

Local and Cultural Factors in Mobile Data Communications: The Case of the SMS in China and Hong Kong SAR



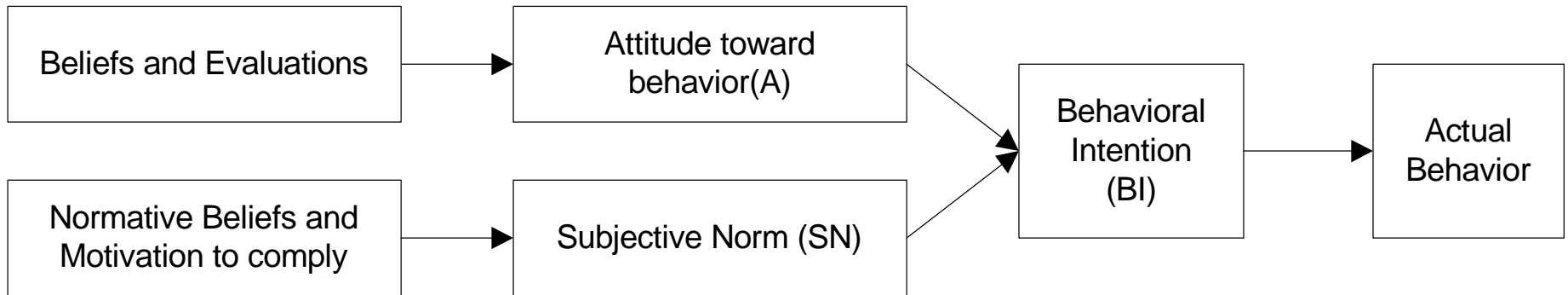
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Introduction

- Studies from the social psychology perspective have revealed that local and cultural factors are key determinants for technology acceptance
- The contrast between the booming of the SMS in China and the sluggish response to the SMS in Hong Kong is a new evidence

Theory of Reasoned Action (TRA)



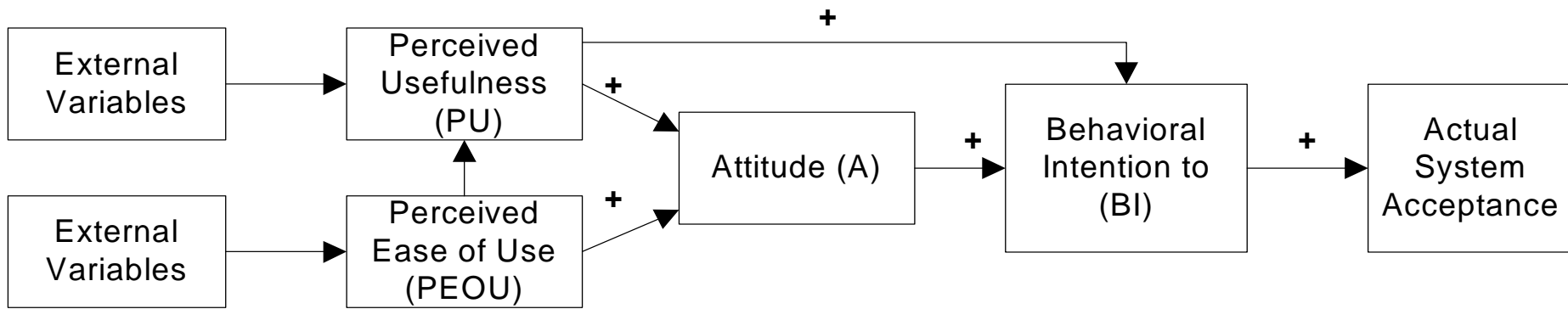
- A person's performance of a specified behavior is determined by his behavior intention (BI).
- BI is a measure of the strength of one's intention to perform a specified behavior.



Theory of Reasoned Action (TRA)

- BI is jointly determined by the person's attitude (A) and subjective norm (SN)
- A is determined by his or her salient beliefs about consequences of performing the behavior and the evaluation of these consequences.
- SN refers to the person's perception that most people who are important to him think he should or should not perform the behavior in question. It may also refer to social pressure.

Technology Acceptance Model (TAM)



- TAM, on the basis of TRA, is specifically used for modeling user acceptance of information technology/systems.
- It posits that two particular variables, perceived usefulness and perceived ease of use, are of primary relevance for IT acceptance behaviours

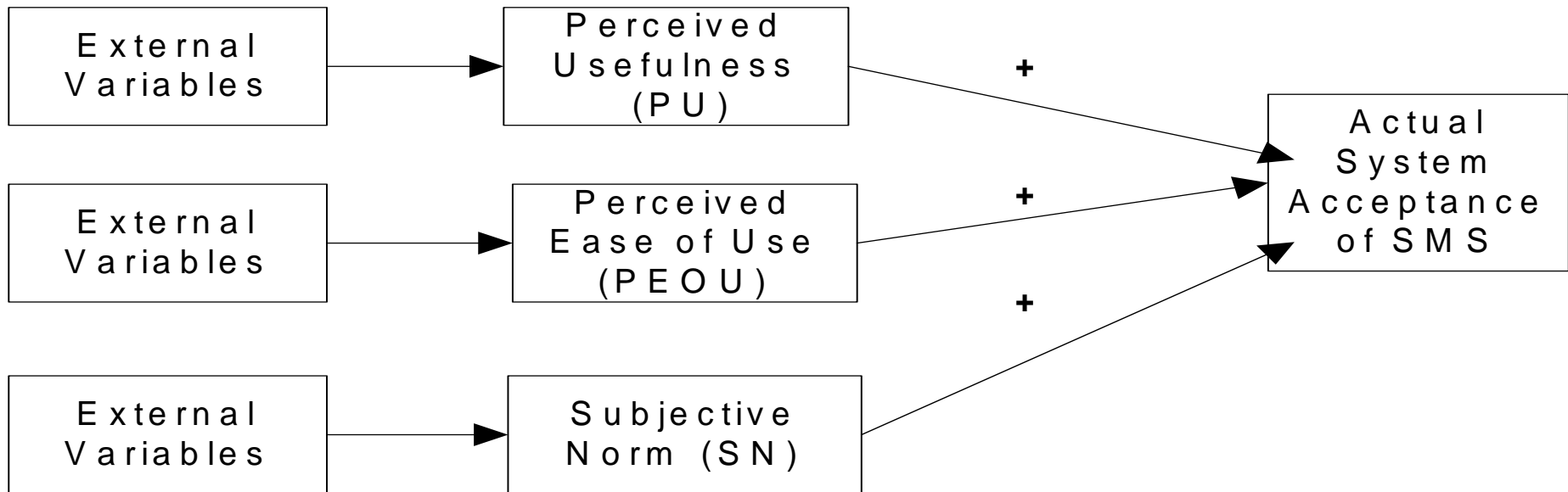


Technology Acceptance Model (TAM)

