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4-14-2018

# An Empirical Investigation Of Information Technology Mediated Customer Services In China

Jianhua Xiao

*University of Chinese Academy of Science*

Suhong Li

*Bryant University, sli@bryant.edu*

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## AN EMPIRICAL INVESTIGATION OF INFORMATION TECHNOLOGY MEDIATED CUSTOMER SERVICES IN CHINA

Jianhua Xiao, University of Chinese Academy of Science, Beijing, China, [xiaojh@ucas.ac.cn](mailto:xiaojh@ucas.ac.cn)

Suhong Li, Bryant University, Smithfield, RI, USA, [sli@bryant.edu](mailto:sli@bryant.edu)

### Abstract

Information technology mediated customer service is a reality of the 21<sup>st</sup> century. More and more companies have moved their customer services from in store and in person to online through computer or mobile devices. Using 208 respondents collected from two Chinese universities, this paper investigates customer preference over two service delivery model (either in store or online) on five type of purchasing (retail, eating-out, banking, travel and entertainment) and their perception difference in customer service quality between those two delivery model. Results show that a majority of Chinese students prefer in store and in person for eating out. For ordering tickets for travel and entertainment, they prefer computer/mobile device. For retail purchasing and banking, less than half of the students prefer in person services. In general, the results show that ordering through computer/mobile devices has become more popular in China and has received higher rating for most of customer service quality except security compared to ordering in store. In addition, it is found that there exist a gender difference in purchasing preference and perception in service delivery quality in China.

**Keywords** Customer service technology, customer service quality metrics, gender comparison, China

### Introduction

Organizations continue to face competitive challenges from both home and overseas, and meeting these challenges often impacts customer brand loyalty and product profitability. Spending more for improved customer service may lead to lower profitability. When product differentiation cannot be achieved, there are two general strategies that can be employed to remain competitive: price differentiation and service differentiation. The focus of this study is limited to investigating service differentiation. Service can be defined as customer care and customer support. Most organizations have some form of customer service, as there will always be times when a customer has a need, a problem, or needs information.

With the growing deployment of self-service technologies, businesses need to determine their most favorable mix of traditional human service with IT mediated service. [5] Many companies are cultivating Customer Service by structuring the business model to meet and satisfy customer requirements. [4] For example: McDonalds has extended the breakfast menu to be served the entire day rather than just in the morning. Kentucky Fried Chicken has “bundled” menu offerings, and no longer sells certain items individually. McDonald’s customer service strategy may lead to a

positive outcome, more sales; KFC may lead to a negative outcome, the customer does not want the bundle of items, only a single item. In any case, the ultimate objective of customer service is to assist customers in solving a problem or meeting a need.

Many see information technology as the modern driving force for customer service innovation. More than twenty five years ago, Clarke and Murray [2] argued that the greatest unrealized potential of IT is in the area of customer service. Recent research by Pulach and Wunderlich [9] studying B2B customers, however, found that despite their potential, gaining acceptance of technology based services presents significant management challenges. [3] The study also found that customers perceived technology based services as high risk. A recent study of the value of self- service [11] reported that while self-service may increase productivity and reduce the cost of service delivery, technology-based self-service may not always lead to desired results and may harm customer retention. Efforts in the area of chatter bots [1] underscore the difficulties in both typed and oral customer interface with automated systems. In spite of these obstacles, deployment of digital technologies is resulting in utilizing Information technology to replace humans in meeting service demands.

Moore's Law states that the number of transistors in a dense integrated circuit will double every two years, [8] therefore overall processing capabilities will double, while the cost stays about the same. Substituting technology for humans to provide customer service makes economic sense for organizations, because the price of technology continues to drop per unit of processing, while the price of human labor stays the same or continues to rise. This has led to such things as human-less automated telephone attendant systems to respond to telephone inquiries, internet driven service request systems, self-checkout stations at grocery retailers (such as Stop and Shop and Publix) [6], [7] and home improvement retailers (such as Home Depot and Lowes), self-ordering and paying devices at food retailers such as Chili's, and of course automated teller machines (ATMs) at banks and kiosks.

A study by Accenture [10] found that 83% of U.S. consumers prefer dealing with human beings rather than digital channels, and that human interaction is vital to customer satisfaction. Humans generally prefer not interacting with technology or machines when they require service. Human interaction, therefore, continues to be a vital element in successfully meeting customer service expectations. When economics come into play and service is outsourced off shore, even when humans are utilized, language may become a problem. Example: Many foreign countries may provide lower cost service representatives, but can these representatives communicate effectively, solve problems, and meet U.S. customer expectations? The Accenture study [10] found that cultural differences and language issues influence customer ratings.

Virtually all organizations claim to strive for superior customer service, but they also must live with finite budgets. In almost all situations great customer service is expected, but when delivered may not build customer loyalty. It is expected, and those expectations are met. Poor customer

service is generally unacceptable, and may drive customers to seek alternative providers, and will often negatively affect customer loyalty.

