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Resistance to the Adoption of ICTs in Independent Restaurants: Insights from China & the UK

Organisations are increasingly employing innovative Information Communications Technology (ICT) solutions to drive growth and create value. Yet the uptake of such tools does not seem to be as widespread in hospitality and tourism as might be expected. This appears to be particularly the case for independent restaurants. In a fiercely competitive operating landscape, it is vital to understand the reasons for low rates of innovation adoption. Through the conceptual lens of the Unified Theory of Acceptance and Use of Technology (UTAUT), this research asks if resistance to technological innovation is a problem, identifies the factors for this, and considers the differences between the Chinese and UK sectors. Initial findings suggest that while cost, language, a desire to retain human interaction in the service experience, and the physical constraints of small premises all contribute to a reluctance to adopt ICTs, managers do feel pressure to keep up with the rapidly evolving demands of increasingly "wired" societies. These findings highlight the need for further research in this area.

Key words: ICT, independent restaurants, UTAUT, resistance to change, service innovation.

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Introduction

Hjalager (2010) defines the scope of innovation in hospitality as including new products, services or processes, as well as new management, marketing or institutional practices. Forward-looking restauranteurs are increasingly turning to ICT innovation in particular to manage their bookings, orders, and payments, as well as to handle customer relations or optimize their stock- and staff rotation (Davis, Lockwood, Alcott, & Pantelidis 2018). However, despite these developments, Bilgihan and Nejad (2015) note that many hospitality businesses still fail to make the most of available technology. This study explores the reasons behind the reluctance to adopt ICT solutions within the specific context of independent restaurants. While ICT innovation resistance literature often tends to adopt a customer, employee, or organisational focus (Makkonen, Johnston, & Javalgi 2016), this study attempts to close the loop by considering managers' views on innovation resistance. Further, research has found that openness towards innovation might differ between countries (Global Innovation Index 2018). This study makes a further contribution by considering resistance factors in two different cultural and geographic contexts: The Western (London, UK) and the non-Western (Guangzhou, China).

Independent restaurants in China & the UK

Despite the rising prominence of multinational restaurant chains, privately owned and operated small- and medium-sized enterprises (SMEs) still comprise the bulk of the hospitality industry in most countries (Davis et al. 2018). For example, in 2017 there were more than 118,740 independent restaurants in the UK, representing over 71% of the overall consumer foodservice market (Euromonitor 2018a). The situation was even more polarized in China, where independent restaurants dominated the market with an approximate 98% share (Euromonitor 2018b). This preponderance of independent operations indicates a highly fragmented industry and in this case, one that is also comparatively labour-intensive (Davis et

al. 2018). Restaurants rely on manual labour and this, combined with high turnover, has acted to constrain productivity growth (People 1st 2015). Schumpeter (1983) argued that to sustain economic growth and to increase competitiveness, businesses need to continually innovate. While larger companies might have dedicated R&D departments, small restaurants rely primarily on the acquisition of external tools to innovate (Lee, Hallak, & Sardeshmukh 2016), hence the importance of identifying any points of resistance which might deter the adoption of useful new ICTs.

Theory

Building on a variety of simpler frameworks, Venkatesh, Morris & Davis (2003) proposed a Unified Theory of Acceptance and Use of Technology (UTAUT) which has been widely accepted across a number of disciplines to explain the factors influencing technology adoption. The basic model is comprised of the following 4 variables:

- Performance Expectancy (PE) – degree of perceived gains in job performance
- Effort Expectancy (EE) – degree of ease associated with the use of a new system
- Social Influence (SI) – the degree to which individual/organisation perceives that important others believe the new system should be used
- Facilitating Conditions (FC) – the degree to which individual/organisation believes that an organisational and technical infrastructure exists to support

The UTAUT was chosen for this study as it provides a robust theoretical framework which is compatible with a qualitative interview approach to data collection and which has been found to provide useful insights in cross-cultural comparisons (Al-Qeisi, Dennis, Hegazy, & Abbad 2015). The original model, with its core variables defined above, was chosen consciously over the more multi-faceted extensions in later iterations of the framework (Venkatesh, Thong, & Xu 2012). In this pilot study limitations of time and resources required

a narrow focus – but one that would indicate a need (or not) for further research. The expanded model, comprising the additional behavioural and demographic modifiers, will be employed in the proposed full study.

Research methodology

Primary data collection consisted of 10 pilot interviews (5 in China & 5 in the UK) with senior managers of independent restaurants. To unearth a broad mix of resistance factors, the restaurants varied in types of cuisine and service model. Participants were chosen using purposive sampling, whereby they had to have worked in a managerial position in an independent restaurant for over 3 years and had to have the first-hand experience of introducing novel ICT systems at their properties. Six of the participants were female, four were male, and overall the participants were aged between 28 and 50. Interviews were conducted with questions designed to identify technologies used, technologies likely to be adopted in the near future, circumstances which might encourage greater uptake of new technologies, and perceived difficulties related to the introduction of novel technology. Interviews lasted for 25 minutes on average and were conducted on the premises of the restaurants. The UTAUT framework was used as the theoretical basis for categorising and analysing participant responses. To mitigate researcher bias, the completed analysis was sent to a sample of participants (30%) for confirmation and comments.

Findings

Table 1 illustrates the range of ICT solutions available to independent restaurant managers – both bespoke and off the shelf. Despite the variety of options on offer overall there remains limited uptake of these technologies in the sector.

