decisions. Usually, the inspirations were used to extract some design elements, then these elements were used directly in their designs. There was a lack of deep cultural
understanding, ideas generation and translating process in this approach. It may be a general issue for single category product brands. Similar approaches can be found in western knitwear brands in their knitwear design process in the 1990s (Eckert and Stacey, 2003), although they have more theme development than Chinese brands. But they also lacked the deep visual culture research for their inspirations like luxury brands or influencing designers do.

The following is the part of the interview with KDD5 for mood board use.

```
Question: Do you make a mood board or theme board in design process?
Answer: Yes, we do. Do you mean we make a PowerPoint (for design proposal) and
also a mood board? I mean, we use a PowerPoint, then we only need simple theme boards.
```

Question: When did you make them?
Answer: We have made them in the past years (for purchasing meetings). But we stopped making them because nobody studies them in the purchasing meetings. It seems a useless job. Afterwards, I make some small colour boards, with series names, and introduction to the series design for how we design these, and what to express in the series. It differs from the big board we used to make that covered all the themes and colours together.

Question: Seem most of them are used in the purchasing meetings, how about the design process?
Answer: Yes, (mainly for purchasing meting). We have a design proposal with PPT in computer for design.
--- interviewee KDD5, 2016 (see table 3-4)

The interview shows that the designers have made some product boards for purchasing promotion, which is different from a mood board (even though they called them mood boards). The current design proposal is not a mood board. They miss the element that with mood boards all images can be seen together as a contemporary act, but also their design proposal does not include visual research, theme development, and clear design direction. It was not a surprise that they do their designing in a different way, because most designers lacked systemic design thinking training in their universities in China.

### 6.5.3. No coherent collection

It was identified in Chapter 2 that visual inspiration research can help the designer set design themes and concepts and narrow down the design direction for their
collections. Importantly, it can reflect designers' creative ability and express their own aesthetic views and understanding of the world (Seivewright, 2012).

In the DAR collection, a design concept with Chinese culture and modern style, was developed with Zen tea styles translated into loose, simple silhouettes and elegant styles. Importantly, all the visual research and development has been managed together in a design portfolio of the collection. The function is the same as mood boards - to offer a design foundation and overall visual direction. It benefited from all the ideas coming from the same root and growing in the same direction to offer an interconnection between the different garments in the collection. There was a hierarchy of role of source of inspiration (Eckert and Stacey, 2003). Designers use core inspiration for the themes, which for the designer make decisions for colours, silhouette, texture, and patterns. Garment details may use other sources out of the themes, but these all need to fit in the selected themes.

For the King Deer team, there were no clear visual directions for their designs.

- They do not work with mood boards or any other replacements, that means they miss this constraint-seeking process for design direction. Designers have freedom to use any elements in their design, if they think that it is a good one.
- They design with small series rather than a seasonal collection; designers create versions of designs rather than use recurring elements (see section 6.4.1), there were no links to different design elements.
- All the designs are not required to be coherent. Designers are free to pick any patterns they find from different sources. This approach is not an individual example but in fact occurs in many brands.
- The design items were not balanced, too many similar tops look the same with internal competition. Lack of products for lower body, lack of products for the summer, the current three categories are not built together, they cannot wear together as complete looks.
- The products lack signature designs or features, they are not recognisable as King Deer.
- In a collection, the total is greater than the sum of its parts. Their products consist of many small series that do not build together tightly. The design team attempted to build product looks harmonious by colours. Over 40 colours were used without arranging themes as such it is hard to achieve the goals of the structure.


### 6.5.4. Every design for itself

The roles of designs and products are important for collections. Normally, design pieces are divided into different parts in the design plan. Any individual design piece should play a specific role in the collection to meet different needs, such as expressing the design aesthetic as a 'profile piece', selling more pieces as a 'volume piece', and for photographs or films to create interest (Raebild, 2015). Normally, designs for catwalk shows play an important role for the brands campaign to 'excite the fashion press and gain maximum coverage' (Renfrew and Renfrew, 2016).

In the DAR collection, garments were linked by themes, and with different functions that included tops, vests, coats, trousers, dresses, skirts, scarves, and shawls. They were matchable and can be worn and sold both in individually and as groups for different looks.

In contrast, the King Deer brand knitwear were not designed to see their products as collections. Their products are all individual and not built together as a team. In this system, the products' only role was the pursuit of sales quantities for all the individual designs. In King Deer, all design styles must prove themselves by high orders in the purchasing meetings, otherwise, they do not have opportunities to appear in the retail stores, because small orders are believed less value and more troublesome, and will be cancelled if the quantity does not meet the minimum production requirements in manufacturing, e.g. 300 pieces for each design.

In this system, the products have the following problems:

- Lack of balance between simple and eye catching.

All products are produced to sell more pieces in the system. There was a lack of eye-catching products. This type of garment usually has higher requirements in
design creativity but may only sell a few pieces themselves in the retail shops. It is mainly for displays in shops or to make product portfolios for advertising. They need to be attractive for people to visit but may not be selected for consumers' final purchasing lists. In this case, eye catching designs are undervalued as timeconsuming, useless products in the current business system.

- Little variation in shapes/silhouette.

Most products in the brand are loose version tops because they can be worn by more body types. Consumers may expect different options based on different fashion trends, so, other silhouettes and shapes are needed.

- Focus on ornate designs.

For the product styles, ornate designs had occupied stable sales shares. These styles were popular for consumers who were born before the 1960s. Chinese middle-aged and older consumers lacked the chance to explore their own styles in their younger days. This was because they grew up in poverty times, or the wearing uniform time when they were a teenager, or young adult time from the 1950s to the early 1970 s, see section 4.4 .5 . These age groups were the main consumer groups of cashmere brands 30 to 40 years ago. Maybe because they lacked colour choice and shiny materials in their younger time, over-decorated styles are attractive for these groups as they turn to middle-age or older. These styles are unattractive for younger generations and that causes the brand market share to shrink.

### 6.5.5. No concern for the longevity of the design

The unsalable inventory problem is a big challenge for King Deer. From the design angle, less attractive designs cause products to be unpopular in the market, which leads to sustainability issues such as 'over production' and 'over consumption', see section 2.3.3. Over production and over consumption can shorten the longevity of products' usage by reducing the products' values in consumers' minds and change their consumption behaviours and habits.

Little concern of longevity of design is one of the important reasons that cause unpopular products in the market. The brand cares more about what products can be
sold than how people wear the products in their daily lives. That reflects a lack of clear target consumers and understanding for their lifestyles in the brand. If a high percentage of unpopular products are produced, the planned annual sale targets for King Deer cannot be achieved. That equates to 'over production', although the brand carefully only produces the ordered products. Thus, there is an imbalance between production and real purchasing in the market. Many new products may never have the chance to be used in their lifecycle and become a waste of resources and loss of income. Based on observation and interviews, the brand has huge surplus stocks. Some may be sold with discounts through outlet shops, and some may still remain in stock for over 10 to 20 years. The sold products may have long product lives, but some of these products may never have the chance be used by consumers. The company still needs to continue spending money for keeping and managing those that become white elephants. They are unsustainable products although these have not been destroyed and recycled.

Promotion with large discounts is a common way to deal with unpopular products. In fact, discount promotions are frequently used either actively or passively as a common sales strategy for many Chinese fashion and knitwear brands. This causes another sustainability issue with 'over consumption'. In these promotions, people may buy more than their real needs, because cashmere products with low prices can attract people to purchase them. Buying clothes for low prices does not mean the consumer really needs them. Compared with desirable products, if the products are not attractive enough, they are less likely to be worn.

In contrast, the DAR collection was with simple elegant styles. It has transformed a Chinese cultural heritage into modern classical designs. It is one of directions to create luxury cashmere products with longevity of design styles. That is an effective way to extend the products' lifecycles for a sustainable propose.

### 6.6. The drivers for the present King Deer process

In Chapter 2 it was clarified that design culture was an important context, which influences both the design process and results. To understand the current King Deer design process, the main influencing factors from design culture need to be examined: their current business model, their evaluation and reward systems, their working methods, and condition settings for design creativity.

### 6.6.1. The franchise models

The current franchise business model, section 6.2., is one of the main influencing factors for design results. Both external buyers (franchise) and internal buyers (independent branch companies) order products built on their selling experiences from the past. They look backwards and that drives conservative designs. For the brand, only relying on the past will cause the brand to date. Fashion naturally looks forwards. There needs to be a balance between new fashion trends and sales experience for new products. Furthermore, this current business model means the brand does not control their brand images. This makes it difficult for them to effectively build their brand identity.

The current model is difficult to change. The current franchise model is a way to deal with local variations for the brand. China is a big market. Most fashion businesses use a franchise model to reduce risks, save investments and quickly extend the brands. Improvements in this should manage the products' range structures; to make sure all the products in retail shops are well-designed and structured by designers. To achieve this goal, the brand needs to make new rules in the buying process. At the same time, they need to offer design collections rather than individual designs, otherwise, the change has less chance for success. The evidence can be found in the following interviews:
'I was talking with the designers, our brand should lead trends, including the direction of purchasing meetings. We should promote our products rather than just allowing them to be selected by buyers. We should have some designs they must buy. If we cannot make all products immediately, we can try one or two small series first. Then we would see different effects in retail stores (chain store). Brands should have different concepts from wholesale markets. King Deer is a brand (chain store), we should not be directed by buyers. However, our designers seem to have disconnected with this concept. You cannot ask a normal cook to make meals like a 5 -star restaurant. They only can design in their old ways. I cannot ask more, that is too much of a challenge for them. I was asked if a whole season collection cannot be achieved (with the design team), at least create 1 to 2 strong series for us, then we can have some designs they must buy in the purchasing meetings. It should be a foundation of brand development. We cannot let buyers continue pick products that only they believe can sell well.'
-----interviewer VGM1, 2016 (From table 3-4)

In this interview, the vice general manager believed they cannot achieve their sales goals because the designers are not good. It might be a reason, but designers are part of the system. There is an issue of who can lead the change. If a designer leads this change, do they have power to make the business model improvement? If a general manager leads this change, does he give clear plans and requirements to their design team? The change is a big step for the business, but it should not be based on informal talk. The whole system needs to work in the same direction. A clear plan is necessary before the seasonal design process begins. An effective system is needed from beginning to end.

The following designer interview shows a different view:
'Our brand looks traditional and old styles. Personally, I do not like the current styles, but change is difficult. If buyers do not select younger styles, designers have to follow buyers' preferences, to meet the purchasing meeting demands. Erdos brand has parts of their designs for promotion. Whether their buyers order them or not, they still produce and sell these designs (for brands images and product structure) in their own retail stores. But we sell in a different way, every year, our big orders are from traditional products, we know these styles are not popular in the markets, but buyers still order in this way because they order products only with basic two rules. One is similar to their old popular designs; another is similar to the popular designs from other shops. Our leaders did not require designers to design products for 'high sales' (design with strong structure, then ask buyers to order those with structures). We (designers) have some ideas, but in the purchasing meetings, they still sell in the old way. In fact, we design with themes and planned colours every year. But after purchasing meetings (freedom selections), the products become messy. The brand images are cluttered. They cannot show the products real values, especially in some small retails stores they look like 'booth goods', which depends on the shop owners.' -----interviewer FDD7, 2016 (From table 3-4)

The King Deer designers tried to change, but the selling model was not improved. It seemed the designers and sales manager blamed each other, and neither of them can effectively decide for this change. It appears the higher positioned company leaders do not afford either of them the power to make a complete change.

### 6.6.2. The internal reward structures

There are management and evaluation rules for designers' performance in the company. Their designers are divided into senior, intermediate, and junior grades. Each grade has different tasks and limitations for how many designs they need to do, which was introduced in section 6.4.1. The designers are evaluated every year to maintain their current grade or be promoted to the next level. There were four indicators that need to be met, and these indicators mainly related to their design numbers, order numbers, order rate on their own and order rate in the whole company. It seems complicated to calculate, even their designers cannot clearly explain this as it is a significant rule for the designers. It influences their incomes and reputations. Both their salaries and their year-end bonuses are related.

Designers will be ranked every year, and the last one will be 'bottomed-out'. If a designer wants promotion to a higher grade, they must meet all the requirements.

For their current positions, designers are asked to meet at least three of four indicators for maintaining, otherwise, they will go to a lower grade.

- The internal reward structure focuses on targets and competitions; designers must prove themselves every year (with design preference ranks).
- The rewards system is only based on one standard for good design (large quantities ordered).
- The 'bottom-out' rule seems not to make sense if they do not introduce new designers, but it happens when their leaders think the design team is too big. When the author visited a second time in 2016, two designers had lost their positions and changed their job to manufacturing.

The following interview considers the evaluation information:
'Once a junior designer was not happy with her evaluation results because the total quantity of her designs ordered was not up to the required rare. She did not accept the results and complained to me, because she believed she was working hard, and most of her design styles were ordered by clients, thirty-two out of thirty-five. It seems she did a really good job. But the total quantity ordered did not quite meet the threshold of $12 \%$, it was $11.2 \%$. It was close but not up to standard. She challenged me on the evaluation rules and believed it was not reasonable. I also wondered if there was anything wrong with this rule. But after checking, I think the rate was made to ask designers to try their best. If the designers design better than others, if clients order more from her, then the rate will be higher. I explained this to her, she said she understand the rules but did not accept them in her mind. However, I cannot change them, it is too sensitive to change because it affects all designers' promotion and year-end bonus'.
------- Interviewer KDD5, 2016 (from table3-4)

This evaluation method is an individual case. Other companies may have different rules, but it shows a common understanding of design and designers in the industry. It reflects that those designers are viewed individually rather than as a team; this will be discussed in the following section.

### 6.6.3. Lack of team working

The reward structure and rules manage designers individually. On the one hand, it seems a way is used to make all the designers work hard to benefit the brand. On the other hand, a negative impact is ignored that designers are forced by the
evaluation rules to compete with each other, which will stop designers working as a team.

- Designers do not recognise each other's strengths.

Because the design preference ranks only account for the number of sold pieces from each designer, other efforts are not considered by the companies. In this system, all the designers have their own tasks in each range. The design director asked them to work with series plans together rather than design what they are good at. i.e. designers create all classical styles in two weeks at the end of November. The aim is easily managed by the director, then they can gradually finish their designs tasks on time.

- There is lack of design leadership.

The brand has two design directors one is for knitwear, and the other is for scarves, but both directors are not the creative leader for the brand. Designers are managed with design tasks and time plan. Both these design directors manage the designers but have limited input in directing the designs and the creative direction. They encourage the combination of each designer's ideas together rather than give hard requirements for what the designers need to achieve.

- There is lack of clear direction and personal guidance for designers.

This was a working method for the single product brand, which was different from fashion brands in China. They design and sell individual products, so it seems there was no need for team-working in this system. Designers work for selling more; their designs are based on what information they find in the markets. Based on the author's working experiences, designers in fashion brands work with team tasks, for example, three designers in charge of a few ranges of clothes. Some specialised designers work across all the teams, e.g. pattern design and knitwear in many Chinese fashion brands in Guangzhou. Market successful fashion brands benefit from these methods, while most Chinese knitwear brands do not follow this approach.

### 6.6.4. Lack of constraints limit creativity

In section 2.2.2 constraints were recognised as important tools to frame clear conditions for design creativity in many fields. In fashion brands, setting clear constraints can help designers to define the fashion context for the brand needs. For example, in the design process, setting constraints for creative direction by selecting and researching inspirations, enveloping themes and colours. Designers can use shared design elements to generate design ideas. That is important to build close links with different designs created by different designers.

The King Deer current design process has few constraints, which restricts the ability to drive creativity in the team. The general manager hopes designers 'create something that looks amazing', but this goal is too vague to achieve.

- It was discussed that the design director does not use inspiration to develop themes, or mood boards to manage the design process.
- Their colours are not well schemed because there is no theme.
- Designers are free to create anything they want, without sharing design elements for the collections, which lead to messy collections.

For the brands, setting suitable constraints is necessary. Designers need to know what the brand wants and needs. A clear direction is helpful for both creative processes and results. Not all constraints are helpful for creativity; some can hinder the creative process. For example, setting reasonable time, money, space constraints are necessary to make design creativity effectiveness (Moeran, 2009). But if the time, budget, and space are too tight, it may decrease design quality.

### 6.7. The missing design cultures

Design culture was defined with emerging themes in section 2.3.2., which included constraints, leadership, designerly thinking, collection, design process, teamworking and sustainability. Based on these themes, twenty-one aspects were identified as important to enrich design culture in the fashion business. These will be used as a standard to evaluate the King Deer brands, and the main findings will be discussed in following sections.

### 6.7.1. Evaluation of the design culture in King Deer

In Chapter 2 it was identified that design culture played a key role for design quality. In section 2.2.8. a conceptualisation of design culture was found for expressing the degree of design understanding, value, and support in organisations. Based on the author's industry working experience, twenty-one aspects have been selected as reflections of design culture in organisations, including ten aspects from the company side, and eleven aspects from the designer team. Here these twenty-one key aspects of design culture enrichment have been brought as standards for checking King Deer performance (see Table 6-1, middle columns). The evaluation will follow these two main angles, to look at the degree of design culture development in King Deer in the following section.

Table 6-1: Evaluation of the King Deer brand with key points to enrich design culture (based on the literature review)

|  | The key points to enrich design culture | King Deer brand position |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Levels of achievement | No evidence | Low | Middle | High | Exceptional |
| What the company should do | Respect and value designers |  |  |  |  |  |
|  |  | Basic level, manufacture centred rather than design |  |  |  |  |
|  | Give designer enough space to explore ideas (divergent thinking) |  |  |  |  |  |
|  |  | Limited space, do not encourage deep exploring for design ideas, only focus on volume of design |  |  |  |  |
|  | The evaluation of designers is trusted (respectrecognising 'right' design) |  |  |  |  |  |
|  |  | Only focus on sale quantities; not all designs sell equally well, but play a part in a collection |  |  |  |  |
|  | Encourage designers to push boundaries, allow to prototype and iteration (design innovation) |  |  |  |  |  |
|  |  | No innovation culture to push boundaries. Limited support for prototype, lack of iteration |  |  |  |  |
|  | Designers are both supported and challenged (extend designers potential) |  |  |  |  |  |
|  |  | Less support and challenge |  |  |  |  |
|  | No blame for lack of success for particular designs |  |  |  |  |  |
|  |  | Unsuccessful designs are reported as design success rate for each designer, that is a negative point in the design reward rules. |  |  |  |  |
|  | Manage all the relevant department to support designers |  |  |  |  |  |
|  |  | Some support for design and sampling, but limited for iteration (two samples for each design) |  |  |  |  |
|  | Give time and resources to analyse the market |  |  |  |  |  |
|  |  | Time support, but with limited resources |  |  |  |  |
|  | Get time for inspiration and exposure to other designs |  |  |  |  |  |
|  |  | Less care |  |  |  |  |
|  |  |  |  |  |  |  |


|  | Support teamworking, nurturing design teams not just individual designers | The reward rules do not support teaming working, rather they cause inside competitiveness in the design teams |
| :---: | :---: | :---: |
| What the design teams should do | Design with broad set of sources of inspiration(s) |  |
|  |  | Sources of inspiration mainly from market and other brands |
|  | Design basic deep research for generate original ideas (primary generation) |  |
|  |  | Lacking |
|  | Designers develop mood boards with themes (overall direction) |  |
|  |  | No |
|  | Designers are immersed winder fashion context (context setting) |  |
|  |  | Limited |
|  | Designers push themselves for the best designs (iteration) |  |
|  |  | With low degrees, lack of iteration |
|  | Designers understand the target consumers (user centred design) |  |
|  |  | Limited, lack of support systems |
|  | Designers follow a process and rigorously down selection designs (design funnel) |  |
|  |  | Design with simple Liner process, do not have design funnel |
|  | Create desirable products to meet consumers potential needs (design-led) |  |
|  |  | High inventory reflects big mount of designs are not meet consumers' needs |
|  | Designers deliberate position their design in a market sector (positioning) |  |
|  |  | Yes, or partly |
|  | Designers work together and challenge each other (teamwork) |  |
|  |  | A few teamwork, limited by evaluation system |
|  | Have an ability to arrange tight design collections for brand differentiation (leading designers) |  |
|  |  | No creative leading designers, lack of skill arranging collections, working with time plans |

## For the company side

As a major supplier to western brands the company is manufacture centred rather than design centred. Both designers respect and support this at a basic level. The company gives limited space for designers to explore design ideas. They prefer a quick and simple way by following markets to find volume popular designs to reduce unknown risks. The designers' evaluations may partly be trusted, although designers are impacted by buyers actions. They mainly focused on sale quantities rather than design qualities. New designs do not have a chance to appear in shops. Therefore, most new designs lose the chance to be 'right'.

There is a lack of innovative culture in the company. The company provides less support and challenge for their designers. There is a lack of atmosphere to push designers to be better.

Designers are not encouraged to push boundaries; prototyping is limited to only twice. If some designs are tested numerous times, designers are under stress for wasting expensive cashmere yarns. The evaluation system includes a success rate based on used design numbers and unsuccessful samples. Unsuccessful design ideas are believed a waste of time, money, and effort in the company.

Iteration is not understood and valued in the company. Designers spend a short time and process that can create products believed to have good design abilities. They have support for regular design processes, but lack support for new ideas testing, e.g. they have digital printing machines but do not allow designers to use them, because it is considered too expensive to make samples. Normally, they do not use the cheapest yarns for sample making and idea testing in Chinese knitwear manufacture, because changing different yarns for final samples means all the related technicians may need to double their work for the same design.

They may care about market research, and do not limit time on it, but do limit the source and support system. Most inspirations come from existing designs that were collected from markets. Designers were not encouraged to pay enough attention to inspiration and research for exploring new ideas. Sources of motivation comes from fashion and knitwear products, with less encouragement for searching inspirations from other designs and fields. In addition, the current rewards structure do not support teamworking and increases competitiveness among designers.

## For the design team

Designers are focused on narrow inspirations from existing knitwear products. Designs follow existing products collected from the market, fashion magazines or websites. These design sources are normally a direct copy or part of the design elements borrowed in their designs.

There is a lack of deep research and original design ideas development in their design process. The design process is short, some important steps are missing, e.g. inspiration, deep research, and mood boards. They may pick a few words to describe their design series (they call them themes), but do not use them to create design ideas and manage colours.

The design process is a simple linear pattern rather than a design funnel. There is lack of design leadership in the brand. Designers are not guided by mood boards for the overall direction for their designs. The design team lack skills to arrange a tight collection but can finish their design tasks within time plans.

Their products design and sell individually. It seems they do not need designers working together in the current business model. Designers only focus on what they do, they are not immersed in a wide fashion context. That means designers lack sensitivity for fashion trends and market demands. Designers are not encouraged to push themselves for the best designs. They are used to their current design process, they may try their best in their own way, e.g. collect more design styles in the markets, but may not know how to push boundaries in a design process, unlike the western design approach. These designers' methods cannot deal with the declining trend and attract new consumers. There is little designer teamwork in the brand. The evaluation system makes them competitors more than collaborators. The brand is not design-led. The current system is a buyer model and new designs lack a supportive environment.

There is a lack of clear setting for their brand position in the market. A lack of deep understanding of consumers, because their consumer groups are too wide, age 20 to 80 , men and women. Importantly, there is a lack of any direct link between the company and consumers because their current buying system does not support this. Designers follow the sales experiences and market information.

### 6.7.2. The missing voice of the designer

For the design voices, there are two angles to look at; first, did the brand give their designers opportunities to express themselves? Second, did the designers offer
original designs at high levels for expressing their design aesthetic views if their companies gave them space?

For the first question, industry data analysis shows there is limited space given to designers from their companies (see Appendices 4-3 to 4-5). Generally, the companies' owners are not satisfying their current design teams. On the one hand, they do not believe their designers' expertise. Most bosses believed that their current design teams have low design levels and blamed that as one of the important reasons to make the brand decline. They blame that their designers' work never makes an impression. All the designs are too common to attract new consumers, and too many designs are unpopular in markets. Using 'copy-replace design’ should be the reason to make their boss not trust the designers' expertise. On the other hand, bosses believe designers should take full responsibility for sales. They blame designers for poor sales. Indeed, some small brands no longer have their own designers and believe that the company owners or their relatives can replace designers by looking for photographs from websites or magazines.

For the designers' aspects, do they have good design ability to create original products with high levels? First, in the current system, most designers do not have the chance to do experimental designs because that needs their company support. However, if the company gives space, do these designers offer outstanding products? It depends. From the interview data analysis, most designers' design abilities were not strong. They lack training for design research and systematic design thinking. The lack of skills for originality and creativity, with cautious and closed minds in their thinking, results in weak designs. Importantly, there were limited self-improvement chances after working for these brands. A conservative environment with limited design sourcing, remote locations and less art events all influence how these designers develop. For the current design team, the following design problems were identified:

- a narrow concept of design
- part design rather than whole
- narrow sense of aesthetic standards

Design was mainly used as superficial decoration in the company. Designers have conservative attitudes for what design can do for themselves and the brands.
Cashmere garments seem to have constant forms in the industry. Designers are used to following the routines and do not question and challenge these basic forms. Their designs mainly make small changes on surface decorations. For example, when designing a v-neck sweater, the silhouette and all-shapes details follow the brand routine. Only texture, pattern and colour can be redesigned. They seem not to see knitwear as a whole garment, just adding new patterns to fixed frames.

In the company, designers play a less important role than they should. Designer voices are too weak to express themselves; that is hindered by both the organisational culture and designers themselves. A deep Confucianism culture may also be influential; designers are not willing to express their own voices and are used to staying within their settled method of working as a component of a group.

### 6.7.3. Missing design direction

Design leadership was discussed as one of important emerging themes of design culture, see section 2.2.3. The importance of creative leaders for a design team were discussed for improving product design in fashion brands. In the King Deer brand, there was a lack of experienced designers to lead the design team. Some designers have worked for a long time at the company. They have extensive working experience in the company, but their designs are still developed in a simple way. They do not have systemic creative design developing experiences, e.g. for how to design products for a tight collection.

Designers are following the buyers; they do not lead the design and trend directions. The brand offers products without collections, they sell products individually. Design follows market information and their buyers' opinions, which makes the brand lose control of their design direction and brand identity building.

### 6.7.4. Little awareness of design for sustainability

Low awareness of sustainable concerns in both industry and society in China was identified in section 1.2, although this is rising now (Wu, and $\mathrm{Wu}, 2006$ ). Industries
pay more attention to maximising their business to make more money; they may not clearly realise market extension will cause sustainability issues.

The Chinese sustainable fashion is still at an early stage and enterprises only consider industry sustainability standards from government guidance and law. Entirely relying on government cannot deal with all aspects of environmental issues, such as the inventory problems from the knitwear brands. The government have made requirements in quality of materials, yarns, dying, washing, and making standards based on the UN'S 17 Sustainable Development Goals (United Nations, 2015). But for the design and aesthetic weakness, it is difficult to address from the government side. These should be the companies' and designers' duties; they play a key role for these sustainability problems.

China became deeply involved in sustainability concepts in the mid-2010s much later than western countries (Government of China, 2010). Designers in Chinese knitwear brands are not working with this concept. Most designers in the industry are not educated with sustainable fashion concepts, so they have limited knowledge of sustainability.

Designers in King Deer have a basic knowledge of sustainable products but in limited aspects. Most of this knowledge comes from their own experience that comes from their surroundings. They are not trained as professional participants of sustainable fashion both in their universities and working time. They understand issues of cashmere dying materials and washing chemicals, because the brand is asked to meet new environmental requirements following China's 12th and 13th fiveyear plans (Government of China 2011). They know a few ideas such as recycled materials for sustainable fashion, but do not think that is suitable for their brand. What they seem not to know is how designers, and their supervisors, can be involved in sustainable goals from the design angle. In their design process, they may accidentally use some sustainable materials, such as yarn with natural colours, but so far design itself is not used to achieve sustainable goals. They are paying attention, but do not see the link to design and design as a means to increasing sustainability.

The brand has tried to improve these problems. Tentative steps from King Deer will be seen in Chapter 7. There are still many problems that will be discussed.

### 6.8. King Deer in the context of other companies

The study collected twenty-four interviews from eight Chinese knitwear brands (see Table 3-4). These eight companies almost covered all types of cashmere brands, including large-scale companies: King Deer, Erdos and Zhenbei, three of the top-five biggest cashmere brands in China, two middle-scale companies, Chunxue and Pangu, and one small-scale company, Duolanna, and two freelance designers with small-scale personal labels.

King Deer was selected as a representative brand with deep research and a case study and thirteen interviews were undertaken with the brand; three interviews were from Erdos, two from Pangu, and one each from the other companies. Based on the interview data, the analysis results were divided into three groups to compare the key elements of business improvement, (Figure 6-13.)


Figure 6-13: Data comparison among King Deer, other brands and freelance designers' feedback in the industry

In the chart, the main problems were divided into five main parts to compare the data analysis results. The five main angles include design, branding, consumers' understanding, business and sustainability (the first column of Figure 6-13). The main issues of these five angles were based on the data analysis of the 13 King Deer interviews. The coloured areas consist of three parts, the light grey area (the third column) is for the King Deer brand, the sky-blue area (the fourth column) is for four other cashmere brands: Zhenbei, Pangu, Duolanna, and Chunxue (company sizes were one big, two middle- and one small-scale). The third group includes two freelance designers' studios (navy blue area in the fifth column), and these two designers were both working for different cashmere brands in the past and they still work for cashmere brands. They also have their own small businesses with own labels. Here, the data analysis results from groups two and three were used for validating the findings from the King Deer case study in order to understand the general issues in the knitwear industry.

