

**A STUDY ON THE RELATIONSHIP BETWEEN
TOUCHPOINT AND SATISFACTION OF YOUNG
CRUISE TOURISTS**

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2025

**A STUDY ON THE RELATIONSHIP BETWEEN
TOUCHPOINT AND SATISFACTION OF YOUNG
CRUISE TOURISTS**

by

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**Thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy**

June 2025

ACKNOWLEDGEMENT

After more than three years of working, to this day, this study and its associated writing are nearing completion. As I look back, I can't help but be thankful to USM for giving me the opportunity to pursue my doctoral degree, and to my supervisor, Dr. Ahmad Zuhairi Abdul Majid, who has continued to mentor me and encourage me to learn and improve with patient. Thanks are also due to Dr. Jazmin Binti Mohamad Jaafar, who as my co-supervisor made very useful comments on my thesis and volunteered to help me in the later period of my PhD (candidature) career. USM is a renowned university in Asia and around the world, and I am proud to be able to study and further my education here. Every inch of Penang campus and every corner of the library is full of happy memories for me accompanied with lectures and schoolmates. For international students, language is the first difficulty we encountered to pursue the doctoral degree. When I first arrived, I was not able to integrate well into the environment or communicate well with others, which once made me feel intimidated. However, my classmates Wang Jinghao, Zhang Qian and Fan Jinyuan made me feel accepted and eventually helped me to adapt to this city. Reading English literature also made me anxious, but this negative feeling was washed away by Dr. Ahmad Zuhairi Abdul Majid's communication with me over and over again. Homesickness and thoughts of my family have even caused me to falter many times, but they have also been my most favorable supporters, supporting me regardless of what lies ahead or what it takes. I would like to say that all these will become my valuable life experiences, they make me more determined, more fearless, and become a strong me. It is with gratitude that I wish USM better and better, and everyone who has helped me better and better.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	viii
LIST OF FIGURES	xi
LIST OF SYMBOLS	xv
LIST OF ABBREVIATIONS	xvi
LIST OF APPENDICES	xvii
ABSTRAK	xviii
ABSTRACT	xx
CHAPTER 1 INTRODUCTION	1
1.1 Introduction	1
1.2 Research Background	1
1.3 Problem statement	4
1.4 Research Questions	7
1.5 Research Objectives	9
1.6 Aims of the Study	9
1.7 Research Conceptual Framework	10
1.8 Research Scope	14
1.9 Significant of this study	15
1.10 Operational Definition	15
1.11 Expected Results	18
1.12 Thesis Organization	19
1.13 Summary of Chapter 1	21
CHAPTER 2 LITERATURE REVIEW	22

2.1	Introduction.....	22
2.2	The Development of Cruise Tourism	23
2.2.1	Cruise Tourism Origin and Development	23
2.2.2	Cruise Tourism in China	25
2.2.3	Products and Services of Cruise Tourism	29
2.2.4	Changes and Challenges of Cruise Market	34
2.3	Young People and Customer (Tourist) Satisfaction	39
2.3.1	Young People as Cruise Tourists with Their New Travel Pattern .	40
2.3.2	Customer (Tourist) Satisfaction and Service Quality	43
2.3.3	Affecting Factors of Cruise Tourist Satisfaction	47
2.3.4	Travel in the Digital Era.....	51
2.4	Service Design (SD) for Cruise Tourism.....	56
2.4.1	User Experience Design (UXD) and Service Design (SD).....	56
2.4.2	The Cruise Journey Map of Young Tourists.....	61
2.4.3	Service Touchpoints in Cruise Service	67
2.5	Overall Satisfaction.....	74
2.5.1	Theoretical Foundation and Index System of Overall Satisfaction	74
2.5.2	Modeling of the Overall Satisfaction Based on System Dynamics	79
2.6	Research Hypotheses	83
2.7	Summary of Chapter 2	84
	CHAPTER 3 METHODOLOGY	87
3.1	Introduction.....	87
3.2	Research Strategy.....	90
3.3	Respondents Selection and Data Collection	94
3.3.1	Respondents Criteria and Study Site.....	95
3.3.2	Instruments	97
3.3.3	Interview Guide.....	99

3.3.4	Development/ Contents of the Questionnaires.....	101
3.3.5	Process.....	104
3.4	Population and Sampling	106
3.4.1	Stratified Sampling.....	107
3.4.2	Determination of Sample Size	108
3.5	Ethics.....	110
3.6	Secondary Data	112
3.7	Semi-structured Interview.....	113
3.8	Pilot Survey.....	114
3.9	Actual Survey.....	115
3.10	Data Analysis	116
3.10.1	Word Frequency Analysis (WFA)	117
3.10.2	Descriptive Analysis	118
3.10.3	Factor Analysis (FA).....	119
3.10.4	Structural Equation Model (SEM)	120
3.10.5	Independent samples t-test.....	121
3.11	Fuzzy Analytic Hierarchy Process (FAHP).....	121
3.12	Validation.....	123
3.13	Summary of Chapter 3	124
	CHAPTER 4 DESIGN DEVELOPMENT AND FINDINGS	126
4.1	Introduction.....	126
4.2	Semi-Structured Interview Based on Literature Review	128
4.2.1	Organization of Interview	128
4.2.2	Results of the Word Frequency Analysis (WFA)	129
4.2.3	Finding and Discussion on the WFA	132
4.3	Pilot Study.....	134
4.3.1	Organization of Pilot Survey.....	134

4.3.2	Results of the Descriptive Analysis	135
4.3.3	Findings and Discussions of the Pilot Survey	138
4.4	Actual Study.....	141
4.4.1	Organization of Actual Survey.....	141
4.4.2	Results of FA.....	144
4.4.3	Results of SEM	154
4.4.4	Results of Independent Samples T-test	156
4.4.5	Findings and Discussions of the Actual Study.....	157
4.4.6	Summary of Actual Study	163
4.5	Fuzzy Analytic Hierarchy Process (FAHP).....	164
4.5.1	Organization of FAHP	164
4.5.2	Results of FAHP	167
4.5.3	Findings and Discussions of FAHP	172
4.6	Implications of Actual Study	175
4.7	Summary of Chapter 4	177
	CHAPTER 5 SIMULATION AND SUGGESTIONS.....	180
5.1	Introduction.....	180
5.2	Modeling the New Satisfaction Index System Based on System Dynamics	180
5.2.1	The Process of Build a System Dynamic (SD) Model.....	181
5.2.2	The Variables' Relations among Young Cruise Tourists' Satisfaction	184
5.2.3	The Mathematical Formula between Variables	186
5.2.4	The Using of Vensim Software.....	188
5.3	Model Check.....	191
5.3.1	Running Test	191
5.3.2	Visual Check	194
5.3.3	Extreme-Condition Test.....	195

5.4	Validation Process on SD Model	197
5.4.1	Statistic on Validation (NVivo Analysis)	199
5.4.2	Summary of Validation	203
5.5	Simulations	205
5.5.1	Simulation 1—For the “Sense” Phase.....	209
5.5.2	Simulation 2—For the “Interest& Interaction” Phase	212
5.5.3	Simulation 3—For the “Connect& Communication” Phase.....	215
5.5.4	Simulation 4—For the “Action” Phase	218
5.5.5	Simulation 5—For the “Sharing” Phase	221
5.5.6	Findings and Discussions of These Simulations	224
5.6	Suggestions from the Simulations.....	228
5.7	Summary of Chapter 5	230
CHAPTER 6 CONCLUTIONS AND RECOMMENDATIONS.....		233
6.1	Introduction.....	233
6.2	Findings Related to Research Objectives	234
6.3	Conclusions of This Study	241
6.4	The Contributions Made by This Study.....	242
6.4.1	Contribution to Professional Practice.....	243
6.4.2	Contribution to the Knowledge of Cruise Tourism.....	244
6.5	Limitations of This Study	246
6.6	Recommendations for Further Research Work.....	247
6.7	Summary of Chapter 6	249
REFERENCES.....		250
APPENDICES		
LIST OF PUBLICATIONS		

