Executive DBA, Université Paris Dauphine – PSL

PSL·巴黎九大高级工商管理博士学位项目

# Research on the Business Model and Consumer Behavior of the Craft Industry

（Thesis submitted for the degree of Executive Doctorate in Business Administration）

Cohort: 2019

Candidate: Yu-Sheng Lin

Supervisor: Bernard Fernandez

14, June, 2024

# CONFIDENTIALITY AND AUTHORIZATION STATEMENT

There is a need to protect the confidentiality of information provided by the interviewees and their organizations. For this reason, the data and other material included in the thesis have been presented in such a way as to protect the interests of the participants. This thesis has been accepted as confidential, and will be handled according to the Université Paris Dauphine - PSL' confidentiality policy.

Furthermore, the writer fully understands the relevant policy of Université Paris Dauphine - PSL, regarding the reservation and usage of the dissertation, namely that the University has the right to retain copies of the thesis, allow the thesis to be accessed and borrowed; The university may publish all or part of the contents of the thesis, and can save the thesis by photocopying, microprinting or other means.

Signature： Yu-Sheng Lin Signature of Supervisor： Date：2024/6/4

# ABSTRACT

Crafting is the main symbol of the standard of social productivity. In each historical period, crafting determines the standard of manufacturing. With the development of the times, crafting has been carried forward and subject to innovations and progress. Advanced crafting is the crystallization of science and technology and the demonstration of a country's industrial capability and culture. UNCTAD's (United Nations Conference on Trade and Development) 2018 Creative Economy Outlook suggests that crafting is the only area where developing countries constitute the majority in the global cultural and creative industries. Over the last decade, craft exports from developing countries have grown nearly twice, and all the top 10 craft exporters came from Asia, highlighting the leading position of Asian countries in the current global craft market. Despite the leading participation of Asian countries in the craft market, however, the craft industry in Taiwan has been confronted with the dual pressures on cheap craft exports from developing countries on one hand and from major global craft players on the other and seen a market shrink in Taiwan ever since the end of the 1990s, leaving the whole industry in the difficulty of either facing shrinking orders or subject to the transition from OEM (Original Equipment Manufacturer) to ODM (Original Brand Manufacturer). It was not until the government promulgated its Development of the Cultural and Creative Industries Act and approved the 15+1 cultural and creative industries that the craft industry was included as an essential part of the authorities' flagship programs, and, thereafter, Taiwan's craft industry showed signs of revival again. Under cultural and creative policies, the transition of the craft industry is underpinned by craft perfection through innovative designs by craftsmen or through the enrichment of the aesthetics and value through handcraft techniques, which further enables the transformation and advancement of the craft industry and the accession and analysis of market information (such as AI analysis). Therefore, it is essential to acquire knowledge of the business models and consumer behaviors in the craft industry. Through the methodology of business model analysis put forward by Alexander Osterwalder, this study examines proprietors in the craft industry, including (1) demand orientation aspects such as target customer groups, customer relationships, and channels, (2) supply orientation aspects encompassing key partners, key activities, and key resources, (3) value orientation, specifically the value propositions, and (4) financial orientation involving cost structures and revenue streams. Besides, this study involves interviews with 20 craft industry players in qualitative analysis and surveys on 218 artifact consumers on the

consumer end by carrying out CATI(（Computer-Assisted Telephone Interviewing System) and online phone calls. Intending to further analyze the business model and consumer behavior of the craft industry, the study finds that:

After technological advancements, art companies and daily-use craft producers re-position their products in the market through such actions as highlighting the cultural value of their products through cultural creation and using Chinese cultural connotations to shape the characteristics of their brands,

In addition, the re-design side and the market side can generate innovative product marketing and image management generate by relying on the “dense network supply chain relationship” in a way to demonstrate their core values in a targeted manner, attract customer awareness and recognition, and enhance their brand influence.

Surveys carried out in this study also found that brands and craftsmen will strengthen their purchasing power and that gender, age, education, and average monthly disposable income can make significant differences in purchasing intentions. Based on the results of quantitative and qualitative surveys, the study proposes trends and suggestions for developing the craft industry’s five sectors: ceramics, woodcraft, glass craft, wood carving, and bamboo craft.