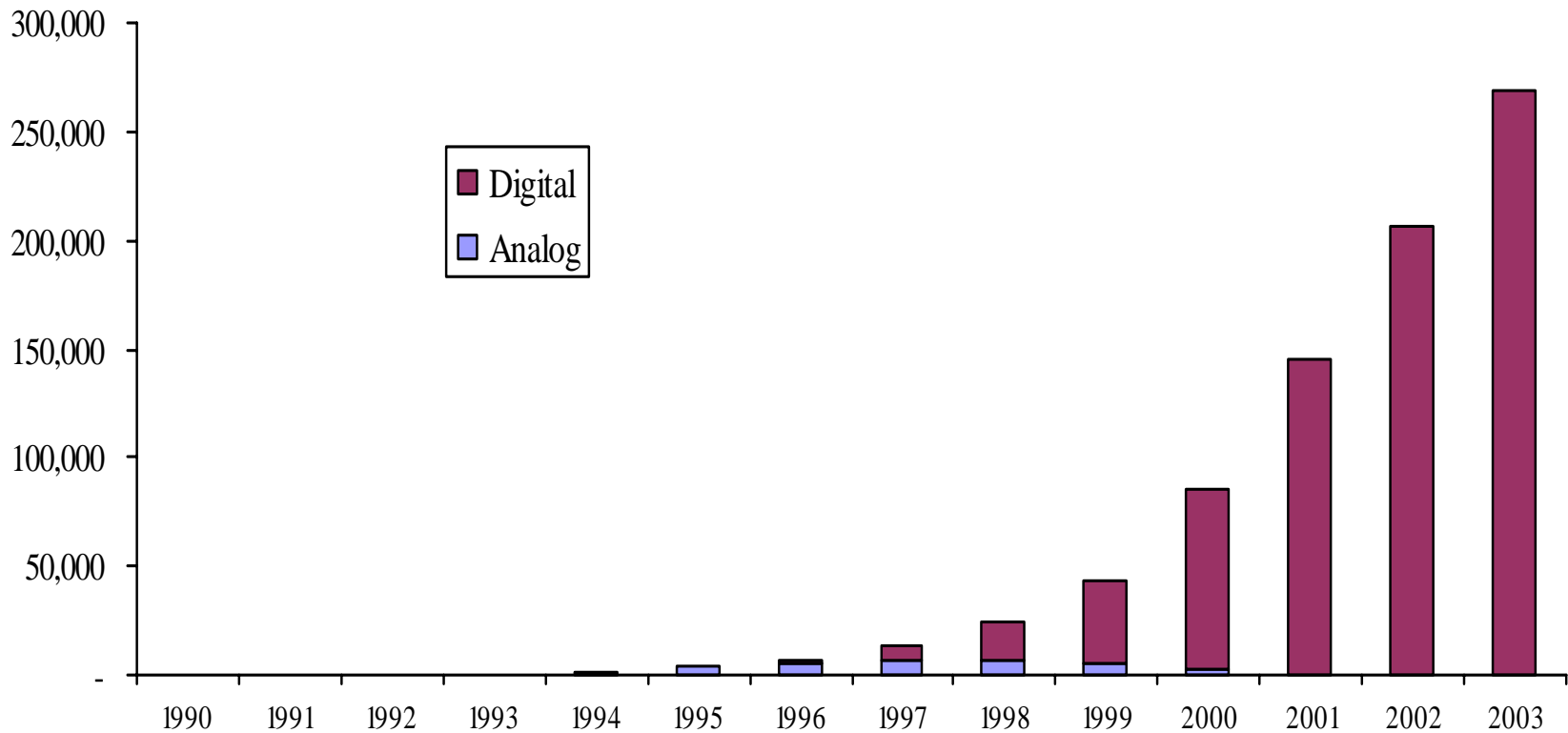
- Perceived usefulness (PU) is defined as the prospective user's subjective probability that using a specific application system will increase his specified performance
- Perceived ease of use refers to which a person believes that using a particular system would be free of effort