LIST OF TABLES

		Page
Table 2.1	Table of mainstream short distance cruise products around the word.....	32
Table 2.2	Table of factors influencing cruise tourist satisfaction in previous studies	49
Table 2.3	Table of touchpoints and their classification in previous studies.....	70
Table 3.1	Published table, sample size for $\pm 5\%$, $\pm 7\%$ and $\pm 10\%$ Precision Levels Where Confidence Level is 95% and P=.5	110
Table 4.1	Table of frequency touchpoints identified from interviews	130
Table 4.2	The basic information of respondents invited in interviews and pilot survey (n=43)	134
Table 4.3	The result of touchpoint categories analysis (n=43).....	136
Table 4.4	Demographical analysis on respondents' basic of the actual study (n=301).....	141
Table 4.5	Results of reliability test on 25 items (n=301)	145
Table 4.6	Results of reliability test on 23 items (n=301)	146
Table 4.7	Results of KMO and Bartlett's test on 23 items (n=301).....	148
Table 4.8	Results of EFA on 23 items (n=301).....	149
Table 4.9	Basic summary of CFA (n=301)	151
Table 4.10	Results of EFA on 23 items (touchpoints) and their 17 sub-categories (n=301).....	151
Table 4.11	Table of the fit indexes of the structure model.....	153
Table 4.12	Table of Pearson correlation coefficients & AVE square roots	153
Table 4.13	Table of path analysis	155
Table 4.14	Grouping of subjects in their different cruise experience.....	156

Table 4.15	Table of statistical group on cruise times of subjects (n=301).....	158
Table 4.16	Table of cruisers' satisfaction evaluation indexes system tested by EFA.....	161
Table 4.17	Pairwise comparison matrix of "Sense" phase at the third order ...	166
Table 4.18	Table of the random index on different factor number	167
Table 4.19	Demographical analysis on experts' basic of the FAHP (n=20)	167
Table 4.20 (a)	The Scores of experts on weights calculation of first order indicators (n=20)	169
Table 4.20 (b)	The Scores of experts on weights calculation of second order indicators-Expectation (n=20).....	169
Table 4.20 (c)	The Scores of experts on weights calculation of second order indicators-Actual experience (n=20)	169
Table 4.20 (d)	The Scores of experts on weights calculation of third order indicators-Sense (n=20).....	169
Table 4.20 (e)	The Scores of experts on weights calculation of third order indicators-Interest/interaction (n=20).....	170
Table 4.20 (f)	The Scores of experts on weights calculation of third order indicators-Connection/communication (n=20).....	170
Table 4.20 (g)	The Scores of experts on weights calculation of third order indicators-Action (n=20)	170
Table 4.20 (h)	The Scores of experts on weights calculation of third order indicators-Sharing (n=20).....	171
Table 4.21	Table of consistency test on FAHP (n=20)	171
Table 5.1	Table of initial values of stock variables.....	187
Table 5.2	Extreme-condition testing on the SD model of young cruisers.....	195
Table 5.3	The "Expectation" data when running the SD model by adjusting the Sense key touchpoint-Official content on social media	211

Table 5.4 The “Expectation” data when running the SD model by adjusting the Interest& Interaction key touchpoint—Official accounts on social media 215

Table 5.5 The “Expectation” data when running the SD model by adjusting the Connect& Communication key touchpoint—Official services on social media..... 218

Table 6.1 Guideline of the findings related to the research objectives and research questions in this study 235

LIST OF FIGURES

	Page
Figure 1.1	Conceptual framework of this study..... 11
Figure 1.2	The research process used in this study..... 19
Figure 2.1	Diagram of the main research fields in literature review 23
Figure 2.2	The six cruise regions around the world..... 30
Figure 2.3	Changes in the average age of tourists in the Asian cruise market .. 36
Figure 2.4	Theoretical framework of satisfaction based on expectation- performance theory 44
Figure 2.5	Decision-making process of vacation destination choice..... 52
Figure 2.6	The closed loop of young tourists' travel in the digital era 55
Figure 2.7	Different service encounters affecting tourist satisfaction 58
Figure 2.8	The preliminary cruise journey map of young tourists 65
Figure 2.9	Crosshair coordinate on the classification of service touchpoints on cruise trip 73
Figure 2.10	Chinese Customer satisfaction index (CCSI) of service enterprises 75
Figure 2.11	The structure of satisfaction index system built based on cruise journey and classification of touchpoints. 78
Figure 2.12	The preliminary CLDs of cruise tourist satisfaction 82
Figure 3.1	The methodology process for this study..... 89
Figure 3.2	The research flow chart in this study..... 92
Figure 3.3	Study sites..... 96
Figure 3.4	The differential scale developed from Likert 5-point scale..... 97
Figure 3.5	The Saaty' s 9 point scale 98

Figure 3.6	The guideline of questionnaires design and evaluation index system.....	102
Figure 3.7	The process of social survey used in this study.....	104
Figure 3.8	Sampling process.....	107
Figure 3.9	Sampling distribution	108
Figure 4.1	Crosshair diagrams filled by corresponding service touchpoints based on the literature review.....	129
Figure 4.2	The completed cruise journey map by typing the key touchpoints	133
Figure 4.3	The bar chart of score in four types of service touchpoints on pilot survey (n=43)	139
Figure 4.4	Procedure of EFA-CFA method been used in the actual study.....	143
Figure 4.5	User interface settings for EFA analysis used in 23 items	148
Figure 5.1	CLD built based on “expectation-performance” theory.....	181
Figure 5.2	SFD drew by regarding the “Sense” as a stock	182
Figure 5.3	Process in dynamic system approach on cruisers’ satisfaction	183
Figure 5.4	Basic model drew to cruiser tourists’ satisfaction.....	184
Figure 5.5	Casual relations of five phases with their affecting touchpoints....	185
Figure 5.6	SD structure based on casual relations from Table 4.16	186
Figure 5.7	The SD structure drew by the Vensim and its types of variables...	189
Figure 5.8	The SD modeling to cruisers’ satisfaction drew by the Vensim and its types of variables	189
Figure 5.9	Final SD model of young cruise tourists’ satisfaction.....	191
Figure 5.10	Dialog box prompted when execute the “Simulate” command at a wrong SD model.....	192
Figure 5.11	Interface of running test on the SD model constructed in this study	193
Figure 5.12	Interface of “Equations” on “Se change” of the SD model developed in this study	194

Figure 5.13	Graph of comparison of extreme-condition test setting Sense = 0 and before	196
Figure 5.14	Graph of extreme-condition test setting Sense = 0, Interest& Interaction = 0 and Connect& Communication = 0	196
Figure 5.15	Word frequency results for Q1-Do you think the proposed SD model can more realistically reproduce the young people' service encounter at various phases of a cruise journey ?	200
Figure 5.16	Word frequency results for Q2-Do you think the proposed model will contribute to the improvement of cruise industry, benefit to the service providers in creating cruise services more acceptable for young people ?	201
Figure 5.17	Word frequency results for Q3-What do you think about cruise travel services with social media for young people ?	202
Figure 5.18	Word frequency results for Q4-How do you think about the role played by service touchpoints in traditional channels versus social media service touchpoints on the development of a cruise industry ?	203
Figure 5.19	Word frequency results for Q5- What do you think is the biggest foreseeable challenge for the future development of the cruise tourism industry ?	203
Figure 5.20	Settings interface of the time span on simulation.....	206
Figure 5.21	“Overall satisfaction” of young cruisers under current (survey) conditions	207
Figure 5.22	“Experience-Expectation” of young cruisers under current conditions	207
Figure 5.23	Key touchpoint of the “Sense” phase for simulation experiment...	209
Figure 5.24	Key touchpoint of the “Sense” simulation on overall satisfaction (Official content on social media*0.5)	210
Figure 5.25	Key touchpoint of the “Sense” simulation on “Experience-Expectation” (Official content on social media*0.5)	211

