

題目:資訊科技在電子商務中的 應用

國立高雄第一科技大學

資管系

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大綱

- 電子商務:透過網路提供的設施進行商務行為
- IT：泛指任何的軟體、硬體、介面等有利商務行為的進行。對購買活動與購買決策有利的IT(貨品瀏覽、貨品篩選、貨品優略討論、貨品運送、貨品與商務服務等)
- 馬雲對創業的建言
- 阿里巴巴的技術發展 (簡要)
- IOT (物聯網簡要)
- 淘寶上的資訊應用
- 結論



2016/9/18

馬雲的話:大家想一想??

- 馬雲首次創業公開課：沒有一種變態的執著和熱愛，後面孤獨的道路你走不下去
- 有三點你一定要清楚
 - 你想不想??(GE（通用電氣）讓世界亮起來;迪士尼 make the world happy)。如果沒有熱忱就別做了。
可以用在你如果是公司員工，願意為公司賣命嗎?
 - 階段性願景(你是否有隨著時間改變而有不同或更好更理想的方向與具體目標)
 - 可以落實與檢視的價值觀(具體的可檢驗的價值體系)

VR／AR時代來臨，電商領頭羊阿里巴巴率先起跑

- 阿里巴巴備受期待的VR購物體驗Buy+，在7月下旬的淘寶造物節上正式對外公開體驗；同時，混合實境公司Magic Leap也在同一個場合亮相。VR、AR、MR，阿里巴巴將如何布局下一世代的電商版圖？
- 阿里巴巴為了VR、AR（擴增實境）、MR（混合實境）等新技術布局，在今年成立了新創實驗室GM Lab。GM實驗室負責人之一，同時也是阿里巴巴移動平台資深總監庄卓然明白表示，Buy+只是一個體驗版本，是阿里巴巴對未來購物體驗的一個展現。



Internet of things (IOT)(物聯網)

- IOT refers to the interconnection of **physical objects**, by equipping them with **sensors, user-friendly devices, and a means** (software, AR, VR, RFID, Wi-Fi, or others) to connect to the Internet.
- Uniquitous computing in the next decade—cloud computing and IOT.