How does an organization verify that they are providing excellent customer service? One way is to measure customer satisfaction. Measurement of customer satisfaction often includes asking the customer to complete a brief survey, either at the time of service or after the fact. The survey provides a window to view those utilizing the service. Customer service quality begins with the business decisions establishing customer service response systems; customer satisfaction is how customers react to these systems when they have a problem that needs to be addressed. Whatever the process, measuring customer service effectiveness is vitally important [2]. Measuring service quality generally involves measuring both objective and subjective outcomes: were your needs met, and were they met in a manner that was acceptable to you.

Few studies have been done on customer service satisfaction in China. Our objective is to determine if today’s Chinese customers are satisfied with customer service systems that are currently in place.

**Methodology**

In order to evaluate customer service satisfaction with IT mediated service we first identified five types of retail purchasing commonly done by potential survey respondents. These are one retail, two eating out, three banking, four travel and five entertainment. Next we identified two dominant means or modes by which purchasing can be done, either in store and in person, or through a computer or mobile device. For each type of purchasing, we developed seven items to measure how people perceive the relative value of each mode within each type of purchasing experience.

The survey was developed in English first, then translated into Chinese and finally verified by two researchers that are fluent in Chinese. The survey was tested with a few Chinese students and college professors for the validity and readability of the survey. The survey was modified accordingly. The final version of the survey was distributed through weChat to the students at two large Chinese universities in Beijing with 208 valid respondents. Table 1 shows demographic Information about the survey population, 91% of the students are in the age of 20-29. Among the respondents, 38 % are male and the rest of the respondents (62%) are female.

Table 1. Demographics Information

		<b>Percent (Number)</b>
Gender	Male	37.5% (78)
	Female	62.5% (130)
Age	Below 20	1.0% (2)
	20-29	90.9% (189)
	30-39	6.3% (13)
	Above39	1.9% (4)

Table 2 shows the types of hardware devices owned by respondents and their inclination toward technology adoption as described in technology adoption modeling (TAM) [3]. It is interesting to note the high availability of owned hardware devices for Chinese students. Nearly 100% have laptops and web-enabled smart phones, and about 55% have tablet computers, hence many have three personal electronic devices. About one third (36%) of the respondents consider themselves as early adopter of new technology and gadgets. It can be seen that Chinese young generation has incorporated technology into their daily life and has more favorable attitude toward technology compared to old generation.

Table 2. Devices

<b>Devices I Own</b>	<b>Percent (Number)</b>
Laptop/Computer	98.1%% (204)
Smart Phone	98.1% (204)
Tablet (iPad, Samsung Note, etc.)	54.8% (114)
E-Reader (Kinder Fire, Nook, etc.)	23.6% (49)
Apple Watch	3.4% (7)
I am always among the first to adopt new technology and gadgets	
Strongly Agree (Eagle Beaver)	9.1% (19)
Agree (Early Adopter)	26.9% (56)
Neither Agree nor Disagree (Early Majority)	51.4% (107)
Disagree (Late Majority)	10.1% (21)
Strongly Disagree (Technically Adverse)	2.4% (5)

Given the age, hardware availability and pro-technology bias associated with this population it was anticipated that survey results would be more friendly toward the use of IT mediated service than that of the Chinese purchasing population as a whole.

### **Data Analysis**

This section will discuss the student purchasing preference (in store or online) by five type of purchasing (Retail, Eating-Out, Banking, Travel and Entertainment). Paired samples t-tested will then be used to test whether there exist significant difference between in-store and online purchasing for each metric of customer service quality. Additional analysis will be conducted to see whether there is a gender difference in purchasing preferences and customer service quality between in store and online purchasing.

*Purchasing Preference by Type of Purchasing*

Table 3 shows that a majority of Chinese students prefer in store and in person for eating out. For ordering tickets for travel and entertainment, they prefer computer/mobile device. For retail purchasing and banking, about 40% of the students prefer in person services, and the rest (60%) prefer computer and mobile devices.

Table 3a further divides student preference for each type of purchasing by gender. For retail purchasing, a higher percentage of female respondents (45%) prefer in store and in person than males (35%), however, for banking, a lower percentage of females (40%) prefer in store and in person than males (45%). Chi-square tests are used to see whether there is any gender difference in student preferences for each type of purchasing. The results show that retail purchasing is significant at 0.10 level (chi-square=2.33, df=1, p=0.08). More female students prefer to do retail purchasing in store than male students. There is no significant difference by gender in purchasing preferences for eating out, banking, travel and entertainment.

In addition, we classified the respondents based on their number of online purchasing preferences. For example, if the respondents prefer online for all five types of purchasing (retail, eat-outing, banking, travel and entertainment), they receive a 5; and if the respondents prefer in store for all purchasing types, they receive a 0. The results are listed in Table 3b. It can be seen that 8% of the respondents prefer online for all purchasing types, 34% of them prefer online for 4 out of 5 purchasing types, and 37% of them prefer online for 3 out of 5 purchasing types. In sum, the majority of the respondents prefer online for at least 3 types of purchasing.