Figure 5.26	Key touchpoint of “Interest& Interaction” phase for simulation experiment	212
Figure 5.27	Key touchpoint of the “Interest& Interaction” simulation on overall satisfaction (Official accounts on social media*0.5).....	213
Figure 5.28	Key touchpoint of the “Interest& Interaction” simulation on “Experience- Expectation” (Official accounts on social media*0.5)	214
Figure 5.29	Key touchpoint of the “Connect& Communication” phase for simulation experiment	215
Figure 5.30	Key touchpoint of the “Connect& Communication” simulation on overall satisfaction (Official services on social media*0.5).....	216
Figure 5.31	Key touchpoint of the “Connect& Communication” simulation on “Experience- Expectation” (Official services on social media*0.5)	217
Figure 5.32	Key touchpoint of the “Action” phase for simulation experiment.	219
Figure 5.33	Key touchpoint of the “Action” simulation on overall satisfaction (Accommodation on/off board+0.05)	219
Figure 5.34	Key touchpoint of the “Action” simulation on “Experience- Expectation” (Accommodation on/off board+0.05).....	220
Figure 5.35	Key touchpoint of the “Sharing” phase for simulation experiment	221
Figure 5.36	Key touchpoint of the “Sharing” simulation on overall satisfaction (Social media personal accounts sharing+0.05).....	222
Figure 5.37	Key touchpoint of the “Sharing” simulation on “Experience- Expectation” (Social media personal accounts sharing+0.05)	223
Figure 5.38	Effects of three key touchpoints involved in expectation on the overall satisfaction.....	225
Figure 5.39	Effects of two key touchpoints involved in actual experience on the overall satisfaction	227

LIST OF SYMBOLS

C	Mean value (math.)
<i>C.I.</i>	Consistency index
<i>C.R.</i>	Randomness Consistency Ratio (RCR)
CV	Coefficient of Variation
<i>df</i>	Degrees of freedom
E	Expected service satisfaction
<i>i</i>	Number of touchpoints/ indicators/ indexes ($i=1,2,3, \dots, n$)
n	Number of subjects/ factors
P	Perceived (Experienced) service satisfaction
p	Significance (math.)
<i>R.I.</i>	Random index
St.d	Standard deviation (math.)
t	Number of period run
SQ	Overall satisfaction
Σ	Summation (math.)
χ^2	Chi-square (math.)
λ_{max}	Maximum characteristic root (math.)
\int	Integral (calculus)

LIST OF ABBREVIATIONS

ACSI	American Customer Satisfaction Index
APP	Application (mobile/Web application)
CCSI	Chinese Customer Satisfaction Index
CFA	Confirmatory Factor Analysis
CJM	Customer Journey Map
CLD	Causal Loop Diagram
CLIA	Cruise Lines International Association
ECSI	European Customer Satisfaction Index
EFA	Exploratory Factor Analysis
ES	Expected Service
e-WOM	Electronic Word of Mouth
FA	Factor Analysis
FAHP	Fuzzy Hierarchical Analysis Process
F2F	Face to Face
ICTs	Information Communication Technologies
OTAs	Online Travel Agents
PS	Perceived Satisfaction
SCSB	Sweden Customer Satisfaction Barometer
SD	System Dynamics
SEM	Structural Equation Modeling
SERVQUAL	Service Quality
SFC	Social media- Firm Controlled touchpoints
SFD	Stock and Flow Diagram
SICAS	User Behavior Models (Sense- Interest/ Interaction- Connection/ Communication- Action- Sharing)
STC	Social media- Tourist Controlled touchpoints
TAs	Travel Agents
TFC	Traditional channel- Firm Controlled touchpoints
TTC	Traditional channel- Tourist Controlled touchpoints
UGC	User Generated Contents
WFA	Word Frequency Analysis
WOM	Word of Mouth

LIST OF APPENDICES

- APPENDIX A INTERVIEW GUIDE FOR HIGH-FREQUENCY SERVICE TOUCHPOINT IDENTIFICATION
- APPENDIX B QUESTIONNAIRE USED IN PILOT SURVEY
- APPENDIX C QUESTIONNAIRE USED IN ACTUAL STUDY
- APPENDIX D PAIRWISE COMPARISON MATRICES USED TO WEIGHT CALCULATION
- APPENDIX E INTERVIEW GUIDE USED IN PROPOSED SD MODEL VALIDATION PROCESS

KAJIAN MENGENAI HUBUNGAN ANTARA TITIK SENTUH DAN KEPUASAN PELANGGAN MUDA KAPAL PERSIARAN

ABSTRAK

Golongan muda secara beransur-ansur menjadi tetamu dalam pasaran pelayaran kapal persiaran di Negara China, sebagai peminat Internet, kecenderungan mereka terhadap media sosial juga telah membawa corak perjalanan baharu pada hari ini. Titik sentuh perkhidmatan baharu semakin banyak digunakan dalam interaksi antara pelancong muda kapal persiaran dan penyedia perkhidmatan, menimbulkan cabaran baharu untuk menguruskan kepuasan pelancong. Untuk menyesuaikan diri dengan perubahan industri pelayaran kapal persiaran di Negara China, 26 titik sentuh perkhidmatan pertama dikenal pasti melalui temu bual dan kajian literatur, dan kemudian siasatan kepuasan mendalam berdasarkan titik sentuh ini telah dijalankan kepada pelancong muda kapal persiaran Negara China, 301 soal selidik yang sah telah dikumpulkan dalam talian dan digunakan untuk analisis data. Analisis Faktor Penerokaan dan Analisis Faktor Pengesahan mendedahkan kesesuaian yang baik pada pembinaan sistem indeks kepuasan baharu yang terdiri daripada 23 titik sentuh perkhidmatan. Pemodelan Persamaan Struktur juga digunakan untuk menganalisis sistem indeks baharu dan mendedahkan hubungan parametrik antara pelbagai jenis titik sentuh dan kepuasan keseluruhan pelancong muda kapal persiaran. Sebagai penemuan utama kajian ini, sistem indeks kepuasan baharu yang terdiri daripada 23 titik sentuh perkhidmatan telah diberi nilai pemberat menggunakan proses penilaian pakar, ia juga dibina kepada model dinamik sistem, yang boleh mensimulasikan hubungan antara titik sentuh dan kepuasan keseluruhan pelancong kapal persiaran, dan meramalkan

tindak balas pelancong muda terhadap perubahan setiap titik sentuh di bawah strategi pasaran yang berbeza. Peranan berbeza yang dimainkan oleh titik sentuh yang berbeza dalam mempengaruhi kepuasan ditafsirkan dari segi saluran, fasa dan pengawal dalam kajian ini. Titik sentuh di rangkaian sosial adalah dominan pada permulaan dan akhir perjalanan kapal persiaran untuk interaksi pelancong-firma, seperti akaun peribadi di blog mikro, dan saluran tradisional adalah penting untuk menyediakan titik sentuh untuk menekankan pengalaman fizikal perjalanan kapal persiaran, seperti aktiviti di atas kapal. Orang muda lebih cenderung menggunakan titik sentuh yang dikawal pelancong, terutamanya titik sentuh di rangkaian sosial, kerana mereka berharap untuk menjadi pembantu dalam pengalaman pelayaran kapal persiaran mereka. Penemuan tersebut akan digunakan sebagai panduan untuk peningkatan pasaran pelayaran kapal persiaran Negara China untuk pelancong muda yang akan datang, dan model dinamik sistem yang dibina menggunakan 23 titik sentuh dan hubungan dalaman mereka akan dianggap sebagai rangka kerja dengan kemungkinan tidak terhingga untuk digabungkan dengan pelbagai pemboleh ubah luaran, seperti pelaburan, untuk membuat lebih banyak sumbangan dalam bidang pelancongan pelayaran kapal persiaran ini.