Research Framework Model

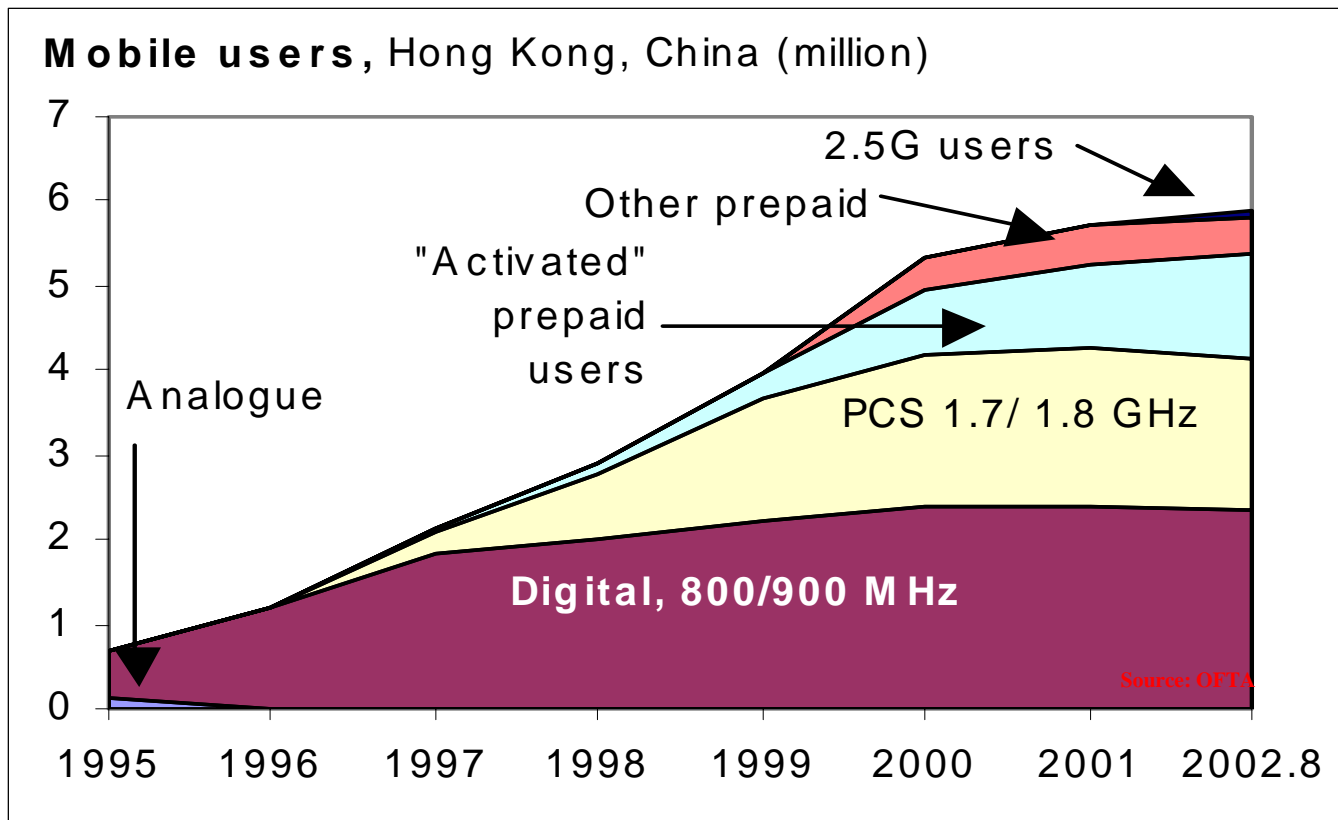


Growth of Mobile Users in China



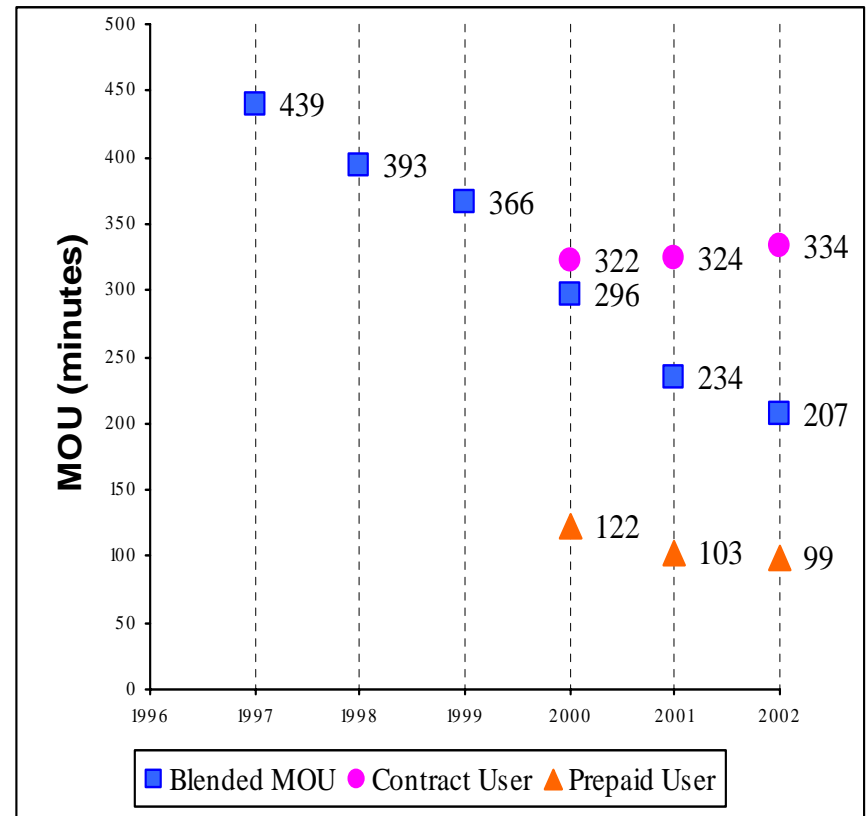
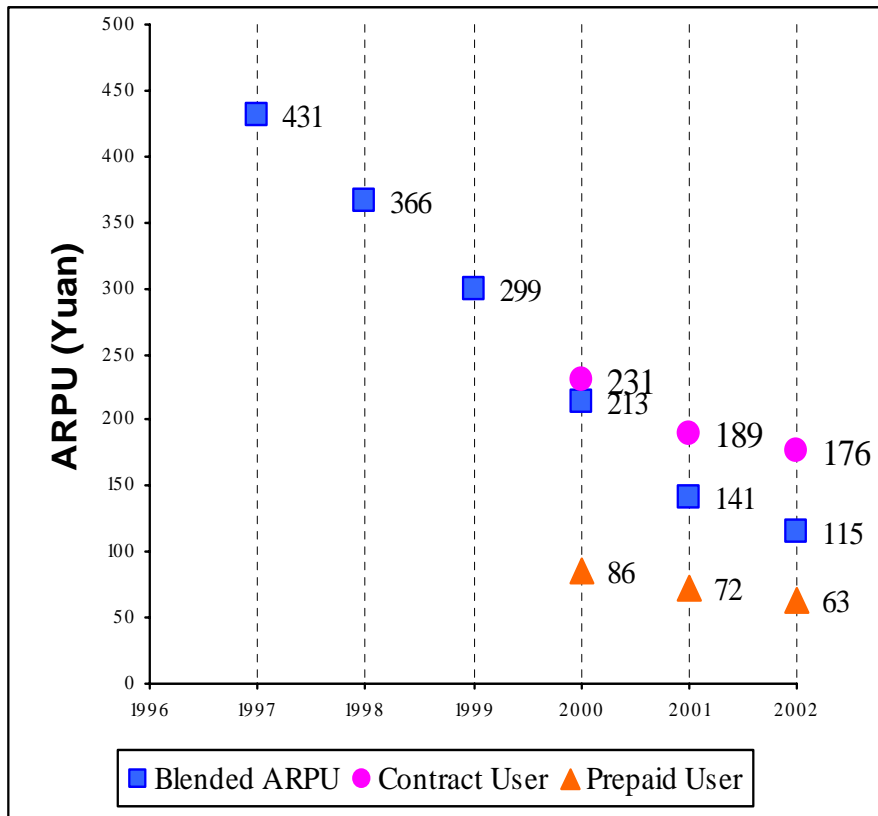
(Source: The Ministry of Information Industry)