Data analyses show that the King Deer brand and their issues is not an individual case. Missing design culture is a common problem in other similar brands. The four other brands (the second group) all have similar problems in design context and process, design method and creative ability, design ability for collection building, designers' positions and working spaces, the degree of brand understanding, brand positioning and market setting, consumer research and understanding. These key elements for enhancing design culture and business improvement are all at a low level so far. The exception is Erdos, who have upgraded their brands, which will be discussed in Chapter 7. All other brands are declining in the market. New consumers do not join these brands. Indeed, two of them have gone out of business in the last decade with only one or two discount shops left for clearing their old inventories. One of them reset their business for younger consumers and have a few shops for testing the new market. The two freelance designers (the third group) gave feedback in the interviews that indicated a similar situation to other comparable brands they worked for. Most other brands in the industry are declining by the lack of design and brand building. The awareness of sustainability is also low, and most of these brands have middle- and high-level sustainability issues to deal with, e.g. huge inventories and pursuing selling more goods with low price strategies.

### 6.9. Conclusion

In conclusion, the King Deer process is a rational response to the drivers they are under. Most traditional Chinese knitwear brands are looking for new market shares to try to stop their market decline in the current decade as the decline appears to continue. The case study with King Deer gave an opportunity to explore the problems and their reasons from a design perspective. Thus, a portrait of Chinese knitwear brands is drawn from the research and data analysis in this chapter.

Chinese knitwear companies are highly successful suppliers to many European and American fashion labels. Historically, China has been the largest producer of cashmere in the world and still accounts for around $60 \%$ of this (Myagamarjav 2021). Companies produce high-quality yarns and are technically highly skilled in translating western designs into high-quality garments. Nevertheless, their internal brands are struggling to gain new customers. The chapter argues that one of the reasons lies in how the buying system works through franchises, which buy a large number of different garments based on their expectation of what would sell locally. The franchise model makes the brand look backwards rather than the forward-looking nature of fashion. The designers are incentivised by how many of their designs the franchisers buy. The resulting design processes are a response to this selling structure. The design process in King Deer was compared to the process of the DAR, which followed a typical western design process. The chapter concludes that Chinese companies have a different design culture, where designerly ways of working are much less valued. Their internal reward and evaluation rules make designers work to targets and compete with each other. The lack of suitable constraints reduces design creativity.

In particular, the Chinese companies have very little understanding of sustainability, and their way of working further leads to unsustainability by producing garments that are too similar to existing ones without enticing consumers to frequently wear them over a long period of time. While working season to season, the brand is not sustainable, because they maximise sales per season without long-term development. These challenges of sustainable brand development and design leadership will be discussed in the next section in Chapter 7.

## Chapter 7: The Challenges of Sustainable Brand Development and Leadership in China

This chapter will discuss the challenges for improving Chinese traditional knitwear brands into sustainable businesses. It will start with a comparative analysis between two Chinese brands, Erdos and King Deer, and then discuss what challenges need solving to improve design leadership, brand understanding, and sustainability aspects.

### 7.1. Erdos, an example of a successful cashmere brand

Erdos and King Deer were similar brands. Both were founded in the 1980s from two nearby cities in Inner Mongolia and had developed from manufacturing. They were both top-five cashmere companies with their own in-house brands and were competitors with each other prior to the 2000s. If one visits their retail shops and websites in recent years, then it is clear they have developed in different directions.

Erdos was one of earliest brands to try to improve and upgrade their brands. It is the only one to have successfully upgraded their old brands and established new multibrands like Armani. Considering the Erdos approach, the following main improvements to develop the brand can be identified.

### 7.1.1. Built both brand and design leaderships for upgrading

In order to upgrade their old brands, Erdos have built their leaderships for both brand development and design improvement. First, the company changed to a new generation to lead the brand with a female leader, Zhen Wang, who graduated from the University of Cambridge with nine years' study experience in the UK. Afterwards, they started a new brand called '1436' from 2006. (Sohu.com, 2022). For design leadership, in 2008 the new brand leader employed Gilles Dufour, a successful, experienced French designer, for leading the design direction of their main brand, Erdos (Jiao, 2021). The main reason is that the brand for the first time had declined, and their annual profits had shrunk by around two-thirds. The company realised they needed to upgrade their single category brands into fashion brands to offer fourseason products. They opened their first shop for four seasons of products in Beijing
in 2009. This change was successful, turning the declining market trend into a $20 \%$ annual growth of new shops (Jiao, 2021).

### 7.1.2. Sub-brands for different market sectors

Brands were repositioned with new market segments in the following aspects. After around nine years, the company gradually turned their knitwear brands into four-season fashion brands, but with knitwear as the brand's main feature. In 2015, the new leader, Zeng Wang, was promoted to general manager of the conglomerate to be in charge of all brands. In order to totally improve all the brands, brand development strategy research was undertaken. First, the brand's main problems were identified: too wide consumer groups, indistinct brand characters, brand ageing, and one brand expressed different information. The brand did not build a distinguished image in consumers' minds. Deep market research was then undertaken in over 30 cities for their own brand's feedback. Afterwards, they decided on brand evolution: consumer orientation, clarified target consumers and market segments, and designed for younger generations.

During 2015 to 2016, brand separation and extension occurred. The main brand, Erdos, divided into two brands. 'Erdos' for mainstream fashionable middle classes, and 'Erdos-1980' for their old traditional brand for original consumer groups. In addition, the sub-brand ' 1436 ' for the luxury market and a more recent addition, 'Erdos Blue' for the young market were repositioned. These four brands were officially announced, with their new styles and market setting, at Erdos's first fashion show during the Beijing Fashion Week in September 2016. Afterwards, sale channel extensions with multiple channels were developed. All the sales channels were evaluated and categorised and repositioned to match different brands. After two years a new brand, Erdoskid for 2-12-year-old children was added, then the market segments were complete (Jiao, 2021).

### 7.1.3. Give time for both design and brand running team growth

The above is an overview of the change of the brand. In fact, these brands have upgraded twice since 2008. The first upgrade took place from 2008-2015. They turned their old knitwear brands (only cold-season products) into fashion brands
(with more categories that covered four seasons). They built their brands into different market segments for the second upgrade, from 2016. This was, for precise product design and delivery for target consumers, and built the brands' characters for long-term development. They spent time and patience to make these brands gradually change and gave time for their teams to mature.

For this study, brand upgrading is important to examine what was designed after the old brand was divided into two. The author visited the Erdos company in Beijing in 2015. That was a period where the old brand was still running but with two different levels of shops. At this time, their brands had not announced the changes to the public, but they had been undertaking the structural changes for around seven years.

Some evidence can be found in the following interview from their product manager.
'First, we will have a product structure, normally from our sales data from retail stores and purchasing meetings. Then we can give these product plans to our design team. The plans detail how many knitwear we need such as how many tops or cardigans, or how many needs printed patterns or solid colors. In the design process, we discuss with designers every month, need for adjustment when they are creating designs. When all the designs are finished, we will make an overall adjustment to meet consumers' different needs. The designs are divided into two parts, one is for spring and summer, the other is for autumn and winter. There are around 20-30 series. Some series are bigger that will include knitwear and weaving fabric clothes with over 10 pieces that consist of close skin wear like shirts or tops, outwear and bottoms. Some series are small, maybe only few pieces. (How about a large collection?) Every month we have a collection delivered to retails shops. It needs new series each month. We design around 400 styles, then the biggest shops need around 300 stock keeping units.
Our main job is communication. We are the link between the design department and marketing department. We work with marketing staff for data analysis from retail numbers and market feedback. We mainly work with the design department. I need their design plan, what is the design direction, the fabrics, and design elements. Then compare this with market feedback and give suggestions. For example, some part may need more for sales growth, or some designs maybe less popular and need some parts adjusting. Another part of the job is related to production. I need to manage fabric, design time, fabric producing time, product production, and a suitable price that cannot be too high for material quantities...
The market needs maturing, then designers' concepts will have chance to be expressed in products. We try to run a market-driven model. Ask marketers not to only pick those they can sell and encourage them to select designs with series that can express the whole brand character

The company gave time for both their brand running team and designer team to mature through trying and testing in a few stores. Their products were designed and sold with collections that followed planned structures that differed from other Chinese cashmere brands who offered individual garments.

### 7.1.4. Fewer garments

In the past six years, and until now, all the Erdos brands developed with clearer characters. Figure 7-1 shows the brand structure for Erdos 1980 for autumn/winter 2021. Although it is still for the old consumer groups, it has more types of products for consumers' different needs, not just those that had sold well in the past. This was to encourage the purchase of products to support the brand character. It can be a useful model for the rest of the knitwear brands' first step towards brand improvement.


Figure 7-1: Product structure for Erdos1980, Autumn/Winter 2021

There were around 110 design styles on the website from the Erdos brand, figures 72 and 7-3 (it is possible to have a different number of styles in each retail shop dependent on the store size). However, this can be used as data to compare with the case study brand, King Deer, who offer over 200 styles for autumn/winter in crowded and repetitive retail stores. Erdos offer a tight collection with fewer garments that avoids overlap and inner competition from similar products.

### 7.1.5. Visual coherence

Both Erdos brands offered coherent collections. Figure 7-2 and figure 7-3 were two collections from autumn/winter 2021. Both brands sell products with tight collections rather than individual designs, e.g. the Erdos collections have balanced structures (Figure 7-1). They offer different categories that can match and be worn together as complementary looks from inner wear to outwear, products from the top to bottom of the body, and accessories. The colours are schemed with gradations. The design details and patterns have linked with each other. The whole collection shows a young, stylish, high fashion style.


Figure 7-2: Part of the design styles and the posture images from Erdos (Source erdos.cn)


Figure 7-3: Two posters from Erdos1980 (source erdos.cn)

### 7.1.6. Integrated brand image and marketing

For the design collections, there are two totally different styles from Erdos and Erdos1980 in the autumn/winter collections. Modern, urban, young styles can be found in Erdos' collection, (Figure 7-2), and more conservative styles in Erdos1980, (Figure 7-3). There are five brands with different collections shown on their website. All brands have independent design, promotion, brand management departments, but share supply chains, production, and information systems (Jiao, 2021).

They are a good example for their old competitors to study the rest of Chinese cashmere (knitwear) brands. During this period, some companies were also trying to upgrade their brands, but most of them have not been successful.

### 7.2. The tentative steps of King Deer

King Deer recognised they need to do something for improving the business. They have tentatively changed their designs recently. This could be influenced by the case study research, to make them rethink their designs and see more possibilities for what design can do for their brand. During the visiting periods, the design manager discussed with her a possibility of collaboration for the brand improvement in the future. At that moment, they decided to make a scarves line to start the improvement of the brand and they invited the author take part in this. It was not the direction of the author's interest, and importantly, this study was only halfway completed at the time. Erdos should be a successful example to give other similar brands more confidence for their brand development.

### 7.2.1. The First fashion show

King Deer held their first fashion show in their Shanghai branch in 2019 (Figure 7-4) and the author was invited to watch online by their designers. It was a large show with many designs, although their colours and details seemed too noisy and rough for cashmere products, but they had decided to change their products for a younger group, which was a positive signal for the brand.


Figure 7-4: King Deer Fashion Show 2019 and a poster of Autumn Winter 2020 (Source Baidu.com)

### 7.2.2. Clusters of coherence

Currently, King Deer is beginning to add summer clothes (Figure 7-5). For the first time, one can find some pattern designs for younger people. Importantly, some patterns look attractive (the light blue and pink blouses) and might be original designs with their deer elements.


Figure 7-5: King Deer Spring/Summer 2021 (Source King Deer online shop)

Based on the data from the interviews, the company knew their designs needed to improve and it was mentioned that they tried to collaborate with designers to add more designs, but without success. With this continued failure, there was a lack of ability to change products for younger consumers. The success of Erdos's upgrading should have helped King Deer's leadership to make the decision to evolve.


Figure 7-6: The 2021 Autumn/Winter collection from King Deer (source King Deer online shop)

These group design images (Figure 7-6) were selected from King Deer's online shop from the AW 2021 collection. Checking the products from this season, they appear different from before. The styles are easier to wear than in the past and they no longer have old-fashioned designs. The products are simpler and look younger than before. The colours also seem lighter and fresher.


Figure 7-7: The 2021 Autumn/Winter collection from King Deer (source King Deer online shop)

The images from Figure 7-7 also belong to the same collection as Figure 7-6. There are still too many colours and design elements when looking at all the products together. These images reflect that they are still designing with small series rather than a big collection. The logic and design thinking method are still a barrier to build a tight, strong collection in the brand. Compared with Erdos, progress is still required, but at least some necessary product categories are now designed, for example, shirts, skirts, dresses, and trousers.

Erdos and King Deer have different improvements in their designs and brand building. This is reflected in different brand and design understandings and cultures from these two companies. The following section will discuss the influence of design from brand understanding, design culture with leadership and sustainability for brand improvement.

### 7.3. How brand understanding supports design

The 'brand' was clarified as a business model to distinguish from others, to express differentiation, and a promise for quality, aesthetic, taste, and service, see section 2.1.1. Brand understanding can be achieved through clear brand positioning. Indeed, branding normally starts with brand positioning. It is a strategy to make decisions for market setting, to answer the questions about: Who are the target consumers? What design styles of products will be offered? What is the brand feature? What are the selling points? Who are the competitors and what is the main difference between these competitions? Clear brand positioning is a prerequisite for designers to understand the constraints of the brands from a design aspect, in order to create suitable products for building brand images, and importantly, to meet their target consumers' real needs. Good brand understanding can support design in the following five aspects.

### 7.3.1. Understanding the target market sector

Understanding the target market sector is related to consumer research. It was discussed in section 2.1.2. for two main types of consumer research that included demography (e.g. age, income, education, ethnicity) (Frings, 2007, Koumbis, 2014, Solomon and Rabolt, 2009) and lifestyle concepts (how people's living and their time and money spending) (Blackwell, Miniard and Engel, 2001). Fashion products
normally position with both of these concepts. For example, a Chinese designer brand offers products for 20 to 40 -year-old female groups, mainly for the middle class, urban, and minimalism lovers. Their products are with slim, long cutting and unique structures and innovative design. The brand clearly knows who their target consumers are, that makes the brand stand out. Fashion products are worn to express users' personality, taste, state and sense of belonging. Different consumer groups have different needs for fashion products. Therefore, the business owners or managers need to make decisions for their main target consumer groups, the products' price range, the shop locations, and the main styles to meet the target consumer group's interests. For example, Erdos used different positioning to divide their old brand into two different brands. Erdos was designed for young, urban, luxury, fashionable consumers with higher prices, and Erdos1980 for traditional, classical, and timeless products with prices lower than Erdos. In contrast, the leadership in King Deer does not have this understanding, as it sits mainly with the franchisers. They ought to gather this brand running knowledge and strategy and then decide whether they want to target other groups as well.

### 7.3.2. Provide coherence of garments

Understanding what the brand offers is important for designers. A brand heritage such as the main colours, or main design features like cutting, fabric, or patterns, can help to provide coherence of the garments with the brand unique styles. It builds brand continuity. A coherent collection can have the following advantages rather than designs mixed individually without structure:

- express clear fashion taste and aesthetic views to consumers
- offer recognisable styles, and the persistence of elements over time
- help to build strong brand images
- supply highly matched products to wear together for complete looks
- provide convenience for both consumers and sellers.


### 7.3.3. Provide a filter to discard designs

Another important function of brand positioning is to provide a filter to discard designs. A clear brand position, including brand concept, a clear style and design features, makes a clear constraint for what are the right designs for the brand. This is
very important for design directors and designers to make decisions for which designs can fit in the collections. If a brand does not have a clear brand positioning, then they normally put all the good or saleable designs together for their collection, just like King Deer do. The consequence is that their collection contains too many unlinked design ideas that make the collection lack consistency. It was discussed that a tight collection was not only a group of attractive designs, but all the designs should be in their right positions (Gehlhar, 2008). Most luxury fashion brands have picked their designs carefully, and only perfect designs can be used for the final collection. According to Raebild's (2015) research data, only around 10\% of designs will be used as final products in Burberry. Only the designs that perfectly fit have the chance to be part of collection. That reflects a high-level requirement for design qualities that match and balance with others, and the creative direction of the collection.

### 7.3.4. Garments for matchable clothing needs

Normally, a fashion collection offers completed looks for their target consumers. Understanding target consumers' lifestyles and their consumption and dressing habits, is important for what the collection offers. The structure of a collection was discussed in section 2.2.6. A collection normally offers most categories based on their target consumers' dressing habits, in order to both benefit the consumers and the brands. For the consumers', it is an effective way to find clothes to wear together in a stylish way. A good collection offers matchable garments to meet consumers different needs, e.g. tops can be worn as inside or outside layers; coats need to match these tops; offer skirts or trousers for matching these coats and tops and a dress to match coats. If it offers accessories, they also should be matchable for most clothes. Providing matchable clothes is convenient and timesaving for consumers. For the brands themselves, it is also an efficient way to increase sales, to build trust with their consumers. Brand as a promise was discussed in section 2.1.1. Offering all clothes for complete styling looks can reflect brand service, design levels, fashion taste and aesthetical promise from the brands to consumers.

### 7.3.5. Differentiation from the competition

The brand's basic function is to distinguish it from others, see section 2.1.1. A brand needs its own uniqueness that differentiates it from the competition. Normally, fashion business competitors have overlaps along market settings, products offerings, or design styles. Clearly positioning makes decisions for the main differences in products or services offered from their competitors. For fashion brands, products could be the key differentiation from different brands. Designers need to understand the details for their brand settings, to create signature designs that can be design styles, special details, colours, colour matching styles, or specific silhouettes to express the brand uniqueness.

### 7.4. The design leadership of a brand

Design leaders work for the brands, so a clear understanding of brand positioning in the following aspects is necessary.

### 7.4.1. Brand gives direction

A brand offers an overall direction that gives design leadership a constraint for the design direction. Only through understanding the brand market setting and the target consumers' needs, can design leaders create the right directions for a collection fitting both the brand and the fashion context. Importantly, to help build and maintain the brand identity. A brand means a specific requirement that offers the direction for both the design leader and other designers.

### 7.4.2. Brands can hire brand leaders, who support the designers

Design leadership was discussed in section 2.2.3. as an important role that facilitates design into organisations to maximise the design advantage. For fashion brands, ideally a design leader can lead both the creative direction and support designer teams. Two types of design leadership, 'DEO' (design executive officer) and 'creative' were discussed in Chapter 2. DEO leadership could be more difficult to achieve for most companies if they do not have a leader trained by design. Hiring a supportive business leader who has a good understanding of design and confidence for the brand's developing direction, is important. They should drive through the
systemic change to the brand, product ranges, organisational structure, purchasing systems, business model, and sales channels. This will put the company on a sustainable footing.

For product improvement, hiring a creative design leader is necessary for most brands. It is an important position to lead designers, and their creative process, forward and in the same direction. The role of design leader is to make decisions for the design collection, to lead design teams to create high-quality products, and to increase products competitive in the market.
7.4.3. Brands force designers to reflect about identity and how it is reflected in the designers

For fashion brands, their products are important factors to build brand identity. Brand forces designers to reflect about what the identity is through products. It is a constraint for creative ideas in the design process. Design leaders need to carefully define fashion trends and context before they make decisions for inspirations, themes. How to let these elements help build or support enhancing brand identify requires careful consideration. The ideas can be various, such as a recognisable geometric pattern brand in new colours, like the Italian luxury knitwear brand, Missoni, or it can be a classical pattern, and colour tones are used in new forms, e.g. British luxury brand, Burberry. Designers need to know the creative directions from their design leaders and then they can create new forms to balance the brands' identity within the fashion context.

### 7.4.4. Brands make designers proud to work for them

A brand is a signal that can be a power of cohesion. People working together build their cultural and common interest. In successful brands, the staff are always proud to work for them. For example, when the author visited Erdos in Beijing in 2015, all the staff met were proud to work in the brands, although the brands had not upgraded at that moment. This included the company CEO, the interviewed designer, the product manager and the marketing manager, who were pleased to be the top selling company in the Chinese cashmere market. It can also be seen with staff in the King Deer brand. Their technicians, the product developer, the managers for international supply business were proud of the company for their excellent
technical advances, top cashmere yarns and good products' craftmanship qualities. For the domestic business part, they were proud of their products' quality in craftsmanship and top yarns. On the other hand, they do not have confidence for their products' design and brand building, The manager said the brand became a sunset business, because he did not find a way to stop it declining. Designers lacked passion for their design activities and change. They did not like the products they designed but have not found a way to make effective change.

### 7.5. Brands and sustainability

In this study, sustainability was considered as the means to make the brand viable by improvement of design, see section 2.3.3. It was discussed that consumers' understanding is important for sustainable brands. For the Chinese knitwear brands, building direct links with their consumers by taking control of retail shops is the first step they need to take. That means the current business model needs to be improved. For the design products this means offering balanced collections with matchable garments for different needs, such as timeless design styles with creative details, or offering a repair service to extend the product lifecycle, durability for wear, and durability in styles.

Designers need to understand their target consumers by offering much better designed, exquisite products than the current ones. Designers and brands also need to educate their consumers to let consumers understand that well-designed cashmere products are a luxury that need to be valued, looked after carefully, and used longer. Importantly, they need to let consumers know the brand has turned to a sustainable business. They can be a part of the experience through extending products usage. Buying fewer but better for longer use, is a sustainable way for protecting the environment, animals, and human beings.

For the cashmere products, there is a special niche for buying items as gifts. Cashmere products are often selected as gifts for friends or family to affirm connections and build ties. In this situation, the buyers are not the final users, and the brands have difficulty knowing who the real users are. When people buy a gift, they may prefer to pick more conservative designs for safety than the wearer would
choose (Section 4.4.4). This gift nature needs to be acknowledged by a brand, especially for wanting to understand who their consumers are.

### 7.5.1. Environmental sustainability

For the environmental impact, Chinese cashmere brands mainly involve with two problems: Cashmere raw materials production, and the drying and washing of yarns and products.

As an animal fabric, raw cashmere is produced by cashmere goats, which impacts on the environment. It was reported there was an increasing trend of grassland degeneration and land desertification in western China (Xu, 2002; Li and Zhang, 2005). Over grazing is one of the main reasons for this damage, e.g., in Inner Mongolia, with the growth in numbers of cashmere goats and other animal husbandry (Hei, 2013; Li and Zhang, 2005). It was discussed that farmers prefer traditional grazing for cashmere goats because it saves labour, see section 1.2. Another reason is that many current cashmere goats have low production of cashmere, with around 200 g of raw cashmere per year, per goat. This is three times lower than the best types of cashmere goats in China. Farmers tried to increase the goats' numbers to increase income (Hei, 2013; Si, 2011). To balance this dilemma, it is suggested to deal with it in two ways. First, reduce goats' numbers and replace low production goats by higher production goats; second is the management of the grassland by local governments by requiring farmers to change their herding methods and to manage grassland to give vegetation space and time to recover (Hei, 2013; Li and Zhang, 2005). Cashmere companies should encourage farmers to reduce the environmental impacts if their products are to be sustainable. e.g. have contracts with goat farmers for certifying that raw cashmere is eco-friendly.

The second aspect involved is the drying and washing process during yarn and knitwear production. Research shows that using natural dyes is a direction for cashmere dying to be eco-friendly. Normally, companies follow the government requirements to achieve the standard of sustainability, to pick dyes and washing auxiliary chemicals for reducing water and land pollution. New technologies such as enzymatic, ultrasonic and low temperature plasma are considered to support natural
dye use (Wu, Han and Wu, 2007; Li, 2005). There has been research related to technology developments for sustainability and eco-friendly drying materials, e.g. saving water use and reducing pollution (Ma, 2018), and natural pigment extraction and purification (Jin, et al., 2018). The interviews with large cashmere companies and yarn suppliers also indicated the need to invest more money in dye and washing research to make the industry use natural dyes for all colour needs. There are few publications from the industry, and they may see their own team research as a business secret, but most companies are happy to spend money for developing techniques. There is also a market for using natural coloured cashmere, which could encourage designers to use it more.

Influenced by traditional thrift culture, there is less potential for clothes to go to landfill sites, especially cashmere clothes. It is an expensive, fine material, and fewer people are willing to discard cashmere items. The common method to deal with surplus stock is to sell with discounts or donate to poor areas. In the consumers' aspect, most people keep their cashmere products for long-term use. If the designs are not satisfied, they may be stored in a drawer or given away to friends or family. If the designs are timeless and exquisite, they would be lifetime products for most people.

### 7.5.2. Economic sustainability

The Chinese knitwear industry needs to change to achieve economic sustainability. Balancing economic development is focused on both the three-pillar and four-pillar sustainable development models, see section 2.3. For the Chinese cashmere companies, they need to sell their garments to survive; the basic requirement for business. This is not only for the brands to make money, but for stable employment and fair wages for their staff.

For these brands, the current business model, with large production quantities and lower prices for competitiveness, needs to be reshaped. It was clarified that the current value of success in the industry requires a rethink (Fletcher, 2010; Black, 2020), see section 2.3.3. Indeed, Raworth's (2017) Doughnut Economics concepts demonstrated all business growth should have a ceiling to balance humanity and
social foundation. For these brands, ideally, all products could sell with full prices, which reduces inventory risks, and have more profit space for the business to continue. The companies can then produce fewer clothes but with better designs.

### 7.5.3. Design sustainability

To extend the products' life cycle is the right direction for sustainable cashmere brands. Cashmere products come with natural advantages in warmth, softness, lightness, and comfort, for wearing next to the skin. Cashmere is a luxury garment that people keep for a long time and are happy to wear if the designs are satisfactory. The design styles need to think wearability for the long term, for example, have a subtle balance of modern and classical designs, or timeless designs with creative details. Cashmere products could be stunning classics, with easy to match styles and colours that could encourage greater and longer user. For the companies, to offer a repair service is helpful to improve their product longevity. The company and designers need to educate consumers to value these luxury products. Furthermore, cashmere could be resold or downgraded to undergarments to extend its lifecycle.

### 7.5.4. Cultural sustainability

Cashmere has a long tradition in China. In the Chinese first science and technique book from the Ming Dynasty, Exploitation of the Works of Nature (Song, 1637), cashmere was reported as 'He Rong', the undercoat of wool from 'Shan yang' (Month goats) from Lanzhou. It was also called 'Lan Rong' because of the place of origin. Cashmere has been used as a luxury clothing material since the Tang Dynasty (618-907 AD), and cashmere fabrics were made by pedal-powered textile machinery as reported in the same book (Song, 1637).

This traditional animal farm and textile business has been extended for the global supplier industry in the 1980s after the Chinese reform. Local cashmere brands gradually appeared during the 1990s to the 2000s, as outlined in Chapter 4. They were domestic businesses with the raw materials, manufacturing and markets all within the home country. Therefore, these brands have huge potential to become sustainable. From the design perspective, to achieve this goal, the brands need to
improve their designs into modern classic Chinese styles to continue the cultural heritage for sustainable business use.

For the consumption habits, Chinese people have a long tradition for diligence and thrift. Clothes for most people are durable goods, just like a famous Chinese sentence said: 'when you have a new cloth, for the first three-years you can use it as new, for the second three years, use it as old, and after fixing and repairing, it can still be used for another three years'. It was common in times of scarcity. There is a long-time tradition for valuing goods including clothes in Chinese history. Now, influenced by globalisation, fast fashion, social media, and new lifestyles, people are encouraged to use more than their needs. It is time to rethink and try to revive the traditional cultural heritage for sustainability.

### 7.6. Conclusion

This chapter discussed the challenges of sustainable brand development and design leadership in China. A comparative analysis was undertaken with two Chinese cashmere companies as case studies. Erdos is the only successful example of the traditional Chinese cashmere that upgraded into luxury fashion brands so far. King Deer have made tentative steps for changing to a better business. However, many business leaders in Chinese knitwear brands do not have long-term development plans. The following is the challenge for building sustainable brands.

- Business leaders must clarify their brand positioning for market setting, brand direction, target consumers and the main differences from the competition.
- The current business model must support consumer understanding and design collections.
- The design requires experienced creative design leaders to define the fashion context for the brands and to lead the design team and creative directions. The result is their products have become unpopular in the market; that is a sustainability issue that needs to be dealt with.
- Both the business leader and the design team need to understand and embrace sustainable fashion. Designers need to work with sustainable goals,
e.g. through creating high-quality, timeless products and educating consumers for extending the products' lifecycle.
- Many brands need to move away from maximum growth with a low-price strategy and work in a different way.

Even so, with a long history of cashmere use and production experiences in China, there is an advantage of the whole system from raw materials, yarn and knitwear products, business, and to the end markets within the home country. These cashmere companies still have huge potential to become sustainable brands if they can make progress in both branding and designing in the future. Chapter 8 now considers suggestions for how the Chinese knitwear sector can develop into sustainable brands though business and design improvement.

## Chapter 8: Suggestions and Recommendations for Upgrading Traditional Chinese Knitwear Businesses into Sustainable Brands

The main aim of this study was to investigate how design can help Chinese knitwear brands survive and prosper in a sustainable way. The Erdos rebranding operation was analysed in Chapter 7 and is a key lesson for other traditional Chinese knitwear brands to follow. This chapter will give suggestions for how similar brands can learn from the Erdos experience, and what they can do to develop their businesses into sustainable brands.

A set of recommendations for sustainable improvement will be presented, which are synthesised in Figure 8-1.

The improvement needs to occur in three levels: the business level (grey area), section 8.1, the design process level (green area), section 8.2, and the product level (blue area), section 8.3. These changes affect multiple roles in the organisation: sales and marketing, brand, and design.

As the legend in figure 8-1 indicates, four distinct types of change are required:

- one-off switches, where the company permanently needs to change the way it operates.
- activities conducted for each collection that need to be carried out seasonally and for which the companies must have processes in place for how to carry out and monitor the activities
- activities that require continuous improvement, which the company needs to encourage and reward
- activities that need to be adapted for a particular context.