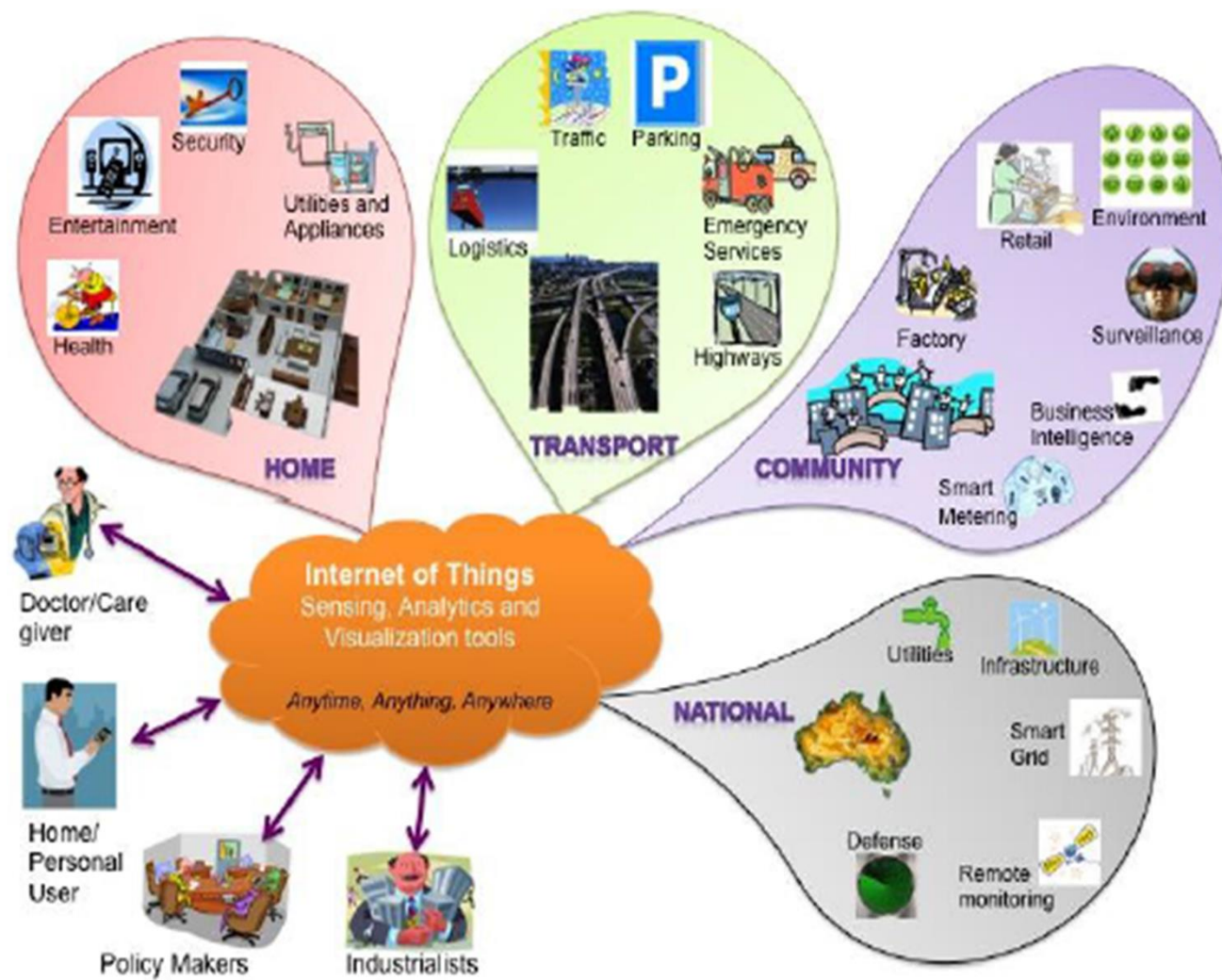
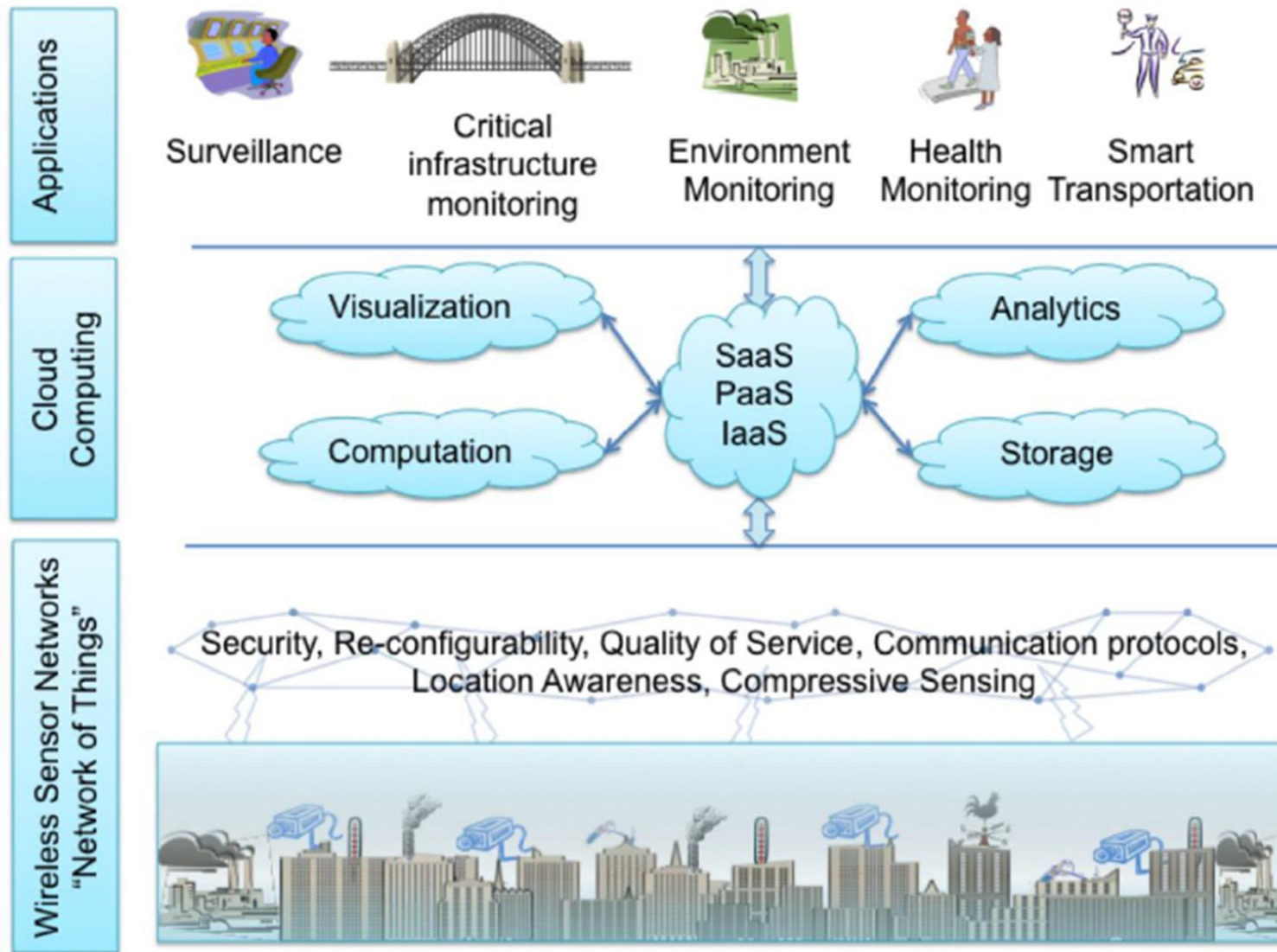