Table 3b also shows that males prefer online than females in China. For example, about 46% of the males prefer online for at least 4 types of purchasing, and this number is reduced to 40% for females.

Table 3. Student Preferences by Type of Purchasing

<b>Type of Purchasing</b>	<b>Respondent Preferences</b>	
	In Store and in Person	Through Computer/Mobile Device
Retail	41.3%(86)	58.7%(122)
Eating Out	84.6% (176)	15.4% (32)
Banking	41.8%(87)	58.2%(121)
Travel	3.8%(8)	96.2%(200)
Entertainment	3.8% (8)	96.2% (200)

Table 3a. Student Preferences by Type of Purchasing by Gender

Type of Purchasing		Respondent Preferences	
		In Store and in Person	Through Computer/Mobile Device
Retail	Male	34.6% (27)	65.4% (51)
	Female	45.4% (59)	54.6% (71)
Eating Out	Male	83.3% (65)	16.7% (13)
	Female	85.4% (111)	14.6% (19)
Banking	Male	44.9% (35)	55.1% (43)
	Female	40.0% (52)	60.0% (78)
Travel	Male	5.1%(4)	94.9% (74)
	Female	3.1% (4)	96.9% (126)
Entertainment	Male	5.1%(4)	94.9% (74)
	Female	3.1% (4)	96.9% (126)

Table 3b. Number of Online Preferences by Gender.

Gender	Number of Online Purchasing Preferences					
	0	1	2	3	4	5
Male	2.6%(2)	1.3% (1)	19.2% (15)	30.8% (24)	35.9% (28)	10.3% (8)
Female	0.8% (1)	2.3% (3)	16.9% (22)	40.0% (52)	33.1% (43)	6.9% (9)
Total	1.4% (3)	1.9% (4)	17.8%(37)	36.5% (76)	34.1% (71)	8.2% (17)

*Customer Services Quality Comparison*

For each of the five purchasing category (Retail, Eating Out, Banking, Travel, and Entertainment), 7 items for measuring customer services quality (see table 4) were developed and students were asked to rate each service quality (on a scale of 1-5) based on where purchasing was conducted (in store and in person, or computer/mobile). Paired sample t-tests were then used to test whether there is a significant perception difference in customer service quality between two modes of purchasing (in-store and in person, or computer/mobile device). In addition, paired sample t-tests were used to test whether there is a significant perception difference for male and female students separately.

The results show that there exists significant difference between in store or online purchasing for each category of purchasing (See Tables 4-8 and Charts 1-5).

Retail Purchasing

Table 4 shows that for retail purchasing, there exist significant difference between in-store and online purchasing for each metric of customer service quality except the last item (customer service met your expectation). Online purchasing received higher mean for all service quality measures except item 4 (you felt secure in doing your transaction) where in store and in person received higher mean.

Table 4a and Table 4b show the results of paired sample t-tests for males and females groups respectively. For males students, online purchasing have significantly higher mean for all service quality measures except item 4 and last item (You felt secure in doing your transaction; and Customer Service met your expectations). For female students, online purchasing have significantly higher mean for all service quality measures except item 4 and last two items. Again, both males and females feel more secure conducting transaction in store. However, males students considered total time to complete transaction for online purchasing is more reasonable than in store. However, this measurement is not significant for female students.

Chart 1 shows that there is a bigger perception difference between in store and online in most of the service quality measures for males students than for females students, indicating males students have a more favorable attitude toward online purchasing in retail.

Table 4. Retail Purchasing

	Mean for Each Mode of Purchasing		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the store/ websit	3.56	3.81	-4.68	<b>.000</b>
You were able to locate what you wanted	3.48	3.88	-5.35	<b>.000</b>
Checkout and payment was quick enough	3.54	4.11	-8.64	<b>.000</b>
You felt secure in doing your transactions	3.91	3.59	5.47	<b>.000</b>
Total waiting time is reasonable	3.30	3.92	-8.66	<b>.000</b>
Total time to complete transaction was reasonable	3.42	3.67	-3.17	<b>.002</b>
Customer Service met your expectations	3.43	3.52	-1.41	.161