Figure 8-1: Overview of change for brand improvement sustainability in Chinese knitwear brands

### 8.1. Business improvement

The barriers to sustainable brand development were discussed in section 6.6 and 6.7, namely the current franchise business model, the lack of clear brand positioning and customer understanding, insufficient valuing of design, lack of leadership, and low awareness of sustainability. To make changes, the companies need to start to invest in people for the following key positions shown in Figure 8-2; the organisational structure of who plays significant roles for brands improvement.


Figure 8-2: The role of professional people in key positions for brand upgrading/improvement

The highest-level leaders need to make decisions for their in-house brand upgrading/improvement. In the Figure 8-2, three types of professional people need to be put in place before the change starts. These include a business/brand leader, design leader and designers. Their main duties (bullet points) and skill requirements for each position will be explained in the following section:

### 8.1.1. New capabilities for new staff in key positions

Companies need investment to get professional people working for them.
Traditionally, the culture in these companies has been to invest in machinery rather than people. The leadership culture needs to change and brand improvement needs investment. Hiring a consultant is not the solution. It might get them started, but to be embedded into the culture and structure requires hiring skilled people.

- Business or brand leader

A brand leader (see section 7.4.2.) is required to oversee brand improvements and ensure that the brand maintains a clear identity once it is established. This person establishes a clear vision for the brand and has the power to implement it. They need to organise brand upgrading, identify the tasks that need to be carried out across all functions of the business, provide a plan and oversee activities. They also need to facilitate collaboration between different departments and support designers directly. The brand leader is likely to come from a sales and marketing background and is expected to have the following skills:

- experience and skill in running fashion brands in the luxury sector
- facilitation of team-working
- understanding of different market settings and target consumers
- fashion marketing skills to promote collections
- understanding design and the support design teams require.

Some companies may be able to recruit a brand leader internally, for example, the heir of Erdos (section 7.1.1.) was trained to be responsible for all brands. Otherwise, the companies need to look externally for an experienced brand leader and give them sufficient power and trust to implement changes.

- The design leader

A design leader, also referred to as a design director, leading designer, head designer, or chief designer, needs to oversee the making of decisions on design direction, manage the design team, process and maintain brand identity, see section 2.2.3, which identifies the following skills:

- direct high-quality seasonal collections
- be able to generate a clear design vision and have a good sense of fashion trends
- have experience in design process management for high-quality fashion collections
- understand target consumers, brand market setting, and brand styles
- understand sustainable fashion principles
- be able to assure balance and coherence in collections
- have the ability to manage a design team.

In addition, these design leaders need to collaborate with their brand leaders who oversee brand upgrading, and to make clear plans for what the brand needs for their products. This would include specific targets, design styles, design quantity and collection structures. At the same time, design teams require time, space and money to make sure all designers can try their utmost for offering the best designs.

A design leader needs deep understanding of Chinese culture as well as an understanding of the design methods of the West. For this reason, an international design leader is not a guarantee for success. A design leader could come from the West, as in the case of Erdos, but needs to able to work with the Chinese designers and market experts as a team. An experienced Chinese designer, educated at a western university, or an alumnus of a Chinese bachelor's, and a western master's, degree, might have both the cultural understanding and the training in western design approaches provided they have leadership aptitude.

- Skilled and creative designers

Innovative designs often come from novices, as experienced designers often tend to produce large numbers of very similar conservative designs, because they burnout or are cautious of pushing ambitious designs through the sampling process (Stacey, et al., 2002). New designers are keener to test new ideas, because they do not clearly know where the boundaries are. A design team with both new and old designers will be a balanced way to keep the design visions and passions going. The companies need better skilled designers at all levels. All designers require the following skills:

- have a good sense of proportion
- are sensitive to fashion trends and target markets
- have the ability to create high-quality designs with original ideas
- have a passion for fashion and designs
- have knowledge of fashion sustainability

In a similar fashion, Chinese companies could take on placement students, or sponsor students for design. As there is an increasing amount of Chinese fashion students taking undergraduate or master's degree in the West, they could also hire junior designers with a western trained outlook.

- The challenge of recruiting designers

Recruiting skilled designers at all levels can be challenging. The companies themselves are not attractive to highly skilled designers. Old-fashion brands, like most cashmere brands, operate close to the source of the cashmere. For example, King Deer's designers were based in the city of Baotou in 2016 and paid less then designers in bigger cities. An experienced designer was paid the same as a design assistant in Guangzhou, and the design director's income was similar to that of a designer with two-years' experience in Guangzhou. Designers with higher skills are keen to set up their own brands or work for famous brands in big cities in China. The companies need to improve their brand images and provide higher salaries to get better designers work for them.

The Chinese university system gives designers little exposure to practice, which means young designers need several years to learn to contribute (section 4.1). The companies need to be willing to invest in them. The improvement of Chinese design education will be discussed in section 8.6.
8.1.2. Switch from a franchise model to a business model for marketing collections The companies, through the brand leader, need to rethink and redesign their selling models so that they are not only led by the franchisers, rather the knitwear companies need to take ownership of their collections and brand images, and actively design these. This will enable long-term brand development, rather than just selling more pieces in the short term. Accordingly, the current incentive rules for
designers need to be changed to fit the new business model. Currently, franchisers select products and the company produces them in the ordered quantities. In the new model, the company needs to require the franchisers to buy products from structured product ranges in order to control the brand images in retail shops. At the same time, companies need to support the management and marketing of their collections. This is not only selling products to franchisers in their annual purchasing meetings, but also to further develop their retail sites and publicity material. They need to offer guidelines on how to display products in retail shops and train their franchisers to display garments in a suitable way. They also need to offer information support to help sell and reduce inventory, such as offering a standardised stock control system to manage products in retail shops. Garments need to be preselected based on market research before showing them to the buyers. Offering a small percentage for exchanging unpopular products between the companies and franchisers articulates as a risk-sharing initiative between the brand and the franchisees. It amounts to a buy-back scheme in which a limited number of products/lines, which don not prove popular in certain locations, can be returned to the brand and moved between franchisees. If they fail to sell in any location, the brand carries the risk of the garment being surplus. (An alternative system would be for franchisees to organise the transfer stock between themselves; this, similarly, has the merit of allowing franchisees to share stock if they run out of particular lines. This approach is similar to the current John Lewis model). A scheme such as the one outlined above requires a stock management system that is capable of recording stock levels at different locations. This would require investment across the full network of franchisees.

This is a one-off switch from current marketing centred business model into a design-led business model. It can start by offering products over four seasons in selected branches as pilot shops. Shops governed directly by the companies could serve as pilots to minimise the impact on the whole business while allowing companies to gather data on how to manage flagship stores, improve product delivery with range times and production.

### 8.1.3. Brand development

As argued in section 7.3, Chinese knitwear brands lack a clear understanding of their market and consumers and do not have explicitly defined target consumer groups. Their brands are indistinct, lack coherent brand images and are too similar to each other. All operate in a crowded and shrinking market of ageing consumers. There is still potential for developing these brands, to obtain market shares, if they can build high-class characteristic knitwear brands, luxury cashmere brands and young style cashmere brands in the Chinese market.

- Establishing a clear target market

The companies must face the changes in the Chinese market environment and consumer habits. The first step is positioning/repositioning the brands and to clearly set/reset the market segments. The current situation is that some brands roughly position themselves but do not meet their targets. Erdos succeeded by turning their old brands into five different brands for different age groups and offering different styles for each brand. Other companies might not want to start with multiple brands but instead by building one with a clear target customer group. The existing model attempts to cover all men and women from 20 to 80 years old. This makes the brands difficult for their consumers to understand. Their designers cannot define clear styles and direction for their brands. It is suggested to set up a new small-scale line first with clear target market segments.

A brand needs to design products for more specific age groups and lifestyles. For example, they could select 30-to-45-year-old women with specific lifestyles, such as urban, middle-class, office workers as their main target consumers. Consequently, the consumers' consumption habits could be better understood and designs made for this market. This enables the company to design and test in the market. Brand positioning also needs time to be tested. It may take several years to find the niches that the brand can fit into.

- Clarify brand differences and directions

Product homogenisation was discussed as a problem that makes brands less competitive in the market, section 1.3. and section 7.3.5. Consumers perception of the differences amongst brands and products is the key to branding success. To make a brand successful requires differentiation from competitors (Keller and Swaminathan, 2019).

The brands need to understand who they compete with in a particular market. Currently, most brands promote cashmere materials as their main selling point, which makes them distinct from products made from other materials. This does not address the overlapping nature of cashmere brands. Brands must find their USP to stand out. These differences can be situated within the characteristic styles, colours, or materials used, or the after-sales services, and be articulated in brand images and marketing material. However, the uniqueness must come from their own designs or brand heritage rather than others in the markets.

### 8.1.4. Range beyond cashmere

Currently, see section 6.4.2. the companies are not running four seasons' products, because cashmere products are typically only sold in cold seasons. To sell all year round, their product ranges need to go beyond using cashmere alone.
a. Collaboration with other manufacturers

Cashmere brands mainly sell knitwear garments and scarves. Big brands, including King Deer, also sell cashmere coats. As a result of this narrow focus, they lack products for the lower half of the body such as trousers and skirts. In addition, shirts/ blouses, jackets, dresses, and accessories may also be needed for building collections. For these new categories, most cashmere brands will need to collaborate with other manufacturers.

In the current system, some brands may have experience of collaborations with other manufacturers or wholesale sellers for summer products, but these were frequently unsuccessful. The problems with these bought-in products included:

- garments could not be matched with their cashmere products
- garments could not sell in the target markets
- identical garments could also be found in smaller shops at lower prices.
b. Subcontract and decide whether to keep design in-house.

The brands have multiple options in their collaboration.

- The brands could directly purchase products matching their collections from suitable professional manufacturers and offer them as exclusive designs. Presently, only a few manufacturers have design services and suitable levels of quality. These kinds of manufacturers rarely support small brands, because the profits from small orders cannot cover the total costs; they may have minimum quantity requirements for each design, otherwise, they would need to pay extra for design and sample making services. That may cost more than to build their own design teams for these brands.
- The brands could operate like western retailers coordinating with their suppliers through common themes and colour ranges but delegating design to the suppliers. This way is common in Chinese menswear, but not high-end womenswear. Most Chinese brands are not willing to share their design research information (seen as business secrets) with outside people, including their suppliers. The concern is that their competitors might see them if common suppliers are used.
- Brands could design their own products and subcontract production. This may need collaboration with a few different manufacturers for different categories. The brands would need to recruit specific designers for these new categories (experienced fashion designers if they only have knitwear designers). Some basic products, like trousers, shirts and leather belts could be bought but higher stylish unique designs would be created by the design team.
- The brands could collaborate with design studios, but most design studios do not have their own manufacturers. The brand could keep the sample making team in-house and support production elsewhere.

If the brands decide not to keep design of these new categories in-house, they must have a professional designer or buyer to in charge of their purchasing to match their themes and collections.
c. Decide whether other garments are subsidiary to cashmere

The brands need to make another important decision about the relationship between these new categories and cashmere products. There are two options, which could be tried at the beginning.

- To add few types of necessary garments like skirts, dresses and trousers as a subsidiary of the cashmere products in order to turn the current products into collections. In this way, cashmere products are still the main proportion of the collections. It is an easier way to upgrade.
- To turn the cashmere brands into fashion brands, offering a wide range of garments of similar importance to cashmere. Developing a clothing brand may take years to achieve. This might be a long-term development direction for some brands.


### 8.2. Design process

It is not enough to hire new people and define a vision for a brand, the design processes also need to change so that designers work together as a team, who critically review their designs as they develop their collections.
8.2.1. Rebuild design teams with young designers and creative design leaders In most companies, the current design teams have been working for a long time in the companies. They are used to designing with formulaic approaches that can hinder design creativity. Some brands no longer have their own design team and rely on purchasing products from the wholesale markets as new products, then sew on
their own trademarks and sell them together with unsold inventory. To rebuild new design teams, the following aspects are needed.

- Respect of individual strengths

The unique skills of all designers need to be respected, wherever they are found within the team (even if in the youngest member). New designers require space to grow. In the case study brand, younger designers were not actively supported. For example, inexperienced designers were warned against wasting expensive cashmere yarns by producing too many designs or samples. This could be addressed by using cheaper yarns like polyester for making the first samples and testing the design ideas. Alternatively, the companies could find ways to sell sample garments on. The design leader needs to recognise and nurture each designer's strengths and interests by giving them time and space to learn and develop and by tolerating unsuccessful experimentation.

- Support and encourage teamworking

To foster creativity, designers need to be encouraged and incentivised to work as a team (see section 2.2.5. and section 6.6.3.). Currently designers work individually and in competition with each other, due to the current rewards rules focussing on the quantity of sales an individual can achieve (see section 8.1.1). This method may work for the current model selling individual designs, but it was not an effective way to build coordinated collections. To incentivise designers to work together, rewards should be considered for the whole design team. The design leader needs to enable team-working by actively involving the designers in most processes and encourage them to contribute ideas. All designers need to do trends research, select themes, sources of inspiration, colours and collect design details. The design leader oversees design quality and includes all designers in final decisions. Current designers may need additional training to contribute more design ideas, select colour schemes or define design directions. The design leader still has to take control of all the important decisions because the brands need to keep going with seasonal design requirements.

- Provide design direction with professional visions

The design leader needs to set design themes and plan collections in order to provide the design team with a shared vision. Other designers can follow the vision and develop sub-themes and specific designs in line with the main theme and directions. The design leader needs to take a lead in the selections of designs but give designers the opportunity to defend their designs. Gradually, the team can shift to a more equal partnership.

Many of the organisational aspects are already in place. For example, in the case study company, the current design leader manages the design process effectively and makes decisions based on discussions with all designers. The problem lies in the lack of professional guidance to build the design visions. Other than hiring a new design director, the company could collaborate with an experienced designer to develop the design vision with them. Companies without their own design team may need to set up a small design team or collaborate with outside design studios or designers.

- Foster a design culture

The importance of design and design culture was identified in section 2.2. Section 6.7. discussed the importance of constraints, leadership, designerly thinking, collection, design process, teamworking and sustainability, as missing elements of design culture. To foster improvements in design culture companies could take the following steps:

- give designers more space and time to explore ideas
- give designers inspiration resources
- pay for travel to fashion centres or fashion and yarn exhibitions
- allow designers to interact with pilot customers
- encourage designers to experiment with ideas
- understand and support unsuccessful ideas as part of the design process
- encourage designers to create flagship designs
- allow designers to design a small amount of art pieces (without thinking of selling and the market) to express their own design tastes and to keep their passions and cultivate their creative abilities.

Design culture, as a part of organisational culture, is related to many aspects of the whole system. The improvement may need to take time to gradually achieve. As companies shift their business into a design centred business, they need to give the design team more support. For example, in 2016, King Deer gave priority to international clients for sampling in their busy manufacturing period, which compressed their own design team's sampling times. To deal with this, building a small sampling team as a design resource for their own design team would be helpful. Then the design culture will be gradually improved along these positive changes.

### 8.2.2. Operate in collections

Collections play a key role for brand success, see section 2.2.6. The DAR collection shows how a collection could operate. Collections need to be balanced and all products play their own role in collections (Raebild, 2015). Collection design for brands has two challenges: coherence across all garments and stylistic consistency through time.

- Creating products within coherent collections

According to Deserti (2014) a design collection, rather than individual products, reflects the brand's identity, management, and drives the brand expressions in the fashion field. A successful collection not only has good performance in the market but can help build brand differentiations to help brand development (Deserti, 2014).

Both brand leaders and design leaders need to engage with the process of developing a collection from the beginning. It is too late to place different products together to sell. Collections have a different logic to individual products. They gain coherence through themes, styles, common features and colours to express the brand's uniqueness. Figure 8-3 shows a map of the design logic of DAR to building the collection coherence, where colours, pattern, texture stitches, silhouettes,
propositions and styles all fit into the 'tea culture' theme. The same design elements are used across different garments to give the collection coherence through using the following aspects:

1. a set of flower patterns (linked with bule lines)
2. colour-match style and proportions (linked with green lines)
3. outline proportion of outfits' styles (linked with yellow lines)
4. silhouette 1 with round garment shapes (linked with orange lines)
5. silhouette 2 with rectangle garment shapes (linked with brown lines)
6. texture 1 with same knitting stitch (linked with black lines)
7. texture 2 with two colours, tiny grade pattern and stitches (linked with grey lines)
8. design details 1 with laces (linked with purple lines)
9. design details 2 with gradually changing colours (linked with red lines) In addition, common features can be found in the collection with loose-fitting outlines, oversize, asymmetric shapes, colour-match propositions that cross the above nine different designs groups (Figure 8-3). Each design in the collection looks distinct but has at least two or three design elements in common with other designs.


Figure 8-3: Shared salient features (key links only) across the DAR knitwear collection

A collection is created through a process of arranging, planning, managing, editing and iterating. It needs constant revaluation whether an idea/swatch/garment fits into the theme, with selection between equally strong garments. Fashion brand collections need to be seasonally updated to reflect new fashion trends and to maintain brand identity continuity.


Figure 8-4: Structure of collections over time

Figure 8-4 shows a structure of collections over time. Season $N-1$ is the previous season (grey), season $N$ (green) the current one and season $N+1$ (blue) the upcoming one. The brands need to manage the balance between uniqueness and continuity. A collection needs to contain different parts.

- Continuity on successful lines from previous seasons, e.g. design details can be shared and continued across different seasons.
- Signature design shared across all seasons. Signature designs are unique to a brand and important to building brand character (section 6.5.4.) Signature designs make the brand recognisable when people use them. The brand's intangible value gives consumers a sense of belonging to the brand or fashion tribe. Some brands continue to sell the same designs unaltered, like Max Mara's classical camel coat, while others update signature designs every year with new colours or fabrics, e.g. the Birkin bags from Hermes.
- New lines (seasonal collection) with new ideas. If they are successful, then they may be selected to continue.
- Flagship designs to draw consumers to the collection in shops but are seasonal.
- A recognisable brand style expressed in fresh ideas.
- Understanding the collection theme

The design leader and their teams need to start with sources of inspiration, analyse the fashion trends and understand the brand's direction for the season. The designers need to engage deeply with their sources of inspiration every season. Clear design themes typically come from fashion research or inspirations. Design directions can be expressed in mood boards showing inspirations, selected themes, colour schemes and the design details. They provide the visual foundation of the design collection clearly to help team communications and support the selections of designs.

- Defining the fashion context and overall design direction

Brands need to clearly define their own design directions in terms of specific colours, shapes, design styles and details. This process sets clear constraints for designs. Designers need to research the fashion context to assure that their products are suitable for the brand's styles, its place in the market and their target consumers' fashion expectations. Design direction is typically based on three elements: data of past sales, fashion trend forecasting, and the target consumers wearing habits. Currently, Chinese knitwear brands seem not to take this stage seriously.

- Encourage design creativity, original design ideas and iteration

Too few original designs and limited iteration were identified as a barrier to brand development, section 6.5.1. Iteration is vital to the improvement of designs. Unsuccessful ideas and mistakes should be seen as a natural part of the design ideas' development process. Original design ideas should be valued by the companies and form the core competitiveness of the brands. Currently, Chinese companies rely on copying or partial copying, as do designers elsewhere. This may be an easy way in the short term; although, this can harm brand differentiation in the
long run. The distinctiveness is important to attract target consumers and to make their business stable in the markets. As discussed in section 6.5.1. better design collections normally come with higher degrees of iterations and a higher degree of down selection of design ideas.

- Rigorous selection of designs against themes and collection plans

Evaluation of design is an important step in the design process. Currently, brands are selling products individually even though they come with others as groups. The current design evaluation rule is to pick up individual good designs, where these designs are believed to be popular in the markets.


Figure 8-5: Design collection selection funnel

Design for a collection has different requirements. The current design selection method (section 6.4.) evaluates garments individually. It may work for their current individual items but cannot present collection coherency. A selection funnel (Figure $8-5)$ has been developed as a suggested model for these brands for upgrading along with check lists, including mood boards, developed with sources of inspiration, design themes, overall design directions, seasonal trends of design details, structure
of collections with specific percentage and numbers of different categories in the collections. The selection funnel (Figure 8-5) shows that, for collections, products need to fit to the brand style and themes, match other designs, and should be good enough to sell as an individual item. In the final stage, structure needs to be edited (looking for visual balance in colours, matching, ranges, different sale periods). It means there are more requirements for each design to be part of a collection rather than only designing and selling them with the current franchise sales model. Again, the product selections for collections should emphasise coherency in different levels: design styles, colour tones, matchable looks, and linked with common features.

### 8.3. Product improvement

One of the challenges for Chinese companies is that the designs are not good enough and not distinct enough. This requires improvement at product level (the blue area of Figure 8-1). The main target is to extend the product's lifecycle, reduce unsold inventory and make the brand sustainable (see section 7.5.3.) Desirable products are an opportunity to sell at a higher price point and increase the time users wear the garment. Ideally, this should lead to fewer unsold and discounted garments and extend the use of items of clothing. According to Fletcher (2010), design sustainability can be achieved if the consumers buy better, buy less and use for longer.

Lack of consideration for the longevity of use was identified as a sustainability issue in section 6.5.5. In western markets, cashmere products are designed in timeless styles and with good wearability. Companies are also beginning to offer repair services. In the current system, most big brands offer repair services and guidelines for how to look after cashmere items for washing and storing. The consumers' surveys and industry interviews showed that many Chinese cashmere owners know how to look after their garments. These Chinese design styles had ornate design, and unpopular ornate design details, with less popular colours, patterns, silhouettes or styles (see section 6.5.4.). Cashmere products should be designed with timeless (new classical) or high artistic aesthetic styles, in which the new classical should be:

- Great attention to details.
- Classical or natural colours, which are always popular and easy to match with other clothes.
- Simple silhouettes.
- Unique textures and different hems to create a fresh look.
- Design styles are classical and avoid fads.
- Brand features can be expressed in design details such as colour matching. proportions, texture, yarn mixtures, and colour use methods.

The high artistic, aesthetic styles rely on designers' personal interests and design abilities. These styles depend on who is hired as design leader for the brands.

### 8.4. An overarching strategy for implementation of these changes

The brands require improvement in many aspects across the whole system, although, it is unrealistic to change them all at once. Some companies had made quick changes to all their shops in the hope that their brand could immediately be successful in the market. The consequence was that their old franchisers did not follow these changes and companies did not have the patience and money to wait for the new brand's success. Some companies only made partial changes, e.g. collaborated with an individual designer to create a new collection, which was mixed with traditional designs without changing the business model. This made very little difference to the brands. Therefore, they believed the new designer and the collection were a failure. These reflect a misunderstanding of what design can do for a brand, and how to make design work.

Companies need to accept several key points.

- Brand upgrading is not a simple; time, money and patience are needed.
- Brand upgrading involves whole system change. It can start with the smallscale, but some key positions need to be filled with suitable professional people. A brand leader and a design leader are necessary to make this change.
- Start with a pilot for practising these changes.
- Understanding what design can do is important. Design can drive the change for building the brand images and make the products attractive. But design is
not a global force or panacea; its function can be limited without support of the sales system and brand building.

The systemic multicausal nature of the decline seen within these companies needs to have a range of recommendations implemented if sustainable solutions are to be arrived at. These changes need to be made gradually and starting with a few key points is an option.

1. Management commitment to save the brand and restructure the companies accordingly and thoroughly.
2. Select a suitable business/brand leader to lead this change.
3. Hire a design leader to manage the design team and the product directions. (An alternative is collaborations with an outside source such as design consultancy or design studios).
4. Hire new design team members to stimulate thought-provoking development.
5. Introduce a theme-based collection.
6. Develop theme and brand-based marketing material.
7. Select shops for pilot to try out ideas.
8. Upgrade the current franchiser models.

### 8.5. Creating a sustainable brand through design

Sustainability needs to be embraced as the direction for future business development (Black, 2008; Fletcher, 2008, 2010). The UN's three-pillar concept of sustainability has been adopted as the standard for this study. It shows that a balance between business, environment, and social aspects is required. The related sustainable principles, along with three pillars, need to be employed by designers and the brands in order to achieve sustainable outcomes.

- Business sustainability

The brands need to consider how to make their business sustainable. The whole lifecycles of fashion items need to be managed under sustainable principles ( Black, 2008, Fletcher, 2008, 2010).

- For the cashmere brands, clearly define what sustainable aspects the business wants to achieve and identify the associated challenges. For example, they may not choose to use recycle cashmere yarns (that may impact on their product quality), but they can make their products for longer use and encourage their consumers to reuse them (give to friends, family, or wear as inner layers for keeping warm).
- Establish the sustainable credentials for the brand and understand how this is communicated to the customer. This can be achieved by building and promoting brands with sustainable concepts (e.g. label the green products with details), share with consumers to influence their consumption behaviours, and build emotional connections with consumers.
- In addition, design improvement is suggested to reduce overproduction and unsold inventory to make the business sustainable.
- Environmental sustainability

Ensure that production is as sustainable as possible.

- For these cashmere brands, natural colours and natural dyes can reduce environmental impact and water use. Unfortunately, limited by technical development it seems only certain colours can be achieved (Li and Dai, 2019; Wu, Han and Wu, 2007).
- For the raw material, overgrazing results in grassland degeneration (Xu, 2002; Li and Zhang, 2005), desertification (Chen, 2015) and carbon emissions. A balanced way is suggested by reducing the number of goats by replacing the high number of low-production goats with fewer higher-production goats and encouraging farmers to change their herding methods to give vegetation space and time to recover (Hei, 2013; Li and Zhang, 2005) would be helpful. Offsetting the carbon emissions from goats could be achieved in partnership with afforestation programmes.
- Social sustainability

Ethical work principles need to be adopted for workers in fashion industries, such as fair wages, good working conditions, health and safety in the working environment. Collaboration with unethical suppliers needs to be avoided.

- Cashmere brands as luxury businesses can afford good working conditions for their employees. King Deer brand have large working spaces for their staff, and care about their health and safety. Their staff have two body-relaxing exercise breaks in the working day, for relaxing their shoulders and necks to reduce tiredness from sitting at computers or knitting machines. All their staff are local residents and with stable jobs in the company. They live at home with their families, and most people work for the company over their lifetime and have retirement pay.
- While western workers had been negatively affected by COVID-19, the different Covid management in China avoided many of the negative impacts.
- While human rights issues, such as working overtime and working in harmful and unsafe workplaces, are reported for bottom of the market companies like fast fashion suppliers and use of toxic materials, e.g. in the production of jeans in Guangdong province (Black, 2008). These are not reported for cashmere production.
- Animal welfare needs to be considered for how to make a balance between reducing environmental impacts and increasing animal health and happiness by giving them enough space. A suggested method is to exclude livestock from vulnerable land areas and use barns to house them for certain times of the year, providing feed rations instead of grazing (Hei, 2013).

All staff, especially designers and company leaders, need to be trained in sustainability and helped to understand what they can do in their roles to contribute to it. Some influencing factors lie outside the company's sphere of influence.

Cultural/educational enablers that need governmental changes are discussed in the next section.

### 8.6. Design education

Design education is an important driving force for the creative industries. Many Chinese designers do not possess sufficient design originality and creativity, because they have not been trained by their university or employers, see section 4.1. Western and Chinese design education has different concepts. At present, Chinese design education is theory heavy, lacks practice and misses links to industry.

Table 8-1: Comparison between Western and Chinese fashion design courses based on research interviews

|  | Western fashion design universities | Chinese fashion design universities |  |
| :---: | :---: | :---: | :---: |
| Design curriculum | Theory courses in fashion design account for $1 / 6$ of credits. The remaining time is devoted to creativity and design practice modules | Over 30 different courses |  |
|  |  | 1/3 general knowledge | e.g. philosophy, law, and English |
|  |  | 1/3 art-based courses | e.g. sketch drawing, fashion illustration, plane/colour/and 3D compositions |
|  |  | 1/3 professional courses | e.g. fashion design, pattern cutting, and clothes sewing |
| Teaching methods | Lectures, tutorials, workshops on context and theory. Scheduled learning time devoted to design projects | General knowledge | Lectures |
|  |  | Art-based courses | Lectures Practical classes |
|  |  | Professional courses | Lectures Practical classes |
| Learning | Self-study, workshop practice | General knowledge | Reading, discussion |
|  |  | Art-based courses | Practise with tasks |
|  |  | professional courses | Practise with tasks |
| Training objectives | Explore design potentials, define personal interests, intensive design training projects for systematic thinking | General knowledge | Knowledge and quality requirement of the degree |
|  |  | Art-based courses | Drawing skills Sense of art vision improvement Pattern design skills |
|  |  | Professional courses | Pattern cutting techniques Cloth sewing skills Fashion design skills, few design projects |
| Advantages | Creative ability, can express personal voice through design | Achieve certain quality of knowledge and related skills; students have the foundations to develop in different directions after graduation |  |
| Disadvantages | Relying on self-study may not be suitable for some students | Lack of systemic training in design process for creativity Not enough fashion design projects for personal interest, imagination, and design thinking logic |  |

Table 8-1 is an example of the difference between western and Chinese fashion education. For example, in the BA in Fashion Design at Birmingham City University, each year students only spend one-sixth of their time on modules to do with theory and context. The other modules are related to creativity and design practice project modules. Chinese universities (data from interviews) have more courses to study. Around of one-third of courses are general knowledge that require all students of the BA degree to study. Another third are art-basic skills for all art students. Finally, the last third is related to fashion design. Compared with the UK university, the practice and creativity opportunities are a much smaller part of the programme.

Another difference is that British universities teach students in a coherent way. Students study design skills, individual aesthetics development and critical thinking in their design projects. Importantly, the teaching modules in western universities concentrate on design thinking and the ideas development processes for design collections. This can help design students develop their own ways of working and personal design directions. This does require students to be good at self-study and self-management. Some may not be disciplined enough to develop their knowledge and skills through these design projects.