**Key Words:** The Cultural and Creative Industry, the Craft Industry, Business Model, Consumer Behavior

# ACKNOWLEDGEMENT

I would like to acknowledge and give my warmest thanks to my supervisor Doc. Bernard Fernandez, who made this work possible. His rigorous scholarship and warm care have guided and encouraged me through the last five years. I would like to thank him not just for his mentoring but also for his approach of humbleness to life, which deserves my life-long learning and practicing. I want to say sincerely, “Thank you, my teacher”.

I would like to thank the oral examiners, Mr. OO and Mr. OO, for taking time out of their busy schedules to attend the oral test and giving me detailed guidance and corrections, which made this paper perfect. I want to thank all the survey contributors and the respondents from the five major craft industries for providing their information and receiving interviews from time to time. Thank you, Mr. Mingzheng and Mr. Zhengfeng, for your tireless guidance and for answering my many basic but trivial questions. Most importantly, I would like to thank my mother, who all the way helped me compile my interview materials and helped with questionnaire compilation on my craft consumer surveys. Thank you, Mom and Dad. Words can’t express how grateful I am to you for raising me for 32 years with your heartfelt support. In the coming days, I will help with your worries and problems. I also want to express my gratitude to my grandmother, who has loved me since my childhood. Since I will be 32 years old in the coming year, I shall promise to start a family to make you happy, grandmom. Finally, if I would take one last moment to express my gratitude, I would like to thank God for allowing me to enter Université Paris Dauphine, meet so many excellent professors, learn so much, and become a helpful person. Wish you all peace and happiness.

Yu-Sheng Lin 2024.6.15

# TABLE OF CONTENT

ABSTRACT ..... I

ACKNOWLEDGEMENT ..... III

TABLE OF CONTENT ..... IV

TABLE OF TABLES ..... VII

TABLE OF FIGURES ..... IX

Chapter 1 Introduction ..... 1

1.1 Background ..... 1

1.2 Objectives ..... 8

1.3 Chapter overview ..... 11

Chapter 2 Literature Review ..... 13

2.1 Craft Industry and Crafts Categories ..... 13

2.2 An Overview of The Development of The Craft Industry ..... 15

2.2.1 Performance in Domestic and Foreign Markets ..... 16

2.3 The Industry Environment of The Craft Industry ..... 18

2.3.1 Industry Environment ..... 18

2.3.2 Brand and Branding Strategy ..... 19

2.3.3 Marketing Models ..... 21

2.3.4 Application of E-commerce and Big Data ..... 22

2.3.5 Industrial Transition ..... 28

2.3.6 Industrial Business Models ..... 33

2.4 Dimensions of a Business model ..... 34

2.4.1 Business Specific models ..... 34

2.4.2 Business Sub-Models ..... 35

2.4.3 Business Meta-Models ..... 35

2.5 Business Models ..... 35
2.5.1 The Nine Building Blocks ..... 36
2.5.2 The Three Dimensions Model ..... 39
2.5.3 The Portfolio Model ..... 39
2.5.4 The Development Structure of Business Models ..... 40
2.5.5 Market Force ..... 40
2.5.6 Key Trends ..... 45
2.6 Consumer Behavior ..... 56
2.6.1 Consumer Behavior ..... 56
2.6.2 Consumer Behavior Research ..... 57
2.6.3 Research on the Business Model of the Craft Industry ..... 59
Chapter 3 Research Design ..... 63
3.1 Qualitative Interviews ..... 64
3.1.1 Research structure ..... 68
3.1.2 Research method ..... 70
3.2 Quantitative survey ..... 75
3.2.1 Survey on Consumer Behaviour in the Craft Industry ..... 76
Chapter 4 Data Analysis ..... 81
4.1Business Model of the Five Craft Industries ..... 81
4.1.1The Pottery Industry ..... 81
4.1.2 Interviews on the Wood Crafting Industry ..... 97
4.1.3 Interviews of Woodwork Practitioners ..... 107
4.1.4 Interviews of the Bamboo Art Industry ..... 115
4.1.5 Interviews of the Glass Industry ..... 123
4.2 Summary: Management Implications ..... 133
4.3 Consumer behavior survey ..... 135
4.3.1 Sample structure analysis ..... 137