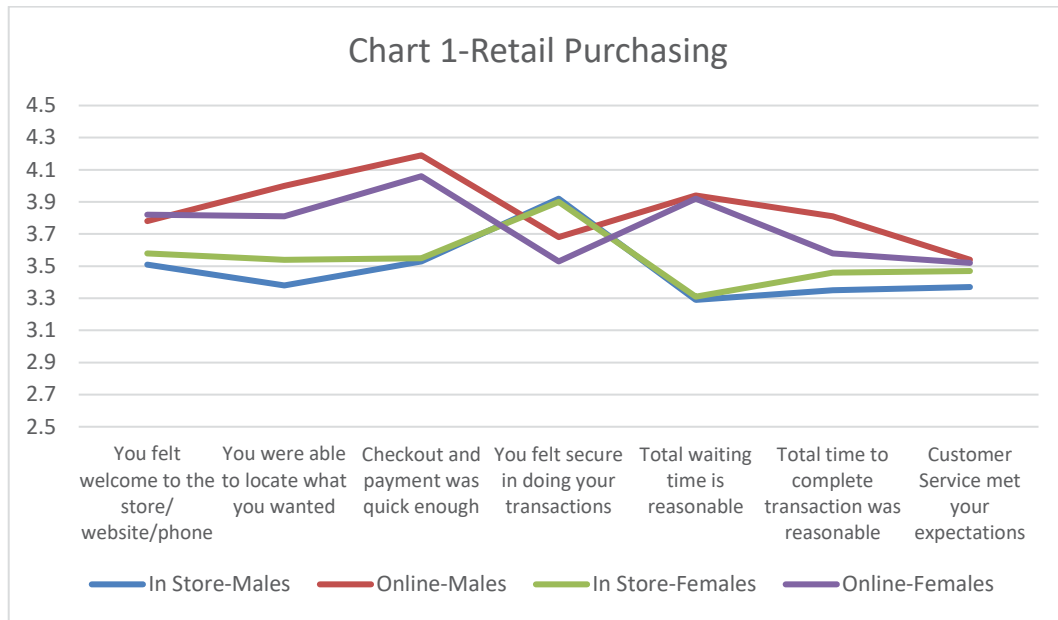


Table 4a. Retail Purchasing (Male Students)

	Mean for Each Mode of Purchasing		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the store/ website	3.51	3.78	-2.97	<b>.004</b>
You were able to locate what you wanted	3.38	4.00	-5.25	<b>.000</b>
Checkout and payment was quick enough	3.53	4.19	-6.12	<b>.000</b>
You felt secure in doing your transactions	3.92	3.68	2.66	<b>.010</b>
Total waiting time is reasonable	3.29	3.94	-5.56	<b>.000</b>
Total time to complete transaction was reasonable	3.35	3.81	-3.59	<b>.001</b>
Customer Service met your expectations	3.37	3.54	-1.71	.091

Table 4b. Retail Purchasing (Female Students)

	Mean for Each Mode of Purchasing		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the store/ website	3.58	3.82	-3.60	<b>.000</b>
You were able to locate what you wanted	3.54	3.81	-2.83	<b>.005</b>
Checkout and payment was quick enough	3.55	4.06	-6.18	<b>.000</b>
You felt secure in doing your transactions	3.90	3.53	4.82	<b>.000</b>
Total waiting time is reasonable	3.31	3.92	-6.63	<b>.000</b>
Total time to complete transaction was reasonable	3.46	3.58	-1.25	.213
Customer Service met your expectations	3.47	3.52	-0.54	.592



Eating-Out

Table 5 shows that for eating out, there exist significant difference between in store and online for 4 out of 7 items. In store purchasing received significant higher mean for the three items (You felt welcome to the restaurant/ website/phone; You felt secure in doing your transactions; and Customer Service met your expectations). In contrast, online ordering eating-out received a higher mean for the item (Checkout and payment was quick enough). The findings is consistent with previous section since the students chose in store and in person as their most preferred method of ordering eating out. They also consider in-store ordering as having better customer service quality.

Table 5a shows for male students, there is a significant difference between in store and online for 3 service quality measures. Ordering food in store has a higher mean in two items (Checkout and payment was quick enough; Customer Service met your expectations), while ordering online has a higher mean for the item Checkout and payment was quick enough. For females students, 4 out of 7 services are significant between in store and online. Besides the three items same to males, ordering food in store also received a higher mean for the first item (You felt welcome to the restaurant/ website/phone) than ordering online. In addition, Chart 2 shows that there is a similar perception difference in most of the service quality measures between in store and online for males and females students.