Chinese universities set different incoherent courses, taught by different teachers, with their students studying individual knowledge and skills in different classes. There is no integration of knowledge and skills. The issue is that some knowledge and skills were not relevant and never used by students. Their fashion design course included basic skills training, but few design projects. Furthermore, compared with western universities, these projects lack intensive training, and the students did not practise enough transferable design and creative skills.

Many Chinese design educators and researchers call for reform to improve current design courses (Bi, 2013; Liu, 2015; Chen, 2013). Knitwear students would also benefit from a balanced design course (e.g. with an industrial placement) with a greater focus on professional design practice. Normally, most university professors persist in teaching how they were taught themselves. Consequently, there are many obstacles to be dealt with, such as improving teaching teams, the students' and their
parents' understanding, university leaders' and educators' awareness and their conceptualisation for education improvement.

To create space in the curriculum, Chinese design universities could combine or reduce some basic art and professional courses to give students more time for training their design thinking and developing their own styles and creative voices, making, and justifying their own decisions, critiquing, and iterating problem-solving approaches.

As researchers are beginning to question the fast fashion system and look for methods to deal with the problems (Rahman and Gong, 2016), students now have more chance to evolve their design with sustainability concepts. Unfortunately, many young, graduated designers do not know their own responsibilities for sustainability, although they may always use the word 'sustainability' (Shen and Sethi, 2021). As Shen and Sethi (2021) suggest, a fashion sustainability course should be added for all degree students in fashion designs schools in China. Educators need to promote sustainability courses in universities to make designers create products with circular designs and know their roles for making the fashion industry more sustainable in the future.

Another disparity identified in the research is that between design universities and the relevant industries. New designers in China struggle to find a suitable profession after they graduate. Chinese fashion companies prefer to employ experienced designers, because new designers normally need to spend around two years to adapt to their design profession (section 4.1). Communications with industries is an important method to help universities to reform and improve their design courses with an industrial placement, see section 8.2.1. Building links with industries, such as expert lectures, mentoring, industry visits or offering internship opportunities to students, are good approaches. Successful internships can help students obtain working experiences, which should lead to future employment. It also benefits industry with new ideas from students. For example, in sustainability matters, a student may help in upcycling of knitwear inventory.

### 8.7. Conclusions

Many improvements are possible and necessary in the Chinese cashmere industry.
The following points cover the most important areas:

1. embrace design
2. embrace the principles of sustainability
3. commit to change
4. invest in and develop skilled professionals
5. understand the market and target customer
6. develop a clear brand identity
7. encourage team working
8. encourage design iteration
9. work in thematic collections
10. create valued garments for long-term use.

The above ten recommendations for change may not bring success in the short term, but they are the right direction that can make progress towards the brand's long-term survival and development.

## Chapter 9: Conclusion

This chapter is the conclusion of the thesis. It examines four main aspects to summarise the research outcomes, including the answers to the research questions, to fulfil the research aims and objectives; the contribution to knowledge; the limitation of the research, gives recommendations and suggestions for future research, and ends with concluding remarks.

### 9.1. The answers to the research questions

The research questions were developed with an overarching research question and three sub-research questions to drive the study forward. The answers to each question will be reflected upon and summarised in the following four sections.

RQ 1: What are the barriers and enablers for knitwear brands in the Chinese knitwear industry?

As the main research question, RQ 1 aimed at understanding the problems and strengths in Chinese knitwear's brand development. To answer this question, the challenges and opportunities facing the Chinese knitwear sector have been investigated. Based on analysis of the industry interviews, the case study, and the related literature (Chapters 2 and 4), the main barriers for successful brands were found, meeting objective one.

It can be concluded that conservative designs and blurry brand images, with low attractiveness for younger consumers, cause the brands to only have an ageing market. Too many similar products in the market led to price competition and high inventories that resulted in sustainability issues such as over production, material and manpower waste (Chapter 6). Furthermore, products were only offered for cold seasons. There were few categories of clothes with non-matchable designs. This was compounded by shrinking retail channels, as such the market share continues to decline. Although these brands have some enablers in technical excellency, luxury raw materials, good quality craftsmanship and good manufactory capabilities, these brands are underdeveloped with survival risks (Chapters 5 and 6).

The following three sub-research questions looked at the main research question from different perspectives.

RQ 1.1 - What role does design play in assuring a sustainable future for Chinese knitwear brands?

This first sub-research question aimed at identifying the role of design in the industry. The current design practices in a representative knitwear brand were evaluated (research objective two was met). Through an immersive field study, with DAR and close observation of the design process in the case study company (Chapter 5), the barriers to a thriving design culture and the reasons behind this were discussed.
Design plays a less important role than it should in the Chinese knitwear industry. Design processes were missing and their product offerings were based on individual items rather than coherent collections (Chapter 6).

Design should be a business resource to build sustainable brands in the future (Chapter 2). Design can play a significant role through improvement in the design process, toward higher quality collections, and distinguished brands, through extending products' lifecycle, reducing unpopular products and unsold inventories in the industry (Chapters 7 and 8).

RQ 1.2 - What role does the organisational set up or structure play in enabling and hindering Chinese brands?

To answer the second sub-research question, RQ 1.2, the organisational structures and their current business models were investigated and evaluated through a case study with the representative brand, King Deer (Chapters 5, 6 and 7). The brand's main drivers were examined. These included the current franchise buying and selling model, the internal reward structure, leadership and teamworking, product direction, and brand management (Chapter 6). These investigations helped to understand both the challenges and strengths that influence embedding design into the organisational context as part of effective brand management (research objective three was met).

RQ 1.3 - How can the design culture in Chinese fashion brands be improved?

RQ 1.3 focused on design culture that consisted of design and its cultural environments. The design roles in the industry were understood through RQ 1.1. In addition, the DAR was developed with a western design approach as a bridge for comparison with the current design processes (Chapters 5 and 6). The current design and business running systems have been evaluated for understanding the problems in detail with RQ 1.2. Therefore, RQ 1.3 is a comprehensive position to explore how design and brand management can be improved in a sustainable way (research objective four was met). Through the literature review, twenty-one factors to enrich design culture were discovered (Chapter 2). These were evaluated with the case study brand (Chapter 6). Based on these understandings, the answer to RQ 1.3 were presented, with three levels for improvement suggested and recommendations that include business, design, and product aspects within a sustainability context (Chapter 8).

### 9.2. Contribution to knowledge

- The causes of the decline in Chinese cashmere brands were identified (Chapter 6)

The research investigated and analysed the organisational context, business strategy model, brand management and product design within the case study of Chinese cashmere brands. The following four main reasons were recognised as key reasons that cause these brands to have continually declining trends.

> - Lack of brand vision and leadership

The leaderships lack vision for how to organise and manage their brands. This can be seen in many aspects. The brands were not built with distinguished characteristics, which include no clear brand identity, and their products were highly similar to their competitors'. The businesses were focused on selling more pieces without long-term brand development plans and strategies.

- Lack of understanding of the target market or customer

The brands currently do not have clear market segments and target consumers. They attempted to cover all consumers from 20 to 80 years old, both men and women, but they only achieved market shares with the elderly. The unfocused consumer groups and market settings caused difficulties for consumers in understanding the products the designers created. The brands were not building direct links with their consumers because they use franchiser business models.

- Franchiser business models

The current franchiser business model is a buy-out model. The brands offer designs and products based on each franchiser's orders. In this system, the brand sells their products to franchisers. The franchisers take the unsold inventory risks from the retail market but have freedom to select the designs they want to control their risks. Furthermore, the brand images in the retail shops were not controlled by the brands. The franchisers look backwards and cause the brands to be more conservative. Importantly, this causes the brands to miss their consumers' fashion expectations.

- Focus on solely selling cashmere garments

These brands focus solely on selling cashmere garments produced in their own factories. This limits the brand's opportunity for providing all necessary product categories, e.g. garments for the lower half of the body. The current products mainly focus on the cold seasons. They use a few types of similar cashmere yarns, which are difficult to build into a full-range, attractive brand, especially for younger markets.

- Analysis of the prevailing culture in Chinese knitwear brands (Chapters 6 and 7)

Design culture was identified as being missing in these brands. Design plays just a basic role for products' surface decoration rather than being a mechanism for brand building in the Chinese knitwear industry. That was reflected in product offerings, design methods, logic, vision, and management in the following key aspects.

- Lack of cohesion in seasonal offerings due to missing collections and themes.

The current brands offer groups of individual products. These products were not developed with themes for coherent collections. Designers rely heavily on existing products that they found in the markets. Their designs do not start with a source of inspiration. This made their products difficult to match with each other. The structures were not balanced. There were too many similar tops. Designs were developed individually with less chance to be sold as completed looks.

> - Lack of iteration

Design in these brands had a short development process. Iterations were not encouraged by the management system. Designers were managed with success rates in their reward system. Unsuccessful garment samples were seen as waste rather than being the normal part of iteration cycles in the design process. Designers were not given enough time, money and space to push themselves for better designs.

- Lack of integrated design vision and leadership

Most of these brands lacked design leadership and integrated design visions. The brands' positionings were not clear. Designers could not define the right directions for the brands. The current design teams lacked technical skills and logic to design coherent collections. Their design visions were with ornate design styles, which limited their ability to offer attractive products for younger generations.

- Analysis of the lack of awareness of sustainability issues in Chinese companies (Chapters 6 and 7)

Issues of low awareness of sustainability are analysed based on the three-pillar concept. Most Chinese knitwear brands were unsustainable. The franchiser business model, and lack of consumers' understanding, leads to 'over production' with high unsold inventories. The effect is material, water, manpower waste and business survival risks. Designers lack sustainable fashion knowledge, which hinders their roles in design sustainability for extending products' lifecycle through accomplished design. The companies were not focused on building sustainable brands but
followed garment policies for environmental protection in the dying and production process, although major brands do offer repair services for customers' cashmere items to lengthen their use. Worryingly, the increase in the use of raw materials has led to grassland degeneration by over grazing of cashmere goats. Culturally, cashmere products were not landfilled, but may remain in the companies' warehouses for decades if they cannot be sold.

- Potential improvements for Chinese cashmere brands (Chapter 8)

The suggestions and recommendations of potential improvement were contributed for these knitwear brands. Systemic improvements were discussed at three different levels. In the business level, the higher leadership needs to make decisions for these changes. There is a need to invest in people for three key positions: brand leaders, design leaders and better skilled designers. Thereafter, brand leaders need to improve the business model, brand management, and marketing. Design leaders need to lead designers, with teamworking, for offering high-quality collections. Design with themes, original design ideas and iterations to make coherent collections are required. It is suggested to design garments with timeless classical styles for longevity of usage. The aspiration would be to create a sustainable brand through design with economic, environmental, and social sustainability.

- Practical example of design for coherent collection development in cashmere knitwear (Chapter 5)

An example of how to build a coherent knitwear collection was contributed through the DAR collection. Design processes were explained along with the DAR knitwear collection development. It included sources of inspiration, research, theme developing, colour scheming, original ideas development, examples of design iterations, and how the design elements use and share the western approach. It fulfils a research lacuna both in practical and theorical dimensions for the Chinese knitwear sector.

### 9.3. The limitations of the research

- While DAR shows that it is possible to produce an interesting collection in and for a Chinese cashmere brand, the suggestions have not been implemented in practice.
- This thesis draws on the limited literature on knitwear design processes, DAR and western teaching. An area of further research would be to compare western cashmere companies.
- Many of the identified issues are deeply situated in Chinese culture and a wider analysis of design culture in China is needed to further the research.
- Following up interviews to investigate further into the understanding of key concepts e.g. what is design? What is the role of a designer? What are the expectations from them? would be noteworthy to understand how practice can be changed.
- While the thesis identified the current understanding of sustainability in Chinese companies and suggests improvements, a more in-depth analysis of obstacles to becoming a more sustainable company is now needed.


### 9.4. Recommendation and suggestion for future research

- Analysis of influences of traditional and contemporary Chinese culture on knitwear practices

Culture is an important influencing factor for design practices including knitwear design, despite current research being less involved with this field. Analysis of both traditional and contemporary Chinese culture in history, society, and business are helpful to understand current knitwear practice and explore solutions for design improvement in knitwear sectors.

- Analysis of influences of traditional and contemporary Chinese culture on improving sustainability

This study involved cultural influences from both traditional and contemporary Chinese culture, but it is not the central focus of the study. More research, with deeper analysis of these two aspects, is needed to increase sustainability
awareness of society and businesses in the future to find a way to deal with sustainability issues in China.

- Improvement in Chinese design education

Expansion of Chinese design education was identified by Chinese scholars, and some improvements have been made in top design universities. The effects of, implementing systemic change needs more research.

### 9.5. Concluding remarks

The research was instigated on the author's working experience and understanding of Chinese knitwear brands. It is an under-researched area. Limited research can be found in both the Chinese knitwear industry and knitwear design in English and Chinese research journals. The research undertook field studies with industry interviews, case studies and design action research. This helped to identify the research problems, investigate the reasons behind them, and explore possible solutions. The research has taken a design lens for looking for answers to build sustainable Chinese knitwear brands through future design improvement.

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Appendix 1: Abstracts of papers

# Appendix 1-1: Book chapter in Chinese Consumers and Fashion Market 

Zhang, X., Gale, C., Eckert, C. (2018). 'Chinese consumers and the knitwear fashion market. In: Xu, Y., Chi, T., Su, J.(eds.) Chinese Consumers and the Fashion Market. Springer, Singapore.

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#### Abstract

: The Chinese knitwear industry is in crisis and needs to adapt to survive. Chinese knitwear brands face the problems of a shrinking domestic market, an ageing consumer base and lack of appeal to new generations. Meanwhile, products created by the industry are becoming more homogeneous.

Influenced by globalization, Chinese consumers have a wide choice of products with different styles and brands in the fashion market. As more and more international brands enter into the Chinese market, offering clothes that appeal to younger consumers, the challenge for many established Chinese fashion brands, especially in knitwear, is increasing.

This paper reports on research into creative design in Chinese knitwear brands, which revealed that the Chinese knitwear industry is lacking a creative culture. In many knitwear companies in China, the lack of understanding of the value of design stems from a number of factors: restricted creative freedom for designers in companies and an absence of practice in the design education system for creative processes to develop. This results in companies lacking confidence in their designers' creative abilities.

This paper introduces the Chinese knitwear market and fashion consumers in China. It discusses why many Chinese consumers prefer luxury or international brands rather than domestic brands and analyses the gaps in creative design between Chinese and successful international brands. This is based on research into consumer behaviour for knitwear. It concludes by making recommendations on how the industry can turn things around.


## Key words: <br> Chinese fashion market, Knitwear design, Consumer behaviors, Design culture, and Consumption trend

Available at:
https://link.springer.com/chapter/10.1007/978-981-10-8429-4 9
https://www.researchgate.net/publication/323661979 Chinese Consumers and the Knitwear Fashi on Market

# Appendix 1-2: Conference paper in GFC2018 

# Could creative design help Chinese knitwear bands develop? 

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## Abstract:

Chinese knitwear brands have been losing their market share over the past decades. Their traditional market share is shrinking, and the consumer base is aging. There is also homogenization in products and brands across the Chinese knitwear industry, so that brands lose their distinct identify. This paper argues that a lack of a creative design culture is a contributing factor to the challenges Chinese knitwear brands face; and proposes solutions on how to improve their competitiveness for their business sustainability.

The paper is based on studies conducted between 2014 to 2017; that included 48 face-toface interviews with business and academic stakeholders, 2 online consumer surveys with 883 people, an industrial case study and design practice research, where a knitwear collection was created in collaborated with a Chinese knitwear brand for exploring future design direction. This paper concentrates on design practice for using Chinese design aesthetics to improve the culture sustainability as a means of developing brands' competitiveness in their fashion business; and attracting younger generations to become their new consumers. Furthermore, the paper also addresses the behaviour of knitwear customers in China through literature studies and observation; and argues that homogenisation of designs across brands and a lack of awareness of international fashion alienates younger customers, despite consistent high-level quality.

The results of the design practice research indicate creative design and distinguished brand characters can attract different aged consumers, including younger generations. $95 \%$ of surveyed people preferred high quality knitwear with unique design styles and Chinese cultural design languages. The conclusions suggest that knitwear companies need to develop creative design and brand culture by re-building brand positioning and market segmentation and re-designing their products. In addition, suggesting using Chinese design styles can help build a brand's distinguished character and design style. Furthermore, it should meet their targeted consumers real needs, which is an essential condition for the future success of knitwear brands.

Key words: knitwear brand, Chinese markets, design creativity, design culture, sustainability. Available at:
http://gfc-conference.eu/wp-content/uploads/2019/02/ZHANG-ET-AL Could-creative-design-help-Chinese-knitwear-bands-develop.pdf

# Appendix 1-3: Conference paper in ADEWS 2015 

# The creativity gap in Chinese knitwear industry 

X. Zhang., C. Gale, Birmingham City University

CI. Eckert, Open University


#### Abstract

: The Chinese knitwear market has suffered a serious phenomenon of homogenization for long time, and the market has been shrinking during the last decade, because the lack of design creativity in Chinese knitwear brands. This research focuses on the internal creativity culture in knitwear companies and the influencing factors in design process. in addition, it explores the reasons for to the situations of design and styles in design management and educational in China. This is in order to find a way to help Chinese knitwear industry to deal with their problems throughout develop their designs and images.

Key words: design creativity, knitwear design, Chinese brands, innovative culture.

\section*{Available at:} https://www.researchgate.net/profile/Xin-Zhang- 171/publication/283492228 The Creativity Gap in Chinese Knitwear Industry/links/563a991f08aee d0531dcb733/The-Creativity-Gap-in-Chinese-Knitwear-Industry.pdf


## Appendix 2: Interview questions in Chinese and English for knitwear designers, product managers, marketing managers, students and teachers.

## 2-1. Interview questions for Knitwear Designers

## A. Design and image

1. How do you feel about the style of your brand? Do you think the knitwear products from your company are creative? Do you feel excited by the design process and why?
2. How many collections will be designed every year? Roughly what size is each collection, and how much of it is knitwear?
3. Colour, texture, pattern, silhouette - in which element is there the most freedom to create in the design process in your company?
4. What kinds of techniques are important in your work currently?
5. What aspects of design do you feel responsible for?
6. How long is the design cycle? And how many people will be involved in?
B. Design and management process
7. How does the design process work in the design department?
8. How long should you spend on preparing for new collection every season? How to do it?
9. Do you care about the trends forecast and fashion trends from other brands when you are making new knitwear collection plans for your company? Do you use a mood board to help you express your ideas to other colleagues from other departments? What are there on your mood board?
10. How about the designers' daily jobs? Do they have to ask design director to check their design drafts? How long do they spend on from ideas to their designs? Do they have daily or weekly tasks?
11. Do you have checking systems for designers' performance? If so, what are they?
C. Brand and company culture and history
12. What are the reasons the brand became such a success?
13. How about the company and brand history? Did it begin as a business company, factory or design studio?
14. When was the company formed and how many staff work in the whole company?

## D. Design management and communication

15. What are the most difficult parts of your working process? And how do you deal with them?
16. How about the relationship between the design department and other departments? What is the most difficult part of communicating with each other?
17. How about the relationship between the design department and manufacturers? Do any innovative design ideas easily become samples or not? If not, how do the designers deal with the problems in the design process?
18. How many designers are there in the design department? How long have the designers been working in the company?
19. How many people are involved in the design process?
20. How often are meetings held to discuss designs and products with other departments? Which departments or positions are involved in meetings?
21. Who totally makes the decision for the collection or styles? Does the design director make the decision?

## E. Customers and markets

22. What do you think your customers like about your products? And why?
23. Which age group is the target consumer group for the brand? Does that totally match the brand position or not in the market, and why?
24. How many stores does the brand have in the world? Are these stores retail stores or wholesale and online?

## F. Designers' education and working environments

25. How many designers in the company studied knitwear design at their college/university? How many designers studied Fashion Design and began to design knitwear in their first job?
26. How many hours do you work per week? Do you have to work overtime before fashion shows or purchasing meetings? If so, how long and how often?
27. How often is a new designer employed in your department? Do designers always change companies or brands? If so, how often do they change the jobs?
28. What are the main reasons for designers changing jobs? Is this because of brand style, income or salary, even the working process?
29. What do you like to do in the company, do you like to talk to your bosses? Do you have meetings with the marketing department?
30. If you had an opportunity to change your specialism would you want to continue to study and work as a knitwear designer? If not? What job would you want to do and why?

## 2－2：Interview questions for knitwear designers in Chinese

## 服装（毛衫）设计师采访问卷

## A．设计与形象

1．公司现在的设计风格是你最喜欢的风格吗？你认为公司产品在设计创意方面做的如何？在设计过程中，那部分工作你感觉兴奋和期待？
2．每年需要出几个设计系列？大约每个系列需要多少款式？毛衫的比例是多少？
3．颜色，质感，图案和线条，那些方面你们有比较大的空间去发挥设计？
4．目前，对你的工作来说，什么样的技术支持是最重要的？
5．你的工作职责有那些？
6．设计完成一个系列通常要多长时间？需要多少人参与其中？

## B．设计和管理流程

7．你们设计部的工作流程是怎样的？
8．每个季节开始新系列的时候，都是怎样的一个筹备过程，这个过程需要多长时间呢？
9．作为一个羊毛衫品牌，你们关注流行趋势和其它时装品牌的趋势吗？需不需要要做概念板展示设计思路和其它部门沟通呢？如果要做概念板的话，一般都包括那些内容？
10．每个设计师的分工是怎样的？需要给设计总监审核图纸吗？每天或每周有规定的工作量吗？做设计的时候，一般从设计灵感到交定稿需要多少时间？
11．你们有设计业绩的考核制度吗？如果有，怎么界定的？业绩和工资挂钩吗？

## C．品牌与公司的文化和历史

12．你觉得什么是你们品牌成功的关键因素？
13．谈谈公司和品牌的起源，最早的时候是工厂还是设计公司？
14．公司或品牌是那年创建的？公司一共有多少个员工？

## D．设计管理和沟通

15．你工作中最大的挑战是什么？如何去化解？
16．如果设计部和其它部门在设计和形象方面有分歧的意见，如何去沟通解决？设计部通常多久与其它部门开一次会，去商讨设计和产品呢？
17．设计部和工厂的关系是怎么样的？当遇到难做和挑战技术的设计时，工厂能够完全配合完成样板吗？如果这个过程不流畅，一般怎么去协调？
18．设计部有多少的设计师？他们都在公司工作多久了？
19．从设计想法到完成样板，需要多少人配合和参与工作？
20．设计部多久会和其它部门开一次会议？都有那些相关部门参与会议？
21．谁决定产品的风格和款式？是设计总监独自完成吗？还是需要和其它部门开会决定？

## E．消费者和市场

22．你觉得公司的产品完全符合消费者的需求吗？
23．公司的目标消费群是那个年龄段？产品风格和定位是完全吻合的吗？如果有不足，那些反面需要调整？
24．你们品牌一共有多少店？都是零售店，还是包括批发或代理和网店呢？

## F．设计师的教育背景和工作环境

25．有多少设计师在大学的时候是学针织设计专业的？有多少设计师在大学是读的是服装设计，然后在工作后开始设计毛衫的？
26．每周你需要工作多少个小时？订货会或产品发布前夕，需要加班吗？如果加班，一般会加多久的班？
27．你们设计部一般多久会来一个新设计师？设计师的流动比较频繁吗？如果是，一般新设计师多久换一次工作？

28．你认为设计师换工作的主要原因是什么？是设计风格融入问题，还是工资待遇问题，或者工作过程中的问题呢？
29．除了设计，一般你喜欢在公司做什么？你会主动找上司给出工作建议吗？
30．如果你有机会重新选择，你还会选择设计专业去读，毕业后还会继续做设计师吗？如果不做设计师，你最想做的工作是什么呢？为什么？

## 2-3: Interview questions for Product Managers

## A. Product management and communication

1. How long you have worked in this company as a product manager?
2. How do you make the decision about the products? What is the basis for the selection of the new designs? In this process, how do you integrate the different viewpoints of designers
3. How many collections will be put on the market every year? What the size of the collection?
4. How long is the production cycle?
5. What would you like to do in the company? Do you offer feedback and suggestions to your line manager?
6. What kinds of support from other departments do you receive? How does it work?
7. What's the most challenging part of your working process, and how do you deal with it?
8. How about the product managers' educational background? Did they study some course related fashion industry or marketing in their university time?
B. Customers and markets
9. Do you think the designs and styles from your company totally meet the consumers' real needs? If not entirely, which aspects could be improved in the future?
10. Which age group is the main target consumer group of the brand?
11. Could you describe the target consumers' lifestyles and consumption habits?
12. How many collections will be put on the market every year? What the size of the collection?
13. How many stores are there selling the brand? Which countries or areas are the main markets?
14. Which price range is popular in each season? How many sales from knitwear are made?
C. Brand and company culture
15. What is the company culture?
16. What is the brand culture?
17. What is the brand history? Who created it and how did it evolve?
18. Does the company have its own manufacturer for production? If not, in which country is the knitwear manufactured?
D. Innovative design and company identity
19. What is the brand identity and why?
20. How often do you have meetings with the design department?
21. How many people are involved in the design process? How many people are involved in making decisions about production? What are the most influential factors in this process?
22. How important do you think original ideas are in the design process?
23. How important do you think it is to use new materials in every collection?
24. Is innovative design a significant driving force for brand development, or a risk for the market?

## 2－4：Interview questions for product managers in Chinese

## 产品经理采访问卷：

## A．产品管理和沟通：

1．你在这个公司做产品经理多久了？
2．你怎么做关于产品的决定？选择新产品的依据是什么？在这个过程中，如何去协调于设计部的分歧？
3．每年有多少设计系列被投放市场？每个系列大约需要多少款式？
4．生产周期是多长？
5．工作之外，你喜欢在公司做些什么呢？你会主动提建议或反馈给你的上司吗？
6．你的工作需要其它部门提供那些支持呢？都是怎么运行的？
7．你工作中最大的挑战是什么，如何去应对呢？
8．产品经理的教育背景通常是怎么样的？在他们的大学时代，他们是学习时装或市场相关的专业吗？

## B．消费者与市场

9．你认为公司的款式和风格完全符合消费者的需求吗？如果还有不足，那些方面需要提升？
10．什么年龄段的消费者是你们的目标消费群？
11．你们目标消费群的生活方式和消费爱好是怎样的？
12．你们每年有几个系列投放市场？每个系列大约多少款式？
13．你们一共有多少个销售店？全部是零售吗？有没有批发或代理商？那些国家或地区是你们的主要市场？
14．你认为你们品牌成功的主要原因是什么？

## C．品牌和公司文化

15．公司的企业文化是什么？
16．公司的品牌文化是什么？
17．公司的品牌历史是怎样的？谁创建的？开始是设计工作室还是工厂？
18．公司有自己的工厂吗？如果没有，是在那个国家或地区加工呢？

## D．设计革新和公司的特征

19．品牌的特征是什么？为什么是这么定位？
20．通常多久会和设计部门开一次会议？
21．有多少人参与设计相关的工作？多少人参与决定要生产的款式？主要影响因素是什么？
22．你认为在设计过程中原创设计非常重要吗？
23．你认为每个季节的新系列都需要运用一些新材料吗？新材料的运用重要吗？
24．革命性的设计对品牌来说是重要的推动力呢？还是意味着市场的风险？

## 2-5: Interview questions for marketing managers

## A. Consumers and feedback system

1. What kinds of people are the target consumers for the brand?
2. Which age group is the main consumer in the brand?
3. What kinds of lifestyles the aimed consumers prefer?
4. How to collect feedbacks from consumers?
5.What kinds of methods are used to communicate between company and consumers?
5. How to built the relationship between brands and consumers?

## B. Brands and publishing systems

7. How to develop the brand influence every season?
8. Which kind of purchasing methods are used for the brands?
9. Does the brand hold fashion shows in fashion weeks or other events?
10. How often publish the designs and images of new collections in medias?
11.how often hold purchasing meetings every year?

## C. Products and images

12. Does the brand have its own image spokespersons? If so, why choose these people? And how often change a new one?
13. Please using at least three key words to describe the brands style?
14. Do you think the brand images and designs need to improve or change?
15. Compare with the competitive brands, what kinds of advantages and disadvantages are in the brand?
16. Do you think the designs and images should more creative?
17. If the brand has to change new styles and images, what kinds of things have to consider first?
18. How often have the meetings with designers and other staff for designs and images?

## D. Sales system and markets

19.How many stores of the brand in the world? How about the percentages of chain stores, wholesale or online shops?
20. Which areas (cities) are the main markets for the brand?
21. What are the main sales points of the brand? Do you think these sales points are stronger than the competitive brands?
22. How many products can be sold every year? What kinds of products are popular?
23. How about the sales performance recent years? Does it improve or not? And why?