Table 1: Smart environment application domains

	Smart Home/Office	Smart Retail	Smart City	Smart Agriculture/Forest	Smart Water	Smart transportation
Network Size	Small	Small	Medium	Medium/Large	Large	Large
Users	Very few, family members	Few, community level	Many, policy makers, general public	Few, landowners, policy makers	Few, government	Large, general public
Energy	Rechargeable battery	Rechargeable battery	Rechargeable battery, Energy harvesting	Energy harvesting	Energy harvesting	Rechargeable battery, Energy harvesting
Internet connectivity	Wifi, 3G, 4G LTE backbone	Wifi, 3G, 4G LTE backbone	Wifi, 3G, 4G LTE backbone	Wifi, Satellite communication	Satellite Communication, Microwave links	Wifi, Satellite Communication
Data management	Local server	Local server	Shared server	Local server, Shared server	Shared server	Shared server
IoT Devices	RFID, WSN	Smart Retail	RFID, WSN	WSN	Single sensors	RFID, WSN, Single sensors
Bandwidth requirement	Small	Small	Large	Medium	Medium	Medium/Large
Example testbeds	Aware Home [31]	SAP Future retail center [32]	Smart Santander[33], CitySense [34]	SiSViA [35]	GBROOS [36], SEMAT [37]	A few trial implementations [38,39]



Swift guanxi (中式關係) in online marketplaces: The role of computer-mediated communication technologies

- Authors: Ou, C., Pavlou, P., and Davision, R.
- Management of information systems (MIS) Quarterly, 38(1), 209-230.

Online marketplace—“TaoBao”

- TaoBao (www.taobao.com) is recognized as leading online marketplace in China.
- communication-mediated tool (CMC) (i.e., WangWang) embedded in TaoBao platform is an instant messenger (IM) technology to facilitate online communications and transactions. (阿里旺旺)
<https://alimarket.taobao.com/markets/qnww/portal-group/ww/index>

Motivation

- Why TaoBao is success (or high customer loyalty 71.3% repurchase intention)?—based on media synchronicity theory (MST)
 - Question: can MST apply to online setting rather than off line communication and transactions?
- Can Guanxi (中式關係)(social interactions, facilitating mutual benefits) be improved through TaoBao
 - A new term titled as swift guanxi refers to a buyer's perception of a swiftly established relationship with a seller that comprises mutual understanding (了解), reciprocal favors (互惠), and relationship harmony (和諧).

Motivation

- Why swift quanxi is important?
 - Lack of formal protection mechanisms
 - Lack of trust on a seller's product, goodwill
- Guanxi seeks to solve the problems caused by lack of trust and protection.