Table 5. Eating Out

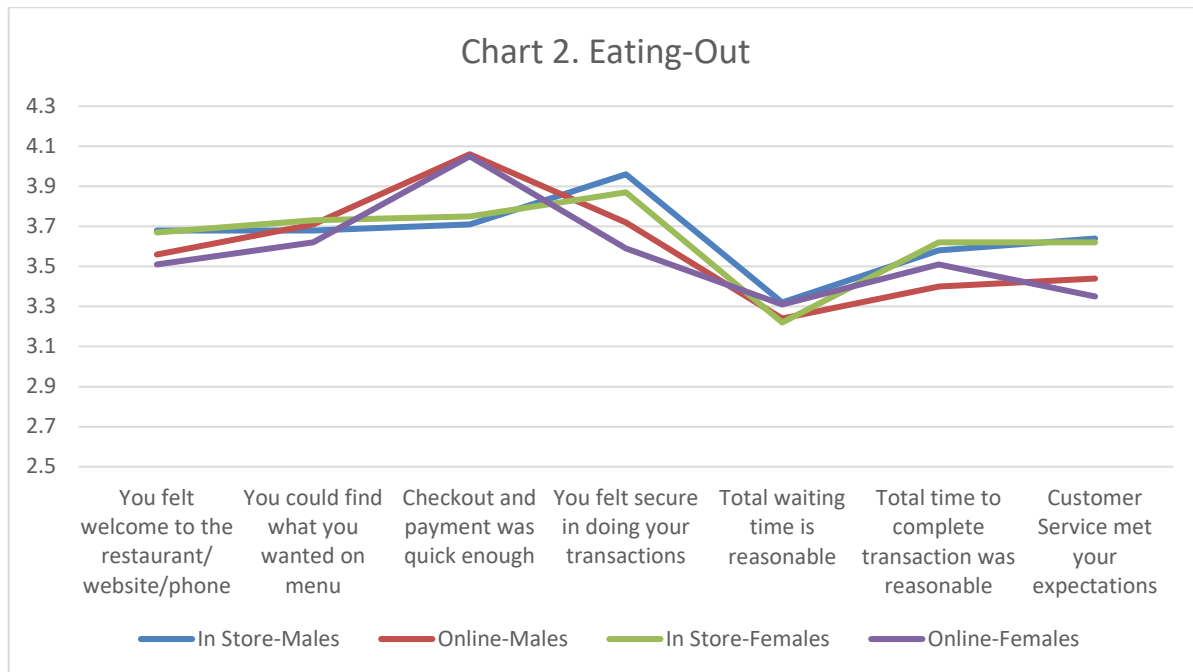
	Mean for Each Mode of Eating Out		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the restaurant/ website	3.67	3.53	2.25	<b>.026</b>
You could find what you wanted on menu	3.71	3.65	0.98	.327
Checkout and payment was quick enough	3.73	4.05	-6.12	<b>.000</b>
You felt secure in doing your transactions	3.90	3.64	4.66	<b>.000</b>
Total waiting time is reasonable	3.25	3.28	-0.38	.704
Total time to complete transaction was reasonable	3.60	3.47	1.92	.057
Customer Service met your expectations	3.63	3.38	3.87	<b>.000</b>

Table 5a. Eating Out (Male Students)

	Mean for Each Mode of Eating Out		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the restaurant/ website	3.68	3.56	1.22	.227
You could find what you wanted on menu	3.68	3.71	-0.26	.798
Checkout and payment was quick enough	3.71	4.06	-4.02	<b>.000</b>
You felt secure in doing your transactions	3.96	3.72	2.97	<b>.004</b>
Total waiting time is reasonable	3.32	3.24	0.65	.516
Total time to complete transaction was reasonable	3.58	3.40	1.45	.150
Customer Service met your expectations	3.64	3.44	2.11	<b>.038</b>

Table 5b. Eating Out (Female Students)

	Mean for Each Mode of Eating Out		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the restaurant/ website	3.67	3.51	1.88	<b>.052</b>
You could find what you wanted on menu	3.73	3.62	1.40	.163
Checkout and payment was quick enough	3.75	4.05	-4.60	<b>.000</b>
You felt secure in doing your transactions	3.87	3.59	3.62	<b>.000</b>
Total waiting time is reasonable	3.22	3.31	-0.94	.351
Total time to complete transaction was reasonable	3.62	3.51	1.27	.206
Customer Service met your expectations	3.62	3.35	3.24	<b>.002</b>



Banking

Table 6 shows that for banking, 3 service quality measures are significant between in store and online. Among those three items, banking in store received higher mean for one item (You felt secure in doing your transactions), and online banking received higher mean for two items (Total waiting time is reasonable; Total time to complete transaction was reasonable). Previous result show that more than half (68%) of the respondents prefer online banking than in store. It seems that transaction time is more important than security in choosing preferred method for banking.

Table 6a and 6b shows that the above three items are also significant for males and females group. For females students, online banking has a higher mean for item 1 (You felt welcome to the bank/ website/phone) than banking in store. This item is not significant for male students.

Chart 3 shows that there is a big perception difference between in store and online for both males and females. In addition, males has a higher mean for online banking than females for most service quality measures.