## 2－6：Interview questions for marketing manager in Chinese

## 销售经理采访问卷：

## A．消费者反馈体系：

1．品牌的主要目标消费者是什么群体？
2．那个年龄段的消费者是品牌的主要顾客群？
3．品牌目标消费者的生活方式是怎么样的？
4．品牌如何去获得消费者的反馈信息？
5．公司和消费者之间是怎么沟通的互动的？
6．如何在消费者和品牌之间构建长久的关系？

## B．品牌和发布系统

7．每个季节如何去扩大品牌的影响力？
8．品牌通常用什么方式推广？
9．品牌会在时装周或其他活动中举办时装 show 吗？
10．您公司多久会在媒体上发布一次新设计或新系列？
11．一年会举办几次订货会？

C．产品和形象
12．品牌有自己的代言人吗？如果有，为什么选择这个人？通常多久会换一次新的？
13．请用至少三个词来描述下你们品牌的风格
14．你认为品牌的设计风格或形象有哪些需要改进的地方吗？
15．对比竞争品牌，你们品牌的优势和劣势都有那些？
16．您认为品牌的设计和形象需要更加有创意吗？
17．如果品牌需要去换个新的风格和形象，您认为最先考虑的应该是那些因素？
18．你们会和设计部门开一些关于产品设计和形象的会议吗？如果开，一般多久开一次？

## D．销售体系和市场

19．你们一共有多少店（全国或全球）？大概有多少是专卖店？有批发和网店吗？
20．那些地区（城市）是品牌的主要销售市场？
21．品牌的主要买点是什么？您认为比较其他竞争品牌，这些买点是不是很有优势呢？
22．每年可以销售多少件衣服？大概是什么品种特别受欢迎呢？
23．近几年的市场表现如何？是逐年增长还是有所下滑？为什么？
24．您认为市场需要更有创意的设计吗？您如何看待毛衣品牌产品之间识别度不高这个问题？

## 2-7: Interview questions for Design Students

A. Courses and education system

1. Why did you choose this subject as your specialism?
2. How many classes per week do you attend that relate to theory?
3. How much time do you spend on practice in the workshop per week?
4. Which is the most exciting part of your studies and why?
5. Which is the most difficult part of your course, and how do you deal with it?
6. Do you think the teaching methods and systems at your university are good for students who want to become fashion designers? If not, which part should be changed or developed in the future?
7. Which subjects are your favourites on your course and why?

## B. Future and career

8. What are your plans for the future?
9. What is the employment situation in the fashion industry? Is it easy or not to find a design job in your country?
10. If you can't work in fashion, what kind of job you would like?
11. What is the most important quality for a designer in your view? And why?
12. What do you think are the five most important skills, as design students need to learn, to be a designer?

## C. Study method and culture background

13. How often do you visit museums and exhibitions?
14. Which designers and their works have influenced you and why?
15. Were you a creative child? How old were you when you decided to study Fashion?
16. Which style is your favourite, and is that influenced by your cultural background?

## D. Creativity in design

17. How do you develop new ideas in your design process? Where are the inspirations from?
18. How important do you think original ideas in your designs?
19. How important do you think it is to use new materials or techniques?
20. Creativity, quality, craft, materials and popularity; which do you think is most important element for a new design?

## 2－8：Interview questions for Design Students in Chinese

## 服装（纺织）设计专业学生采访问卷

## A．课程和教育体系

1．你为什么会选择这个专业？
2．你们每周有多少课是理论课或文化课？设计课程是以怎样的方式上课的？
3．每周，你大约会花多少时间在琏㧅室或相关的工房做设计实践？
4．在学习中，你最喜欢和享受的部分是什么？为什么？
5．你的课程中最难的是哪部分，如何去克服这些困难？
6．你认为你们学校的教育体系和教学方法对你今后成为一个设计师有帮助吗？
如果不完全有帮助，你认为那些需要改进？
7．你最喜欢的课程是什么？为什么？

## B．未来与事业计划

8．你对未来的规划是什么？
9．在你的国家或城市，服装业的就业情况怎么样？毕业后容易找到设计师的工作吗？
10．如果你不能够在时尚行业找到理想的工作，其它什么工作是你最想做的？
11．在你心目中，想成为设计师应该要具备怎么样的素质？为什么？
12．你认为要成为一个设计师，最重要的五个能力或技能是什么？

## C．学习方法及文化背景

13．你多久去一次博物馆或艺术展览？
14．哪些设计师对你影响最大？为什么？
15．你是个有创造能力的孩子吗？你是在什么时间决定将来要学习设计的？
16．你最喜欢哪种设计风格，这和你的个人文化背景相关吗？

## D．设计与创意

17．你如何把你的新想法发展成为新设计呢？这个过程是怎么样的？你的灵感通常来自于哪里？
18．在你的设计中，你认为原创的想法和主意有多重要？
19．在设计过程中你认为运用新材料和新技术很重要吗？
20．创意，质量，工艺，和受欢迎程度，对于新设计而言，哪一个是最重要的，为什么？

## 2-9: Interview questions for the teaching staff working in Fashion (Knitwear or Textile) Design

## A. Curriculum structure and educational system

1. Is there a knitwear design specialism offered in your university?
2. How many BA courses in fashion, knitwear or textile design will be offered at your university?
3. What percentage of courses is offered theoretical knowledge and design practices for BA students?
4. Do you think the existing teaching systems are suitable for design students to develop their careers in the future? If not entirely, which parts should be improved in the future?
5. How many days per week should students do their design practice in workshops per semester? And how important is the practice for students' careers?
6. Do teachers in your university have to follow requirements or textbooks from the university or regulatory body as a teaching standard?
7. Who makes the decisions about the teaching methods and approaches for the subjects in fashion, knitwear and textile design?

## B. Teaching experiences and methods

8. How long have you worked as a teacher in the field of fashion? Which subjects have you taught?
9. Do you like the teaching methods on your course and why?
10. Do you have some specialized and successful teaching methods?
11. How much freedom of teaching methods is there for teachers in the Fashion or Textile Design course?
12. What's the most challenging aspect of your job, and how do you deal with it?
13. Are there any special teaching methods used in your university, which differ from other schools of Fashion and Textile design?
C. Educational concept
14. Do you think creativity is more important than other skills for a design student?
15. How are the grades on your degree courses assessed and awarded?
16. What do you think are the five most important skills that students need to learn, to be a designer?
17. What is the concept for design education in your university? And why?

## 2－10：Interview questions for the teaching staff working in Fashion（Knitwear or Textile）Design in Chinese

## 设计专业教授和辅导老师采访问卷

## A．课程设置和教育体系

1．你们大学有针织设计专业吗？如果没有，纺织设计专业或时装设计专业会教相关的知识吗？
2．在服装（针织，纺织）专业的本科阶段，需要学习多少门课程？这些课程学生在设计中都会用到吗？
3．就本科设计课程而言，理论知识和实践课程大概是什么比例？
4．你认为现存的教育体系开设的课程是适合培养学生将来就业的吗？如果不完全适合，那些方面需要改进？
5．每学期学生应该花多少时间在设计实践中？设计实践对学生的设计事业将会起到什么样的作用？
6．教育部对每个大学的服装或纺织设计课程，有没有具体统一的要求标准？大学有自己进一步的规定和要求吗？
7．是谁负责服装设计或纺织设计的教学方法和课程的制定和设置呢？
B．教学经验和方法
8．你在时尚专业做老师多久了？你负责教那些课程？
9．你喜欢你们大学的教学方法吗？为什么？
10．你自己有什么特别有效的教学方法吗？
11．每个老师，在服装设计或纺织设计的教学方法方面有多少自由度可以发挥？
12．你工作中最大的挑战是什么？如何化解这些挑战？
13．你们大学有没什么特别的，完全不同于其它大学同类专业的教学方法？

## C．教育理念

14．对于设计类的学生，你认为创造性是比其它技能更重要吗？为什么？
15．设计类课程怎么评定学习成绩和等级？是考试吗？如果是，都怎么考？
16．你认为设计师最应该具备的的五个技能是什么？为什么？
17．你们大学的设计教学理念是什么？为什么？

Appendix 3：Online survey questionnaires
Appendix 3－1：Online survey 1 Consumers dressing and consumption habits in knitwear in Chinese（with English translation）

## 女性消费者关于毛衫的购买和穿着习惯调查

## 1．每个季节你会购买几件毛织类服装？［单选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 少于 2 件 | 285 |  | $63.33 \%$ |
| 3－5 件 | 149 |  | $33.11 \%$ |
| 5件以上 | 16 |  | $3.56 \%$ |
| 本题有效填写人次 | 450 |  |  |

2．你买新毛衫的主要原因是［多选题］

| 选项 | 小计 |  |
| :--- | :---: | :---: |
| 设计漂亮 | 288 |  |
| 易于例 |  |  |
| 搭配其它衣服 | 324 | $64 \%$ |
| 暖 | 192 |  |
| 本题有效填写人次 | 450 |  |

## 3．那种类型的毛衫你最喜欢穿［多选题］

| 选项 | 小计 |  |
| :--- | :---: | :---: |
| 贴身保媛内衣类 | 116 |  |
| 圆领或 V 型领套头衫 | 258 |  |
| 外套型毛衣 | 254 |  |
| 开胸外套 | 150 |  |
| 本题有效填写人次 | 450 |  |

4．当你购买毛衣的时候，以下那些因素是你做决定的主要原因？［单选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :--- | :--- |
| 年 |  |  |  |
| 时髦的新款式 | 223 |  | $49.56 \%$ |
| 漂亮的颜色 | 54 |  | $12 \%$ |
| 上等的原料和质量 | 173 |  | $38.44 \%$ |
| 本题有效填写人次 | 450 |  |  |

5．你每年大概用在购买服饰上的花费大约是：［多选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :--- | :--- |
| 少于 5000 | 235 |  | $52.22 \%$ |
| $5000-10000$ | 172 |  | $38.22 \%$ |
| $10000-30000$ | 61 |  | $13.56 \%$ |
| $30000-50000$ | 11 | 1 | $2.44 \%$ |
| 多于 50000 | 2 |  | $0.44 \%$ |
| 本题有效填写人次 | 450 |  |  |

6．如果你想买一件毛衣，通常，什么价位比较适合你？［单选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :--- | :--- |
| 低于 500 元 | 268 |  | $59.56 \%$ |
| $500-1000$ 元 | 144 |  | $32 \%$ |
| $1000-3000$ 元 | 32 |  | $7.11 \%$ |
| $3000-5000$ 元 | 5 |  | $1.11 \%$ |
| 高于 5000 元 | 1 |  | $0.22 \%$ |
| 本题有效填写人次 | 450 |  |  |

## 7．你在冬天会穿几层衣服？［单选题］

| 选项 | 小 |  |
| :--- | :---: | :--- |
|  | 比例 |  |
| 三层：大衣（棉衣）＋毛衣＋内衣（bra） | 282 | $6.67 \%$ |
| 三层：大衣（棉衣）＋衬衣＋内衣（bra） | 89 | $19.78 \%$ |
| 四层：大衣（棉衣）＋毛衣＋保暖内衣＋内衣 <br> （bra） | 75 | $16.67 \%$ |
| 多于四层 | 4 | $10.89 \%$ |
| 本题有效填写人次 | 450 |  |

8．冬天你的腿上（下半身）通常穿几层服装？［多选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 条牛仔裤 | 90 |  | $20 \%$ |
| 一条紧身裤 | 87 |  | $19.33 \%$ |
| 裤袜加裙子 | 155 |  | $34.44 \%$ |
| 光腿穿裙子 | 10 | 1 | $2.22 \%$ |
| 牛仔裤加保暖裤袜类 | 195 |  | $43.33 \%$ |
| 外裤＋毛裤＋秋裤 | 72 |  | $16 \%$ |
| 本题有效填写人次 | 450 |  |  |

9．为了看衣服或买衣服，你多久去一起商场或百货公司？［单选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :--- | :--- |
| 每季度去 1－2 次 | 186 |  | $41.33 \%$ |
| 每个月至少去一次 | 145 |  | $32.22 \%$ |
| 每个月去两次 | 59 |  | $13.11 \%$ |
| 几乎每周都去 | 52 |  | $11.56 \%$ |
| 每周去两次或以上 | 8 |  | $1.78 \%$ |

10。每当你去逛商场或购物中心，你的主要目的通常是：［多选题］

| 选项 | 小 |  | 比例 |  |
| :--- | :---: | :--- | :--- | :--- |
|  | 计 |  |  |  |
| 休闲时间的娱乐或放松 | 178 | $39.56 \%$ |  |  |
| 去看看新设计新产品，或许会找到一些我需要的 <br> 东西 | 217 |  |  |  |
| 想买一些我喜欢的东西 | 216 |  | 48 | $48 \%$ |
| 有急需的东西要买，不得不去 | 98 | $21.78 \%$ |  |  |
| 本题有效填写人次 | 450 |  |  |  |

11．你的个人年收入在那个区间？［单选题］

| 选项 | 小计 | 比例 |
| :--- | :---: | :---: |
| 少于 30000 元 | 129 |  |
| $30000-50000$ 元 | 105 | $28.67 \%$ |
| $50000-100000$ 元 | 112 |  |
| $100000-200000$ 元 | 73 | $23.33 \%$ |
| 多于 200000 | 31 |  |
| 本题有效填写人次 | 450 |  |

## 12．每年，你生活中最大笔的消费是用于？［多选题］

| 选项 | 小计 | 比例 |
| :---: | :---: | :---: |
| 生活费用和食物 | 311 | － $69.11 \%$ |
| 衣服和首饰 | 233 | －51．78\％ |
| 旅行和娱乐 | 160 | － $35.56 \%$ |
| 用于收藏品 | 5 | $1.11 \%$ |

13．你每星期在外面吃饭的次数是：［单选题］

| 选项 | 小计 |  |
| :--- | :---: | :---: |
|  | 比例 |  |
| 少于两次 |  |  |
| $2-5$ 次 | 165 | $44.44 \%$ |
| $5-10$ 次 | 35 |  |
| 基本在外面吃，家里很少开伙 | 50 |  |
| 本题有效填写人次 | 450 | $7.78 \%$ |

14．你属于那个年龄段？［多选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 小于 25 岁 | 95 |  | $21.11 \%$ |
| $25-35$ 岁 | 187 |  | $41.56 \%$ |
| $35-45$ 岁 | 138 |  | $30.67 \%$ |
| $45-55$ 岁 | 35 |  | $7.78 \%$ |
| $55-65$ 岁 | 8 |  | $1.78 \%$ |
| 65 岁以上 | 0 |  | $0 \%$ |
| 本题有效填写人次 | 450 |  |  |

15．你的最高学历是：［单选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 高中以下 | 17 |  | $3.78 \%$ |
| 高中或中专 | 50 |  | $11.11 \%$ |
| 还在大学学习中或者大专 | 115 |  | $25.56 \%$ |
| 大学本科 | 197 |  | $43.78 \%$ |


| 硕士学历 | 64 |  | $14.22 \%$ |
| :--- | :---: | :--- | :---: |
| 博士或以上 | 7 | $\square$ | $1.56 \%$ |
| 本题有效填写人次 | 450 |  |  |

16．你阅读时装杂志或着关心来自品牌的流行趋势吗？［多选题］

| 选项 | 小 |  | 比例 |
| :--- | :---: | :--- | :--- |

17．你如何看待其它人穿着很新潮又不寻常的衣服［单选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :---: | :---: |
|  | 97 |  | $21.56 \%$ |
| 太过头了，这些离我的生活很远 | 154 |  | $34.22 \%$ |
| 很有趣，或许我也可以试试 | 119 |  | $26.44 \%$ |
| 很有趣，我可以购买一些，搭配我的衣服 |  | $17.78 \%$ |  |
| 我很喜欢，这些衣服很让人向往和期待 | 80 |  |  |
| 本题有效填写人次 | 450 |  |  |

18．当你的朋友或着不认识的人，在街上穿设计很新奇的衣服，你通常会怎么想？［多选题］

| 选项 | 小计 | 比例 |
| :--- | :---: | :---: |
| 这个太过头了 | 58 |  |
| 很有趣，不过我不想尝试 | 284 |  |
| 很不错，我也想要一件 | 148 |  |

```
consumption habits in knitwear
dressing habits
    to collect information for research on consumers' knitwear purchasing habits
    1. how many items of knitwear do you buy in every season?
    O less than 2
    C 3 to 5
    O more than 5
    2. what is the main reason you buy new knitwear?
    O attractiveness
    O styling
    O warmth
    3. what kind of knitwear you would like to wear?
    O thermal underclothes
    O V or round neck sweater
    0 knitted coat
    O cardigan
4. when you want to buy knitwear, which following factor will be the main reason to make the decision?
    f fashionable new style
    O beautiful colour
    O good material and quality
    5. how much money do you spend on average on clothes every year?
    C less than GBP }100
    C GBP 1000-3000
    O GBP 3000-5000
    O more than GBP 5000
```

6. if you want to buy a piece of knitwear, generally, how much is a suitable price for you?

O less than GBP100
C GBP 100-300

- GBP 300-500

C more than GBP 500
7. how many layers of clothes do you usually wear in the winter?

O 3 layers: coat + knitwear + bra
O 3 layers: coat+blouse+ bra
O 4 layers: coat + knitwear + thermal underwear + bra
C more than 4 layers
8. how many layers do you usually wear on the low half in winter?

O one pair of Jeans
O one pair of leggings
O skirt with hosiery
O skirt without hosiery
O jeans with thermal hosiery
O more than two layers

## consumption habits in knitwear

## consumption habits

9. how often do you go to shops or department stores for clothes?

C 1-2 times per season
O at least once per month
0 over twice per month
O almost once every week
O over twice every week
10. When you visit shops and department stores, your aim is for

O relaxation and fun in leisure time
O check new products, maybe I will find something I need
O buy something i like
O something I really need and I have to buy

## consumption habits in knitwear

lifestyles and background information
11. which is your annual income level

O less than GBP15,000
O GBP 15,000-30,000
O GBP $30,000-50,000$
O GBP 50,000-80,000

- more than GBP 80,000

12. what is the biggest expenses in your life?

O foods and living expenses
O clothing and jewellery
O traveling or entertainment
O your collection
13. how many times do you eat out every week?

O less than 2 times
C 2-5 times
O 5-10 times
O almost every meal
14. which age group do you belong to

O under 25
O 25-35

- $35-45$

O 45-55
O 55-65
O over 65
15. what is the highest level of education you have completed?

O high school
O studying in college
O bachelor degree
O master degree
O postgraduates or higher

## consumption habits in knitwear

adoption of creativity
16. do you read fashion magazines and care about fashion trends or new looks from brands?

- don't care much for fashion

O sometimes I read them, but they are just magazines for entertainment
O read and get new information for my style
O I care about trends, but just try something which matches my style
17. what do you think about crazy designs and images?

O too crazy, far from my life
O very interesting, although I never try them
O very interesting and I try some ideas for my wardrobe
O I'd love to try them, so exciting
18. when your friends or other people on the street wear very creative or different clothes, you always feel

0 it is too much
O it's interesting, but I don't want to try it
O it's very nice and I also want to wear that

Appendix 3－2：Online survey 2：Female knitwear（cashmere）design and style survey in Chinese（with English translation）

## 女装羊毛衫（羊绒衫）设计风格调查问卷

第1题 有时候专门去买衣服逛街，但却空手而归的原因是［排序题］

| 选项 | 平均综合得分 |
| :--- | :---: | :---: |
| 没有找到自己满意的设计 | 2.77 |
| 找到了喜欢的衣服，但价钱太贵 | 2 |
| 找到喜欢的款式，但不满意质量 | 1.49 |
| 不知道自己适合什么，拿不定主意 | 1.11 |

第2题 当你需要买一件羊毛（羊绒）衫的时候，你最先想到的是［排序题］

| 选项 | 平均综合得分 |  |
| :--- | :---: | :---: |
| 国内毛衣品牌或羊毛衫专柜 | 3.37 |  |
| 国内时装品牌专卖店 | 2.67 |  |
| 国际时装品牌专卖店 | 1.69 |  |
| 淘宝或其他国内其他网店 | 1.61 |  |
| 国外的网站或代购 | 1.18 |  |

第3题 当你买羊毛（羊绒）衫的时候，通常在哪里可以找到你期待的货品？

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
|  |  |  |  |
| 国内的时装品牌 | 166 |  | $55.33 \%$ |
| 国内羊毛衫品牌 | 185 |  | $61.67 \%$ |
| 国外的时装品牌 | 88 |  | $29.33 \%$ |
| 海外代购或网站 | 63 |  | $21 \%$ |
| 淘宝或其他国内网店 | 109 |  | $36.33 \%$ |

第4题 购买羊线衫时，影响你做决定的因素顺序是：［排序题］

|  | 选项 | 平均综合得分 |
| :--- | :---: | :---: |
| 款式设计 | 7.23 |  |
| 版型 | 4.87 |  |
| 颜色 | 4.54 |  |
| 含绒量比例 | 4.14 |  |
| 穿上身的感觉 | 3.75 |  |
| 搭配性 | 3.51 |  |
| 价格 | 3.51 |  |
| 手感 | 3.29 |  |
| 保暖性 | 2.34 |  |

第5题 每年你自己会花多少钱在购买衣服上［单选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 低于 5000 元 | 102 |  | $34 \%$ |
| $5000-10000$ 元 | 118 |  | $39.33 \%$ |
| $10000-30000$ 元 | 58 |  | $19.33 \%$ |
| $30000-50000$ 元 | 13 | $1.33 \%$ |  |
| $50000-80000$ 元 | 5 |  | $1.67 \%$ |
| 80000 以上 | 4 |  | $1.33 \%$ |
| 本题有效填写人次 | 300 |  |  |

第6题 你买过最贵的单件衣服的价格是？［单选题］
选项 小计 比例

| $500-1000$ 元 | 54 |  | $18 \%$ |
| :--- | :--- | :--- | :--- |
| $1000-2000$ 元 | 77 |  | $25.67 \%$ |
| $2000-3000$ 元 | 62 |  | $20.67 \%$ |
| $3000-5000$ 元 | 36 |  | $12 \%$ |
| $5000-8000$ 元 | 26 |  | $8.67 \%$ |
| $8000-15000$ | 25 |  | $8.33 \%$ |
| 15000 以上 | 20 |  | $6.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

## 第7题 你的服装购买理念是［多选题］



## 第8题 你自己的穿衣风格属于［多选题］

| 选项 | 小计 | 比例 |
| :--- | :---: | :---: |
| 商务干练型 | 59 |  |
| 中性运动风格 | 88 |  |
| 小清新学院风 | 36 |  |


| 优雅知性 | 149 |  | $49.67 \%$ |
| :--- | :---: | :---: | :---: |
| 性感女人味 | 56 |  | $18.67 \%$ |
| 怀旧复古 | 46 |  | $15.33 \%$ |
| 个性时尚型 | 101 |  | $33.67 \%$ |
| 非主流 | 19 |  | $6.33 \%$ |
| 不是很确定自己适合的风格 | 67 |  | $22.33 \%$ |
| 本题有效填写人次 | 300 |  |  |

## 第 9 题 你有多少件羊绒衫？［单选题］

|  | 选项 | 小计 |  |
| :--- | :---: | :--- | :--- |
|  | 29 |  | 比例 |
| 没有 | 98 |  | $9.67 \%$ |
| $1-2$ 件 | 106 |  | $32.67 \%$ |
| $3-5$ 件 | 33 |  | $35.33 \%$ |
| $5-8$ 件 | 34 |  | $11 \%$ |
| 8 件以上 | 300 | $11.33 \%$ |  |
| 本题有效填写人次 |  |  |  |

第10题 你多久会买一件新羊绒衫？［单选题］

| 选项 | 小计 |  |
| :--- | :---: | :---: |
|  | 28 |  |
| 从没买过 | 69 |  |
| 2－3 年买 1 件 |  |  |
| 每年买 1 件 | 47 |  |
| 每年买 2 件 | 15 |  |
| 不确定，遇到喜欢的会多买 | 141 |  |
| 本题有效填写人次 | 300 |  |

第 11 题 你拥有的羊绒制品是？

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 羊线围巾或披肩 | 183 |  | $61 \%$ |
| 羊线毛线帽 | 39 |  | $13 \%$ |
| 羊线手套 | 51 |  | $17 \%$ |
| 羊线套头毛衫 | 209 |  | $69.67 \%$ |
| 羊线毛衣外套 | 110 |  | $36.67 \%$ |
| 羊线大衣 | 143 |  | $47.67 \%$ |
| 其它 | 29 |  | $9.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

第12题 你最喜欢穿的羊毛衫（羊线衫）是：［多选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| v领套头衫 | 122 |  | $40.67 \%$ |
| 圆领套头衫 | 137 |  | $45.67 \%$ |
| 高领套头衫 | 97 |  | $32.33 \%$ |
| 开胸短外套 | 64 |  | $21.33 \%$ |
| 开胸长款外套 | 86 |  | $28.67 \%$ |
| 膝盖长度的连衣裙 | 83 |  | $27.67 \%$ |
| 设计特别的时装款式 | 131 |  | $43.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

第13题 你买羊绒衫除了喜欢羊绒本身的优点以外，设计方面你比较偏爱？［多选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :---: | :---: |


| 特别的裁剪或版型 | 117 |  | $39 \%$ |
| :--- | :---: | :--- | :--- |
| 提花图案 | 54 |  | $18 \%$ |
| 华丽的绣花或其它装饰工艺 | 27 |  | $9 \%$ |
| 款式简约优雅，但细节设计独特 | 205 |  | $68.33 \%$ |
| 明显的粗针纹路和机理 | 31 |  | $10.33 \%$ |
| 宽松休闲款 | 99 |  | $33 \%$ |
| 合体包身的款式 | 53 | $17.67 \%$ |  |
| 本题有效填写人次 | 300 |  |  |

第 14 题 对于羊绒衫的颜色，你通常喜欢 ［多选题］

| 姺项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 柔和的自然色调 | 225 |  | $75 \%$ |
| 鲜艳的纯色 | 71 |  | $23.67 \%$ |
| 甜美的糖果色 | 61 |  | $20.33 \%$ |
| 浓郁的深色调 | 67 |  | $22.33 \%$ |
| 黑白灰 | 123 |  | $41 \%$ |
| 多色混合或印花 | 61 |  | $20.33 \%$ |
| 本题有效填写人次 | 300 |  |  |

第15题 你最想拥有的羊线衫是：［多选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :---: | :---: |
| 设计独特＋高品质原料＋高价位 | 92 |  | $30.67 \%$ |
| 基本款式＋高品质原料＋高价位 | 39 | $13 \%$ |  |
| 设计独特＋中等材料＋中等价位 | 187 |  | $62.33 \%$ |
| 基本款式＋中等材料＋中等价位 | 79 |  | $26.33 \%$ |
| 设计独特＋混纺材料＋较低价位 | 46 |  | $15.33 \%$ |


| 基本款式＋混纺材料＋较低价位 | 16 | $5.33 \%$ |
| :--- | :---: | :---: |
| 本题有效填写人次 | 300 |  |

第16题 你期待的羊绒衫价格在人名币：［单选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :--- | :--- |
| 1000 以下 | 168 |  | $56 \%$ |
| $1000-2000$ | 94 |  | $31.33 \%$ |
| $2000-3000$ | 26 |  | $8.67 \%$ |
| $3000-4000$ | 5 |  | $1.67 \%$ |
| $4000-5000$ | 3 |  | $1 \%$ |
| 5000 以上 | 4 |  | $1.33 \%$ |
| 本题有效填写人次 | 300 |  |  |

第 17 题 你对羊绒的了解是：［多选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :---: | :---: |

第18题 你通常怎么洗涤和保养你的羊绒衫？［多选题］

|  | 选项 | 小计 | 比例 |
| :--- | :---: | :--- | :--- |
| 干洗 | 83 |  | $27.67 \%$ |


| 用特殊洗涤剂手洗 | 158 | －52．67\％ |
| :---: | :---: | :---: |
| 平铺晾干 | 103 | － $34.33 \%$ |
| 用凉水手洗 | 112 | － $37.33 \%$ |
| 放洗衣机里洗但装在洗衣袋里 | 22 | － $7.33 \%$ |
| 洗衣机洗，和其他衣服一样 | 12 | 1 4\％ |
| 折叠好平放在衣柜里 | 123 | － $41 \%$ |
| 挂在衣架上 | 30 | － $10 \%$ |
| 不知道，因为我没有羊绒衫 | 18 | － $6 \%$ |
| 本题有效填写人次 | 300 |  |

第19题 你购买羊绒衫时在意是不是知名品牌吗？［多选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :---: | :---: |
| 主要考虑价格和款式，品牌无所谓 | 142 |  | $47.33 \%$ |
| 主要看设计和质量，不在意品牌 | 163 |  | $54.33 \%$ |
| 比较看中品牌，因为品牌是品质的保障 | 80 |  | $26.67 \%$ |
| 看情况，因为很多名牌设计比较保守 | 70 |  | $23.33 \%$ |
| 偏爱个性化的设计师品牌 | 47 |  | $15.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

第22题 你所在的年龄段是：［单选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 25 岁以下 | 31 |  | $10.33 \%$ |
| $25-35$ | 101 |  | $33.67 \%$ |
| $35-45$ | 136 |  | $45.33 \%$ |
| $45-55$ | 24 |  | $8 \%$ |
| $55-65$ | 7 | 1 | $2.33 \%$ |


| 65 以上 | 1 | $\square$ |
| :--- | :---: | :--- |
| 本题有效填写人次 | 300 | $0.33 \%$ |

第23题 您的工作是在［单选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :---: | :---: |
| 行政或政府职能单位 | 23 |  | $7.67 \%$ |
| 教育或医疗或其它服务系统 | 135 |  | $45 \%$ |
| 外企或制造业 | 17 |  | $5.67 \%$ |
| 私人公司或企业 | 46 |  | $15.33 \%$ |
| 自由职业者 | 21 |  | $7 \%$ |
| 和艺术相关的领域 | 26 |  | $8.67 \%$ |
| 其它 | 32 |  | $10.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

第24题 您的最高学历是［单选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :---: | :---: |
| 高中以下 | 12 |  | $4 \%$ |
| 高中或中专 | 13 |  | $4.33 \%$ |
| 大专或大学在读 | 57 |  | $19 \%$ |
| 本科 | 134 |  | $44.67 \%$ |
| 硕士 | 67 |  | $22.33 \%$ |
| 博士或以上 | 17 |  | $5.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

第25题 您的年收入在那个区间：［单选题］
选项 小计 比例

| 30000 以下 | 55 |  | $18.33 \%$ |
| :--- | :---: | :--- | :--- |
| $30000-50000$ | 48 |  | $16 \%$ |
| $50000-80000$ | 51 |  | $17 \%$ |
| $80000-100000$ | 42 |  | $14 \%$ |
| $100000-150000$ | 58 |  | $19.33 \%$ |
| $150000-200000$ | 23 |  | $7.67 \%$ |
| 200000 以上 | 23 |  | $7.67 \%$ |
| 本题有效填写人次 | 300 |  |  |

第 26 题 除了食物和基本生活费用以外，您自己的主要开销是：
［多选题］

| 选项 | 小计 |  | 比例 |
| :--- | :---: | :--- | :--- |
| 买衣服 | 208 |  | $69.33 \%$ |
| 买首饰 | 63 |  | $21 \%$ |
| 旅游 | 164 |  | $54.67 \%$ |
| 社交 | 95 |  | $31.67 \%$ |
| 收藏品 | 20 |  | $6.67 \%$ |
| 学习或培训 | 85 |  | $28.33 \%$ |
| 投资或理财 | 91 |  | $30.33 \%$ |
| 医疗或保健 | 60 |  | $20 \%$ |
| 本题有效填写人次 | 300 |  |  |

第27题 你对国产羊毛衫（羊绒衫）品牌的印象是［多选题］

| 选项 | 小计 | 比例 |  |
| :--- | :---: | :---: | :---: |
| 感觉设计比较老，所以很少去看 | 127 |  | $42.33 \%$ |
| 品牌之间设计和形象雷同，我分不出谁是谁 | 129 |  | $43 \%$ |
| 不太关注，基本没去逛过他们的店 | 57 |  | $19 \%$ |


| 质量不错，但设计没有适合我的 | 80 |  |
| :--- | :---: | :---: |
| 还可以，但我没买过 | 27 | $26.67 \%$ |
| 喜欢，我买过产品 | 64 | $9 \%$ |
| 很喜欢，我是忠实客户 | 11 | 1 |
| 本题有效填写人次 | 300 | $21.33 \%$ |

## Survey 2：English Translation

## Shopping concepts and purchasing habits

1．Sometimes you spend more time for shopping，but buy nothing，which is the main reason for these kinds of situations？
－I do not find any satisfying design
－I find some designs I like，but the quality is poor
－I find some designs I like，but the prices are too high for me
－I do not know what is suitable style for myself，so I just have no idea what I should buy
2．When you want to buy a piece of knitwear／cashmere，where do you look first？
－Chinese knitwear brands and their department shores
－Chinese fashion brands and their chain stores
－International brands and their chain stores
－International shopping websites or shopping services
－Taobao．com or other Chinese shopping websites
3．When you are looking for knitwear／cashmere for yourself，what kind of brands always provide some products you are satisfied with？
－Chinese fashion brands
－Chinese knitwear brands
－International fashion brands
－International shopping websites and shopping services
－Taobao．com or other Chinese shopping websites
4．When you decide to buy knitwear／cashmere garments，which elements influence you to make a decision？
－Design
－Cashmere percentage
－Colour
－Silhouette
－Co－ordinate with other clothes
－Sensual feel
－Heat retention／warmness
－Prices
－Good fit
5．How much money do you spend on your clothes every year？
－Less than RMB 5000
－RMB 5000－10000
－RMB10000－30000
－RMB30000－50000
－RMB50000－80000
－More than 80000
6．How much did you spend on your most expensive clothes？
－RMB 500－1000
－RMB1000－2000
－RMB2000－3000
－RMB3000－5000
－RMB5000－8000
－RMB8000－15000
－Morn than 15000
7．Your shopping concepts in clothes are：

- I do not really like to buy clothes, I think it is kind of a waste
- I just buy clothes in shopping websites or whole sale markets, because the prices are lower
- I like to buy clothes in fast fashion brands, because their prices are reasonable, I can buy more if I wish.
- My clothes are from high-to-low brands, but I just buy the clothes which match my style, I do not follow fashion trends.
- I just buy clothes in high quality brands, because I can wear them for long time
- I prefer famous brands, because their designs and quality are always better than others
- I do not care whether the brand is famous or not, I just care design and quality.