Motivation

- Why CMC tools can facilitate swift quanxi?
 - Instant messenger, message box, feedback system that allow buyers to use a variety of tool for communication and express their feelings (e.g., avatars, icons), termed as **convergence** in MST (具有高度收斂性 不至於使線上溝通產生困難)
 - Message box displays all buyers' short text message associated with a product.
 - Feedback systems allow buyers to evaluate products using textual and numerical evaluations.
 - (**converyance** 傳遞性)(充分掌握產品特性 使得多元的訊息有具體的結論 反映真實)

Motivation

- Why can CMC facilitate relationship building?
 - Increasing **interactivity** (controlled, two-way, synchronized interactions)
 - Increasing **presence** (perception of being physically and psychologically close to each other)

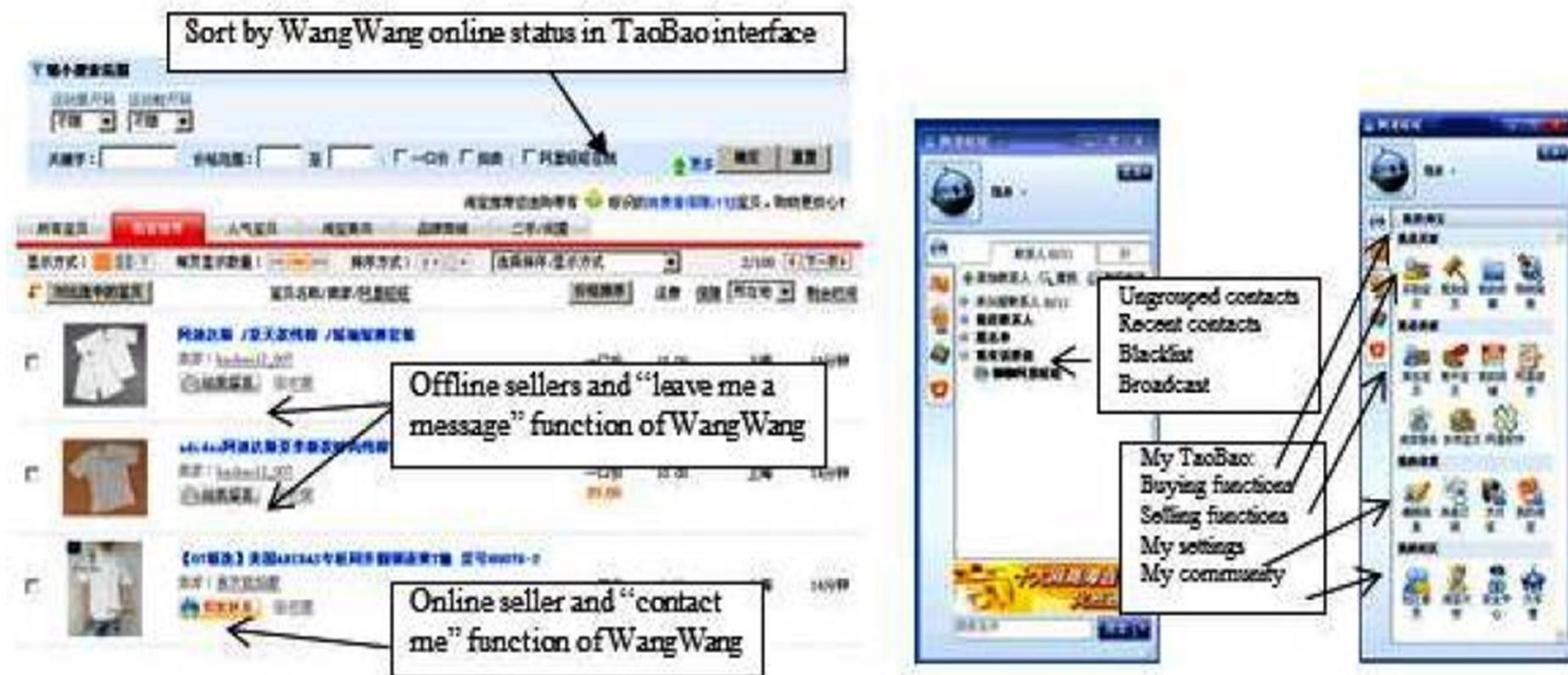
Objective

- What is the **nature** of swift guanxi in online marketplaces in China?
- What is the **effect of swift guanxi** on facilitating transactions?
- How can swift guanxi be developed with the **help** of CMC tools?



Notes: At the top of this web page, buyers can search products inside the seller's store using the embedded search engine. The rest of this web page shows detailed information about a particular product, including the seller's information (on the left-hand side), the product picture (in the middle), and detailed product descriptions, delivery and payment information (on the right-hand side).