Table 1: ICT Innovation in Hospitality

Innovation Type	Examples	UK	China
Product & service	Smart customer service Smart delivery Smart reservations Smart ordering	SnatchBot, Chatobook Deliveroo, UberEats Opentable, Quandoo McDonald's Click & Collect, myStarbucks	Udesk, Yichuang Cloud Fengniao, Meituan, Dianbida Dingduoduo EICO, WeChat
Process	Smart order-taking Smart inventory management Smart receipts Service automation	iZettle, TouchBistro Jolt Toast Pepper	LeapCloud, Lewaimai, RioTop PalPower, SunWale Alipay, WeChatPay, 2DFire Sumdoo
Management	Smart scheduling Smart training	Deputy, Ximble TalentLMS, Kiwi	Passiontec TrainGo
Marketing	Smart marketing Smart reviews Smart loyalty	Instagram, Facebook Tripadvisor, Zomato Pizza Hut Rewards	Weibo, WeChat Dianping, Meituan, Eleme HaiDiLao Hot Pot Credits
Institutional	Smart networks	Hosco	Alipay, WeChat, Dianping, Meituan

Management views on the uptake of available technologies: UK

While restaurant managers in the UK seem to be generally open-minded concerning technology, they are at the same time slightly sceptical about adopting new ICT. The most common ICTs used in the studied restaurants were smart reservations systems, smart order-taking, and smart marketing and customer relations management. The majority of HR and other administrative tasks (e.g. staff rotas, ordering, cashing-out) were still typically done manually. Overall, however, the need to keep up with the times is recognised, with one General Manager explaining that "if you're not being part of the technology change, you're going to be out - you're going to be left behind".

Increasing efficiency through streamlining operational management tasks as well as keeping staff engaged and customer-focused were some of the common benefits associated with adopting ICT. However, the benefits were at times overshadowed by doubts of ICT systems' ability to provide tangible cost-savings as well as concerns of the systems' reliability. The inability to thoroughly test systems and measure impact before committing to purchase was perceived as an issue. Further, a few bad experiences (e.g. glitches, issues with

connectivity) with one system were often enough to cause apprehension towards all new technology.

Management views on the uptake of available technologies: China

In China, while attitudes towards ICTs in independent restaurants are largely positive, actual adoption of such innovations remains limited. Similar to the UK, the most common ICTs adopted by the restaurants are smart delivery, smart receipts and smart marketing and customer relations management. Some managers felt *pushed* toward ICT solutions in response to wider societal shifts. With respect to smart receipts, for example, one Manager observed, "Alibaba and Tencent are promoting their payment Alipay and WeChat Pay systems. They are used everywhere now and have changed peoples' lifestyles. So you have to keep pace with it."

Interestingly, aside from those applications noted above, there remains generally low uptake of ICTs in independent restaurants in China. Cost is cited as a major factor behind this – with managers often believing it to be cheaper and more effective to simply hire more staff. Some managers felt that the use of ICTs could have a negative impact if perceived by customers as a reduction in the level of personal service. Thus tasks requiring human interaction (e.g. ordering, customer service, cooking) are still done manually. At the same time, some managers more open to ICT innovation actually feared that their businesses could not bear the increased costs and complexity resulting from greater customer demand.

Discussion

The insights from these preliminary interviews allow the findings to be categorised as follows using the UTAUT framework.

Performance expectancy (PE)

Cost, as well as a general lack of knowledge of what products are available, seem to be common concerns for managers of independent restaurants both in China and the UK

when it comes to the adoption of ICT. Predicting the return-on-investment (ROI) of new ICT systems is difficult, making it hard to justify purchases. Further, as independent restaurants tend to be relatively small in size, there would be no economies of scale when purchasing and installing new systems.

Effort expectancy (EE)

Language presents another pressure point for ICT adoption in independent restaurants. Many of the ICT systems available for restaurateurs in the UK and China use English as their primary language of operation. However, this is often not the first language of the people working in restaurants. For example, according to KPMG (2017) over 75% of waiters in London are of non-British origin. In China, the situation is more homogeneous, but ICTs available still sometimes needs to be operated in English. This brings about difficulties in training staff and maintaining the systems.

Social influence (SI)

Deciding what parts of the service should be enhanced with technology for best outcomes in terms of efficiency and customer and employee satisfaction is difficult, leading to both internal and external dissatisfaction if the outcome is negative. Further, independent restaurants are particularly vulnerable to negative word-of-mouth as they often rely on repeat custom. The rise of social media and smart marketing has exacerbated this, as customers tend to voice their opinions, especially after a service failure.

Facilitating conditions (FC)

The physical layout and small size of most independent restaurants may pose problems in adopting certain ICTs both in China and the UK. There might also be issues of interconnectivity, whereby multiple systems might not work well together or new systems might not work well with existing ones. Sometimes managers feel they receive inadequate training in new ICT from the service provider. Generational differences in attitudes towards

ICT may also exist, whereby there might be a significant gap between the managers' and their employees' IT proficiency.

Conclusions, Limitations and Future Research

In both China and the UK cost, the dominant use of English in ICT operating systems, limited knowledge of what ICTs are available, and the physical constraints of premises are primary concerns with respect to the adoption of new ICTs. Additionally, managers in the UK are concerned with the poor interconnectivity of different ICT systems, while their counterparts in China worry that the diminished role of human interaction in the service experience might alienate customers. These preliminary findings provide important insights into the factors underlying resistance to ICT adoption in the independent restaurant sector. It should be noted that there are a number of potential limitations to consider. Resource and time constraints necessitated both small sample size and a narrow focus in the pilot interviews. The use of the UTAUT framework in a purely qualitative approach may raise questions about the subjectivity of measurements. A further study employing the extended version of the UTAUT model and involving a larger sample of participants (possibly including a quantitative survey) would allow for an exploration of additional factors moderating the behaviour of managers and would result in specific recommendations for overcoming resistance to the adoption of new technologies.

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