## Clothing styles and preferences

8. Which is your clothing style?

- Smart style
- Neutral sport style
- Preppy style
- Elegant
- Sexy and feminine
- Vintage and retro styles
- Personality and fashionable style
- Non-mainstream
- Not sure what my style is

9. How many cashmere knitwear garments do you have?

- None
- 1 to 2 pieces
- 3 to 5 pieces
- 5 to 8 b pieces
- More than 8 pieces

10. How often do you buy a piece of new cashmere knitwear?

- Never
- Every 2 or 3 years
- Every year
- Every 6 months
- Not sure, I will buy more if I find some designs I really like

11. What kinds of cashmere products do you have?

- Cashmere scarf or shawl
- Cashmere hat
- Cashmere gloves
- Cashmere sweater
- Cashmere cardigan
- Cashmere coat
- Others

12. What kinds of knitwear/cashmere are your favorite to wear?

- V-neck sweater
- Round-neck sweater
- Turtleneck sweater
- Bolero sweater
- Cardigan
- Long dress
- Unique and fashionable designs

13. What do you prefer in cashmere knitwear design apart from the good material?

- Beautiful colour
- Simple basic design, for next to skin wearing
- Special silhouette or cutting
- Figured pattern
- Luxuriant embroidering or other decorations
- Concise design with unique details
- Coarser knitting with distinct texture and patterns
- Loose and casual design
- Figure-hugging design

14. What is your favorite colour for cashmere knitwear?

- Soft natural colour and tone
- Vivid pure colour
- Sweet candy colour
- Intense dark colour and tone
- Black, white and grey
- Multicolour or colourful printing

15. What kind of cashmere knitwear do you prefer?

- Unique designs+ higher quality materials+ high prices
- Basic designs + higher quality materials + high prices
- Unique designs +medium-grade materials + medium prices
- Basic design + medium-grade materials+ medium prices
- Unique design+ blended yarn+ lower price
- Basic design+ blended yarn + lower price

16. Which price you would to pay if you buy a piece of cashmere knitwear?

- Less than RMB 1000
- RMB 1000-2000
- RMB 2000-3000
- RMB 3000-4000
- RMB 4000-5000
- Morn than RMB 5000

17. What is cashmere in your mind?

- Do not really know about it, I think it is a kind of good quality wool
- Soft and comfortable material can wear next to skin
- Warmer than wool
- Finest soft fibers from goats
- Lighter than wool
- High quality materials with good sensual feel

18. How do you wash and keep your cashmere knitwear?

- Dry cleaning
- Hand washing with gentle detergent
- Lay knitwear flat for airing
- Hand washing with cold water
- Machine washing and covered by washing bags
- Machine washing like other clothes
- Folded flat in the wardrobe
- Hang on the coat hangers
- Not sure, because I do not have any cashmere knitwear

19. Do you mind if the brand is famous or not when you buy a piece of cashmere knitwear?

- I just care about designs and prices, do not really care about which brands they are from
- I really care about design and quality, not really care about brands
- I care about brands, because different brands always represent different qualities.
- It depends, because some designs are very conservative in most famous brands
- I prefer designers' brands with individuality

20. Please write all the knitwear/cashmere brands you know (including Chinese and international brands)
21. Please write down the brands of knitwear/cashmere you have bought.

## Personal backgrounds and lifestyles

22. Which age group do you belong to?

- Under 25
- 25-35
- $35-45$
- 45-55
- 55-65
- Over 65

23. Which field are you working for?

- Functional government departments
- Educational or medical and other service systems
- Foreign companies or manufacturing industry
- Private companies
- Freelance
- Fields related art
- Others

24. What is your highest education

- Under high school
- High school or vocational school
- College degree or studying in university
- Bachelor degree
- Master degree
- PhD and above

25. Which annual income range are you belonging?

- Under RMB 30000
- RMB 30000-50000
- RMB 50000-80000
- RMB 80000-100000
- RMB 100000-150000
- RMB 150000-200000
- Over RMB 200000

26. What is your biggest spending except foods and basic living expenses?

- Clothes
- Jewellery
- Travel
- Social life
- Collection
- Studying and training
- Financing or investment
- Medical treatment or health care

27. What do you think about Chinese knitwear brands?

- Their designs are too old fashion to buy for myself
- I cannot distinguish the brands from one to others, because their designs are similar
- I pay no attention to these brands, I never visit their stores
- Good qualities, but I do not think I can find something I like in their stores
- They are ok, but I never buy them
- I like them, and I bought some products from these brands
- I really like them, I am a loyal customer of these brands

Appendix 4: Data analysis
Appendix 4-1: An example of industry notes during the DAR process
$22^{\text {nd }}-23^{\text {rd }}$ Nov. 2016 Baotou, China
One thing needed to take notes today. It was about a scarf I designed yesterday afternoon. I was told they (technicians) want to change my design details, because they believed than the design will cause more time in the knitting process. They gave me two suggestions for how to change the details, but both of these ideas will make the design lose the main details and unique feature. The first idea is they want to sew my side part rather than knitting them together. If this idea is used, it will make the design become a cheaper product. Sewing two colours together is nothing exciting for a new design. Knitting them together was the uniqueness of the design. Another idea was they mix the colour for the side part, then this idea will make the design have a more common effect.

So, in this morning I ask the CAD technician to do the design with my original idea. He said it will cause over 10 hours work for the scarf, but if I make a common one, will save half time. I do not believe his words, because I think he does not want to spend time to help me to achieve the design effect. He said if following my idea he needs to make the setting part different in his process. I discussed with the design director, she said she aggress with me, she also did not believe the simple scarf will take such long time to knit. She guesses the technician just did not want to spend time for achieving the details in his process in CAD system. She said he may just want make things in sample way to finish the sample quickly, because they are used to giving similar excuses, and always not have passion to support creative ideas for their own designers. They claim such longer time for knitting, it may be just to make me to give up my original ideas.

The innovative design culture seems to be missing here.

Appendix 4－2：An example of interview data transcriptions （With key word highlight as 1st step of data analysis）

| Interview fields | Fashion design student interview |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| University | Beijing institute of clothing technology |  |  |  |
| Interviewee | DS10 | $3^{\text {rd }}$ year BA | knitwear design |  |
| Interview date | $30^{\text {th }}$ Sept．2015 | Interview type | Online |  |
| Interview time | 55 minutes | Location | UK／China |  |

设计学生采访 北京服装学院 针织设计大四学生 DS10（微信语音采访）
以下采访大约半小时，是四个方面的问题，包括教育体系，学习方法和个人背景，然后是设计与创意。采访内容会用于我的博士课题的研究，毕业论文和相关学术论文，但不会用于商业用途。 采访会录音。

## Q1．你为什么选择学习这个专业？

其实之前的话，我没有接触过针织，不是很了解。但是大二的时候有一个钩针选修课，然后我就发现我很喜欢手工方面的东西，就是那种织物性的，我就特别特别喜欢。然后我就选择了针织。
那你现在做了大概有多少了，就是从学习到现在？大概做了多少个系列，多少件衣服？
是学针织后还是大学开始呢？5－6 件左右，就是有一个有三套，件数的话，因为有些是课堂是做一件，还有一个系列做了三套。
你觉得你自己完成的怎么样？
都是我自己做的。
Q2．那你们大概每周有多少理论课或设计课，那设计课是以怎样的方式上课的？
我们第一次上针织课是在横机室里面做手摇横机，然后会有专门手摇横机的老师教我们横机方面的，然后同时要学的是电脑提花机器。就是用电脑上课的地方。然后后面就是有一个针织设计课。那是大三的第一学期，就只有这几门课。后面大三的下个学期，因为第一学期主要学横机学成型，所以第二学期是裁剪，裁剪针织。然后还有内衣课一个系列，然后上完这两门课之后，还有一个成型针织 2．然后就有一场秀，我们就办了一场秀。这就是大三的课。
那么成型针织2是怎样形式的课呢？
成型针织 1 就是手摇横机的，织一件上衣。然后成型针织 2 就是每个人做一套。要做一套服装，自己做。我们有手摇横机课，和两个成型针织课，第一个成型针织课，大三第一学期，织一件衣服，大三第二学期，成型针织 2 做一套衣服。一共做了两件上衣，再加一套。
那这个是从灵感出发，然后一步步设计，最后做出来衣服吗？是的，但是我们的横机课不是的，因为是刚开始接触，所以主要是来练手的。告诉你要怎么能织出一件衣服来，用机器。那个手摇横机课，后面两个针织课就都是要有灵感的。然后自己来做。第一件是侧重于技术？对的，第一件侧重于技法，后面就必须要有灵感。
然后还有什么理论课呀？针织方面的理论课啊，我想一想，好像没有什么。我是问除了针织设计，大三还有什么理论课要上吗？那就是非专业课，像什么电脑啊什么的那种。丝网印这些也会学。还有扎染啊，蜡染啦，学这些，这些都是自行的选修课了，然后还有流行趋势。那这些课是不同的老师教吗？然后是不同的课分别上吗？对对，

不同老师教的。那每个课学完要有考试什么的吗？是的，有些课的话，是要笔试。但是有些课的话，就是你要教 PPT 或者是做一件衣服出来，那就是交作业了？对。 Q3．你们每周大概要花多少时间在工艺室里面？
我感觉我们从开始上课，基本上每天都在工艺室的。那还是花挺多时间的。对的，我们去年第一个月没什么课嘛，第二个月开始，基本每天都有课，所以基本每天都在工艺室里面。每天都在，周六周天都在。那你们一般织一件衣服，因为有很多技术问题需要解决嘛，那你们老师会给你们讲呢，还是怎么样学呢？会有老师给我们讲。那是先织一些各种针法的布片吗？是的，我们是在比设计灵感的时候，就会要把你的布片给织出来，因为你要画这个系列的画，你画的针法要能够做出来，用学校的横机，因为学校的横机局限性很大嘛。他们那个织数不能太粗也不能太细，局限性很大。所以在做灵感的时候，就要想要织的布片，然后开始做之前，是要有布片的，要把布片的密度调好，然后针法决定了才能够开始织。
那有没有自己想做，遇到解决不了的那些纹路啊？那一般怎么解决？这种情况有些人就会去外面找人去做。如果是这种针法不会的话，老师也会教你。但如果是因为线的问题，或实在是学校机器实现不了的话，就只能换别的了。
那纱线呢？自己买吗？对，自己买，老师那边也有的卖，然后你也可以自己在网上买。那学校没有提供吗？学校不会有提供。一般能够买到一些自己想要的新颖的纱吗？基本上不会有的。淘宝上一般都是便宜纱吧？是的，很便宜，但是质量就不会特别好。是的，一般专业的供应商不在淘宝上卖的。量太少的话，不好买到呢。是的，像我们以前上的成型编织课，老师就会通知我们大家一起去买纱线，然后还给我们提供供应商，因为和我们学校老师有合作，供应商就会便宜一点给我们。起重至少有 2斤才可以卖给你，我们就这样买的。他会把色卡发给我们老师那边，然后我们自己过去挑，颜色只能选现有的。那机器呢，大概有多少台？你们一般都有自己的机器吗？
没有，我们就是一个横机教室，里面有大概 30 多台机器。然后有 50 多个人用。大家就只能把时间错开，像针织有些人用机器织，有些人手织，大家就都把时间错开用。那要是织了一半，还要取下来吗？是的。除了横机你们还有什么设备？我们有横机
室，有一个裁剪的机器。像人字车啊，那些机器都会有，但在另外一个教室里面。那是属于裁剪的。那你们可以去吗？可以的。那个机器也很少。那丝网印刷那些呢？它不是属于我们服装系的教室，都是属于材料系的。所以我们除了选修课可以去那边上课之外，就是老师和那边打好招呼，就是先弄好以后，我们才可以去，要不就要去学校写申请，写完申请，签完证以后才可以用他们材料系的教室。那这个程序方便吗？就是不方便啊。会不会因为程序麻烦，时间对不上，放弃用啊？会的，会有。
Q4．在学习中你最喜欢和享受的部分是什么？为什么？
我自己比较喜欢的就是当那个款新出来，然后自己去做那个感觉，我会比较喜欢。然后因为我喜欢针织，是因为它是从线开始的。然后你自己织成一个面，我可以把那些纱线啊，各种喜欢的颜色想织的，然后混合成一个大支的，我会觉得那种颜色特别好看，因为我自己比较喜欢五颜六色的那种色彩感觉的。我就会喜欢混了不同的颜色，然后就是一种新的感觉，就会特别享受那种过程。
嗯，这个是挺好玩的。对。
Q5．你的课程中最难的是哪部分？如何去客服这些困难？
我觉得对我来说就是设计吧，因为我是，怎么说呢，我是感觉自己看的东西也是会特别少，所以基本现在我有把自己框在一个框架里面，看很多设计的品牌啊，就觉得自己设计的好丑啊。就是只能接受自己长期以来喜欢的那种风格，其它的就不能接受，这是我自己最近特别想突破的一个地方。就是让自己多去看一些别的东西啊，不仅仅

是自己喜欢的。就想要什么都去看一点，让自己接受面更广一些。因为我觉得自己太局限了，知道的东西都太局限了，尤其是太爱把自己框在一个设计的小小范围内，就是自己都走不出来的感觉。那你自己喜欢的是哪种风格呢？我自己就是比较喜欢简单一点的风格，就是特别特别简约的。然后上面会有一些面料上面的设计感的风格。不是很喜欢那种特别特别浮夸的造型。因为喜欢颜色很多的嘛，就比较喜欢印花系列的，如果是黑白系列，我就不怎么喜欢。就是觉得自己还是有把自己太框住的感觉。这个其实没关系，随着你的阅历和经验多了，会不一样。但其实这也是两面的，不好处可能是你会排斥一些东西，但是好处是你很清楚自己的风格和走向。就顺其自然吧，哈哈，谢谢啊。因为我觉得做设计师没必要强迫自己去喜欢自己看不上的东西的。但阅历不同，眼界会拓宽。
Q6．你认为你们学校的教育体系和教学方法，对你今后成为一个设计师会有帮助吗？
我觉得会有的，尤其是对我选择针织来说，我对针织方面会了解的比较全面一些，比如暑假实习，因为我想未来做针织设计，所以我就去了一个专门做毛衫的公司。是上海的，然后他们还有别的学校的实习生，他们就说，你们北服有针织专业，所以你们一上手就会懂很多的。不用特地去交流些什么，你会自然而然会懂，而且像很多横机方面的，我们会自己做一些织片。他们让我们自己出一个款，自己去织织片，我们就去横机室里面自己做，也能都很清楚的和他讲，因为针织和梭织很不同的就是有转变性啊，各种性能是很不一样的嘛。就是你可以很清楚的和他们讲，你的边是打空转，还是用其它的包边。你就会更加了解一些，让他们设计师一看，就知道你是学过的。是比没学过针织的更容易上手一些。我觉得这个还是很好的一方面。确实，那你去的那个公司，是大公司还是怎样的？是一个小公司，他主要是做意大利纱线的。总公司在香港，主要是做意大利纱线国内生意的，是近几年才开始做针织设计的。设计主要是给雅莹，玛丝菲尔等国内一线品牌做针织设计的。他们出款，然后别人来挑。他做的纱线，公司卖意大利纱线。那你们可以在那里实习多久啊？两个月左右。你们两个月可以设计多少啊？我们主要是跟一个设计师，因为我们主要是实习嘛，实际其实学到的东西也不会很多。我们每天的话，因为那个设计是她需要画衍生款，让我们画一个系列 5 件，然后，基本上一天最少要画 5 个系列。如果我们有多的时间，我们每周都要去上海那些大的广场或其它地方去调研一次，调研你喜欢的品牌，然后看一些东西，随便看，就是每周都要去一次，我们会要自己出一个款，但是打版师打完版，我们时间就不够了，本来是要给工艺师算工艺的，都没时间了就没有做了，就只做了打版。然后要是有空闲的时间，我们两个实习生，就会经常去横机室。因为那里面是有很多阿姨在织样衣。我们就会去那里玩，看到好看的针法，就会问阿姨怎么织出来的。学了一些能够很快使用横机的一些小技巧。那你这个暑假都去了？是的，都是呆在那个公司里面的。那你好勤快啊！你是上海人吗？不是，我是湖南人。那你住到上海去实习，那还是花很多时间和精力，还有钱。不过觉得挺好的，因为我以后要做毛衫，所以就提前看一下针织类型的公司。针织类型的服装。你是 9 月份就毕业了吗？我们明年 6 月份毕业。
Q7．现在你们的教学方法中，有哪些你觉得需要改进的？
就针织而言，我觉得最应该改进的就是所有的老师，他们好像都有一个观点，就是你这件衣服一定要能够放在市场上去卖。就是一定要成衣化的，成衣化的，感觉就让我们很多同学感觉不能理解的。罨，他们可能太着急了，怕你们找不到工作。设计感太强的话，他们会感觉这衣服没有人穿或穿不了。这是让我觉得唯一不好的一点。然后另外一点不好就是学校安排课程的时间安排的有点不好，就像也许你一个月都没有课，也许剩下的两个月，就把所有的课都安排在了一块儿。就是两个月的时间，你什

么作业都没做完，还得上课。就是时间安排不合理。那为什么这么安排呢？就是学校教室不够，老师也不够。所以就安排了很多在一起。那你们平常上课有自己的教室吗？会有，但是就是要错开。都有男装女装啊，教室都要用啊，所以就是要错开。课程也是有些会安排在一块儿。那比如会把什么课安排在一起呢？就比如上学期，一月份我们基本没有课，从二月开始，我们开始要上裁剪针织，上裁剪针织得同时，又要上内衣课。然后内衣也是一个很难搞定的课程。这两个课就要同时去上，然后还有必须要上的选修课也要一起上，然后这两门课一上完就是我们要走秀，老师就说你这个裁剪针织要做两套衣服。然后就得开始做了，在开始做的时候，立马又另外一个成型针织课就来了。然后你又得做两套衣服，又得上成型针织的课，然后老师还会觉得你做得太慢了。成型针织课一做完就要走秀了。又得再做成型针织的一套衣服。然后就那段时间感觉从四月份裁剪针织上完， 4 月开始大家一直都在通宵，周末也都不出去玩儿。一直到 6 月份走秀为止，才松了一口气。走秀是这些课程的一部分？还是有另外的要求？不是，走秀不用另做衣服，走秀就是你结课的作业。那四月份之前呢？就基本上没有课，就是空的。那空的时间你们做什么？我们有时候会去 xx 服装公司去兼职。我们还有个晚上上的课，也是经常上，就是白天你得抽时间去做东西，做一些领子啊什么的，就是工艺课，我们得在晚上上课。白天就得去做，工艺课因为要求特别高，所以剩下的时间就是在 xx 做兼职。是缝㧅工艺课？是的，是梭织的不是针织的。就是你选了针织方向以后，还是要上梭织的工艺课的？对对对，那个是自己选的，所以我选了那个。就是那个属于选修课？是的。
那你最喜欢的课是什么课程？
我比较喜欢成型针织，我就觉得这个课需要动手能力比较强，然后做出来以后比较有成就感。因为是从线开始，所以做好以后，感觉比梭织裁剪做出来的衣服成就感更强烈一点。所以我比较喜欢这个课。
那么成型针织课上，是一定要掌握很多老师教的针法呢，还是需要自己创造一些针法？你可以自己创造，只要你能做出来好看的都行的。那一般情况是什么样的？基本上开始的时候，老师会教一些很基础的针型，然后后面的话，我一般看一些网上面的呀，不是上海那些都有一些纱线展嘛，然后他们拍了最新的纱线展的照片就会发给我，然后我就找一些感兴趣的去参考。
Q8：你对未来的规划是什么？
我想毕业后先去女装型的公司，我想去他们的针织部门。先工作两年左右，然后如果觉得自己不是很好的话，因为我现在觉得我针织方面不是涉及的很广。我想去考香港理工针织的研究生，如果有能力的话，就想再去考一次研究生。
香港理工不错的。对的，因为它的针织很好，所以我想去考他们针织的研究生，但是我想先工作。现在目前是想着去 xx 公司。就是想去上海江浙那一边，因为他们的颜色比较亮一点。像北京这边服装颜色会普通偏暗一点。所以我想去上海那边。上海那边很多品牌做的不错。是的，就是老师说香港理工的针织特别好，但是这个只是想法，到底毕业之后会不会实现还不好说呢。你要有工作经验后再申请也是容易一些的，因为很多大学很欢迎有工作经验的人去学习的。是要做作品集申请吗？是的，还有英语要达到要求。
Q9．你家乡或你打算去发展的城市，服装设计的就业情况是怎么样的？毕业后可以顺利的找到设计师工作吗？
我家乡湖南那边基本上是没有什么服装公司的。我知道的就一个男装品牌七匹狼，然后其它的基本就没有啦，但是，如果是像上海那边的话，我觉得还是会有，因为今天我去上了一个关于就业方面的选修课。我们去听了一下，那个老师就跟我们说，如果

想回南方工作，可以去上海，他觉得上海那边是挺不错的，因为女装公司会比较多。这个公司要求会比较高，公司是在嘉兴还是绍兴那一块。它不在上海？对的，不在上海，在江浙那一块。我觉得江浙那一块的女装的话是真的挺不错的，因为在国内知道的品牌，基本就是在上海浙江那一块，然后还有在广东深证那一块，还有就是在北京这一块。对的，本来就这几个中心，就是北上广。所以我还是想着去上海那边吧。对的，上海不错的。上海整体来说，消费能力和服装公司都做的不错的。是的，我去做调研发现上海是挺不错的，并且市场不像北京这么广，像三里屯啊，离的那么远，上海主要就集中在几个地方。是的，淮海路，南京路那边。对的，就是你走过去就是连卡佛，人民广场啊，我感觉都在一块。是的，他们的整体规划做的挺好的。
Q10．如果你不在时尚行业工作，你会做什么工作呢？
就是会在服装或服装周边的。其实，如果不做服装设计师，我会比较想做面料方面的或家居方面的，我也会比较喜欢，就是沙发面料啊，那些我都比较喜欢。那些是挺好玩的。
Q11．在你心目中想成为设计师，应该具备怎么样的素质，为什么？
首先你自己的专业要别人觉得你有做设计师的资格，然后，我觉得很重要的是一定要有一个很好的团队精神。还有心理素质啊，就是心理素质和承受能力一定要好。哈哈，承受能力？是的，因为我在 xx 那个公司做兼职，我发现在那个公司上班，你的心理承受能力一定要好，要不然每天都会哭死的。那是比较压抑吗？对的，就是很压抑。还有就是我们老师经常说，你一定要心智成熟。不管你在哪一个行业，心智成熟的人都是很容易干成功的。
Q12．你要成为一个设计师，最重要的 5 个能力或技能是什么？
我觉得 5 个最重要的能力的话，一个是团队精神，还有专业修为，专业技能，然后是心理素质，学习能力一定要强，眼界要好吧，应该。
Q13．你多久去一次博物馆或者是艺术展览呢？
我一到两个月去一次。一般都去哪里呀？798呀，然后逛街就去了。798里面会有一些艺术展览是吧？对呀，有一些。那这些展览经常会有新的吗？会呀，会经常有新的，然后很大型的，像迪敖的那些展的话，都会在 798 ，然后提前会告诉你。基本上艺术活动都在 798 了？是的。那么博物馆呢？博物馆就是国家博物馆吧，还有国际展览中心啊。那你会去这些地方吗？我就是去过国家博物馆，国家科技馆那一块也有去。这些博物馆是去一次就够了呢？还是说要经常去呢？国家博物馆如果有好的展览或感兴趣的展览还是会经常去。像科技馆那些就只去过两三次。里面东西不怎么变化是吧？那国家博物馆是会经常有新的展览进驻？对的，会有画展或别的东西，基本画展是会经常换的。那还可以，很多博物馆不常去的原因，就是东西基本都不怎么更新。对的，中国博物馆楼下那些古代的文物就基本没变过。但这个博物馆总有新的展览还是不错的。
Q14．哪些设计师对你的影响最大，为什么？
我以前会比较喜欢高田贤三，在我大一刚开始接触时尚的时候，就特别喜欢花花的东西，那会儿高田贤三做的印花比较多，所以就特别的喜欢。但是感觉近两年他的风格开始变了嘛，因为他换了他的设计总监。前几年我还觉得挺好的，但是他换了风格以后衣服的廓形我会比较喜欢，但是印花方面就不是很喜欢了。印花还是更喜欢他们以前的设计。然后还有一个是近几年来我比较喜欢的一个日本的设计师，津森千里。女设计师，她的印花和色彩都是偏向与明亮的感觉，也就是比较青春活力一点的感觉，我还比较喜欢。这个设计师我还真不知道，她是在日本开店吗？还是国际发展的？她好像不是吧，她好像在巴黎或纽约那边有走秀。我基本上只是看她的秀场图片，对她