Growth of Mobile Users in Hong Kong

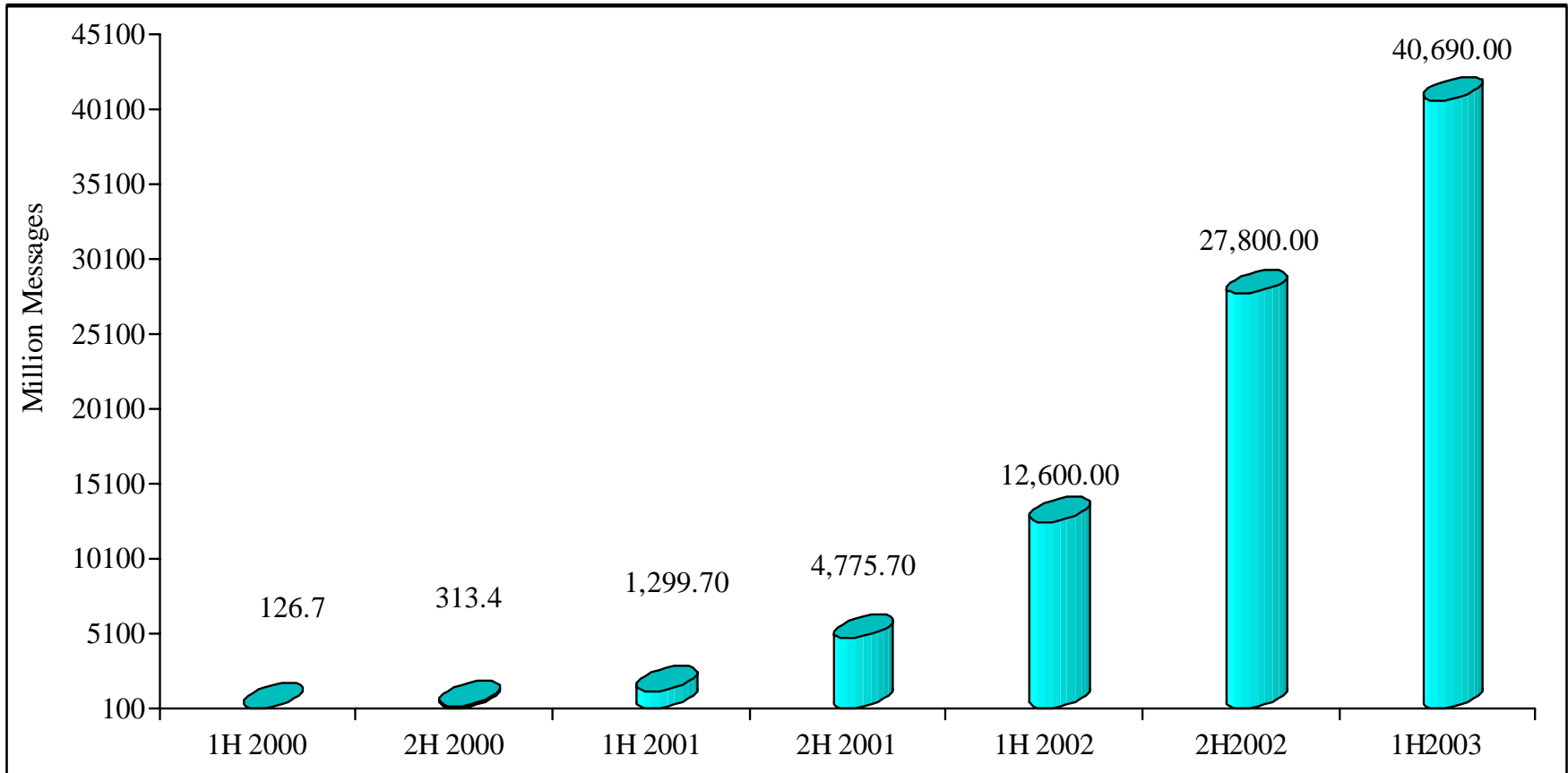


↑
103 % mobile penetration by 2003

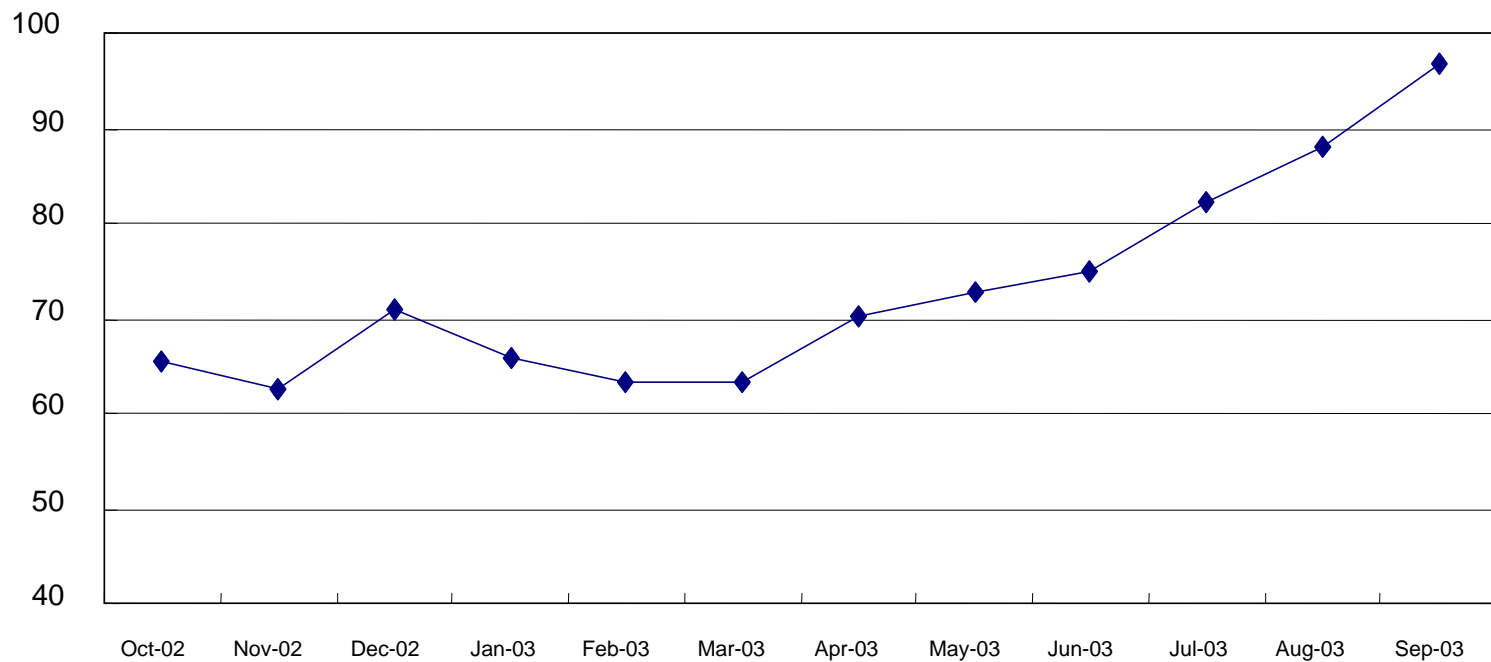
Subscribers are not Necessarily Users



Explosive Growth of the SMS in China



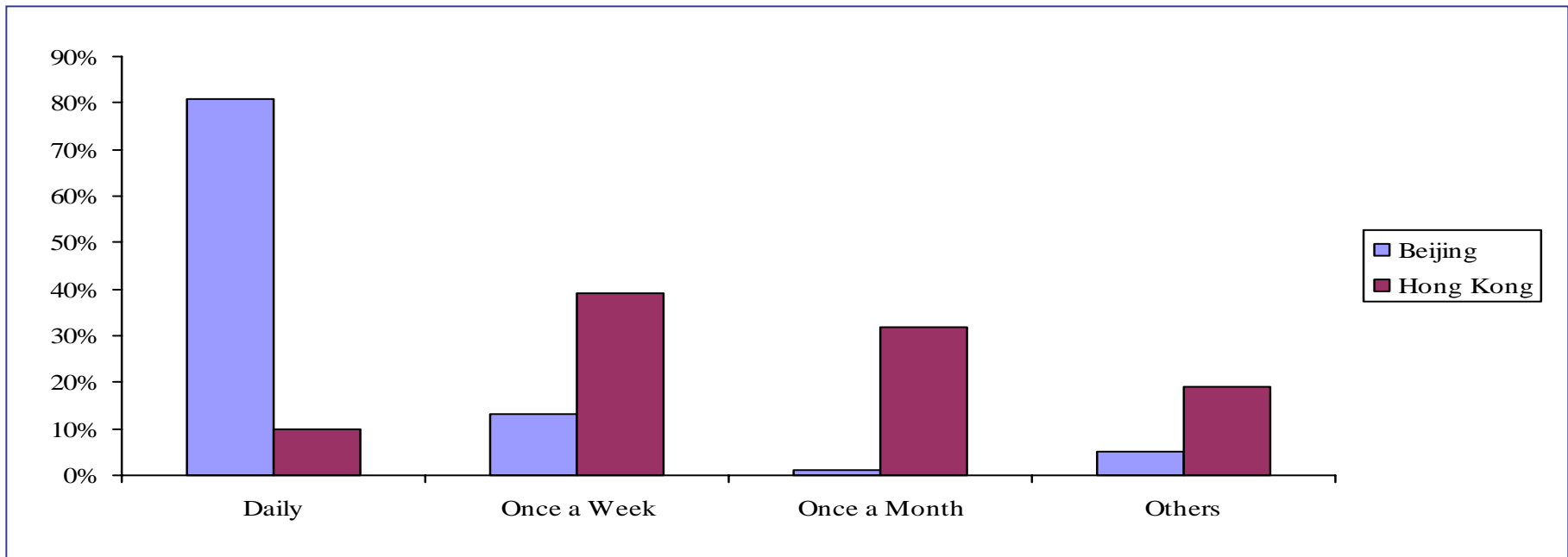
Sluggish Response to the SMS in Hong Kong



Mean Comparison by T-test and One-way ANOVA

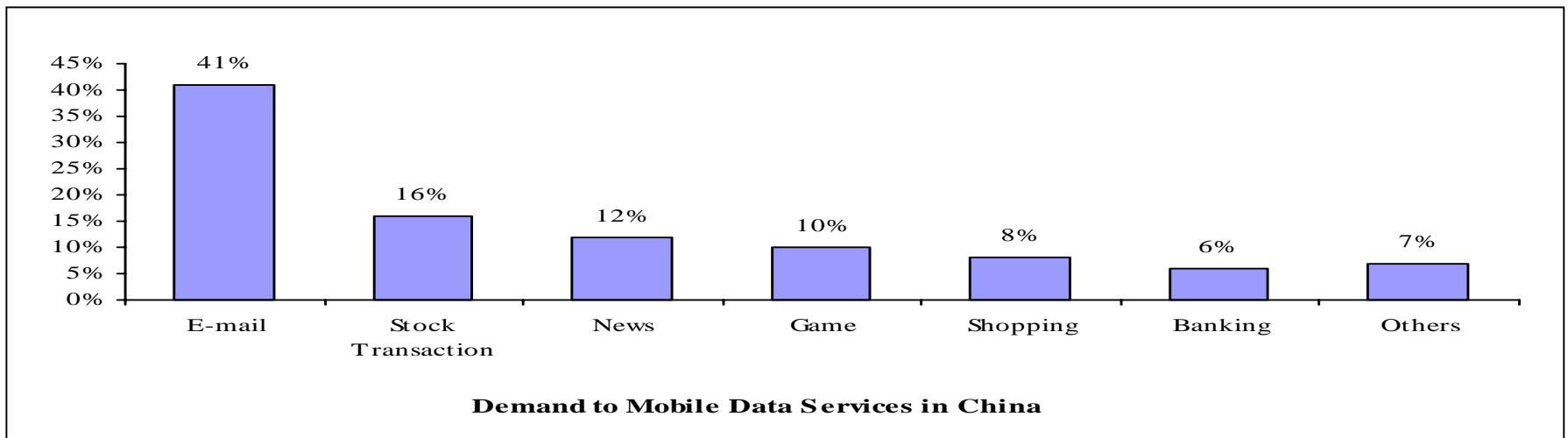
	Mean (SD)		N		F	P-value	Significantly different?
	Beijing	Hong Kong	Beijing	HK			
PU1	4.0950(.9000)	3.5610(.8620)	200	82	20.976	.000	Yes
PU2	3.4450(.9117)	2.7604(.8914)	200	96	37.102	.000	Yes
PEOU1	4.1700(.8089)	3.4881(.9999)	200	84	36.382	.000	Yes
PEOU2	4.1150(.9307)	2.2500(.9468)	200	100	264.65	.000	Yes
SN1	4.040(.9967)	2.5054(.8923)	200	93	160.58	.000	Yes
SN2	2.950(1.097)	2.6000(.8921)	200	95	7.355	.007	Yes
UA1	3.715(1.0999)	2.5684(.9963)	200	95	74.265	.000	Yes
UA2	4.030(1.0886)	2.1064(1.041)	200	94	205.17	.000	Yes
UA3	4.175(1.0724)	2.3951(1.147)	200	81	152.46	.000	Yes