Table 6. Banking

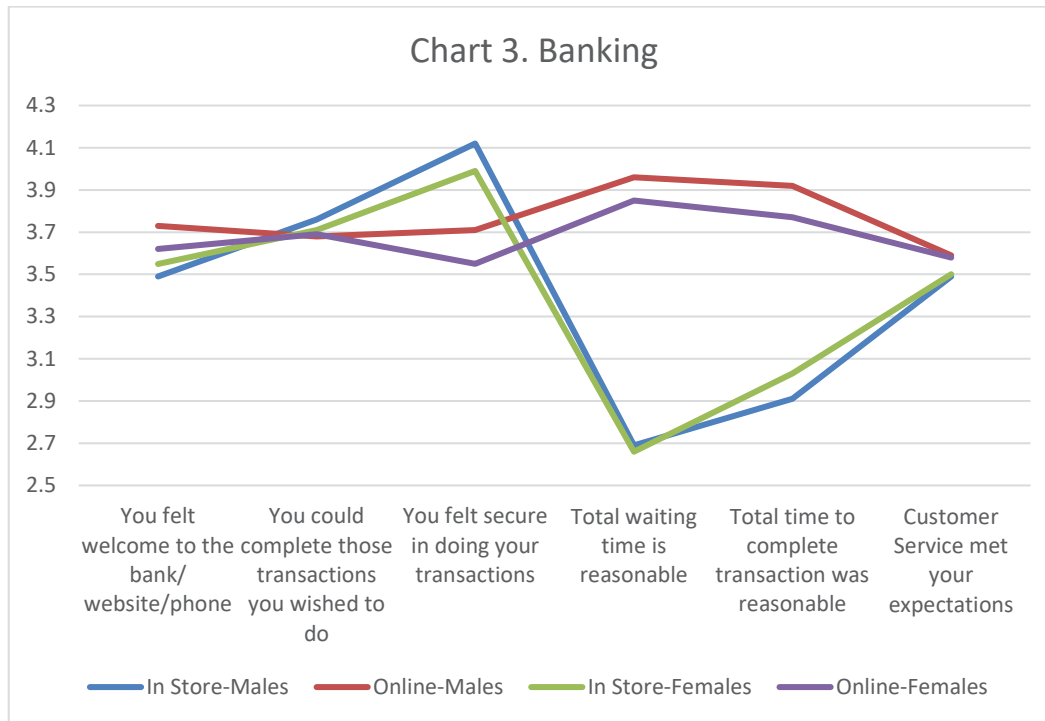
	Mean for Each Mode of Banking		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the bank/ website	3.53	3.66	-1.89	.060
You could complete those transactions you wished to do	3.73	3.69	0.61	.545
You felt secure in doing your transactions	4.04	3.61	7.59	<b>.000</b>
Total waiting time is reasonable	2.67	3.89	-14.74	<b>.000</b>
Total time to complete transaction was reasonable	2.99	3.83	-10.19	<b>.000</b>
Customer Service met your expectations	3.50	3.58	-1.17	.242

Table 6a. Banking (Male Students)

	Mean for Each Mode of Banking		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the bank/ website	3.49	3.73	-2.13	<b>.036</b>
You could complete those transactions you wished to do	3.76	3.68	0.80	.426
You felt secure in doing your transactions	4.12	3.71	3.83	<b>.000</b>
Total waiting time is reasonable	2.69	3.96	-8.00	<b>.000</b>
Total time to complete transaction was reasonable	2.91	3.92	-6.81	<b>.000</b>
Customer Service met your expectations	3.49	3.59	-0.77	.445

Table 6b. Banking (Female Students)

	Mean for Each Mode of Banking		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome to the bank/ website/phone	3.55	3.62	-.72	.475
You could complete those transactions you wished to do	3.71	3.69	.18	.855
You felt secure in doing your transactions	3.99	3.55	6.89	<b>.000</b>
Total waiting time is reasonable	2.66	3.85	-12.89	<b>.000</b>
Total time to complete transaction was reasonable	3.03	3.77	-7.63	<b>.000</b>
Customer Service met your expectations	3.50	3.58	-.88	.379



### Travel

Table 7 shows that for travel, there exist significant difference between in store and online except item 4 (You felt secure in doing your transactions). The similar findings are observed for males and females as shown in Table 7a and 7b. Purchasing online received higher mean for all service quality measures except security question than in store purchasing. Those are consistent with our earlier findings, showing students chose computer/mobile device as their most preferred way of purchasing travelling tickets. Chart 4 shows that both males and females rated online purchasing higher in all items except security. There is no significant difference regarding the security question between in store and online purchasing. This is surprising considering ordering in store is perceived more secure compare to ordering through computer/mobile device for retail, eating-out and banking.

### Entertainment

Table 8 shows that for entertainment, there exists significant differences for all service quality measures between in store and online. Online purchasing has a higher mean for all measurement including the item (you felt secure in doing your transaction). This is unexpected as online is usually viewed as less secure than in store. This pattern is the same for females. For male respondents, the security question is not significant between in store and online. Chart 5 shows that both males and females rated online purchasing higher in all items than in store.

Table 7. Travel

	Mean for Each Mode of Travel		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome at the counter or at the website/phone	3.12	3.85	-10.44	<b>.000</b>
You could complete those transactions you wished to do	3.51	4.09	-9.52	<b>.000</b>
Checkout and payment was quick enough	3.26	4.16	-12.44	<b>.000</b>
You felt secure in doing your transactions	3.75	3.83	-1.36	.175
Total waiting time is reasonable	2.75	4.08	-15.69	<b>.000</b>
Total time to complete transaction was reasonable	2.88	4.09	-14.69	<b>.000</b>
Customer Service met your expectations	3.31	4.00	-9.92	<b>.000</b>

Table 7a. Travel (for Male Students)