的品牌不是很了解。她的品牌名是什么？就是个英文名字，挺长的，我一会儿发给你好吗？好的，谢谢，我不知道这个设计师。但很多日本设计师的风格我自己也比较喜欢的。
Q15．你是个有创造力的小孩吗？你是在什么时候决定将来要学习设计的？
从小我就比较喜欢想一些有意思的。像在我们考前班，在一个央美里面，我就会想一些很有意思的广告或平面方面的，但是没有从小就有丰富的设计感。读设计是因为小时候喜欢动画，所以去学了美术，然后学了美术以后高三就参加考前班，因为上了央美的平面设计课，很有意思，就是让你自己想，想怎么表现就怎能表现，特别有意思，然后当时就想着以后可以学设计。当时就想的不想以后当一个画师什么的，就想去学设计。当时想的是学家居设计，家居家私类的，因为那会儿特别喜欢去看那个《交换空间》，就觉得哇好厉害，当时是准备学家居，但是没考上。后来就来了北服。其实很多人也是偶然选的。但都是相关的。
Q16．那你最喜欢哪种设计风格？这个和你的个人文化背景相关吗？
基本上没有什么特别大的关系，就是我会喜欢干净简洁一些的，但是上面一定要有面料上的设计或者印花的，颜色要有很鲜亮的颜色，然后我不喜欢暗色系，基本就是喜欢简洁一些的。不怎么喜欢高订。高订太复杂了吗？对的，对我来说就是不怎么适应的感觉，就很不喜欢。但如果我看到那种简洁中带设计感的，我就会觉得特别好。你喜欢现代风格的？是的，现代风的。
Q17．你如何吧你的新想法发展成你的新设计呢？这个过程是怎样的？你的灵感通常来自于哪里？
我的灵感基本来自于中国的一些东西吧，有时候是一个地方，那时候我设计一个森林女巫系列，当时就是看了很多图片，然后就看摄影，就很喜欢他们拍的那种森林的图片，就是一个女生，背景是森林，就是拍的很梦幻的那种感觉，就是摄影方面的也可以作为我的灵感，就是感觉来自于很多地方啊，就是突发奇想，突然之间想到了，我觉得很有意思，就这样子了。那你是怎么发展灵感到你的设计呢？我有一次设计的是西藏那边的，然后我的灵感就是来自于西藏的经幡。因为我一直想去西藏，所以我就选了西藏去做，我会取大家在西藏经常看到的颜色，还有他们的经幡，然后把他们用在我自己的服装里面。然后把那些经幡演变成带有流苏感的针织。然后在过程当中，一天画了 50 多个款，然后就给老师看。那就是说，你灵感后找到元素就直接画款了？中间的话，我会去横机放上去做一些这方面的面料（小样），然后把他们放在一起看运用在一块的感觉。我自己现在在这方面很弱，我感觉我自己会有一个不好，就是在灵感方面放很少很少的时间去做，会用很少的时间去想灵感什么的，很多时间都会用在做的方面。但是我觉得要在一个很大的范围内想灵感，然后很小的范围内想你最后做出来的成果。应该是吗？在英国这边，他们是比较注重你的发展过程。从灵感到设计出来，中间这个过程比较长的，我们国内目前大部分的教法是不同思路的。所以不是学生自己可以完善的，是需要有人往这个方向推才能实现的。中间是需要老师们引导的，但老师们都不是这个教学方法的话，就还是有一个差距的。对，比如我们老师第一节课就是第一节课你有个灵感，然后第二节课就是把你灵感里面的元素提取出来，然后就是第三节看需要画多少多少个款，然后第三节课，她就给你挑款，让你做成衣，然后我觉得主要的过程就是你来做成衣的过程。老师还会挑款？是的，老师要挑款的。对的，她会让我们画很多款，然后让我们自己去挑。然后她来挑，有一次上 xx 老师的课就是，她帮我挑了款，然后挑了的款我不喜欢，然后我说我要做另外一个，她说那个她不喜欢。然后她就说你觉得做出来谁会穿啊？我说我会穿啊。然后她说那行吧，你就做吧，然后我就做了自己喜欢的那个款。我们国内老师们操心的比较

多，我们从小到大，老师们习惯在前面帮你做很多选择，但是国外的老师们基本是不会管到这些的。他们是一切都让你自己弄。对呀，我觉得这样子会比较自主性一点。但是开始刚读的时候，应该会比较崩溃，因为他们不管的。因为我们的发展比较短，你也给不出老师一个怎么设计这个的理由，所以只能挑谁喜欢这个款了。英国这边因为发展的过程一步一步很长，所以在中间过程中会发展出明确的思路，然后你做出来其实就不需要挑款，因为也不需要画那么多款，因为发展到最后画出来就比较精准了。因为发展一步扣一步，所以最后的设计是想的比较成熟的了。和我们不同，因为我们发展过程太短，我们一个灵感之后就是画款了，但这不是老师们个人的问题，是我们的设计教学体系没有要求涵盖这个过程。
Q18．在你的设计中，你认为原创的想法有多重要吗？
很重要啊，因为当我去做市场调研的话，我就会发现你在雅莹看到一件衣服，然后你在玛丝菲儿你也许会看到和它很像很像的一件衣服。然后国内会有一个很普遍的现象，就是你把吊牌摘了，很多衣服你都不知道它到底是那个品牌的。我就觉得没有自己的风格，是的。那你现在还是看的女装这块，我现在研究的是中国的羊毛衫品牌，就更严重，大家都做的非常像。真的？是的，所以我才会做很多采访和研究，去找出到底是设计教学呢？还是哪些原因造成这样的结果。到底哪个环节缺失了？羊毛衫品牌，羊线衫品牌更严重。对对对，很多就是图案不同，是的，风格基本一样。面料颜色都差不多的。是的是的，但是我去实习的那个公司的话，我发现它的羊毛衫跟别人的不一样。我实习的那个公司会做的很漂亮，会有设计感在里面。意大利纱线本身就有特点了，然后做一点设计，整体基调把握的好的话，出来的作品都是很有风格的。但是意大利纱线比较贵，所以只有时装品牌会用少部分，他们也不会用特别多的。就是价格很贵，他们买的话，就是三千多一件。然后定的时候也定很少件的。公司订货的时候有这一部分东西，但是不走量，他们就需要一些很跑量的东西去赚钱。
Q19．在设计过程中，你认为运用新材料和新技术很重要吗？
我觉得很好玩啊，我就很想找那些，但是我觉得在国内很少吧。你要有新的和别人不一样的，会是一个很好的点。我会特别喜欢在服装里面用一些新的材料，就是很有趣的非常规材料。我会很喜欢这种，但是在市场上这些会不好卖吧。也不见得，但是很少人想试吧，担心风险，也不一定不好卖。太新的材料，公司用的时候会比较保守。创造性的东西也代表一定的风险，所以会有些阻力。
Q20．创意，质量，工艺和受欢迎程度，对于一个新设计而言，哪一个比较重要？为什么？我指设计产品。
如果作为消费者，我会先选择款式，就是先看设计，再看质量，然后再看版型。最后才是受欢迎程度，其实就我自己而言，我不会看到大家都喜欢，就去买一件的。如果是设计师的角度，首先我想的时质量，然后是工艺，后面是设计。你设计是放在第三位了，创造性是吗？等等，我再想一下，那你在乎东西好不买卖吗？嗯，当然在乎了。让我再想一下。应该是设计，受欢迎程度，质量，然后工艺。

## Appendix 4-3 : Coding of industry interview data and theme developing

| Themes (design styles) | Colds |
| :---: | :---: |
| Current design need | Too traditional |
| improve | Too old fashion |
| Lack of attractive design | Lack of fashionable design |
|  | Too traditional |
|  | Too old fashion |
|  | Market preference not good |
|  | Design with problems |
|  | Don't like the styles |
|  | Design needs to improve |
|  | 70\% ok, 30\% need to change |
|  | Was too old not popular, change new styles now |
|  | Products are in right direction, but too many similar |
|  | Product without structure |
|  | Designers like more fashionable styles |
|  | Top cashmere, but design no good enough |
|  | Many similar designs |
|  | Own brand design is not good |
|  | It is widely believed the designs are less attractive |
|  | Design styles, colours, patterns are not accretive |
|  | Outdated feeling of the brand |
|  | Lack of fashionable designs |
|  | More Creative design needed |
|  | Improve design for new chance |
|  | Pay more attention to design |
|  | Younger styles will be popular |
|  | Products not popular with big inventory |
| Design improvement | Don't like the current styles, but difficult improve |
| unsuccessful | Don't like the styles, but new designs not sure accept or not Design is difficult to change |
|  | Lack of support system (for design improvement |
|  | Everybody talks younger styles, but how to do is a question |
|  | Didn't find design direction |
| Market and resellers | Limited by our consumers needs |
| limited design | Only transitional design can be ordered |
| improvement | Top 50 (ordered) with old designs |
|  | Consumers don't like younger styles |
| Over-reliance on sale experiences, lack of exploration of new needs | Current styles are a business choice, designers cannot change it |
|  | Designer like or don't like Current style is not important |
|  | Following current style is designers job |
|  | Styles accept by franchisees |
|  | Lack design creativity limited by markets |
|  | Limited by cashmere prices |
|  | Old people buy for comfortable use |
|  | Cashmere is mainly to keep warm |
|  | Basic design is ok |
|  | Simple design accepted |
| Cashmere knitwear as | Most buy as gifts |
| gifts | 80\% people buy as gifts |
|  | Men's knitwear sells more |
|  | Lady's scarves or shawls |
|  | People prefer buy knitwear with patterns as gifts |
|  | Single colour for own |
| Design has to improve | Design is too old, less people visit the stores |
| to younger styles | Young people didn't accept |
|  | Avoid completion with traditional brands |
|  | Design for young |


| Extending consumer groups <br> Brand needs new consumers | Need younger fashionable styles <br> All traditional brands are declining <br> Consumers complain too old to wear <br> Younger styles more popular <br> Design styles driven sale performance <br> Old brands through too old to develop <br> Young people didn't wear <br> Many men also side products too old for them <br> Consumers age over 40 <br> People want younger styles <br> Design change for younger styles <br> Trying younger design styles <br> Hope extends the consumers groups <br> Hope continually get new consumers attending <br> Too old to wear for young people <br> Main consumers should over 60s <br> Less attractive for 30-40 groups |
| :---: | :---: |
| Cashmere brands with conservative designs (including successful brands) <br> Cashmere is mainly for keeping warm <br> Cashmere is too expensive to waste (try unsuccessful designs) | Conservative designs are popular in purchasing meetings Crystal decoration looks out of fashion, but popular in purchasing meetings <br> Cashmere is middle-aged or elderly clothing Cashmere is too expensive to try new designs Stared cashmere business with basic design Franchisee prefer conservative designs Nobody buys new designs in purchasing meetings Old consumers prefer conservative designs Conservative designs are popular in market Franchisees looking for designs similar popular sales Cashmere is conservative brands <br> Cashmere limited designs <br> Simple styles with details <br> More natural colours <br> Pattern mainly with flowers, animals, geometric figures <br> Basic silhouette with collar change or texture change <br> Cashmere is for keeping warm <br> Basic design is ok <br> Simple design accepted <br> Brand feature and concepts <br> Cashmere as a core material <br> Basic brand history |
| Possible design directions <br> Simple elegant younger styles would be better (current too intricacy) | Old design styles <br> Styles is based on the beginning of the brand <br> Styles and designs <br> European and US with simple designs, more grey colours <br> Own brand designs are complicated, maybe people like bling-bling styles <br> Too simple maybe nobody buys <br> Japanese firms with more detailed requirements and more colours <br> Korean firms with high requirement of silhouette <br> Design improvement aspects <br> Design styles should change more simple (current too intricacy) <br> Maybe like European brands' styles <br> Need younger design styles <br> Do not know how to improve the brand |
| Themes (design structure or plan) |  |
| Design is not required for building brand | Did not design like complect brands Nobody asks to build brand styles by design Designers can make diction for design styles |


| Design only for sale more Brand purses short term sales performance rather than long-term developing | Designs follows market Company with business task in purchasing meetings Focus on short-term business |
| :---: | :---: |
| Mixed styles make brands image blurry | Too many mixed styles <br> Mix of styles no clear feature <br> Based on developing experiences, change is not easy <br> No brand concept in the beginning, need time to improve |
| Lack of design structure and plan | Sell individually products not as a complete brand Design structure is not good Knitwear brand need summer products |
| Design structure limited by manufacture capability rather than the brand needs (manufacture thinking ) | Products only for cold seasons or not |
|  | Lack of summer products from April to August |
|  | Summer products buy from outside are not working |
|  | Single category products hard to change |
|  | Difficult change in current system |
| Different categories with no links each other | Design structures rely on what can produce in own manufacture rather than brand needs |
|  | Building brands with full season products is needed Currently no summer products |
| Lack of summer products | Buy summer products from wholesale and change own trademarks, but does not work |
|  | Currently no design for April to August |
| Take serious for adding spring and summer products | Scarves not related to knitwear |
|  | No exchange information for different category |
|  | Scarf, knitwear, blanket |
|  | Different department for different products |
| Many similar designs in retail stores | Summer has less business |
|  | Products mainly for autumn and winter |
| Disordered and confuse styles are less attractive for consumers | Half year business, should add summer products to extending sale times |
|  | Should take serous for spring and summer |
|  |  |
|  | Design styles in retail shops |
|  | Around 150 designs |
|  | Many similar designs |
|  | Design not attractive |
|  | Disorderly styles and colours |
|  | Design with confuse styles |
| Design full season products is a helpful to keep the business going | Design summer product recently (Summer 30-50 designs |
|  | Autumn 100 designs |
|  | Winter 140 design) |
| Design with full category structures | 2/3 sales from Autumn and Winter |
|  | Need to improve summer clothes design |
|  | Design with full category structures |
| Lack of good atmosphere | 40-50\% knitwear + coats + dress + lower half clothes Autumn and Winter |
|  | Knitwear +top +dress +coats Spring and Summer |
| Design with clear styles and product plans | With four season products since 2008 |
|  | Around 70\% sale from knitwear |
|  | Design with product plans |
| Design with reasonable quantity for purchasing meetings | Make product structure in details |
|  | Product plan based on data |
|  | Monthly collection for market |
|  | $20-30$ design series around 400 design styles for purchasing |
| Design with clear target consumers | meetings <br> Marketing plans follow product plans |


|  | Design styles |
| :---: | :---: |
| Continually building brands with patience | Elegant |
|  | Fashionable |
| Successful fit sale channels | Designs for purchasing meetin |
|  | Around 300 designs for purchasing meetings |
|  | Lack of good atmosphere |
| Design for younger fashionable market | Creativity in complete angle |
|  | Target consumers |
|  | 25-45 age group womenswear |
|  | 30-50 age group menswear |
|  | Middle-aged men buy more |
|  | Main prices range of products |
|  | CNY 2,000 main |
|  | Coats : CNY 6,000-7,000 |
|  | Menswear : 3,000 main |
|  | Coats: CNY 6,000-7,000 |
|  | Brand successful reasons |
|  | Good qualities |
|  | Design styles distinguished from other cashmere brands |
|  | Original patterns |
|  | More international styles |
|  | France design director working for 6 years |
|  | Company values |
|  | Put people first |
|  | Loyalty, quality |
|  | Opportunities for Self-improvement |
|  | Stable staff |
|  | Love the brands and company |
|  | Retail stores and types |
|  | 1600 retail stores in China |
|  | In-stores |
|  | Chain stores |
|  | Mixed brands in stores |
|  | Four brands so far |
| Unique design can improve brands | Exclusive design more attractive |
|  | Designer brands are growing |
|  | Fashionable styles can attract young consumers |
| Fashionable design sale better in market | Fashionable design sale better |
|  | Consumers want beautiful clothes |
|  | Excited designs are attractive |
| Creative design is needed | Original design centres popular in Shenzhen |
|  | Designer brands growing |
|  | Creative design is brand pursue |
| Limited design spaces and freedoms | Free in colour match |
|  | Patterns can share with others |
|  | Texture depends on facilities |
|  | Pattern can freedom design |
|  | Design styles freedom |
|  | Only allow change design details (surface decoration) |
|  | Mixed colours (old and new) |
|  | Some new silhouette is acceptable |
|  | Patterns are freedom change |
|  | Give up design ideas by cost limitations |
| Design improving challenge |  |
|  | Had unsuccessful cooperate work with Italian designer |
|  | Design was good, but no success in market |
| Unsuccessful experience in designs in the past | Brand running problems |


| Themes (design understanding) |  |
| :---: | :---: |
| The company do not encourage new designs Seen all no-ordered products as unsuccessful designs | Designer with stress for new design Seen new designs as risks Designer rank with sell quantity |
| Reseller with conservative attitude for new design <br> Lack of support policy for new designs | Seen new design as a risk <br> Fail to realize risks by ordering safe products <br> Franchisees do no try new designs <br> Own branches under stress of sell target and requirement <br> Sell more that impact personal and team's incomes <br> Rely on sales experiences to order new products <br> No trends forward-looking <br> Only buy the design like popular styles they sell Only buy the design like the popular style from other shops <br> Refuse to try new designs <br> Or less order for new design |
| New design less opportunities appear in markets <br> Do not produce small quantities (small= high cost=low profits) | Less or no order new design <br> Small quantity orders= cancel <br> Small quality=high cost=low profits <br> New designs less opportunities appearing in markets <br> Only have ordered design in shops <br> Safe product= already popular in market <br> Want products were tested by market <br> Do not produce small quantities <br> Ordered styles need up to 200 or 300 pieces |
| With only one standard of good designs <br> Brands raking a passive position for low risks | Pursue big sell quantity <br> Good design=sell more <br> Only one standard for evaluation of design <br> Design quantity and quality (ordered) <br> Sale quantity <br> Order qualities related designers' salary <br> Only prefer order quantity <br> Design quantity <br> Design quality <br> Sale quantity <br> Preference related designers' salary |
| Think little of design | Do not pay enough attention to design Don't want spend money for design Don't want to invest money for designs Many brands no longer have designers recently |
| Lack of design understanding | Nobody cares creativity <br> Design concepts nobody care <br> Big gap between designers and bosses <br> Lack of design understanding <br> Do not support new designs, but if sale not good, blame lack of new <br> Company wants designs good first then they will give support <br> Do not need designer, believe boss can find photos from websites |
| Themes (design process) |  |
| Lack of mood board and themes | Mood board and themes <br> Sometimes have mood board Mood board including themes and trends Never use mood board before design No mood board, we use PPT |


| Over Relace on market information for design | Collecting trends information from market <br> Colours <br> Patterns <br> Flower types <br> Trends <br> Market information <br> Care about fashion trends <br> Check trends online <br> Following fashion trends <br> Rely on trend website <br> Whole Design process <br> Business trips(market/trend)/designer plans/ summarizing/final design <br> plan/design tasks/design/samples/review <br> Market survey/design plan/colour \& styles/design/sample/purchasing <br> meetings <br> Fashion trends collecting <br> A Trend website <br> Magazines <br> Markets in big cities <br> Fashion shows |
| :---: | :---: |
| Design directors mainly a design managers rather than leading designers | Design director's job <br> Make Design plan <br> Design tasks for each designer <br> Select design form design draft <br> Balance design and market <br> Yarn design and test <br> Texture design and test <br> Based on company's requirement to design products <br> Design products for market <br> Following boss's through <br> Market survey <br> Looking for new needs <br> Design tasks for each designers <br> Manage designers jobs, select designs, control design styles and time, qualities |
| Themes (designers) |  |
| Boss no satisfying designers | Designers not strong enough for brand |
|  |  |
| Designers are not with good design abilities | Believe designers not good enough <br> Less support |
|  | Designer is quick to change jobs |
| Some company owners believe they can replace designer by copying | If purchasing meeting not good, designers will be fired Designers need a support system |
|  | Keen to blame designers when poor sale Boss complaint design not good, not enough new |
| Don't believe expertise of designers | Didn't want to spend money for designers <br> Do not satisfy design, looking for outside designers |
|  | Famous designer, but not help brand develop |
| Lack of design requirement from brands | Lack of good designer in industry Lack of good designers in knitwear industry |
|  | Brand need designers or not Employed totally 5 designers |
|  | No designers with good levels |
|  | Good designer too expensive to use |
|  | Designers not worth their high salary |
|  | Bought a trend website so can find designs photos Have market information for popular designs |
|  |  |


|  | Waste a lot of money for design ideas <br> Lack of outstanding designers in the industry <br>  <br> Designer's design abilities <br> They can design all styles, but put together looks mess |
| :--- | :--- |
| Less satisfying aspects <br> of designers | Need designer understand market <br> Designers do not understand market |
| Designers do not design <br> something new and <br> attractive | Designer needs to focus on markets, rather than concepts <br> Current designers do not know how to do full-range products <br> Brands copy each other heavily |
|  | Too many similar products |
|  | Team working collaboration |
| Suitable for the company |  |


|  | Stay too long time, with closed minds |
| :---: | :---: |
| Limitation of designer self-improvement <br> Limitation of location and areas | Many people cannot find museum <br> Museum is new built <br> The city is only 60 years as was a small town <br> No art exhibitions in the city <br> Don't design accessories, no local industry support <br> Lack of local resources <br> Lack of design supporting industries <br> Limited resource for design |
| Lack of leading designer for the brands <br> The products are not well cognized and planed <br> Too many designs crowed together is a disaster <br> Successful brands with conformable images that build with clear style, design themes and cognized colours | Designers all do what their want <br> Collecting design elements, they like <br> Sometimes with 1,000 designs with 600-700 colours together <br> Not needed, designs are a big waste <br> Up to 100 designs are enough per year <br> 60-70 knitwear $+40-50$ others enough for 40-50 square meter stores <br> Too many designs crowed together in stores <br> Too many colours and designs make the brand looks disorderly <br> All designs display together <br> Should feel comfortable <br> International brands with comfortable images in their purchasing <br> meetings with clear new colours <br> Confusion styles and colours without themes <br> Should design products with main designs (for sale qualities), creative designs (for images to attract people visit the stores) <br> Lack of leading designer to arrange the design collections <br> Current designers only can design pure cashmere |
| With leading designers for brands <br> Designers live and work in capital city (Beijing) | Leading designers and design teams <br> An experienced France designer leading womenswear with around 10 designers <br> An experienced Japanese designer leading menswear with 7-8 designers <br> Designers working locations <br> Designers work in Beijing |
| Creative designs can drive business <br> Creative designs are needed even in conservative brands <br> Need attractive designs to make people visiting | Creative designs can drive market or not <br> 10-15\% creative designs for brand images <br> $85 \%$ to $90 \%$ keeps safety designs <br> Conservative brands not a design advance brand <br> Safety design strategy <br> New design for normal materials <br> New material with basic designs <br> Do not want surprise consumers <br> Keeping brand styles <br> Keep promote some new designs for fresh the brands with design plan rather than order qualities <br> Creative designs can dive markets, but need time to accept Keeping some design with new ideas is important for the brand |
| Products in retail stores looks conservative than original design plans | New designs ordered or not in purchasing meetings <br> Choose spaces for buyers <br> Buyers make dictations for the market they are in charge of Prefer to order similar designs with popular sales in the past Conservative for new designs <br> Some new designs did not have chance to get to market Big market with different preference of design and colours May looks conservative than original design plan in some stores |
| Designers training and working experiences <br> Fashion design background, knitting | Designers educations <br> 10\% knitwear design <br> Most study fashion design <br> Knitting skills trained by company <br> Study in textile design <br> Fashion design |


| skills trained by companies <br> Textile or other designs, fashion and knitwear trained by companies | Textile and clothing design <br> No designers study knitwear design in universities <br> Fashion design background <br> Designers working experiences and background <br> Pattern cutting for business suits <br> Sale manager <br> Designer for middle-aged and elderly market |
| :---: | :---: |
| Advantage and disadvantage of stable designer teams <br> Lack of fresh blood in design teams | Stable designer team <br> All designers are over 5 years in the company (except design assistant) <br> Recent 10 years no designer leave <br> As Designer stay over 10 years <br> Working over 4 years <br> Stable designer team, location is main reason <br> 17 years in the company <br> 23 years in the company <br> How often have a new designer <br> Each 3 or 4 year have a new designer (not including design assistant) |
| Design teams with good size in big brands | Size of designer team <br> 10 designers <br> 11 designers <br> Around 15 designers |
| Themes (branding) |  |
| Lack of confidence for knitwear brands <br> Many brands with business failure | Lost confidence in cashmere business <br> Boss wants quick money <br> Bosses looking for new business <br> Many companies change to other industries for new opportunities making quick money <br> Declining trends in knitwear industry <br> Knitwear brand already closed <br> Declining market <br> Difficult to survival <br> Own brand has closed <br> Was with 100 stores <br> Business turn to cashmere goats farming <br> With own land for goat farming for cashmere raw materials |
| Copy is a popular culture in the industry | Following successful brands' styles If one brand success, then many others copy Some cashmere brands in low end markets only follow others Low end market does not need styles Some brands no longer with design teams Only following exciting designs from others Prefer to copy Other brands copy popular designs Brands heavily copy each other |
| Following markets rather than leading them | Market decided design styles Market makes decisions, rather than design director and marketing teams |
| Big Gap between purchasing meeting and market <br> Reseller with big inventory by order 'wrong' products | Conservative design popular in purchasing meeting but fail in market Crystal decoration styles are unpopular in market, but franchisees always order them |
| Lack of brand understanding <br> Selling trademarks $=$ given up brands | Selling trademarks <br> Short vision for developing <br> No clear direction and awareness <br> Brands with fake funny names in wholesale market Imitating brand names |


|  | In low end cashmere knitwear More styles attempt to attract all people Some brands sale trademarks to franchisees, (let them to buy some products for own stores) |
| :---: | :---: |
| Challenge of brand upgrading | It is a system problem, it needs complete change Cashmere brands, tried silk clothes nobody buy Knitwear brands no longer in good locations |
| Do not have complete design concepts | New category is less popular than knitwear (in Erdos) Current market share is still big, but difficult |
|  | Similar products in price war |
| Leaderships lack of directions for brand developing | Building brands is opportunity but not easy |
|  | Need study |
|  | Discussed many times, but didn't have common ideas Worry no success |
| Lack of support for design creativity and concepts Lack of support system for new investment (brand upgrading need money and time) | Need more time to prepare |
|  | Adding summer products is difficult |
|  | Do not have complete design concepts |
|  | No design concepts |
|  | No clear concepts |
|  | Brands copy each other |
|  | Leaderships lack of directions for brand developing Lack of clear direction in leaderships |
|  | Leaderships fried for change |
|  | Mainly developing manufacture scale rather than brand |
|  | Still have cashmere zones in department stores (don't want to give up old business) |
|  | A negative ripple effect of design and brand improvement Low value design makes low profits |
|  | Low profits make low support to design |
|  | Low support of design makes design difficult improvement |
|  | Lack of design improvement, design still with low value |
|  | Designers' concepts difficult to achieve |
|  | Had talked with some design universities, no success to cooperate |
| Why knitwear brands need to upgrade | Wholesale with price war |
|  | Old business model has no profits |
|  | Unsustainable business |
| With risk for losing all sale channels | Risks of losing sale Channels |
|  | Upgrade brand is needed |
|  | Looking for roads for development |
| Building brand is opportunity to be sustainable business | Looking for brand direction |
|  | Market segment trends |
|  | Have to face market segment in China now |
|  | Consumption habits are changing |
| Upgrade brand by sale channel change | Old consumers with low consumption power after retiring |
|  | Department store change to shopping malls |
|  | Some department change to shopping malls Big cities no longer have department stores |
| Brand with no clear design styles and brand characters | Worry losing all sale channels |
|  | Upgrade knitwear brand, get into womenswear areas |
|  | Export business with more quantity but low profits than own brand |
|  | Business structure |
|  | More big orders more lower profits in exporting business |
|  | Difficult time for business including exporting |
|  | Current market share is still big, but difficult |
|  | Similar products in price war |
|  | Building brands is opportunity but not easy |
|  | Wholesale with price war |
|  | Old business model is no profits |


|  | Most brands no brand characters Upgrade brand by sale channel change Most brands no brand characters Most brands no clear styles |
| :---: | :---: |
| Lack of brand positioning and market segment <br> Lack of understanding for brand positioning | Brand should have market segment <br> Target consumers need clarify <br> Lack of clear brand positioning <br> For all ages of people <br> Children and adults <br> Brand positioning needed or not <br> Design should mainly follow market <br> Positioning is not needed <br> Famous brands people will follow, even if design is crazy |
| Brand upgrading and developing plan <br> Need design products for whole year <br> Need to improve design for building brand <br> Need start with small scale for testing and studying | Different marketing strategies for different stores <br> Upgrade stores in big cities <br> Looking for outside designer team support <br> For 30-50 years old consumers <br> Brand name needs to improve <br> Trying in a few stores <br> Mix part of womenswear to try <br> Brand improving ideas <br> Need to improve as a brand <br> Design products for whole year <br> Need to open a few stores in big cities for rebuilding brand <br> Rebuilt the brand, give fresh views to old franchisees <br> It should be a way we can have success with <br> Design collections to express the brand image <br> Products made from cashmere /cotton, cashmere/ silk, silk, cotton <br> can be available across all seasons <br> Style like Lora Pinna <br> Products with reasonable prices is important for business success |
| Brands with different lines | Traditional knitwear for old consumers groups Upgraded brands for younger consumers |
| Brand upgraded to fashion brands with more categories is a right decision <br> Design with product plans <br> Design styles is clear <br> Brands with different lines <br> Design styles distinguished from other cashmere brands <br> Continually building brand for long time | Upgrading to fashion brand since 2009 <br> It has developed for a few years then getting better <br> Upgrade brand to full category is a right direction <br> Product structure <br> Cashmere Menswear, womenswear, and accessory <br> Use old sale channel from 10 years ago <br> Design with product plans <br> Make product structure in details <br> Product plan based on data <br> Monthly collection for market <br> 20-30 design series around 400 design styles for purchasing <br> meetings <br> Marketing plans follow product plans <br> Design style is clear or not <br> Brand design style is clear <br> Design focus on brand images <br> Designers leading, not totally following popular styles from market <br> Design focus on brand feature, different with other knitwear brands' methods <br> Only Erdos did ok <br> Great leaderships with clear direction and developing speeds <br> Brands with different lines <br> Traditional knitwear for old consumers groups <br> Upgraded brands for younger consumers <br> Design styles distinguished from other cashmere brands |
| Brand strengths (erdos) | Brand strengths |