Frequency of Using the SMS

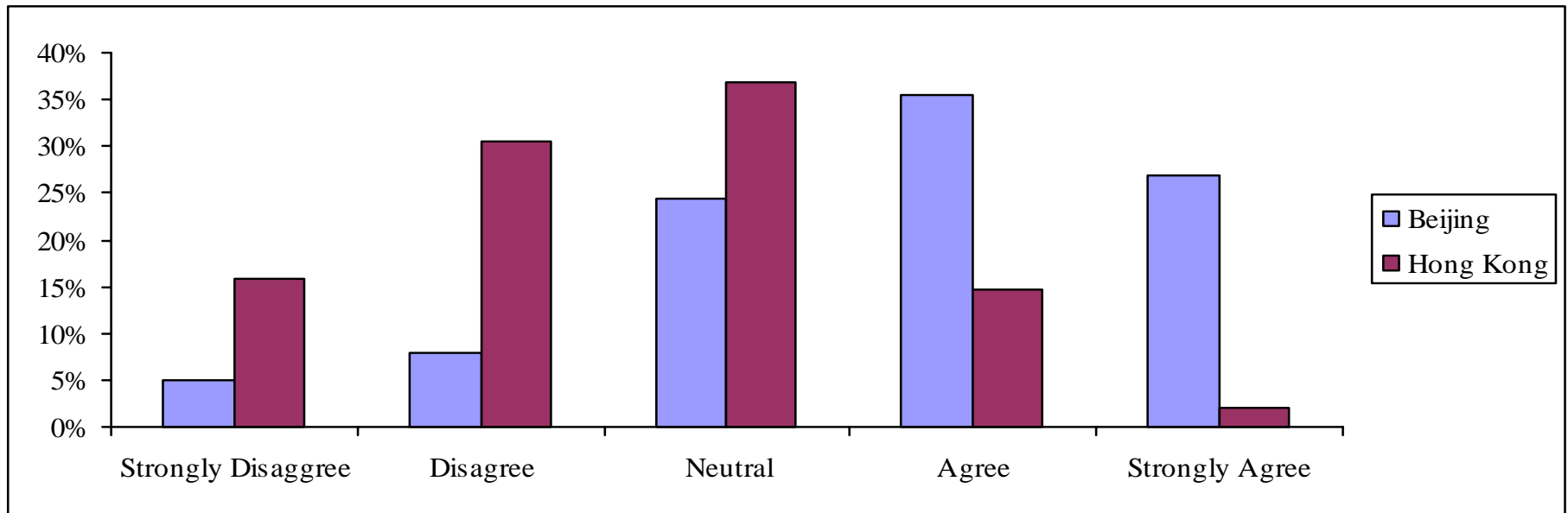


Information Infrastructure Level

- A substitute to e-mail wireline Internet
 - 206.6 million mobile subscribers but only 49.7 million Internet subscribers by 2002
 - **Not all mobile services are more advanced than the fixed!**



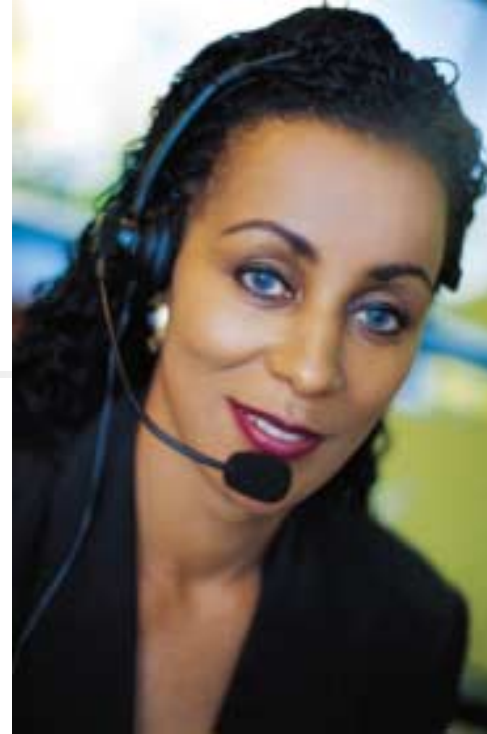
Preference of Using the SMS to Send Message





Culture

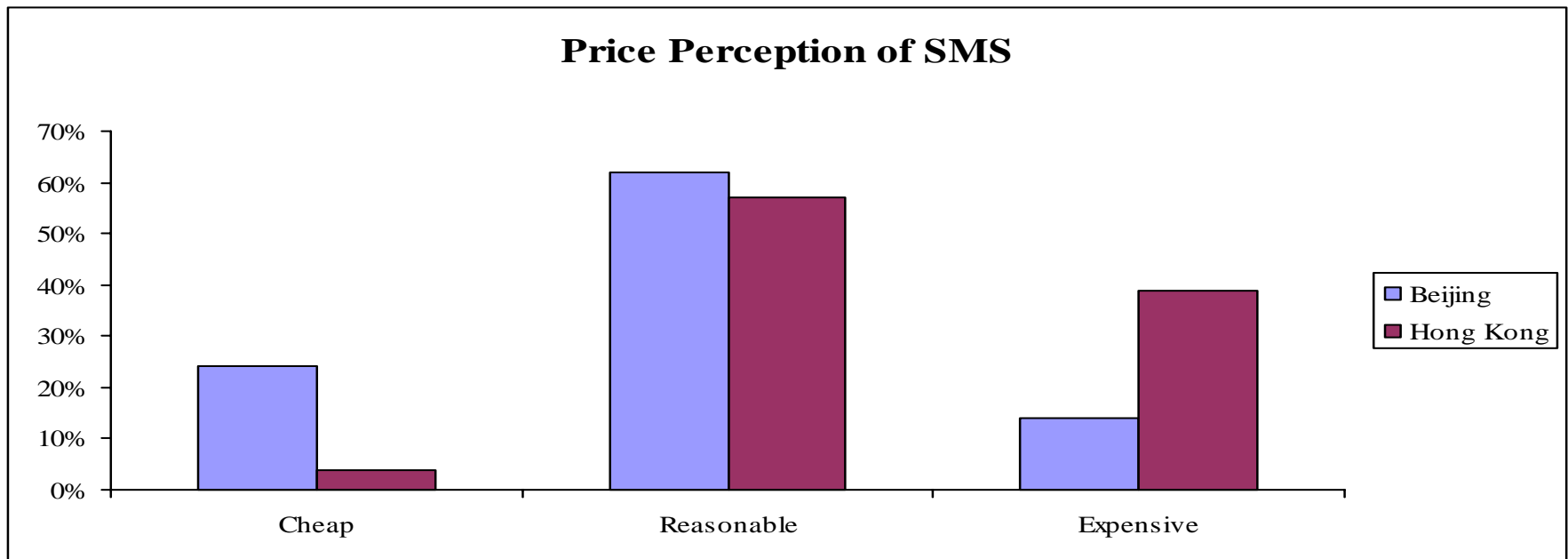
- Users in China are reluctant to talk to machine
- Users in Hong Kong has been used to leaving voice mail