Figure A1. Screen Shots of a Sample Seller's Storefront on TaoBao



Notes: The web page on the left-hand side of the screen shot shows the product listing from different sellers, including information about product names, seller names, and online/offline status of sellers. TaoBao's search engine is shown in the top left corner of this web page, which can sort the product listing by keywords, price range, fixed or bidding prices, and WangWang online status. On the right-hand side of the screen shot, the WangWang tool, which can be used by both buyers and sellers, is shown. The middle screen shot shows the contact list in WangWang and the right-hand side screen shot shows the "My TaoBao" functions.

Figure A2. Screen Shots of the Instant Messenger (IM) Tool on TaoBao



Notes: The left-hand side shows detailed product descriptions such as product name, price, size, pictures, and delivery/payment methods. The right-hand side displays the buyers' and the seller's discussions on one focal product via the message box.

Figure A3. Screen Shots of the Message Box on TaoBao

来自买家的评价		来自卖家的评价	给他人的评价
评价	评论	评价人	宝贝信息
	真真蛮好的 我一般不评价的 还是要来买的 老板 打个折啊 哈哈哈哈哈 [2009.11.12 11:59:09]	买家: netboy0412 	09韩国春装新款 热卖 休闲简约V领长袖T恤/打底衫 (...) 38.00元
	好看, 质量也不错, 红色很漂亮 [2009.11.12 11:51:31]	Positive feedback with warm messages	韩国进口 经典款-JBA抓绒卫衣(BK1001) 现货 75.00元
	衣服的质量和款式都不错, 谢谢店家送的小礼物, 很漂亮! [2009.11.12 10:44:47]		韩国进口 百搭休闲字母有帽连帽卫衣(BK5008) 65.00元

Notes: This webpage is a screen shot of a seller's feedback system that displays the seller's name, the buyers' name, the sold product, and the buyers' qualitative comments regarding the purchase experience. The comments as shown on this particular web page were all positive with warm feedback from the buyers.