A STUDY ON THE RELATIONSHIP BETWEEN TOUCHPOINT AND SATISFACTION OF YOUNG CRUISE TOURISTS

ABSTRACT

Young people are gradually becoming the guests of the cruise market in China, as fans of the Internet, their preference for social media has also brought new travel patterns today. New service touchpoints are increasingly being used in interactions between young cruise tourists and service providers, posing new challenges to manage the satisfaction of tourists. To accommodate the changes of cruise industry in China, 26 service touchpoints were first identified through interviews and literature review, and then an in-depth satisfaction investigation based on these touchpoints was conducted to young Chinese cruise tourists, 301 valid questionnaires were collected online and used for data analysis. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) revealed a good fit on the construction of a new satisfaction index system of 23 service touchpoints. Structural Equation Modelling (SEM) was also used analyzing the new index system and revealed parametric relationship between different types of touchpoints and the overall satisfaction of young cruise tourists. As the main findings of this study, the new satisfaction index system consisting with 23 service touchpoints was assigned weight values using expert scoring process, it also be constructed to a system dynamic (SD) model, which can simulate the relationship between touchpoints and the overall satisfaction of cruise tourists, and forecast the responses of young tourists to the changes of each touchpoints under different market strategies. The different roles of different touchpoints played in affecting the satisfaction are interpreted in terms of the channels, phases and controllers in

this study. The touchpoints on social media are dominant at the beginning and the ending of a cruise journey for tourist-firm interactions, such as the personal accounts on micro blog, and the traditional channels are important to provide touchpoints to emphasize the physical experience of a cruise journey, such as onboard activities. Young people are more likely to use tourist-controlled touchpoints, especially the touchpoints on social media, as they hope to be the co-producers of their cruise experience. Those findings would be used as guidance to the improvement of China cruise market for the coming young tourists, and the SD model constructed using the 23 touchpoints and their internal relationship will be regarded as a framework with its infinite possibilities to be combine with various external variables, such as investment, to make more contributions on this field of cruise tourism.

CHAPTER 1

INTRODUCTION

1.1 Introduction

In recent years, China's cruise market is undergoing tremendous changes in demand and supply side, more and more young people are bringing new travel patterns to the cruise market, so understanding their behavioral preferences and experience on cruise journey will be the key to competing in the future market. Cruise experience are widely discussed in previous studies, many scholar put the tourists' satisfaction as a target to research its affecting factors, and focus on the service quality of cruise lines, so some special types of services or special phases of cruise journey are overstated in their impacts on the overall satisfaction of tourists. Few of them took about the changes of tourists' experience with firms over the times, and given a systematic assessment on the overall satisfaction of cruise tourists. This study aim to provide a framework for the satisfaction assessment of the young Chinese cruise tourists, using touchpoints as items representing different types of services from a more holistic perspective, to explore more creative guidance for cruise service providers form different types of touchpoints.

This chapter is the starting point of this research, the background is given first and then the problem statement, the research questions as well as the research objectives are clarified follow the problem statement, the significance and limitations of this study are also included, and wraps up with the organization of the thesis.

1.2 Research Background

Cruise tourism, originated in North America, has been popular all over the world in recent years (Wu et al., 2020). According to the State of the Cruise Industry

2024 report published by Cruise Lines International Association (CLIA), cruise passengers reached 31.7 million in 2023, 7% higher than it in 2019, and it is counted to close 35 million in 2024, which is expected to grow even more in 2025. Asian cruise industry benefits from the rapid development of China, Chinese cruise tourists account for 60% of the total in Asia, and expected to become the largest cruise market in the world by 2030. The 2024 China Cruise Economy Development Summit Forum and the '2024 China Cruise Industry Development Report' released the China and Asia Cruise Economy Prosperity Index is 102.13 and 102.16 respectively, which are solid on the basis of 2023. China's cruise economy has entered into a period of climbing and stabilization from a period of momentum building, and it is predicted that China's Cruise Economy Prosperity Index in the period of 2025-2026 will be on a steady trend of improvement, and will gradually recover to the level before the epidemic.

Although the growth of cruise market is the fastest among all the tourism projects, there are also reports showing that the cruise tourism market has shifted from high-speed development to high-quality development since 2017 (Gong, 2022). The cruise industry has been undergoing a period of rapid growth and remarkable change in both supply and demand (Maragkogianni & Papaefthimiou, 2015). Service organizations have long recognized the importance of the customer experience for customer satisfaction and loyalty (Indriastuti & Hidayat, 2021). A luxury cruise brings tourists multiple enjoyment such as catering, accommodation, entertainment, social intercourse and leisure experience (Zhang et al., 2020), that is why people choose to escape, thrill seeking, social bonding, self-esteem recognition, novelty seeking, adventure seeking etc (Aras & Geosites, 2023; Yang, 2015). However, young tourists are increasingly to attend cruise and pursue the ultimate experience

and value the service quality of tourism, and becoming more and more picky (Dabija et al., 2018). Therefore, enriching the types of cruise products and improving the service quality of cruise tourism is necessary to ensure the continued development of the cruise industry. The continued expansion of cruise passengers is also due to the provision of high-value cruising through the newest ships, world-class destinations, innovative ship facilities, and various onboard activities and off board services. Cruise lines design various new services to meet the young customer's various needs on higher-quality service through various channels, and engage them in planning of cruise journey, rather than traditional mass routes and experiences (Mehta et al., 2021; Qu et al., 2020). The intense competition in the tourism sector increasingly pushes tourism destination marketers to seek more effective promotional practices, so that they remain competitive and attract more visitors (Chavez et al., 2020).

The rapid development of cruise tourism is achieved through a combination of supply and demand. Cruise passengers (customers) determine the demand for cruise products, while cruise companies and port authorities (service providers) determine the supply of cruise services (Brida, Bukstein, et al., 2012). The changes of cruise market with new travel pattern also due to the use of social media, as the enthusiasts of social media, more and more young people are becoming the guests of cruise market. They are more inclined to organize their journey through social media touchpoints, and their decisions will affect the choices of their families (Roblek et al., 2019). The touchpoint theory originated in marketing, and a touchpoint is a term used to describe the point of interaction between service providers and customer (Homburg et al., 2017; Majid, 2022; Verhoef et al., 2009). Touchpoints act as mediators that positively and negatively influence customer perceptions and opinions of a particular product/service (Meyer & Schwager, 2007). The fast expansion of the

Internet and social media provides new touchpoints for destination marketers to approach potential tourists in a simple and cost-effective way (Chen et al., 2021; Sigala & Gretzel, 2017). Young travelers increasingly visit social media to search for travel-related information, including online reviews on social application and e-word-of-mouth (e-WOM) of micro-blogs, because they believe comments and experiences posted by other consumers help them make better destination choices (Filiari & Mcleay, 2013).

In reference to Lemon and Verhoef (2016), customer journey as the dynamic customer experience with a firm over time through various touchpoints involved in three main phases: pre-purchase, purchase and post-purchase (Lemon & Verhoef, 2016). In the customer journey, post-purchase leads to a following pre-purchase phase as the experience is conceptualized as a circular process, which is not only has an obvious impact in the customer himself or herself, but also has a potential influence in other customer through the social media. Service design, an innovative method, regarding the touchpoint and customer journey as research tools, been widely used in service industry to make a better experience to customer in recent years. And the service design thinking also been used to tourism to promote the tourists' satisfaction and loyalty (Hu & Olivieri, 2020; Stickdorn, 2014), it will be introduced in this study to explore the ways that can benefit the experience of cruise tourists and the improvement of the cruise services.

