mTASTING CULTURE: A TASTE OF SINGAPORE THROUGH A MOBILE-DRIVEN STREET FOOD TRAIL

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ABSTRACT

Food-related activities are a central feature in Singapore's social and cultural landscape. A destination's culinary heritage can be a key cultural resource and attraction in tourism, contributing to its unique character, local identity and sense of place. Culinary tourism and food trails offer tourists the opportunity to get a taste of local heritage, culture, and vibrant flavors life in local neighborhoods through eating and touring. This exploratory study investigates the application of a mobile-driven street food trail within the context of cultural and heritage tourism. Specifically, it explores research themes within the domains of (1) culinary tourism and food trails as tourism attractions, and (2) mobile-driven applications for culinary tourism. A street food trail mobile app developed for a Singaporean neighborhood is utilized in the study.

Keywords: Mobile Applications, Food Trails, Culinary Tourism, Asian Street Food.

INTRODUCTION

Food and gastronomy are key ingredients in Singapore's social and cultural landscape, and feature prominently in its tourism promotions. A destination's culinary heritage can be a significant cultural resource and attraction in tourism, contributing to its unique character, local identity and sense of place. Singapore's culinary culture is a unique blend of cuisines derived from its multi-ethnic Asian heritage melding *"a world of flavors"* from its Chinese, Malay, Indian, Eurasian and Peranakan communities (STB, 2013). Singapore street food enables visitors to sample local cuisines and enjoy the vibrant flavors of life in local neighborhoods through eating and touring. Culinaria and gastronomy have become vibrant features in tourism (Kim, Eves & Scarles, 2009; Kivela & Crotts, 2006; Richards, 2002), wherein local foods have been acknowledged as a form of place identity and destination marketing (Cohen & Avieli, 2004; Henderson, 2004; Rand & Heath, 2006). Culinary tourism and food trails offer tourists the opportunity to get a taste of local heritage, cultural traditions and way of life. While there has been research on the role of culinary tourism in showcasing destinations' cultures and heritage, there has been no significant research in which a mobile-driven street food trail is developed and evaluated as a means of cultural representation and tourism attraction in Asia. Therefore, the research objectives of this study are to:

1. Investigate visitors' receptivity towards, and evaluation of a mobile-driven street food trail;
2. Explore the role of street food trails in reinforcing perceptions about a destination's cultural identity and heritage; and
3. Suggest strategies for successful utilization of mobile-driven food trails to package and showcase culinary and cultural resources. Can this objective be deleted as in this paper we are not offering strategies? Perhaps in the full paper?

TASTING CULTURES: FOOD TRAILS AS TOURISM ATTRACTIONS

Culinary tourism is an amalgamation of agriculture, culture and tourism development (Rand & Heath, 2006), and present opportunities for cultural diversity and differentiation. Local culture and cuisines can play a significant role in attracting tourists, and establishing social and place identities (Mason & O'Mahony, 2007; Hjalager & Richards, 2011). Local cuisines represent cultures and places; embodying symbolic meanings experientially and emotively (Long, 2004). With its distinctive and diverse food cultures, local cuisine and gastronomy has become a major tourism resource, brand identity and cultural attraction in Singapore and Asia (Horng & Tsai, 2012; Lin et al., 2009). Within

the Asian context, cultural, religious and social influences often guide food consumption behaviors, "flavor principles" and "human foodways" (Mak, Lumbers, Eves & Chang, 2012, p.929). Food can be seen as a symbol of communion, (sharing and eating with others), social marker (lifestyle representation), and emblem of culinary heritage (Bessière, 1998). The sensory and hedonistic characteristics in travel dining and gastronomic pursuits provide a cognitive cue for destination-related associations, and offers a powerful medium for visitors to experience authentic, meaningful and satisfying interactions with local culture and traditions (Long, 2004; Lin, Pearson, & Cai, 2009; Okumus, Okumus, & McKercher, 2007; Scarpato, & Daniele, 2003). Mason and O'Mahony (2007) described food trails as the itinerary products of tourism, where self-directed tourists explore cultures, cuisine and people in a well-defined area. There are three key elements in a successful food trail: (1) developed food production and networks, (2) narratives and interpretation – i.e. compelling stories creating place memories, and (3) walkability – i.e. well connected, safe and comfortable walking conditions (Freidberg, 2003; Hayes & MacLeod, 2007; Mason & O'Mahony, 2007). Trails serve to: (1) encourage movement of visitors, (2) create opportunities for development and revitalization, and (3) allow exploration of an area without reliance on motorized transport (Timothy & Boyd, 2015). Trails can promote visitor appreciation of a place, whilst providing opportunities to learn about the local culture, heritage and natural environment.

