

**National Cheng Kung University**  
**Institute of International Management**

**Service Management from Chinese Perspective:**  
**Technology Adoption**

**Final Term Paper**

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## 1. INTRODUCTION

Self-Service Technologies (SSTs) such as self check-in machine, ibon, automatic ordering machine, ticket machine, vending machine, ATM, e-banking have been increasingly used to support or replace traditional service delivery in many businesses. SSTs allow customers to produce their own service with little or no service employee involvement (Kokkinou & Cranage, 2015). From the business perspective, technology enables businesses to compete more efficiently by lowering labor costs, increasing service provider's efficiency, productivity and allowing value co-creation between customer and service provider (Lin & Hsieh, 2011). It is important that service providers invest in what they think the customers want with the correct understanding of what makes customers use the technology.

Many theories such as Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), Technology readiness index (TRI) have been developed to explain the customer adoption of new technologies. However, these theories are constructed from the individualistic aspect of western society by focusing on the potential benefits that the technology can bring to the person while Chinese holistic and relational worldview originated from a different cultural root. This shaped the different approach in how the Chinese conceptualized technology adoption. Better understanding of Chinese customers can be obtained with the five Chinese metaphors towards SST adoption that includes instrumentality, face, sociability, terminating connection, and initiating connection (Stanworth, 2020). This study explores customers' rich self-dialogue as they think about using new technology, connecting these dialogues with theories and highlighting the distinction to the western thinking.

## 2. CUSTOMER MENTAL DIALOGUE AND TECHNOLOGY ADOPTION THEORIES

We interview two Taiwanese customers and one Thai customer then connect their self-dialogues to the theories, our interview questions includes:

Why not all Thai?  
This would bring  
more focus to your  
work

1. Which self-service technology have you used?
  - What comes up to your mind before you are going to use it?
  - What are the questions you asked yourself the moment you are going to use it?
  - Are there any difficulties?
  - Are you going to use it again?
3. Which self-service technology have you not used? Are you going to use it in the future?

ok

### Instrumentality

Convenience

avoid so many font  
changes!

Taiwanese customer 1: “I often use ibon for printing or getting my ticket...and I know how to use it so *even though people have to wait for me but that is how ibon works, its slow (很慢), its not a business...I need to print my homework and there is no printing shop near my house...there are many types of train and many different stops...there are areas we don't know...I will go to the ticket machine when there are too many people lining up, I use them because I just don't want to wait...some online food ordering design is very bad and I can't find where is the ordering button...it is inconvenient...even if they design a user-friendly interface*”



Taiwanese customer 2: “...I feel excited to use the vending machine and it is *convenient*, the drinks are always cold and it is available 24 hours...I have never used the self-check-in machine

at the airport...I would consider using it because *the lines are always long....I saw my cousin use it before and it is really good...*The first time I did not use KFC food ordering machine because it can only pay by the credit card but afterwards we can pay at the counter so I use it...sometimes it is *lagging*, I press hamburger and have to wait ten seconds before it comes out...I expect it to be fast but I continue to use it frequently, it is exciting.” ✓

Thai customer: “I had tried to use the train ticket machine before... I actually like those self-service machines because...*the lines are long...sometimes the people...are quicker than the machine...*”

Ibon is easy to access compared to other channels. The customer thinks about using the ticket machine, self-check-in machine when there are long lines. The inconvenience barrier to use the technology include bad interface of technology, slower than expected or lagging and customers cannot ~~self-service~~ themselves as fast as the service provider can. The long line of ibon doesn't make the customer hesitate to use it because they feel it is socially appropriate. ?

### Uncertainty

Taiwanese customer 1: “At the train station, people don't use the ticket machine because they can ask the service counter to check if there is enough seat for some route because it shakes a lot... I really don't know if the machine ~~can~~ provide you with a reserved seat. I have used the ticket machine some time and *it is the worst...*”

Taiwanese customer 2: “...sometimes the [vending] *machine is broken and eats our money*. In school, we can stick the paper on the machine to get the money back but in other places, we don't know how...so if the machine broke once and *I lost my money, I won't use it again...*When

you go to the people, *you can clearly tell them what you want*, but if you go to the ticket machine and if you don't know how to use it, then you do it wrong you may need to *spend a lot of money*. I did it once...because *I don't know what to press*, I pay from the first stop to the last stop but I found out later that I only need two stops but I pay for all and it is really expensive...so *I never use it again* because of this.” ✓

Thai customer: “...I also used the vending machine ...I don't like to use it often if I don't really need to use it because in the past *I did something wrong and I lost my money*...so I would probably avoid it...I have seen several other machines but I probably won't use it if I really did not have to use it because *things could easily go wrong* and it is often *difficult to fix* it.”

Service technologies can present unknown outcomes due to its complexity and its records of failures in the customer mind relative to higher certainty outcomes from service providers. Many bad experiences also make customers hesitate to use other and newer technology in the future. Painful experience can totally prevent customers from using the technology again.