1.3 Problem statement

Tourists' age was absorbed in variables system in earlier time which have a significant impact on tourists' choice, perception and satisfaction in cruise journey (Li, 2020). According to the Asian Cruise Industry Ocean Source Market Report

(2018), the cruise passengers aged 50-59 years old were declined than before, while the group of passengers aged 30-39 were increased obviously. In recent years, the cruise market is gradually being dominated by young people, the young people who were born in the 1980s and 1990s have become the backbone of the customer group of cruise industry (Song, 2023). The engagement of young passengers influences their repeat behavior and stimulates their friends and family members to engage in a cruise trip. This leads to the cruise market being strongly supported by the young generation in the future and the behavioral preferences of young tourists bring up the cruise market with three problems need to be considered.

Firstly, the increasing young tourists prefer to organize their own cruise journey, and like to interact with the service providers earlier through multiple channels and different service touchpoint, which makes the cruise journey have to face more phases included in a longer period. Previous studies focused on the traditional touchpoints, such as the accommodations, facilities, onboard activities, and cruise brand employees, and regarded these physical experience phases as the main sources that influence the tourists' satisfaction (Ackerman, 2015). But the core experience provided by cruise lines also include the process of providing services and somethings new organized based in the "tourist-firm" interaction (Chua et al., 2019). Young tourists increasingly visit social media to search for travel-related information, including online reviews and e-word-of-mouth (e-WOM), which helps them make better destination choices and destination images (Amaro et al., 2016) before purchasing. And they often use social media in their purchase decision to alternatives and share their experiences after cruising (Ana & Istudor, 2019). As the intermediary for "tourist-firm" interactions, the touchpoints on social media segments the cruise journey in more phases, rather than the three phases of pre-

purchase, purchase and post-purchase mentioned in previous studies (Yoon & Cha, 2020). Cruise lines creates sustainable demand and loyal customers by different services during cruise journey, the destination image, preparation before embarkation, onboard activities, perceptions on port cities and sharing after disembarkation are all regarded as detailed components of a cruise journey, and should be treated as the phases of satisfaction production.

Secondly, the preference of young tourists for social media has brought new travel patterns to the cruise market, resulting in differences in behavioral process between young tourists and other generations. So it is necessary to understand the young tourists' experiences during cruise journey when the overall satisfaction of young tourists was assessment, because of the cruise market being strongly supported by the young generation in the future. Due to the increasing influence of social media on cruise market strategies and tourists' choices, the service touchpoints in social media should be integrated with traditional channels of service marketing (e.g. accommodations, facilities, onboard activities, and cruise brand employees) (Tham et al., 2013) and regarded as different channels that affect young tourists' experience in cruise journey. In order to reveal the young tourists' behavioral process, some new customer behavioral model were proposed based on the integration of social media. New consumer behavior models including AIDMA, AISAS, and SICAS, which describe the consumer journey of young tourists as different phases according to customers' behavioral processes (Jingyan et al., 2018). Each letter of these behavioral models represents a process of customer journey, such as the SICAS model is composed by the Sense, Interest, Communicate, action and Sharing, which was proven suitable to explore the experience of young customers during the customer journey (Huang & Management, 2019). Tourist satisfaction is the outcome

of a comparison between actual experience and expectation of a journey (Mcdowall et al., 2010), so how the different touchpoints of different channels performance in young tourists' cruise journey should be discuss before the assessment of tourists' satisfaction.

Thirdly, the social media is valued by young tourists as well as the service providers, which causes the abundance of service channels and interactive touchpoints in social media need to be considered in a cruise journey, it bring up new challenges to manage them from a systematic perspective. Social media as a platform with new touchpoints has obviously influence on young travelers' selection, decision-making and travel-planning, which are not completely under the control of the travel firms (Mangold & Faulds, 2009). On the other hand, social media is also a platform for companies to provide personalized service and brand vision to their customers, which helps to increase customer loyalty (Senders et al., 2013). Hence social media represent a key channel for companies to reach their target (Moro & Rita, 2018) and the investments of companies on this channel has been rapidly increasing (Tiago & Veríssimo, 2014). Consequently, this focus on social media is gradually evolving into the study on tourists' satisfaction (Hu & Olivieri, 2021), which is very important to both of tourists and companies, it has become more challenging for firms to monitor the new touchpoints involved in the social media because it is difficult to predict the influence of social media on young tourists (Peter et al., 2015).

1.4 Research Questions

Tourist expectations and actual experiences need to be completely understood because tourist perceptions have been revealed to play an important role in

determining a tourists' satisfaction. Whereas service quality is based on a perception (i.e., how a tourist rates excellence in service), while satisfaction is a feeling, a frame of mind that arises when the service received meets or exceeds expectations (Oliver, 2014). Service quality and customers' satisfaction represent different positions in the measurement on service, but they are often indirectly equivalent since they have similar components of customer's perception and use the same evaluation methods in many studies. Under the changing of cruise market in both supply (destination managers and service providers) and demand (cruise tourists and customers), and gradually increasing use of touchpoints on social media for 'tourist-firm' interactions, it is even more difficult to understand the relationships between different types of touchpoints and the overall satisfaction of cruisers, so that the following outlines the questions of the study that need to be pursued.

- 1) How social media affects the "tourist-firm" interactions during young tourists' cruise journey under the new travel pattern?
- 2) Which touchpoints that have the most important influences on the young tourists during different phases of their cruise journey, and which types these touchpoints are belong to?
- 3) What are the relationships between different types of touchpoints and young tourists' overall satisfaction during their cruise journey?
- 4) How can the findings contribute to the development of cruise services to assess the young tourists' satisfaction based on the service touchpoints in terms of the phases, channels and controllers.

1.5 Research Objectives

In order to answer the research questions, there are some issues have to be assessed, which can be described as the research objectives that lead to the study.

- 1) To analyze the performance of social media on the “tourist-firm” interactions to form young tourists’ expectations and experiences towards the cruise services.
- 2) To investigate the key touchpoints in different channels that have most important influences on the satisfaction of young cruise tourists during the cruise journey, and to construct a tourists’ satisfaction index system using these touchpoints.
- 3) To propose a system dynamics (SD) model to reveal the dynamic relationships between various touchpoints and the overall satisfaction of young cruise tourists.
- 4) To sort out the findings on various touchpoints in terms of the phases, channels and controllers, provides some recommendations that can contribute to the development of cruise services during the cruise journey.

1.6 Aims of the Study

In the context of tourist satisfaction assessment, touchpoints have been identified as key influencing factors in many studies. Many scholars have focused on specific types of touchpoints and their effects on young tourists’ satisfaction (Ieva & Ziliani, 2018; Stein et al., 2016), or have concentrated on particular phases of the customer journey, such as the decision-making and purchase processes, to explore how touchpoints influence tourists' behavioral intentions (Dhebar, 2013; Manser

Payne et al., 2017). While these studies provide valuable insights into the factors affecting satisfaction in greater detail, few have examined the interaction between social media and traditional channels in shaping tourists' experiences.

This study proposed new mode by composing the newest classification of service touchpoints and consumer behavior (SICAS) model to describe the cruise journey of young tourists, it represents a theoretically contribution to understand the new travel pattern of young tourist by classifying the touchpoints in social media and traditional channels. Practically, a new satisfaction index system developed through the data analysis in this study offers a fresh scale for measuring satisfaction, considering the phases, controllers, and channels of touchpoints. This system will be seen as an innovation in cruise practices and related service sectors. The specific aims of this study are (1) to provide a more systematic and diverse approach to measure young tourists' satisfaction for service providers, offering valuable insights for cruise lines aiming to improve their service, and (2) to investigate how different touchpoints function during the cruise journey of young tourists, helping service planners and developers better understand the specific impacts of various touchpoint types on overall satisfaction.