| Good qualities | Good quality |
| :---: | :---: |
|  | Famous brand |
|  | High consumers satisfactions |
| Good design | Top knitwear brand in China |
|  | Design is good |
| Successful brand building | Brand successful reasons |
|  | Good qualities |
|  | Original patterns |
|  | More international styles |
|  | France design director working for 6 years |
|  | Design in right direction |
| Brand selling points | 30 years |
|  | Good quality knitwear |
| Good stable quality | Good quality, but recently not good like in the past |
|  | Good quality |
| Consumers' trust | Top quality cashmere, and making qualities |
|  | Stable teams |
| No clear brand characters | Not really clear, like other fashion brands |
|  | Design styles |
|  | Elegant |
|  | Fashionable |
|  | Easy to wear |
|  | Different with famous luxury brands |
|  | Lack of distinguishing brand feature |
|  | Knitwear brand with low distinguished feature |
| Product department is necessary | Product manager's job |
|  | Design plan feedback |
|  | Market data analysis collecting |
| Product manager is a bridge between design and market | Time plan for production and going to market |
|  | Coordinate fabrics and producing time |
|  | Balance design and market needs |
|  | Make sure designers create products with whole views to lead brand Make sure designs are not totally following markets |
|  | Making dictions with design director and |
| Cashmere brands are luxury or not |  |
|  | CNY 1,000-3,000 knitwear |
|  | Pure cashmere CNY 2,000-3,000 |
| Some cashmere brands are in low end markets | Cashmere Blended under CNY 1,000 |
|  | Cashmere knitwear is luxury products in China |
|  | Buying knitwear needs a month income Cashmere is in low end market? |
| Themes (business) |  |
| Sell products to franchisees | Purchasing meetings for order products |
|  | Lack of support policy from the brands |
|  | Order products for own shops |
|  | Only follow the resellers' opinions |
|  | Sell something they want |
|  | Not trying to lead markets |
| Lack of support policy | Taking full investment risks with no return and exchange support Own channel with similar situation and models |
| Management problems make people less passions | Management problems make less passion to do more Lack of reward systems but with fines for mistakes |
| Knitwear brands are declining | Knitwear business in decline All brands declined in recent 3 years Two big brands closed in 2015 |


| Big brands are declining <br> Small companies cannot survival | Zhenbei declining <br> Knitwear brands declining <br> Declining trend since 2015 <br> Franchisee business declining <br> Market is declining <br> All knitwear brands shrinking <br> Beginning is developing quickly, then declining <br> All traditional brands are declining <br> Franchisee no longer order new products <br> Market declining <br> More difficult success than before <br> Almost close the business now <br> Small business as supplier <br> Purchasing products for domestic companies with low profits <br> Only left a few people in facture <br> Big brand declined still with big business <br> Brand or business closed <br> Was with 20-30 stores <br> Cashmere blended knitwear <br> Had 400 registered knitwear factories in the city <br> Most manufactures are closed <br> Similar designs only can sell in low prices <br> Small business hard to survive |
| :---: | :---: |
| The reason of decline <br> Marginalization of knitwear brands <br> Shopping malls require sale in brands rather than categories <br> Knitwear brands with single or few categories, with half year business | Influenced by slowing economy <br> Cashmere is good but price too high <br> With big inventory <br> Still have a lot of inventory needed to sell <br> Economy declined <br> Market is not good recently <br> Market is declining in China <br> Declining trend in whole markets <br> People need to spend own money buy luxury now <br> Grey income was used for cashmere <br> More and more difficult to satisfy consumers <br> More choice for consumers <br> Fast fashion brands with low prices <br> Competition with international brands <br> Online stopping is a challenge for retail stores <br> Disordered design styles and colours is a main reason for orders <br> declining in purchasing meetings <br> Marginalization of knitwear brands <br> Lost popular locations ( $2^{\text {nd }}$ or $3^{\text {rd }}$ floors) in department stores <br> Now in top floor of department stores (fewer people visiting) <br> No longer knitwear zones in department stores <br> Brand reasons for being unsuccessful <br> Design is not good enough <br> Products disordered <br> Buy products from wholesale market, products not linked to each other <br> Design needs to be more creative <br> Retail stores <br> Only left 3 retail stores <br> Online store is still open <br> Stores for inventory |
| Sale channel declining or losing | No long cashmere zones Channel decline cannot change Shopping mall looking for good brands not easy Online store with high costs |
| Inventories need to deal with | Inventory stress Big inventories need to sell |


|  | Buy designs from wholesale Mix with old clothes to sell Low discount for sell Big inventory in Paluo brand Inventory makes second dealer no long need new designs |
| :---: | :---: |
| Brand is keeping stable or growing <br> Retail prices are different in different areas | Own brand is stable <br> Brand is keeping stable <br> Spring/ summer growing <br> Challenge of business <br> Retail prices are different in different areas Brand hope with a national-uniform price |
| Unsustainable business <br> A negative ripple effect of design and brand improvement | Products mainly sale with discounts <br> Mainly sell in discounts <br> 50-70\% off old designs <br> $20 \%$ off new designs <br> Discount promotion works <br> Holidays with discounts <br> Low discount with negative impact for new products <br> Old products are too similar new products <br> Old products with low discounts impact new products' sale performance <br> Similar design every year, only prices different <br> Big brand with high cost <br> Low profit makes business difficult running <br> A negative ripple effect of design and brand improvement <br> Low value design makes low profits <br> Low profits make low support to design <br> Low support of design makes design difficult improvement <br> Lack of design improvement, design still with low value |
| Brand images not good in retail stores <br> Brand images are important for business growing | No professional guide for display <br> Products look mess in shops <br> Brand website no good <br> Website isn't updated for years <br> Atmosphere is not enough in retail store with old channels <br> Different levels channel different images <br> Display problems <br> No guide for display <br> Too many patterns hard to display together <br> Display without guidelines <br> Only once taught how to display in 3 years <br> Display is important <br> Good display attracts people to visit <br> Fresh colours for display <br> 3 time per week for change display |
| A gap between resellers' choose and consumers preference | Their orders are lagging behind the market Purchasing meeting sell products to resellers rather than consumers <br> Resellers claim no new designs |
| Quick design cycles for single knitwear <br> Design time too short for new seasons | Single Design cycles <br> 20-50 days <br> 1-2 weeks design <br> 1-2 weeks sample making <br> 10 days for design <br> 2 weeks first sample <br> 8 weeks from design to sample <br> Sample making 4 weeks <br> Seasonal design cycle <br> 2-3 months <br> Collect information on Oct. |


|  | 3 months / per season |
| :---: | :---: |
| Lack of brand promoting | Fashion weeks |
|  | Too early to fashion weeks |
|  | Finding a right time is important |
| Success brand with brand promoting | Market information collecting methods |
|  | Sale data from retail stores |
|  | Observation in retail stores |
| Lack of brand images (both in store and websites) | Experiences with promotions or event in retail stores |
|  | Brand promotions |
|  | TV advantage |
|  | Fenzong TV nets |
|  | Cinema advantaging |
|  | VIP events with design director |
|  | Supermodel as brand ambassador |
|  | Website looks not good |
|  | Focus on stores, no built website like a brand |
|  | Website too many costs to built |
|  | Was built a website, but need big money to continue |
|  | Lack of brand building and promoting |
|  | Different running model with fashion brands |
|  | Purchasing meetings |
|  | Too low profits to promote brand |
| Manufacture background | Brand history |
|  | Begin as manufacture |
|  | Founded in 1986 |
|  | Was a manufacture |
|  | Small manufacture to bigger 1980s |
|  | Manufacture in the beginning |
| Big brands still with market share | Brand scale |
|  | With 3,000 staff with 600 retail stores |
|  | Chain stores/in-stores/ online store |
|  | No wholesale |
|  | 3,000 retail stores in China |
|  | With wholesale and online stores |
|  | Brand peak time |
|  | 2000-2003 golden period Around 2008, big inventory/ |
|  | But no success |
| Purchasing meetings | Purchasing meetings |
| Upgraded brand with 2-3 purchasing meetings | 3 times a year |
|  | Spring/Summer (August), Autumn (January ), and Winter (March) Winter is main reason |
| Other brands with 1-2 purchasing meeting for cold seasons | Purchasing meetings |
|  | Once per year (small company) |
| Themes (consumers) |  |
| Too broad segment =not clear target consumers | Target is over 30 years old, 80 years old also buy 20-80 years old is target <br> Mainly 40-60 buy products |
| Missing target consumers | Design for 30s, actually consumers is over 60s Consumer complains design too old Gifts for elderly families rather themselves Consumers said designs too old for them Want fashionable designs |
| Aging consumer is main | Middle age and above <br> 50 years old is main <br> $50-60$ years old is main <br> Over 60 years old is main <br> Mainly 50 years old group |


|  | Young people don't buy cashmere Over 45 years old consumers Less young people visit Middle age \& above is main Over 40s |
| :---: | :---: |
| Met the target consumers <br> No deep research of consumers | 35-55 age groups <br> Basically match <br> Meet the target groups <br> 90\% met <br> Consumer understandings <br> Don't know consumers' lifestyles <br> Professional women and men <br> Elegant styles with exquisite details <br> No consumer research systems <br> No research in the systems <br> Consumer research need support system <br> Lack of consumer research <br> Never think about who consumers are and what are their lifestyles |
| Meet the consumers' needs, but to similar others | Most met but with deviations <br> Meet the consumers' needs, but designs too similar others |
| Current consumers with low taste of designs | Low taste and fashion sense of design Consumers easy following others |
| Lack of direct link with consumers <br> Lack of consumer research | Consumers feedbacks <br> Aftersales service calls <br> Most calls for complain <br> Sale feedbacks <br> No direct links with consumers <br> Franchisees manage retail stores <br> Independent branch marketing departments for direct chain stores <br> No consumer research systems <br> No research in the systems <br> Consumer research needs support system <br> Lack of consumer research |
| Themes (manufacture) |  |
| With technique supports advantage in own manufactures <br> Technique support for yarn developing <br> Design support with convenance <br> Can make top quality knitwear | Own manufacture with technique support <br> With full line capability from yarn to garments <br> Design support from manufacture <br> Full support from manufacture <br> Technique research and support <br> Blended yarn designs <br> Technique research for spring and textile <br> Design yarns for company own use for all business <br> Yarn quality control <br> Quality control systems <br> Raw materials blend with cashmere <br> With a team for design fabric texture (for knitwear) <br> Top quality cashmere supplier <br> Pure cashmere and cashmere blended products <br> Stable export business <br> Top quality raw material and products <br> Big technician team for technical support <br> Facilities support, most design ideas can be made <br> Good quality to wear <br> Good quality with top materials <br> High standard producing qualities <br> Can offer top quality products <br> Cashmere coats and knitwear with good quality but with low profits <br> With full producing system from spring yarn to products |


|  | Products production systems Own manufacture for knitwear Other with cooperated manufacture |
| :---: | :---: |
| Technicians supporting issues <br> Lack of culture and system for supporting design | Technicians didn't like too many communications <br> Technicians work with hourly tasks <br> Technicians prefer simple works <br> Technicians with hourly tasks <br> Some new designs, cannot be made, limited by facilities <br> Was with a technician team for design sample, half year job <br> Difficult when technicians who didn't understand designs <br> Limited technique skills <br> Old facility cannot achieve some new ideas |
| Technician with good skills <br> Technician with professional education backgrounds in big brands | Technician teams and technique skills <br> 21 technicians with over 10 years experiences <br> Textile background <br> With good technique skills <br> Sometime limited by facilities <br> Technician backgrounds <br> Textile universities <br> Knitting workers <br> Transfer Software for knitting stitch, training is needed |
| System issues for supporting designs | Sample making cycles <br> Normal design one week <br> Difficult design around 10 days <br> 20 years knitting machine, need update <br> 2,000-3,000 designs need make samples <br> Stable qualities with high standard <br> Focus on details <br> Sample making and producing period <br> September to begin to make sample <br> Summer is producing time until products ready to market <br> Own brand begins design in November, need market information |
| Export business profits are low and declining <br> Own brand is worth to developing for higher profits and sustainable business | Knitwear company business structure <br> $90 \%$ export as supplier with $70 \%$ salesroom <br> $10 \%$ domestic market with $30 \%$ salesroom <br> Export business scale CNY 0.4-0.5 billion <br> Own brand with CNY 0.2-0.3 billion <br> Cashmere Knitwear and scarves supplier business <br> 85\%-90\% European and American <br> 10-15\% Japan <br> Eg M\&S, department stores in Japan <br> Exporting business as manufacture <br> Do not need design for export business <br> Making samples and purchasing products <br> Designs come from original brands <br> 600-700 samples, $70-80 \%$ with design drafts, $20 \%$ with knitwear <br> samples <br> Designers visit for their design samples requirement |
| Big knitwear companies | Manufacture scale <br> Biggest cashmere manufacture in the world Around 4 million pieces annual production capacity Automation with computer knitting machines with limited workers |

Appendix 4-4 Theme developing and relationship with industry data

| Themes (design for brand) | Related themes |  |  |
| :---: | :---: | :---: | :---: |
| Current design need improve | Lack of attractive design <br> Many similar designs in retail stores | Possible design directions | Simple elegant younger styles would be better (current too intricacy) |
| Design improvement unsuccessful | Market and resellers limited design improvement <br> Design improving challenge | Over-reliance on sale experiences, lack of exploration of new needs | Unsuccessful experience in designs in the past |
| Design needs to improve to younger styles | Extending consumer groups | Brands need new consumers |  |
| Cashmere brands with conservative designs (including successful brands) | Cashmere is mainly for keeping warm <br> Cashmere is too expensive to waste (try unsuccessful designs) <br> Cashmere knitwear as gifts |  |  |
| Themes (design structure \& plan) | Related themes |  |  |
| Design only for sale more | Brand pursues short term sales performance rather than longterm development |  |  |
| Mixed styles make brands image blurry | Lack of design structure and plan <br> Disordered and confuse styles are less attractive for consumers <br> Lack of design requirement from brands | Different categories with no links each other |  |
| Lack of summer products | Design structure limited by manufacture capability rather | Design is not required for building brands |  |


|  | than the brand needs (manufacture thinking ) Not taking serious for adding Spring and Summer products | Buy Summers products from wholesale markets |  |
| :---: | :---: | :---: | :---: |
| Design full season products is a helpful to keep the business going | Design with clear styles and product plans <br> Design with clear target consumers <br> Successful fit sale channels <br> Continually building brands with patience | Design with full category structures <br> Design with reasonable quantity for purchasing meetings <br> Design for younger fashionable market | Lack of good atmosphere |
| Creative design is needed | Unique design can improve brands | Fashionable design sells better in market |  |
| Limited design spaces and freedoms | Lack of clear constraint and freedom Design direction not clear |  |  |
| Themes (design understanding) | Related themes |  |  |
| Lack of design understanding | The company do not encourage new designs | With only one standard of good designs | Seen all no-ordered products as unsuccessful designs <br> Good design=order more |
|  | Reseller with conservative attitude for new design | Brands raking a passive position for low risks |  |
|  | Lack of support policy for new designs | Do not produce small quantities (small= high cost=low profits) | New design less opportunities appear in markets |
| Themes (design process) | Related themes |  |  |
| Over relace on market information for design | Design after winter market | Design time too short for new seasons |  |
| Design directors are mainly a design manager rather than design direction leader | Lack of mood board and themes | Lack of clear design direction |  |
| Themes (the role of designers) | Related themes |  |  |


| Boss not satisfying designers | Designers do not design enough new and attractive products | Lack of good design abilities |  |
| :---: | :---: | :---: | :---: |
| Lack of design understanding | Think little of design | Don't believe expertise of designers | Some company owners believe they can replace designer by copying |
| Designers with low self-confidences | Designer with low positions <br> Limitation of designer selfimprovement <br> Designer hierarchy <br> Designers training and working experiences | Lack of respect for expertise <br> Younger designers with limited opportunities <br> Fashion design background, knitting skills trained by companies <br> Textile or other designs, fashion and knitwear trained by companies | Manage designer like factory workers <br> Limitation of location and areas |
| Expectations from designers | Good fashion sense <br> Understanding markets |  |  |
| Lack of outstanding designers in the industry | Brands need designers, but didn't know who should be the 'right' one <br> Current designers do not know how to do full-range products |  |  |
| Lack of leading designer for the brands | The products are not well cognized and planed | Too many designs crowed together is a disaster | Successful brands with conformable images that build with clear style, design themes and cognized colours |
| With leading designers for brands <br> With more design resources than other brands | Designers live and work in capital city (Beijing) |  |  |
| Creative designs can drive business | Creative designs are needed even in conservative brands | Attractive designs make people visit |  |


| Advantage and disadvantage of <br> stable designer teams | Lack of fresh blood in design <br> teams <br> Design teams with good <br> number of people in big brands |  |  |
| :--- | :--- | :--- | :--- |
| Theme (branding) | Related themes <br> Many brands with business <br> failure | Big gap between purchasing <br> meeting and market | Reseller with big inventory by <br> order 'wrong' products |
| Lack of confidence for knitwear <br> brands improving | Following markets rather than <br> leading them |  |  |
| Copy is a popular culture in the <br> industry | Selling trademarks = brands <br> given up <br> Lack of understanding for <br> brand positioning | Lack of brand positioning and <br> market segment | Lack of brand images (both in <br> store and websites) |
| Challenge of brand upgrading | Leaderships lack of directions <br> for brand developing | Success brand with brand <br> promoting |  |

$\left.\left.\begin{array}{|l|l|l|l|}\hline \begin{array}{l}\text { Brand upgrading and developing } \\ \text { plan }\end{array} & \begin{array}{l}\text { Need design products for whole } \\ \text { year } \\ \text { Need to improve design for } \\ \text { building brand } \\ \text { Need start with small scale for } \\ \text { testing and studying }\end{array} & & \\ \hline \begin{array}{l}\text { Brand upgraded to fashion brands } \\ \text { with more categories is a right } \\ \text { decision }\end{array} & \begin{array}{l}\text { Design with product plans } \\ \text { Design styles is clear } \\ \text { Brands with different lines }\end{array} & \begin{array}{l}\text { Design styles distinguished from } \\ \text { other cashmere brands } \\ \text { Continually building brand for } \\ \text { long time }\end{array} & \begin{array}{l}\text { Good qualities } \\ \text { Good design } \\ \text { Successful brand building }\end{array} \\ \text { Product manager is a bridge } \\ \text { between design and market }\end{array}\right] \begin{array}{l}\text { No clear brand characters }\end{array}\right\}$

|  | Other brands with 1-2 purchasing meeting for cold seasons |  |  |
| :---: | :---: | :---: | :---: |
| Management problems make people less passions |  |  |  |
| Knitwear brands are declining | Big brands are declining <br> Small companies cannot survival <br> A gap between resellers' choice and consumers preference | Marginalization of knitwear brands <br> Brand images are important for business growing <br> Sale channel declining or losing | Brand images not good in retail stores <br> Shopping malls require selling in brands rather than categories <br> Knitwear brands with single or few categories, with half year business |
| Unsustainable business | A negative ripple effect of design and brand improvement | Inventories need to deal with <br> Low profits cannot cover cost |  |
| Theme (consumers) | Related themes |  |  |
| Too broad segment =no clear target consumers | Missing target consumers <br> Met the target consumers | Aging consumer is main issue <br> Meet the consumers' needs, but to similar others | Current consumers with low taste of designs |
| Lack of direct link with consumers | Lack of consumer research | Lack of system for consumer research | No deep research of consumers |
| Theme (manufacture background) | Related themes |  |  |
| Advantage and disadvantage of Manufacture background | With technique supports advantage in own manufactures <br> Big knitwear companies | Quick design cycles for single knitwear <br> Technique support for yarn developing <br> Design support with convenience Can make top quality knitwear <br> Technician with good skills <br> Technicians supporting issues | Technician with professional education backgrounds in big brands |
|  | Manufacture culture rather than brands' | Manufacture standard and different thinking | Lack of culture and system for supporting design |


|  |  | System issues for supporting <br> designs |  |
| :--- | :--- | :--- | :--- |
| Why need improved brands | Export business with low <br> profits and declining sales | Own brand is worth to develop for <br> higher profits and sustainable <br> business |  |

Appendix 4-5: thematic maps of industry data analysis







## Appendix 4-6: An example of grounded theory analysis

Table 1: intermediate codes

| Categories | Sub-categories | Knitwear brands/companies | Designers |
| :---: | :---: | :---: | :---: |
| Products design | Design styles | Following consumers' preferences | Don't like the styles they design, less freedom, different to change |
|  | Design creativity | Nobody orders in purchasing meetings <br> Following markets Following popular clothes | Less support for new ideas, limited by cost, manufactures, techniques and facilities |
|  | Design process | Market information Photos from markets or websites <br> Colour from trends Designers working individually Signal design, not link with others | Following market information for reducing the market risks Short periods for design, totally following market, less confident from the whole companies |
|  | Design collections | Autumn \& winter Single structure $90 \%$ knitwear products Around 300 styles No themes Linked by colour | Designers selected clothes photos as their inspirations, Designer design new styles without themes |
|  | Design features | Similar other brands No distinguished design features | Not clear |
| Sale channels | Knitwear areas in department stories | Move to top floors or no longer have | Less people visiting, old-fashioned |
|  | Shopping malls | Top floors with un-fashionable brands <br> If full collection with fashion brand, then located on lower floors | No younger people visiting the stores. Just old people visit by knitwear for keep warm |
|  | Chain shores | In-stores in shopping malls and department stores Street shops | Less visitors than shopping malls, mix with other brands to sell in some areas |
|  | Outlets | Community stores Manufacture stores Discount stores | Low prices for inventories |
|  | Online stores | In few big Chinese platforms | Inventory from brands, the products left from manufacture, low prices |
|  | Wholesale | Local whole markets |  |
| Branding | Brand positioning | Not clear | Not really clear |
|  | Target consumers | Target 25-45, or 20-80 But mainly 40-60 | 25-45, but mainly for over 45 |
|  | Brand value | Low value Raw materials Qualities | Not strong, good quality and raw materials |
|  | Brand understanding | Simple <br> Trademark + advertising + packaging | Brands not good enough, but designers do not have the power to discuss |
|  | Brand strategy | Buy out business model Discounts Advertising | Buy out business model |
| Categories | Sub-categories | Knitwear brands/ company | Consumers (survey results) |
| Consumers understanding | Consumers preferences | Chinese consumers are unfashionable, young people do like cashmere/knitwear | Knitwear buying reasons: $40.30 \%$ for styling, $36 \%$ for attractiveness, $23.88 \%$ for warmth. |


|  |  |  | Buy decision reasons: 49.5\% for fashion new style, $38.44 \%$ for good material and quality $12 \%$ for beautiful colours <br> Rank of Influencing factors for buying: <br> Design/silhouette/colour/cashmere percentage/good fit/coordination/prices/ warmness Clothing styles: <br> 49.67\% elegant, $33.67 \%$ personality and fashionable styles, $29.33 \%$ neutral sport style, $22.33 \%$ not sure what style they are. <br> $19.67 \%$ smart style, $18.67 \%$ sexy and feminine, $15.33 \%$ vintage and retro styles, $12 \%$ preppy style, $6.33 \%$ nonmainstream |
| :---: | :---: | :---: | :---: |
|  | Consumers dress habit | No research Based on refection of the sale Offer basic knitwear Or heavily decorated knitwear | Chinese: <br> $33.16 \%$ V \& round neck sweater <br> $32.65 \%$ knitted coats <br> 19.28\% cardigan <br> $14.91 \%$ thermal underclothes |
|  | Consumers lifestyles | No research Don't care Don't know | Shop visiting frequency <br> 41.33\% 1-2 times ever seasons <br> $32.22 \%$ at least once per month <br> $13.11 \%$ over twice per month <br> $11.56 \%$ almost once every week 1.78\% over twice every week <br> And the visiting reasons: <br> $30.61 \%$ for checking and finding something they like <br> $30.47 \%$ buy something they like <br> $25.11 \%$ relaxation and fun in leisure time <br> $13.82 \%$ something must to buy <br> Biggest spending: <br> 43.86\% foods and living expenses <br> $32.86 \%$ clothing and jewellery <br> 22.57\% traveling or entertainment <br> $0.71 \%$ for collections <br> Weekly eating out <br> $44.44 \%$ less than 2 times <br> 36.67\% 2-5 times <br> 7.78\% 5-10 times <br> $11.11 \%$ almost every meal <br> Fashion magazine: <br> 33.84\% read for entertainment <br> $30.30 \%$ read for new information of style <br> $19.87 \%$ for trend and their styles <br> 15.99\% don't care about fashion <br> For crazy clothes <br> 34.22\% interesting, but never try <br> 26.44\% want to try some ideas <br> 21.56\% too crazy <br> 17.78\% like it, exciting <br> For creative different clothes <br> $63.11 \%$ like it , but don't want to try <br> 32.89\% like it, want to try <br> $12.89 \%$ too much |
|  | Consumers feedback systems | Less links with consumers directly Feedback from retail stores Or after-sale service | Annual clothes spending: 39.33\% CNY 5,000-10,000 34\% less than CNY5,000 19.33\% CNY10,000-30,000 4.33\% CNY 30,000-50,000 |



|  |  |  | $42.33 \%$ too old fashion to buy for |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  | $26.67 \%$ good quality, but nor suitable |
|  |  |  |  |
|  |  |  | $19 \%$ never visit |
|  |  |  | $9 \%$ ok, but never buy |
|  |  |  | $21.33 \%$ like them and brought some |
| products before |  |  |  |
|  |  |  | $3.67 \%$ really like them, are loyal |
| consumers |  |  |  |


|  | Basic professional course | Class + homework (different skills practices) | Using in projects (a part of whole projects) |
| :---: | :---: | :---: | :---: |
|  | Design course | Class + homework | Projects with whole development process and research |
|  | Main focusing | Meeting the teacher requirements, with personal interests | Looking for personal methods for design development, build personal direction of the design |
| Educational concepts |  | Teacher leading, meet the university requirement of the digress levels and job requirement | Students leading, self-study, develop independent design skills |
| Categories | Sub-categories | The collection of the practice research | The case study knitwear brand (observations) |
| Design themes | Design inspirations | Chinese tea culture | No clear, many different things |
|  | Background research | Tea culture research | No |
|  | Design ideas development | All the design elements are from the same inspiration | Put different element together without themes |
| Design style | Style | Modern + Chinese culture | Multi-styles |
|  | Colours | Natural tones | Multi colours, no clear tones |
|  | Silhouettes | Square + circle, over size | Basic tops |
|  | Patterns | Linked by the theme | Freedom design |
|  | Stitches | Linked by the theme | Freedom design |
| Target consumers |  | 25-45 female consumers | 20-80 consumers both male and female, main group 45 above |
| Collections | A series of feeling | Strong | Weak |
|  | Collocation | Strong | No, single designs |
|  | Inside links | Strong | Weak, linked by colour and materials |
| Images |  | Modern, young, elegant, fashionable | Old-fashion, aged |
| Attractiveness |  | Positive feedback from exhibitions, and many young people like them | Less attractive for young consumers, and every year around $2 / 3$ new products will become inventory |

Table2: Advanced coding, theoretical integration and story lines of the data

| Story lines | Theoretical integration |  |
| :--- | :--- | :--- |
| The knitwear brands | The companies | The designers |
| Products design | Design styles are only <br> following the sale experiences <br> and market information, less <br> support for creative design. <br> Most brands only offer knitwear <br> and coat for cold seasons, and <br> in summer they sale discount <br> clothes. Single structure of the <br> products, with 90\% knitwear <br> products. Mainly sell cashmere <br> products. Collection is without <br> strong inside links. | Most of designers don't like the <br> brands' styles and their <br> designs. But they have limited <br> freedoms for design in their <br> systuations by the design <br> the shs. Less support for <br> creative design, and they are <br> used to follow market <br> information to do designs. The <br> design processes are short <br> and lack organisation and |
| management. |  |  |


| Teaching systems | More lectures and less <br> practice. Different course <br> taught by different teachers. <br> The lecture is main method <br> plus study homework. Fewer <br> tutorials, only a final project for <br> the complete process | More practice in workshops, <br> more tutorials. |
| :--- | :--- | :--- |
| Study methods | Lectures and exams for <br> general course. Design course <br> lecture and homework. <br> Students meet teachers' <br> requirement. | Look for personal methods for <br> design development and build <br> personal direction of the design |
| Educational concepts | Teacher led, meets the <br> university requirement of the <br> degree levels and job <br> requirements | Students leading, self-study to <br> develop independent design <br> skills |
| Design practice research | The collection of the practice <br> research | The case study knitwear <br> brand (observations) |
| Design themes | Design with inspiration, and <br> research, all the design <br> elements are under a storyline. | No clear theme and storyline, <br> no research. Use different <br> design elements together, but <br> no link between each other. |
| Design styles | Modern style with natural <br> tones. Use square and circle <br> as creative silhouettes. <br> Patterns and stitches are <br> related the storyline. | Multi styles with multi colour. <br> No clear characters. Mainly <br> offer basic tops. All the <br> designer are not linked by <br> theme. |
| Target consumers | 25-45 female consumers | 20-80 consumers both male <br> and female, main group 45 <br> above |
| Collections | Strong tight collection with <br> inside links | Not really a collection, single <br> designs together as group. <br> Linked by colour and materials. |
| Images | Modern, young, elegant, <br> fashionable | Old-fashion, aged |
| Attractiveness | Positive feedback from <br> exhibitions, and many young <br> people like them | Less attractive for young <br> consumers, and every year <br> around 2/3 new products will <br> become inventory |

Appendix 5: Exhibition photographs of the DAR knitwear collection
Group 1: photos in 3-days exhibition in King Deer showroom, Baotou, China, 2016.



Group 2: fashion show with Tsinghua University in Shenzhen, China, 2016.



Fashow show photos took by photographer Bryan Cheng

Group 3: 3-days exhibition in BCU in birmingham, UK, 2017.


Creative knitwear Design VS
Traditional Knitting industry

Design practice research
Xin Zhang PhD Final Project




Group 4: photos in Birmingham festival, Birmingham. UK, 2017.


Birmingham Fashion Festival designer runway show
$23^{\text {rd }}$ June 2017


Group 5: photos in fashion show of midland fashion week, Cannock, UK, 2017.