	Mean for Each Mode of Travel		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome at the counter or at the website	3.09	3.81	-6.01	<b>.000</b>
You could complete those transactions you wished to do	3.46	4.14	-6.74	<b>.000</b>
Checkout and payment was quick enough	3.27	4.21	-7.70	<b>.000</b>
You felt secure in doing your transactions	3.77	3.86	-0.85	.396
Total waiting time is reasonable	2.69	4.06	-9.11	<b>.000</b>
Total time to complete transaction was reasonable	2.81	4.10	-8.66	<b>.000</b>
Customer Service met your expectations	3.35	4.04	-5.64	<b>.000</b>



Table 7b. Travel (for Female Students)

	Mean for Each Mode of Travel		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome at the counter or at the website	3.13	3.87	-8.55	.000
You could complete those transactions you wished to do	3.54	4.06	-6.83	.000
Checkout and payment was quick enough	3.26	4.14	-9.74	.000
You felt secure in doing your transactions	3.73	3.82	-1.05	.294
Total waiting time is reasonable	2.78	4.08	-12.85	.000
Total time to complete transaction was reasonable	2.92	4.08	-11.96	.000
Customer Service met your expectations	3.29	3.98	-8.23	.000

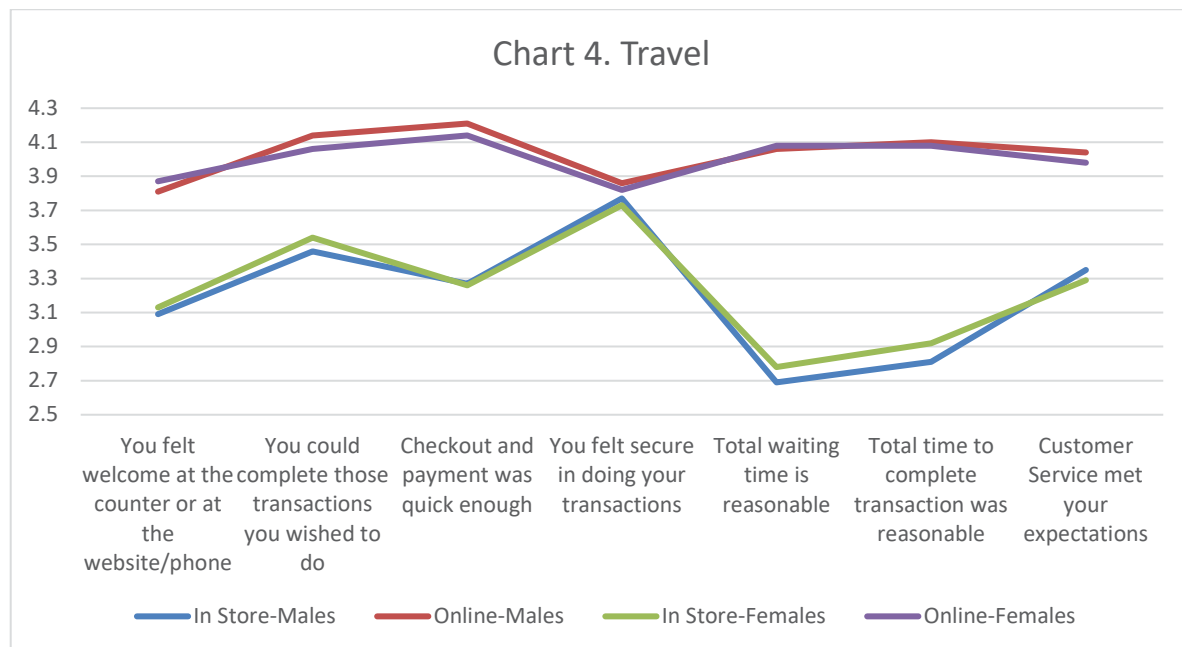


Table 8. Entertainment

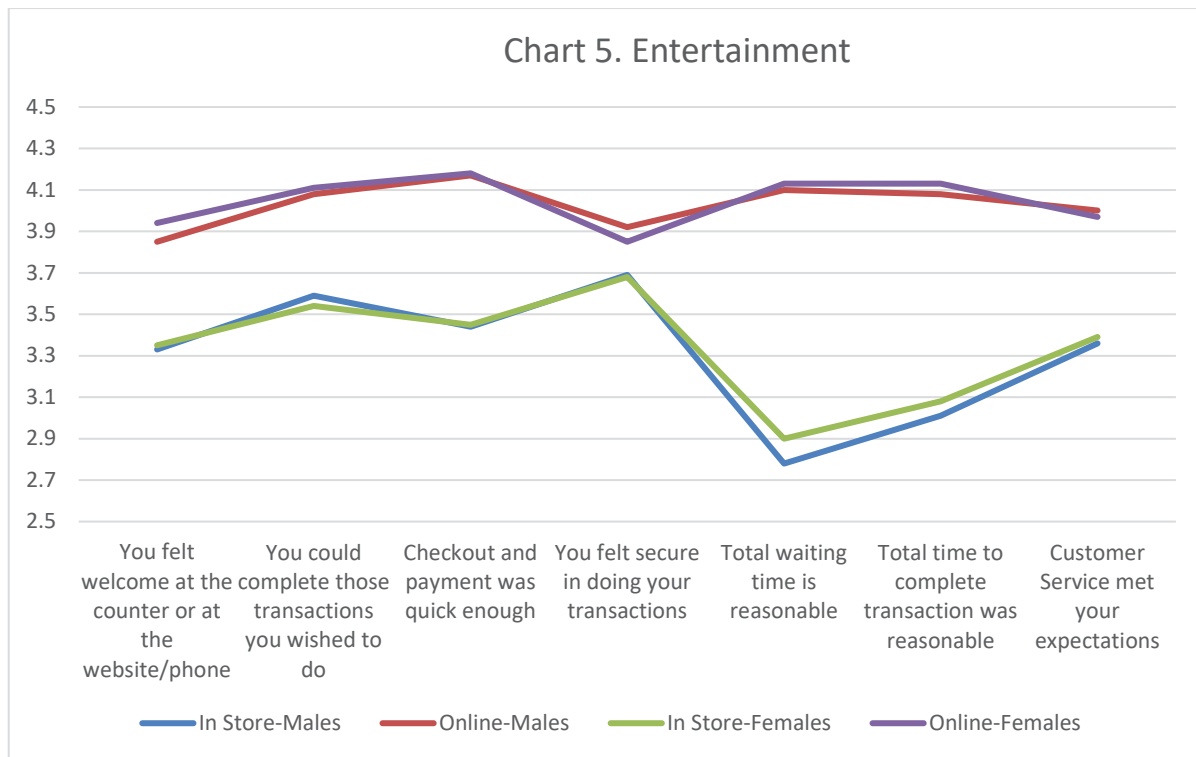
	Mean for Each Mode of Entertainment		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome at the counter or at the website	3.35	3.90	-8.16	<b>.000</b>
You could complete those transactions you wished to do	3.56	4.10	-9.07	<b>.000</b>
Checkout and payment was quick enough	3.45	4.18	-11.60	<b>.000</b>
You felt secure in doing your transactions	3.68	3.88	-2.92	<b>.004</b>
Total waiting time is reasonable	2.86	4.12	-16.58	<b>.000</b>
Total time to complete transaction was reasonable	3.06	4.11	-13.81	<b>.000</b>
Customer Service met your expectations	3.38	3.98	-9.30	<b>.000</b>

Table 8a. Entertainment (Male Students)

	Mean for Each Mode of Entertainment		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome at the counter or at the website	3.33	3.85	-3.83	<b>.000</b>
You could complete those transactions you wished to do	3.59	4.08	-4.35	<b>.000</b>
Checkout and payment was quick enough	3.44	4.17	-6.20	<b>.000</b>
You felt secure in doing your transactions	3.69	3.92	-1.85	.069
Total waiting time is reasonable	2.78	4.10	-8.94	<b>.000</b>
Total time to complete transaction was reasonable	3.01	4.08	-6.90	<b>.000</b>
Customer Service met your expectations	3.36	4.00	-5.18	<b>.000</b>

Table 8b. Entertainment (Female Students)

	Mean for Each Mode of Entertainment		Paired Samples t-test	