1.7 Research Conceptual Framework

Satisfaction is a feeling that affected by expectation and actual experience of tourist, and the acquirement of them are different, including traditional channels and some new touchpoint, such as user generated content (UGC) on micro-blog. Young people as cruise tourists are different with other generations and brings new travel patterns, their expectation and experience towards cruise services are deeply impact by social media and newly individual values, furthermore, the potential tourists are

influence by the information shared by other cruise experienced tourists. The researcher believes that young respondents will share their thought, which can help to answer the research questions of this study. Figure 1.1 shows the conceptual framework of this study, which is a preliminary insight of how the touchpoints involved in cruise journey plays their roles in achievement of the young tourists' satisfaction. The SICAS model also be absorbed in this conceptual framework, because it has been proved suitable for segment a customer journey in a new purchase environment under the Internet 2.0+, and be proposed to the analysis of tourist journey map of this research.

The keywords or elements illustrated in Figure 1.1 above will be high frequency used during the explanation and discussion throughout the study. The definitions of the keywords related to this study are as followed:

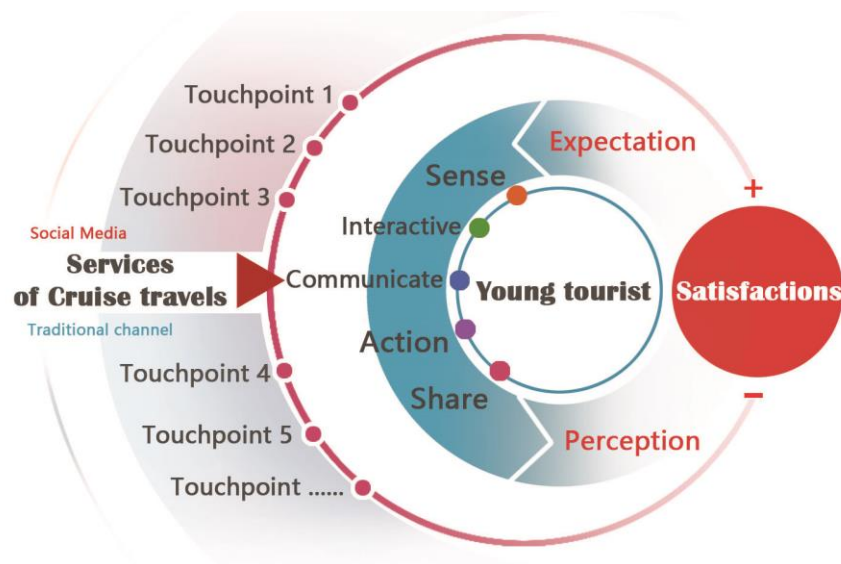


Figure 1.1 Conceptual framework of this study

“Young tourist” gradually increasing in cruise market, and in the content of this study, young tourists are concerned in which the researcher needs to study and will become the main group of cruise passages. According to the relevant definition of the World Health Organization (WHO), ‘youth’ refers to people aged 15-44.

China has been expected to be the largest cruise market by the year of 2030, and a 35-year-old respondent today will attain 45 years at that time. Therefore, the group of people which aged from 15 to 35 are the main objects will to be investigated and their statements or thinking are indispensable to make appropriate service strategies of cruise travels and meet the demands of young tourist in the future.

“Satisfaction” is perceived as a level of fulfillment of expectation, also be influenced by the perception towards the experience (Mcdowall et al., 2010). The “satisfaction” of young tourists towards the cruise travel is related to the market competition and sustainable development of cruise tourism, which are consideration as the target of upgrade cruise services in this study. Therefore, the “expectation” and the “experience” of young tourist towards the products and services of cruise travels are considered importantly with different influences on their satisfaction, and make continuous impact on the development of cruise tourism. In this study, the focusing influences on satisfaction are consist of various touchpoints involved in different phases of a cruise journey, such as the embarkation, the onboard activities, the destinations and the disembarkation, which would be described as a customer journey.

“Service touchpoint” originated in marketing, and be used to describe the point of interaction between service providers and customer (Homburg et al., 2017; Majid, 2022; Verhoef et al., 2009). Service providers offer services to consumers through service touchpoints (including traditional touchpoints such as service staff, store decoration, brand adverting, and social media touchpoints such as user contents on social applications), through which consumers access services and build perceptions and evaluations of a brand. The fast expansion of the Internet and social media provides new touchpoints for destination marketers to approach potential

tourists in a simple and cost-effective way (Chen et al., 2021; Sigala & Gretzel, 2017). Service touchpoints are included in this study to represent the factors that influence tourist satisfaction and are observed variables or independent variables

The model of “SICAS” which is consist of “Sense-interest & Interactive-Connect & communication-Action-Sharing” of customers, it was proposed in previous studies as a consumption behavioral model to describe the processes of customer on shopping in internet era under the influences of online channels. Since the young tourists gradually dominate in the cruise market and prefer to use the online platforms to assess the services, the SICAS model was introduced as observation points to research customer experience of young tourists in different phases of cruise journey (Lin et al., 2019; Liu, 2017). In this study, the model was led in order to analysis the young tourists’ purchase behaviors on cruise travel and simulate the process. “Sense” is something refer to contents shared by travel agencies and other users, and to get expectation of the destination image from those contents. “Interest and Interactive” are the resonance of young tourist based on their perception of the related contents, then, they get a motivation to cruise travel and actively “Connect or Communicate” their intentions with service provider. “Action” includes all the activities during a cruise travel, it’s the process of the travel experience, and at last, “Sharing” their experience with potential tourists online, and evaluate their journeys on various channels.

“Social media” is an important channel and increasingly used by young travelers to access to their decision-making processes on travel, and has regarded as a connection which can provide the medium of information interaction between firms and tourists (Azazi & Shaed, 2020). The advertisements on the official Weibo, controlled by travel agencies, the online reviews of social applications, and the

electronic word-of-mouth (e-WOM) (Kasabov, 2016) are included in social media, which are widely favored by young people and proposed in this study to complement traditional channels as the two main constituent channels carrying service touchpoints that affect visitor satisfaction. Consequently, the “digital touchpoints” on social media appear as the main concern of this research that researcher needs to give it emphasis as much as the “traditional channels”, and their influences on young tourist behavior will be measured by proper classification in this study.

1.8 Research Scope

This study was carried out in Yangtze River Delta city cluster of China, where has many cities located along the Yangtze River, and focused on young people aged between 15-35 years old who were interested in cruise travel and have had once cruise journey at least. To cater to the development and changes of cruise market in both of demand and supply, this research uses interdisciplinary service design thinking and theories (used some tools such as touchpoints and customer journey, principles such as the sequential, and some methods of service innovation), and the knowledge of system dynamics (SD) theory, to improve the development of the knowledge and its application in market practice. It is worth declaring that in this study, the touchpoints using for the “tourist-firm” interactions (social media touchpoints such as personal account of Micro-blog, and the touchpoints in traditional channels such as online travel agencies) and the relationships between supply and demand indicated by touchpoints are the only things need to be measured. Although some factors represented by personal characteristics of tourists (motivation, values, income level, taste and preference), which have been proved to have a significant impact on tourist satisfaction, they are not contrary to the research principles in this study, nor are they the subject of this study.

1.9 Significant of this study

This study introduces the knowledge, tools and methods related to service design and system dynamics to the service innovation of cruise tourism, aiming to construct a new evaluation system of young cruisers' satisfaction in terms of the phases (travel-planning, decision-making, etc.), channels (social media or traditional channels) and touchpoint controllers (firm or tourist side), which contribute to the development of cruise industry-related research for the increasing young tourists in the future.

With the development of social media, the interaction between the firms and tourists of cruise tourism begins at an earlier phase, young tourists' experience involve in multiple touchpoints that occur before their travels, across several phases during the cruise journey (Jászberényi & Miskolczi, 2020; Tiago et al., 2018). Therefore, to establish a structure model of the relationship between service touchpoints and tourists' satisfaction can help to identify the key factors that affecting tourists' perception and satisfaction in different phases of cruise journey. The researcher hopes to provide cruise service providers with reference methods of marketing strategies by understanding the changes of cruise market both in supply and demand. Satisfaction of young cruise tourist is an important index that can lead the service innovation of cruise industry, and the researcher believes that this study would contribute and benefit the competitiveness of cruise lines by understanding the new travel patterns of young tourists.