Figure A4. Screen Shots of the Feedback System on TaoBao

Research model

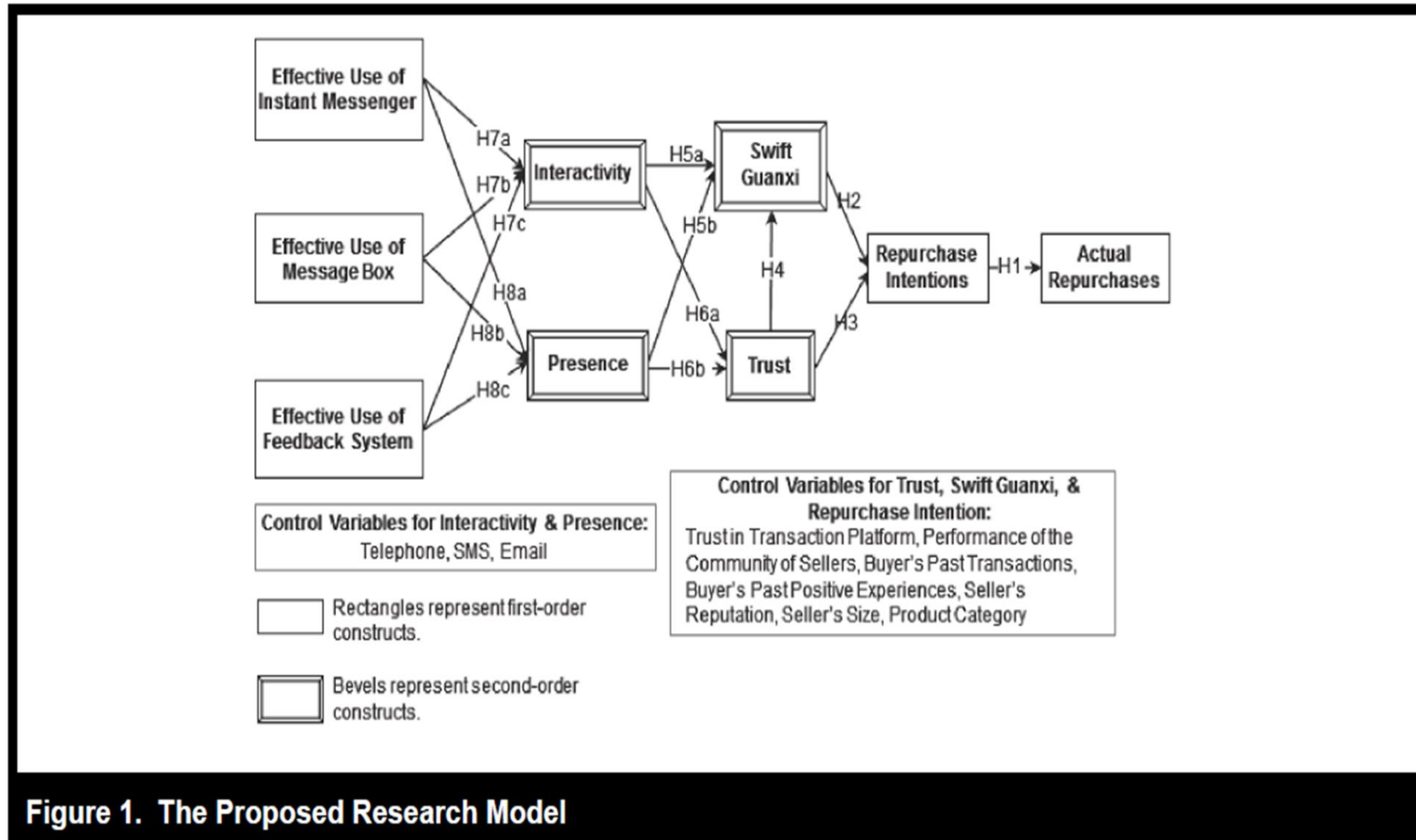


Table 2. Principal Constructs and Their Definitions

Constructs	Definitions
Actual Repurchases	The frequency of actual re-transactions that a buyer conducted with a focal online seller.
Repurchase Intentions	A buyer's perceived likelihood of a re-transaction with a focal online seller.
Swift Guanxi	A buyer's perception of a quickly formed relationship with a seller that consists of (1) <i>mutual understanding</i> (each other's needs), (2) <i>relationship harmony</i> (respect and conflict avoidance), and (3) <i>reciprocity</i> (positive benefits based on each other's kind actions) in the context of online marketplaces.
Trust	The extent to which a buyer perceives in a seller's <i>ability</i> (i.e., skills, competencies, and characteristics of his/her products online), <i>integrity</i> (adhering to a set of principles that the buyer finds acceptable), and <i>credibility</i> (i.e., doing good toward the buyer).
Interactivity	The extent to which a buyer perceives that the interaction with the seller can be actively controlled and the communication is synchronized. Interactivity thus encompasses <i>active control</i> (the degree to which control parties have over the communication process), <i>two-way communication</i> (the extent to which communication is reciprocal), and <i>synchronicity</i> (the degree to which their communication is synchronized).
Presence	The extent to which a buyer perceives the immediacy (i.e., physical distance) and intimacy (i.e., psychological distance) between a buyer and a seller. Presence includes <i>telepresence</i> (which refers to a buyer's perception of being present at a seller's location remote from the buyer's own location) and <i>social presence</i> (which refers to a buyer's perception of intimacy with a seller in terms of human contact, human warmth and sensitivity).
Effective Use of Instant Messenger	The extent to which a buyer believes that the effective use of the embedded <i>Instant Messenger tool</i> in the online marketplace can facilitate a communication among buyers and sellers.
Effective Use of Message Box	The extent to which a buyer believes that the effective use of the embedded <i>message box</i> in the online marketplace can facilitate a communication among buyers and sellers.
Effective Use of Feedback System	The extent to which a buyer believes that the effective use of the embedded <i>feedback system</i> in the online marketplace can facilitate a communication among buyers and sellers.

Table 4. Demographics

Buyer	Items	Percentage	Buyer	Items	Percentage
Gender	Male	38.2%	Education	Below College	15.4%
	Female	61.8%		Junior College	36.7%
				Bachelor or above	47.9%
Age	16-20	1.2%	Annual Household Income (US\$1 = RMB6.83)	Under RMB40,000	20.7%
	21-30	60.1%		RMB40,001-70,000	34.6%
	31-40	30.8%		RMB70,001-100,000	23.7%
	41 and above	8.0%		RMB100,001 or above	21.0%
Online purchases in past year (# of times)	1-5	9.8%	Number of Contacts in WangWang	None	3.3%
	6-10	17.8%		1-20	49.4%
	11-15	14.5%		21-50	26.0%
	15-20	11.8%		51-99	8.9%
	21 or above	55.9%		100 or above	12.4%