In determining tourists' desire for trying local foods while travellingMcIntosh et al. (1995) conceptualized four categories of motivators: (1) physical (sensory perceptions and desire to taste new/exotic foods), (2) cultural (experiencing different cultures, lifestyle and activities), (3) interpersonal (meeting new people, spending time with family and friends, and/or escape from routine relationships), and (4) status and prestige (self-esteem, recognition and desire to attract attention).

mTASTING CULTURE: MOBIL-DRIVEN APPLICATIONS FOR CULINARY TOURISM

Mobile technological innovations and applications available today offer a plethora of options catering to the social, communication, informational and connectivity needs of tourists (Dickinson et al., 2014; Wang, Park, & Fesenmaier, 2012; Wang & Xiang, 2012). These mobile-driven applications provide rich multimedia content and interactive social communication platforms that are revolutionizing tourism consumption (Costa-Montenegro et al., 2012). Within the context of street food trails, the mobile applications created and implemented should value-add to the overall culinary and cultural experience. Thus, mobile-driven food trails should provide experimental and informational elements that enhance tourists' food-related activities and encounters.

Koivumaki (2002) suggested that when designing and implementing mobile applications for tourism, informational and interpretative content should be planned and developed within a multi-channel, inclusive service package. Thus, mobile-driven food trails should consider and incorporate the diverse interpretative programs and content being communicated; and ensure positive perceived value and usability for visitors. A holistic and integrative approach is needed wherein the totality of the food trail experience is conscientiously mapped out. Wang et al. (2012) had discussed the value of mobile applications in mediating the tourism experience, shaping attitudes and destination impressions across three phases of the tourism experience: (1) pre-trip information search and planning, (2) on-site tourist experience at the destination, and (3) post-trip recollection and word-of-mouth. The application of mobile-driven platforms can boost visitors' overall satisfaction and interpretive outcomes in culinary tourism efforts by enabling (1) quality and variety of information, (2) information access anywhere at anytime, (3) a myriad of visitor experiences and activities, (4) maximum time spent at the location, and (5) evaluation and feedback for destination planners. To achieve a satisfying and enriching mobile-driven food trail and culinary tourism experience, there needs to be a synergistic implementation of software applications, contextually relevant content and interactive components across different visitor types, tourism conditions and activities (Costa-Montenegro et al., 2012; Dickinson et al., 2014; Wang et al., 2012).

THE JALAN BESAR FOOD TRAIL MOBILE APP

A mobile application (app) for a street food trail was developed (figures 1 and 2) for a local area (Jalan Besar) in Singapore, well regarded for its historical, cultural and culinary heritage. A location-based

app created in conjunction with LDR Technology Pte Ltd (www.LDR.sg) was developed for this project. Its *Pocket-Trips* interactive heritage and nature trails facilitates and enhances authentic, collaborative and self-directed learning experiences at selected heritage sites around Singapore through mobile-enabled technology in the field (LDR, 2015). This location-based app utilizes applications such as QR (Quick-response) Codes, GPS (Global positioning systems), Image recognition (IR) - a marker-less QR, and Beacons to transform the visitor experiences on the trails. In addition to the above basic on-site features, the trail apps also offer options such as cloud-based analytics, *gamification* and visitor tracking features for service providers. All this adds to the opportunity for an engaging, multi-sensory experience for visitors.

Jalan Besar is a street located in the north-eastern part of central Singapore, with a rich history and an old world charm. The area offers a kaleidoscope of preserved heritage and culture sites, unique landmarks, vibrant local flavors and colorful sights for visitors (National Heritage Board, 2015). The The Jalan Besar mobile Food Trail App   developed enables visitors to experience and learn about the colloquial way of life, local culture and culinary heritage in this area.