1.10 Operational Definition

In this study, touchpoints and satisfaction involved in cruise travel are the most important keywords, which occurred with high frequency hereafter. This study

took service touchpoints as independent variables and assumed that they had significant effects on the dependent variable (young travelers' overall satisfaction with cruise journey). Those two definitions and related keywords mainly come from cruise tourism and service design, this study tries to apply service design thinking to understand the young tourists' demand in cruise service, to measure their satisfaction, therefore, the definitions related to cruise tourism, service design thinking and the main research methods must be clarified at first.

Service design is a way of design thinking, which helps to innovate (create new) and improve (existing) services experience for people. These experiences occur at different touchpoints over time to make the services more useful, useable, desirable for customers and as well as effective for firms doing market strategies (Stickdorn, 2014). Service innovation is a new, integrated and multidisciplinary comprehensive field, and it also be regarded as a mindset, a toolkit, a process, a cross-disciplinary language and a management approach (Majid, 2022; Stickdorn, 2018). For this study, service design are illustrated as a primary method of thinking used to enhance tourist satisfaction, its tools such as customer journey map (CJM) and Persona are also used in the practice of step-by-step solution of the research problem (Majid, 2022). Cruise journey as a new issue sourced from the concept of the CJM, is used to describe the service encounter of cruise tourists, the Persona is the representative of a group of people, who are purchase with common behavioral preference. The service touchpoints are regarded as smallest units to pick up the “tourists-firms” interaction moments to shape the satisfaction of customer, including personal touchpoints and no-personal touchpoints and other types in previous studies. Satisfaction is the subjective feeling of the consumer, derived from the perception of the service, from the difference between the consumer's perceived service and the

service expectations, which is one of the most important theoretical foundations used in this study.

A cruise is defined as “a trip by sea in a line for pleasure, usually calling at a number of ports.” In addition to the traditional function of providing accommodation and transportation, cruise tourism also provide tourists with pleasant and comfortable leisure activities. Cruise tourism, the products and services provided by cruise lines, have expanded in their scope, and becoming intangible based on new channels applied in this field in recent years. Social media as an emerging platform, on which passengers can share their experience are becoming an alternative information source (Pender et al., 2014), and cruise lines are also aware of the important to use social media. As a result, the products and services provided by cruise lines to customers have been expanded, and the life cycle of tourists has become longer, even start at the first time they saw a leaflet handed by a waiter in a shopping mall and end with many years’ influence to the potential tourists by their online comments. Therefore, many cruise lines recently center on improving passengers’ vacation experiences more than ever as their marketing/service strategies for attracting new customers and retaining existing customers (Chua et al., 2017; Chua et al., 2019), and their products and services are ubiquitous, from tangible to intangible, from offline to online, had crossed the life cycle of tourists.

“System dynamics” is an approach to complex problem solving, first introduced by Professor Jay W. Forrester of the Massachusetts Institute of Technology (MIT) in the 1950s, which is regarded as a new perspective been introduced in this study to describe the relationships between tourist satisfaction and its influencing touchpoints. System dynamics is a method that can describe processes, behavior, and complexity from the perspective of a system, by setting the influencing

factors and their goals as various variables in a causal system. It has been applied in a number of industries by many researchers in many fields as an experimental method to observe the behavior of systems based on the reality that exists in them. Causal Loop Diagrams (CLD) and Stock and Flow Diagrams (SFD) are the two key factors to use System dynamics method and the foundation to build a System dynamic (SD) model corresponding to the reality (Octabriyantiningtyas et al., 2019).

1.11 Expected Results

This study conducted based on the development and changes of cruise tourism, aiming to understand the experience of young tourists and the affecting touchpoints involved in cruise journey. Making contributions to the sustainable development of cruise industry and giving references to cruise service providers to their market strategies. The expected results are listed as follows:

- 1) To identify the key touchpoints affecting the young cruisers' satisfaction under their new travel pattern, to construct a new evaluation indexes system for young Chinese cruisers' satisfaction.
- 2) To establish a system dynamics (SD) model of young tourists' satisfaction towards the cruise travels by taking the touchpoints in their cruise journeys as the variables.
- 3) Providing a theoretical model or framework for market strategy developers to simulate changes in market strategy by adjusting parameters at service touchpoints

1.12 Thesis Organization

This study consists of four parts, the research gap, research design, data collection/analysis and the conclusion are included in 6 chapters, as shown in Figure 1.2 below. The briefly process of this study also shows how the research had been developed.

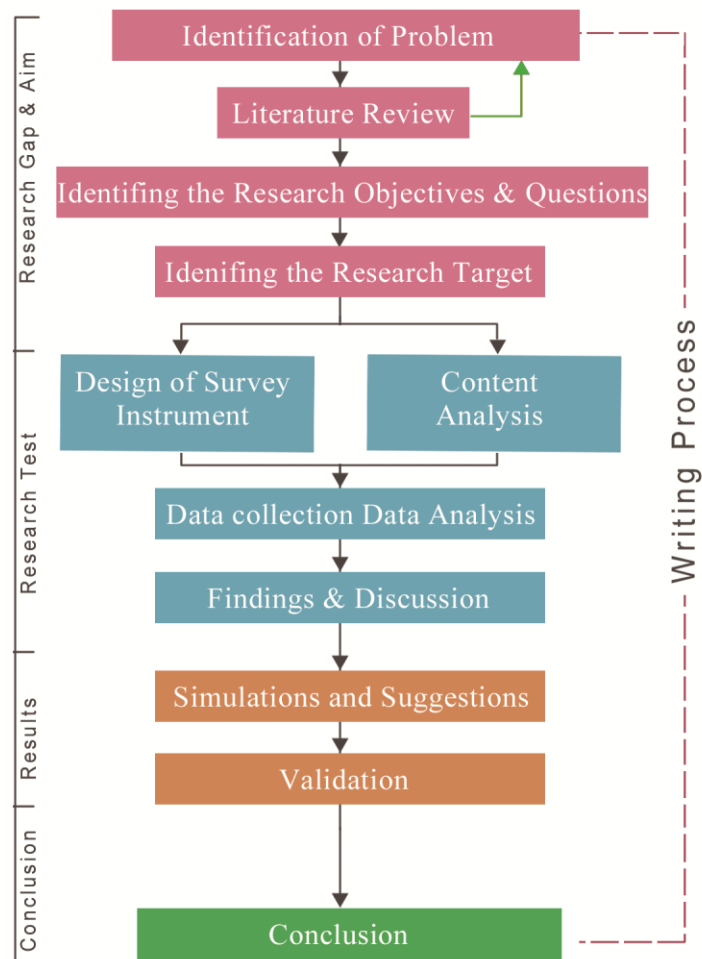


Figure 1.2 The research process used in this study

Chapter 1 offers the overview introduction to the thesis. The development status, existing problems and research gaps of cruise tourism are proposed, the research direction and research objectives of this study are also established. Finally, it describes some expected results aiming to improving the satisfaction of young tourists in their cruise trips. Following this introductory chapter, chapter 2 offers a

literature review of related research fields, the changes and development of cruise industry, specifically in China. Young tourists are coming with new travel pattern and the mainstream evaluation methods used in travel experience as well as their advantages and disadvantages also be listed separately. The tendency of social media highly influence young people's purchasing behavior also be covered in the review to analyze the classification of touchpoints and phases segment of cruise journey.

Chapter 3 mainly introduces the methodology used for this study to achieve the research objectives step-by-step. Questionnaire design and online survey process with random respondents to collect data as well as semi-structured interviews are described, pilot survey, actual survey and secondary data using are correspond to each research question. Then, data analysis methods are introduced, including factor analysis, structural equation method (SEM), variance analysis and Fuzzy analytic hierarchy process (FAHP). At the same time, having described the results of data analysis and the interpretation of finding will be discussed in chapter 4.