4.3.2 Analysis of dependent variables ..... 138
4.3.3 ANOVA analysis of independent variables and dependent variables ..... 151
4.4 Conclusion: Management implications ..... 160
Chapter 5 Conclusions and Suggestions ..... 163
5.1 Conclusions and Suggestions ..... 163
5.2 Discoveries of and Recommendations for the Five Major Craft Industries ..... 166
5.2.1 Discoveries of and Recommendations for the Woodcarving Industry ..... 166
5.2.2 Bamboo Craft Industry ..... 167
5.2.3 Glass Industry ..... 169
5.2.4 Woodcraft Industry ..... 170
5.2.5 Ceramic Industry ..... 171
5.3 Research Limitations ..... 172
Appendix A:Map of Taiwan ..... 177
Appendix B: Interview Consent Form ..... 177
Appendix C: Central and Local Government Initiatives for the Yingge Ceramic Industry ..... 179
Appendix D: Basic Law of Culture ..... 185
Appendix E: Law on the Development of Cultural and Creative Industries ..... 185
Appendix F、Explanation of Proper Noun ..... 194
Appendix G、Interview Content ..... 195
REFERENCES ..... 204
Resume ..... 214

# TABLE OF TABLES

Table 1-1 The world's top6 multinational cultural and creative companies ..... 2

Table 1-2 The number of cultural and creative companies in Taiwan and their turnovers ..... 6

Table 2-1 Export sales of the crafting industry and its growth rate (2014-2018 ) ..... 17

Table 2-2 Digital Platforms Frequently Utilized in the Craft Industry ..... 26

Table 2-3 Definition Table for the Nine Key Elements of Business Models ..... 37

Table 2-4 The Nine building blocks in the four pillars..... 52

Table 3-1 A comparison between qualitative and quantitative research ..... 64

Table 3-2 The Collected business models of Alexander Osterwalder et al. ..... 67

Table 3-3 Recommendations and checks of Case Interview Implementation..... 73

Table 4-1 Companies of the Four Interviewees..... 81

Table 4-1-1 Commercial nine-square grid of ceramic practitioners..... 95

Table 4-2 Interviewees of wood crafting practitioners..... 97

Table 4-2-1 Commercial nine-square grid of woodworking practitioners ..... 106

Table 4-3 Interviewed woodwork businesses..... 107

Table 4-3-1 Commercial nine-square grid of woodcarving practitioners ..... 114

Table 4-4 Interviewed bamboo art businesses..... 115

Table 4-4-1 Commercial nine-square grid of the bamboo art industry ..... 122

Table 4-5 Interviewed glass industry businesses..... 123

Table 4-5-1 Commercial nine-square grid of the glass industry ..... 131

Table 4-6 Analysis of sample structure of consumer survey（N = 218） ..... 138

Table 4-7 Comparison of the characteristics of art, crafts and industry..... 140

Table 4-8 Distribution of channel times for selecting and purchasing handicrafts ..... 142

Table 4-9 Three factors affecting the purchase of handicrafts ..... 145

Table 4-10 The main motives for purchasing handicrafts ..... 149

Table 4-11 Perception of handicraft brands..... 151

Table 4-12 Summary of ANOVA test results ..... 152

Table 4-13 Analysis of the variance of gender on “whether there is increased purchase willingness of award-winning handicrafts”..... 153

Table 4-14 Analysis of the variance of gender on“whether there is increased purchase willingness of award-winning handicrafts”..... 153

Table 4-15 Analysis of the variance of age on “considering buying handicrafts because I am impressed by the cooperative brands”..... 154

Table 4-16 Analysis of the variance of age on “considering buying handicrafts because I am impressed by the cooperative brands”..... 154

Table 4-17 Analysis of the variance of age on “considering buying handicrafts because I have heard a little about the craftsman”..... 155

Table 4-19 Analysis of the variance of age on “whether there is increased purchase willingness for award-winning handicrafts”-ANOVA analysis ..... 156

Table 4-20 Analysis of the variance of age on “whether there is increased purchase willingness for award-winning handicrafts”-ANOVA abstract..... 156

Table 4-21 Analysis of the variance of education level on “whether there is increased purchase willingness for award-winning handicrafts”-ANOVA analysis ..... 157

Table 4-22 Analysis of the variance of education level on “whether there is increased purchase willingness for award-winning handicrafts”-ANOVA abstract..... 157

Table 4-23 Analysis of the variance of monthly average disposable amount on “whether there is increased purchase willingness for award-winning handicrafts”-ANOVA analysis .. 158

Table 4-24 Analysis of the variance of monthly average disposable amount on “whether there is increased purchase willingness for award-winning handicrafts”-ANOVA abstract... 159