### **Sociability**

Perhaps reluctant to use it in the short-term at least

### **Progress**

Taiwanese customer 2: “I have used the vending machine in B1 of the management building, T-bike and ATM...I feel *excited* to use the vending machine...I continue to use it frequently, it is *exciting*...I am so *excited* to use the touch the ATM, so the first time I u ordering machine] to be fast but I c

this was an interesting example  
Often sociability refers to situations where people share use of SST as a means of socializing with others / sharing experiences within their social group.  
I suspect, too, this is about sharing experience (*jing-yuan*).

adults can  
KFC food

One of the reasons for the interest to use despite some inconvenience in this example relates to her father forbid her to use it and how she feels she becomes an adult.

### **Initiating connection**

Pretty dead

Taiwanese customer 1: "...when I don't want to eat some vegetable or some ingredients, *you cannot tell the [food ordering] machine* most of the time, I hate tomatoes and there is no option for no tomatoes...if I *need any special arrangement or ask some questions* I will definitely go to the people [train station], they will *do everything* for me..." ✓

Taiwanese customer 2: "Service people are *more flexible*, you can tell the waiter that you don't want onion but you *cannot tell the machine*...there is one in Yule street, there is a machine but we always order with people because we can tell them we want less amount of rice."

The machines often lack flexibility to make adjustments and customization that customers need which make these machines less satisfied compared to service providers.

Just a machine

Taiwanese customer 2: "...I would prefer to go to the people because people have some *warmth*...I went to Australia when I was young...my friends brought in dry meats but the service people are still *nice* to us because we are kids."

Thai customer: "...But I don't feel like using the automatic order touch screen in this restaurant, since the service personnel in that restaurant are so nice, I really *want to interact with them more than the screen*."

Sense of sincerity, warmth and other human touches can be the main reason that ✓  
customers come to experience the service and the technology terminates this connection.

### Comfortableness

Thai customer: “I had tried to use the train ticket machine before... I actually like those self-service machines because sometimes *I don't feel like interacting with the counter service* so much especially when they don't look really nice...I wish that these machines could replace all these rude people and keep the nice ones...” ☺

Machines can sometimes be an attractive alternative when customers anticipate some pressure from social interaction and make them more comfortable.

### Face

#### Unease

Taiwanese customer 2: “...it is quite *embarrassing* ✓ when you want to use the machine at T-bike and you don't know how to use it...I don't know how to borrow the bike...I later consider it a lot and *refuse to use it for three months* because I feel embarrassed... I did not expect that I would not know how to use the machine.”

I like your use of examples and quotes throughout

Self-service technology can cause unexpected socially inappropriate behavior that can prevent customers from using it in the future.

#### Guidance

Thai customer: “Another self-service machine that I used is the ticket machine at the cinema...there is a service people besides the machine...so I think I can try the machine...*the*

*service people might help me...after a little while, a service people come to help me use the machine...I feel quite good that there is someone helping me aside from being fast...later I also come back to use it and there are always people coming to help you so there is no problem if you get stuck somewhere or being not so sure what to press.”*

Having a service provider nearby to guide and help the customer can make customers more inclined to use the technology while also creating a positive experience for the customer to use it next time because the problems can be resolved along the way.

Consideration

Taiwanese customer 1: “F

Ha - this is a great example of what can go *wrong* when managing across cultures. See here how you have interpreted this as *consideration*. For the Taiwanese respondent this might still be *face* while for the Thai respondent this might be *consideration*!

if I use the ordering machine what if there are *people waiting for me and I feel stressed*. It takes a lot of time for me to decide what to eat...I have to press the buttons and select the food if I use the menu then *nobody has to wait for me...*”

Thai customer: “...I also used the vending machine when no one is using it because of less *pressure from people waiting...I think I can try the [ticket] machine and spend some time with it because there are no people...*” (Kreng Jai: เกรงใจ)

A good dissertation topic!

Pressure or stress created from consideration for other people that they are waiting for is a significant factor that affects the experience and customer decision of using the technology.

### Western Interpretation

I'm not sure why you are bring this model in here - Western is for Western customers. . . .

periences such as no long lines, availability, easy access for customers to the examples are the perceived usefulness or benefits that act as the driver for customer to use. Another example is when Taiwanese Customer 1 said



“...some restaurants will give you a discount when you use their online ordering website...I will use it when there is a discount.” While complexity of machines such as a bad interface, being slow relative to service providers are the perceived ease of use that impact customer decision. TRI also focuses on the optimistic attitude of the user and innovativeness or discomfort and security which are what technology can positively or negatively affect the user. These explanations neglect the effect of other people in the field.

The main distinction to the western explanation is the elements such as saving face, comfortableness, sociability and connection that focus on interpersonal relation between the customer and the other people such as service providers, friends, family, other customers play a crucial role in the decision of the customer to use or continue to use the technology in the future. Although UTAUT includes social influence, the model only regards it as one factor that explains customer behavioral intention to use the technology while the rest focus on the difference between each individual.

### **3. CONCLUSION**

Chinese metaphors to SST adoption help provide explanation for the customer's self-dialogue to use the technology. Chinese metaphors that are present in the interview include instrumentality, sociability, initiating connection and face. Instrumentality and initiating connection are the most frequent ones while consideration is another dimension that is important and appears frequently in Thai customer's thought process.

The existing western theories place large importance on the individual in isolation of the environment which can provide some but not complete explanation of the reason behind the non-western customer decision to use the technology.

ok

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