	In Store and In Person	Computer /Mobile Device	t-value	Significance
You felt welcome at the counter or at the website	3.35	3.94	-7.83	<b>.000</b>
You could complete those transactions you wished to do	3.54	4.11	-8.46	<b>.000</b>
Checkout and payment was quick enough	3.45	4.18	-10.11	<b>.000</b>
You felt secure in doing your transactions	3.68	3.85	-2.28	<b>.024</b>
Total waiting time is reasonable	2.90	4.13	-14.61	<b>.000</b>
Total time to complete transaction was reasonable	3.08	4.13	-13.05	<b>.000</b>
Customer Service met your expectations	3.39	3.97	-7.98	<b>.000</b>



## Conclusion and Future Research

This paper investigates Chinese customer preference over two service delivery model (either in store or online) on five type of purchasing (retail, eating-out, banking, travel and entertainment) and their perception difference in customer service quality between those two delivery model. Results show that a majority of Chinese students prefer in store and in person for eating out. For ordering tickets for travel and entertainment, they prefer computer/mobile device. For retail purchasing and banking, less than half of the students prefer in person services. In general, the results show that ordering through computer/mobile devices has become more popular and has received higher rating for most of customer service quality except security compared to ordering in store. In addition, it is found that there exist a gender difference in purchasing preference and perception in service delivery quality. Male students prefer online purchasing and consider online purchasing as having higher service quality than female students.

Customer service strategy is in play and is becoming progressively more technology mediated. The checkout process is becoming a more time consuming part of the “bricks” shopping experience, which may be an unintended contributor to the significant worldwide increase in “clicks” sales. An increase in the ratio of self service to full service checkout in retail results in empty self-checkout and unnecessarily longer lines at full service. Companies should review their strategies for customer service and adjust their rate of IT mediated customer service to more closely match customer willingness to embrace these changes.

Areas of future research for information technology mediated customer service should include development of a model that links current customer adaptation realities to profit motivated changes in customer service, before such changes are implemented on a broad scale.

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