Table 4-25 ANOVA results of independent variables ..... 160

# TABLE OF FIGURES

Figure 1-1 Growth rate in the turnover of the cultural and creative Industries in the U.K., South Korea, and Taiwan (2014-2018) ..... 3

Figure 1-2 Growth rate of export sales of the cultural and creative industries in the U.K., South Korea, and Taiwan (2014-2018) ..... 4

Figure 1-3 Number of cultural and creative companies in Taiwan and their turnovers （Unit： NTD in Thousands, %） ..... 5

Figure 1-4 Turnovers and growth rate of the cultural and creative industries in Taiwan（Unit： NTD in Thousands, %） ..... 5

Figure 1-5 Average annual spendings of each Taiwan household on recreational and cultural consumption (2014-2019) (Unit: NTD) ..... 6

Figure 1-6 Domestic and export sales in Taiwan’s cultural and creative industries (2015-2020) (Uni: NTD in Thousands)..... 7

Figure 2-1 Industrial chain of the craft industry ..... 14

Figure 2-2 Average annual turnover and growth rate of each craft producer (2017-2019)..... 16

Figure 2-3 Overview of Taiwan's Craft Industry Imports and Exports from 2016 to 2021. .. 18

Figure 2-4 Brand strategic 0bjective ..... 21

Figure 2-4-1 Global Business Turnover from 2014 to 2024 ..... 26

Figure 2-4-2 Process Diagram of Craft Design and Big Data-Driven ..... 27

Figure 2-5 Bilderbeek's New Business Model ..... 29

Figure 2-6 Architecture Diagram of the Four-Construct Model ..... 36

Figure 2-7 Architecture Diagram of the Nine Elements Model for Taiwan's Craft Industry ... 38

Figure 2-8 Model Architecture Diagram ..... 38

Figure 2-9 Three-Dimensional Model Architecture Diagram ..... 39

Figure 2-10 Architecture Diagram of the Transaction Portfolio Model ..... 40

Figure 2-11 Porter's Five Forces Analysis ..... 43

Figure 2-12 Factors of Porter's Five Forces ..... 45
Figure 2-13 The Nine Building Blocks in Four Pillars ..... 45
Figure 2-14 Business Model Canvas..... 52
Figure 2-15 Development Strategy for Taiwan's Craft Industry ..... 55
Figure 2-16 Innovation Strategy for the Craft Industry ..... 56
Figure 2-17 Five Stages of Consumer Purchase Decision ..... 61
Figure 2-18 Value Chain Evolution of Business Models and Consumer Behavior.....62
Figue 3-1 Quality interview process.....66
Figure 3-1-1 Research structure ..... 68
Figure 3-2 Qualitative in-depth interview process in the craft industry ..... 69
Figure 4-1 Penguin ceramic plate from Franz collection..... 93
Figure 4-2 Lotus porcelain from Franz collection ..... 93
Figure 4-2-1 Contemporary Masterpiece - Gantangxuan's Tang San Cai Standing Horse.....94
Figure 4-3 Daxi museum woodworking exhibition ..... 98
Figure 4-4 Moyi+, a woodworking sightseeing factory..... 99
Figure 4-5 “Zhuzi”, a brand known for traditional craftsmanship and modern design ..... 116
Figure 4-5-1 Organizational Structure of the Taiwan Glass Team and Related Industry Friendship Association. ..... 128
Figure 4-6 Installation art “transparent garden”..... 132
Figure 4-7 A case of innovative, cross-generational and cross-medium art creation..... 1322
Figure 4-8 Pursuit of art of each original artist.....133
Figure 4-9 Number of times to browse and purchase handicrafts in the past two years..... 139
Figure 4-10 Types of handicrafts purchased in the past two years ..... 140
Figure 4-11 The main reasons for selecting the channel..... 142
Figure 4-12 Average number of handicrafts purchased at one time (N=218)..... 143
Figure 4-13 Average amount of money spent on handicrafts in one purchase(In RMB)..... 144

Figure 4-14 Channels for obtaining handicraft information ..... 146

Figure 4-15 The most common channels for obtaining handicraft information (2015)..... 147

Figure 4-16 The most important factors in purchasing handicrafts ..... 148

Figure 4-17 The most important factors in purchasing handicrafts (2015)..... 148

Figure 4-18 Attractiveness of customized handicrafts ..... 150

Figure 5-1. Relationship diagram between consumer behavior and business model……..174

.