Market Competition

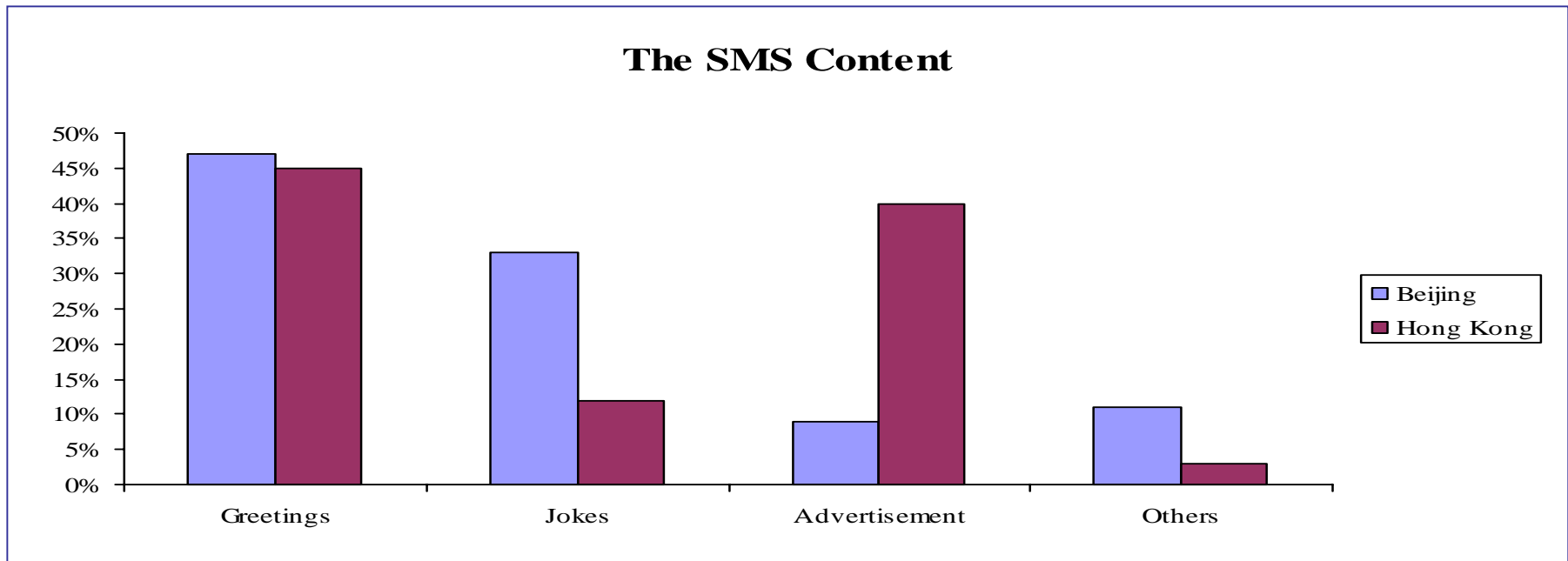
- The competitiveness of mobile voice service makes the SMS a relatively expensive service in HK

Price Perception of SMS

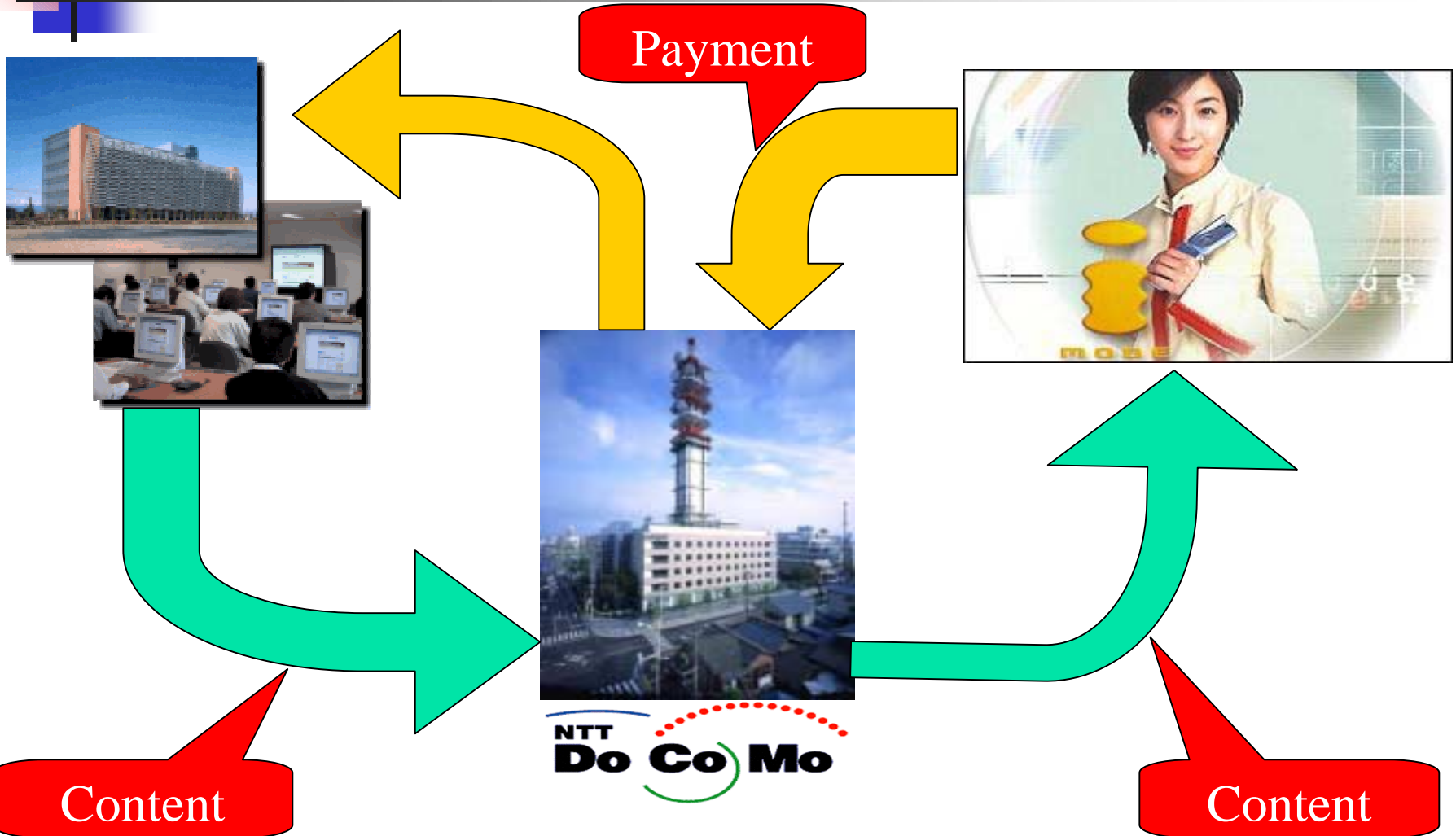


Political Factor

- The SMS is Now a New and Informal Literature
 - Bypass the Government's censorship
 - Social pressure to access and share with the others