In chapter 5, the parameters of key touchpoints are substituted to construct a system dynamics (SD) model using Vensim software for simulation, and the relationship between touchpoints and cruise tourist satisfaction can be explained from different perspectives of touchpoint types. Combined with the analysis results from previous studies, suggestions on the key touchpoints of cruise journey at different phases from various simulations results can be summarized, such as how to improve their satisfaction in the sense phase before travel. A further advice gives about the sustainability of cruise tourism base on the SD model. The expert group's validation process on the rationality of the SD model was completed prior to the simulation practice, which also be conducted in this chapter.

Chapter 6 summarizes the thesis by re-addressing the research questions and research objectives. The contribution and limitation of the study are summarized in this chapter, as well as some recommendations on what further works might involve.

1.13 Summary of Chapter 1

Chapter 1 is the beginning of this study, presents the overall of research organization and tells what will be researched in this study. The service touchpoints are introduced as the main factors affecting the overall satisfaction of young cruise tourists, so that the relationships between different types of touchpoints and the overall satisfaction of young cruise tourists will be regarded the foundation to answer the research questions. The research objectives also be identified from a brief literature review in given scope on cruise industry and young tourists' satisfaction after the problem statements in first chapter. But the current studies on the similar topic cannot be fully interpreted in chapter 1, so the detailed studies on cruise tourism, young tourist, satisfaction assessment and service touchpoint for "tourist-firm" interactions will be reviewed in chapter 2, where the reviews including not only what content will be researched, but also include how far and how deep the themes being studies till today.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Cruise tourism has changed from noble activities to mass activities since the late 1990s, benefiting from the rapid growth of Chinese cruise tourists, the center of the cruise market today has shifted eastward from the North American. As the fastest growing sector in the tourism and hospitality, it facing many challenges due to the changes of cruise market. Young people increasingly coming as the guests of cruise market and bring up with new travel patterns which have been discussed in previous studies mainly about the young tourists' preference for the social media. The cruise market increasingly dominated by young tourists and the satisfaction of young cruise tourists must be effected by the social touchpoints for "tourist-firm" interactions, so that the online travel gradually reveals its market values affecting the young tourists' experience during cruise journey. The service design in previous studies shows its advantages to regard the satisfaction as a result which processed by different service touchpoints and detailed analyze the experience in different phases of a customer journey. Due to the relationship between the satisfaction and the loyalty of customer that had been proved in service-related researches, the young Chinese cruise tourists' satisfaction and its affecting service touchpoints will be discussed as the keynote of this study for the future market competition using the methods of service design. This chapter is organized focus on the literature review of these issues related to this study, as shown in Figure 2.1, the development of cruise tourism will be reviewed first and then the new travel pattern of young cruise tourists, the application of service design in cruise industry, and last the assessment on the overall satisfaction of young cruise tourists.

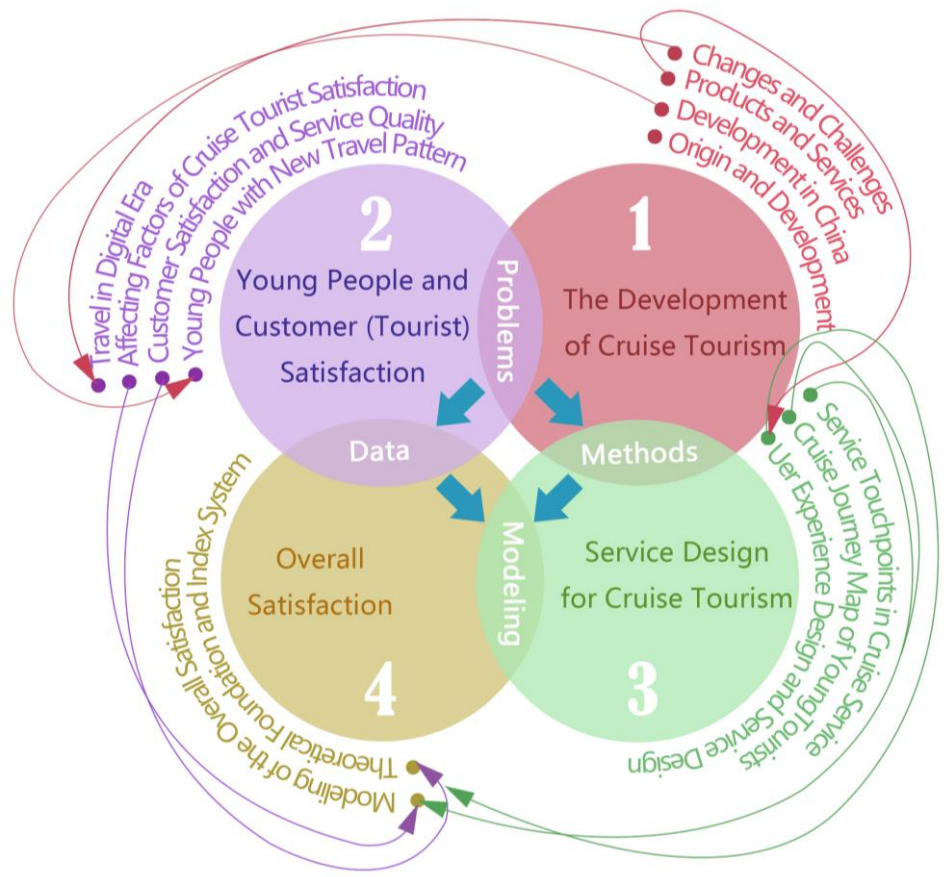


Figure 2.1 Diagram of the main research fields in literature review

2.2 The Development of Cruise Tourism

2.2.1 Cruise Tourism Origin and Development

According to the dictionary of travel, tourism and hospitality, the term cruise has the meaning of “a voyage by ship for pleasure—commonly by sea but also on lakes, rivers and canals of varying duration, which may but need not depart from and return to the same port or include scheduled calls at ports in route” (Medlik, 2012, 2016). According to the Collins English Dictionary, a cruise is defined as “a trip by sea in a line for pleasure, usually calling at a number of ports.” In addition to the traditional function of providing accommodation and transportation, cruise ships also provide tourists with pleasant and comfortable leisure activities. Acting as “floating resorts”, cruise ships apply comfortable and leisure trip along the coastal cities

worldwide for tourists. Consequently, the concept of a cruise tourism includes sailing or a voyage by ship for pleasure, which can take place on a sea or some of internal waterways mainly for the purpose of recreation and leisure. Moreover, cruise can be defined as sailing for fun, entertainment, i.e. a sail from-to or from place to place, on a boat, ship or motor yacht for satisfaction, usually by sea (more often), but also on lakes and rivers (less)".

With its unique visionary, Costa cruise line first realized the important transformation in cruise industry, it takes cruise as the carrier, and uses tourism services to replace single transportation services in cruise industry. The modern cruise industry was born in the 1960s, take the cruise ship named "Franca C" launched by Costa cruise company as the symbol (David Mc A, 2016), and since then cruise tourism has become the fastest-growing segment of the global tourism industry. The early goal of the cruise industry was to develop a mass market since cruising was until then an activity for the elite from Europe. With the founding of Norwegian Cruise Line (1966), Royal Caribbean International (1968) and Carnival Cruise Lines (1972), more and more tourists have changed their cognition of cruise ship, and regard it as a new way of leisure vacation, rather than just as a means of transportation. Since 1990, the world's average annual passenger growth has reached about 6.63%, with cruise tourists increasing from 7.21 million in 2000 to 26.86 million in 2019 (Website, 2020).

From the early 1980s to the middle and late 1990s, the cruise tourism market in Europe and the United States flourished, and the market pattern of cruise tourism was relatively stable. During this period, the related research of cruise tourism started up from Europe and the United States. The American anthropologist Foster (1986) first pointed out the important position of cruise tourism in the future development of