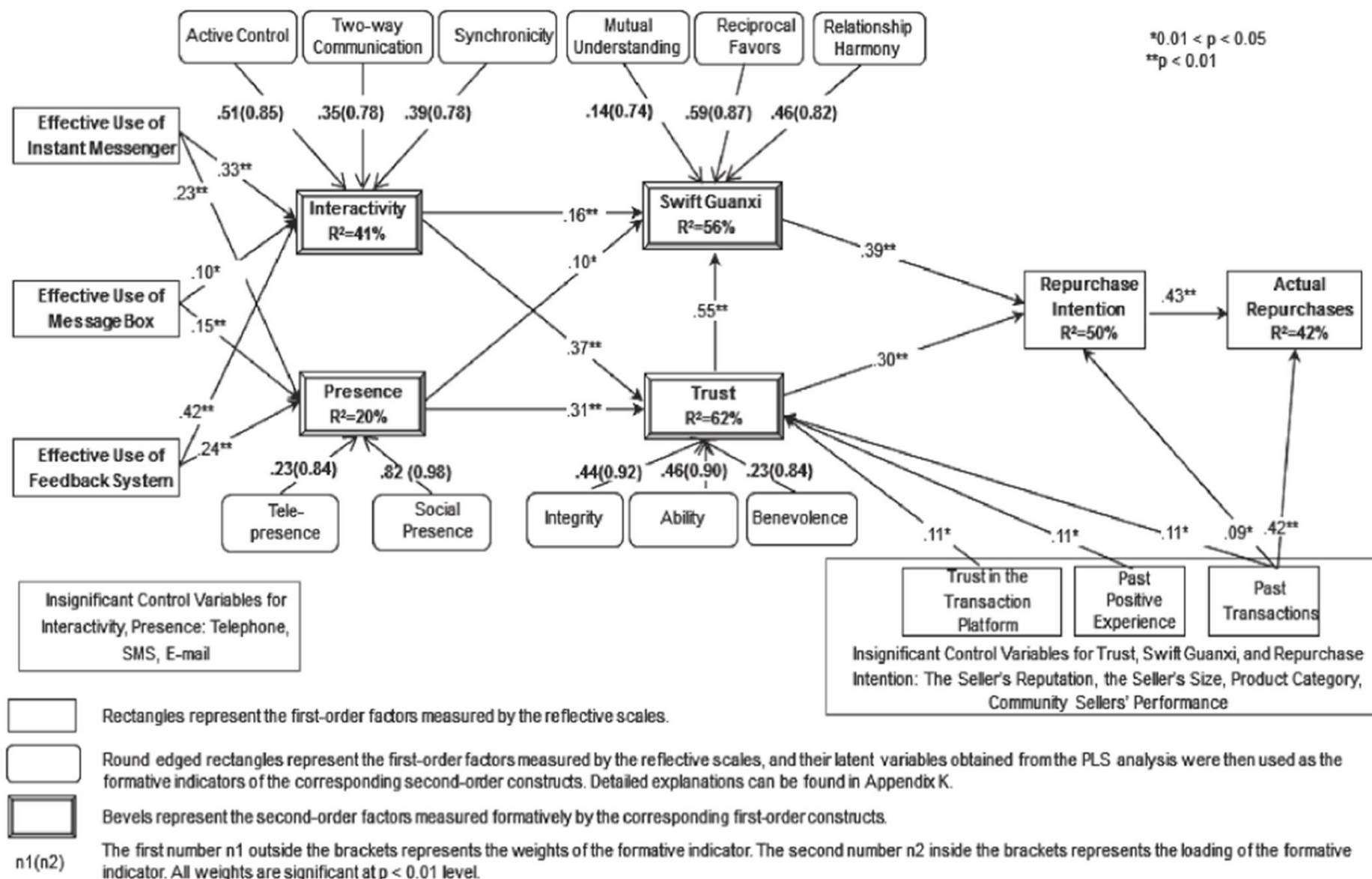


Figure 2. PLS Results of Structural Model with Formative Measures (n = 338)

結論

- Building Guanxi in e-marketplaces
- The importance of building relationship with buyers, in terms of **how** (swift quanxi), **what** (**IT features**: instant messenger, message box, feedback system; **buyers' perception**: interactivity, presence)

結論

- 想創業嗎？你的意志力, 基本的IT能力，了解電子商務上的新發展(VR, AR??)
- 物聯網: 有哪些應用？需要那些心態？專業(IT)？那些基本商業模式？
- 淘寶給你的啟發？(適合中式關係的商業模式？)

- 謝謝各位
- 問題？