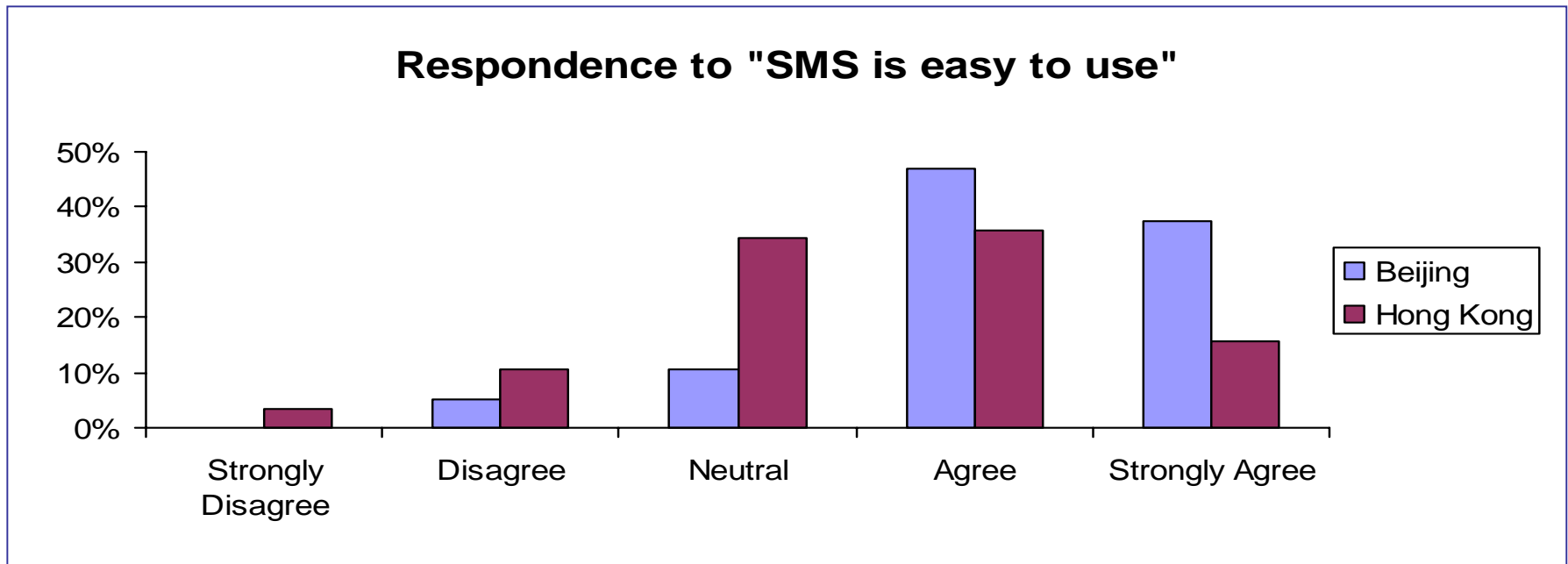


Business Model: Forming a Positive Feedback

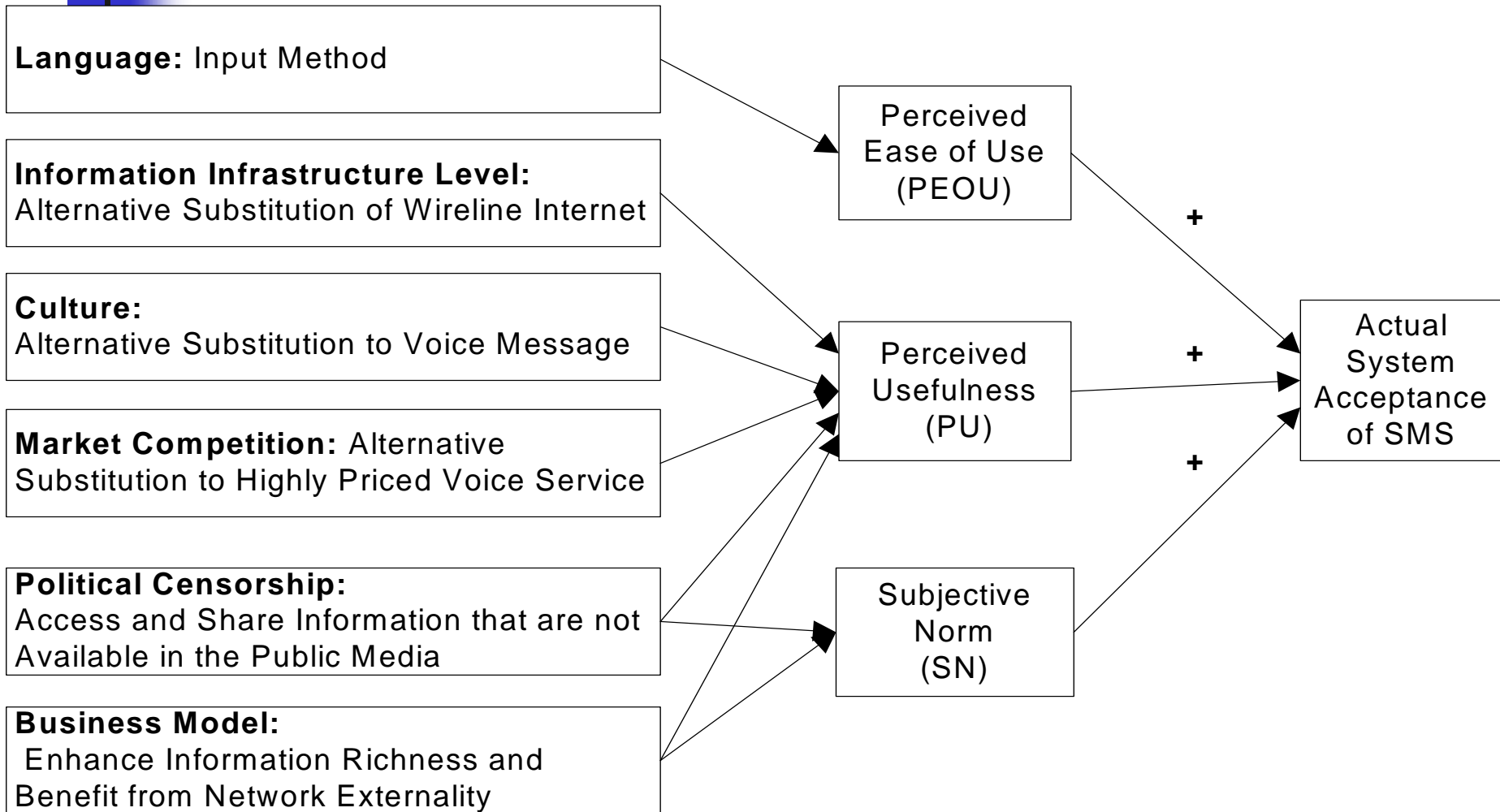


Input Methods of the Chinese

- Pin Yin is simple and popular in China
- Cheong-chi is a complicated method of inputting Chinese in Hong Kong



The SMS Acceptance Model





Conclusion

- Good technology or bad technology? That is not a problem.
- User will accept a new technology only when they perceive it as a useful technology
- There are many local and culture determinants that lead to the perceived usefulness
- Perceived ease of use should be paid with attention by vendors and operators
- Social pressure is one of the key factor to achieve critical mass



THANK YOU!