CONCLUSION

Horng and Tsai (2012) and Kivela and Crotts (2006) had suggested that destinations embrace the opportunity to harness, develop and refine their distinct culinary delights to create a niche gastronomic and culinary tourism experience as a key of differentiation and competitive advantage. This study was undertaken with the objective of exploring the role of a mobile-driven street food trail to showcase Singapore's culture and heritage. It aims to investigate how a mobile food trail can be used in tourism to assimilate local foods, culture and heritage. With the mobile street food trail app developed, the next stage of the project will bring the live version of the app to the field to investigate visitors' opinions and feedback of its usability, functionality and effectiveness in enhancing their culinary tourism experience. The data collected from this investigation will serve to provide valuable information for the development of similar cultural, culinary and heritage trails in the future.
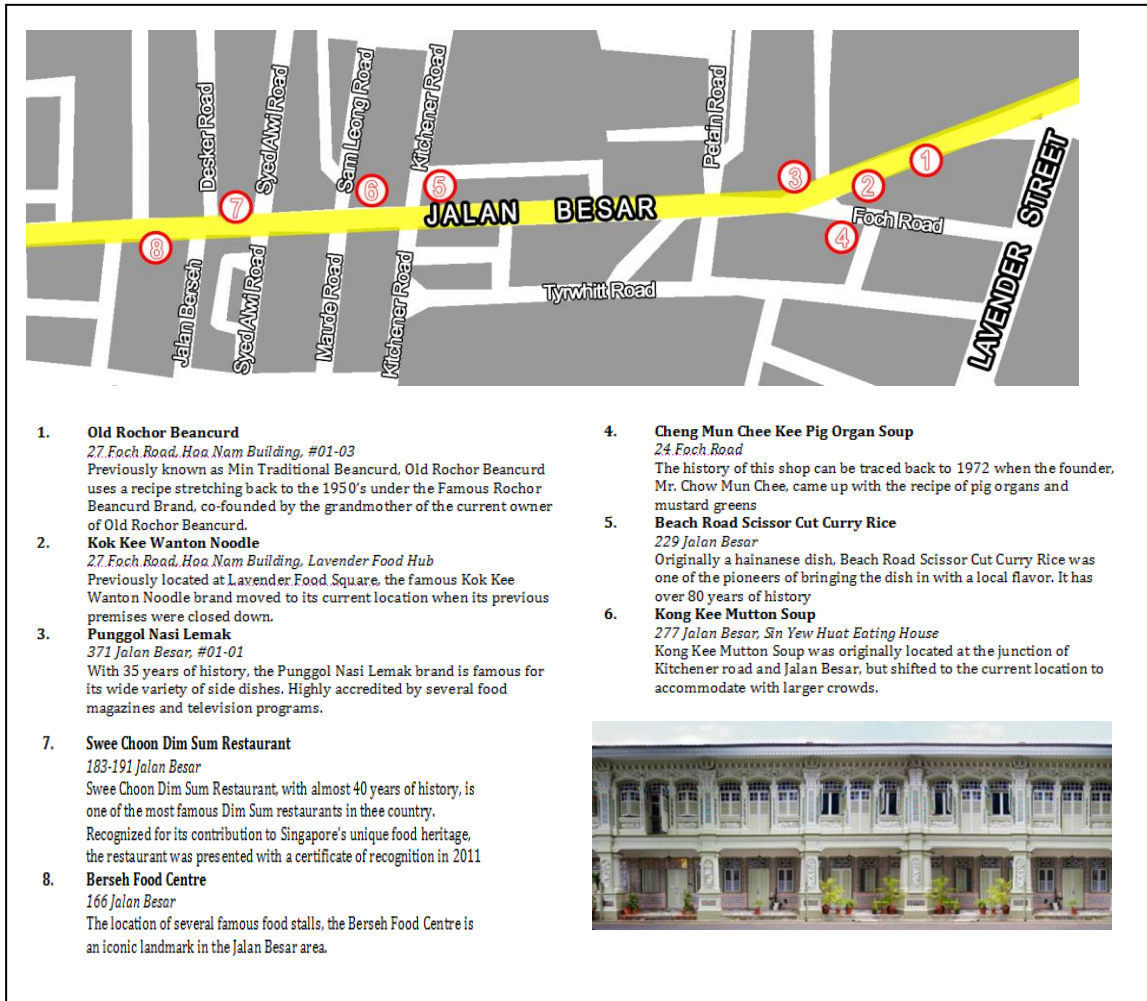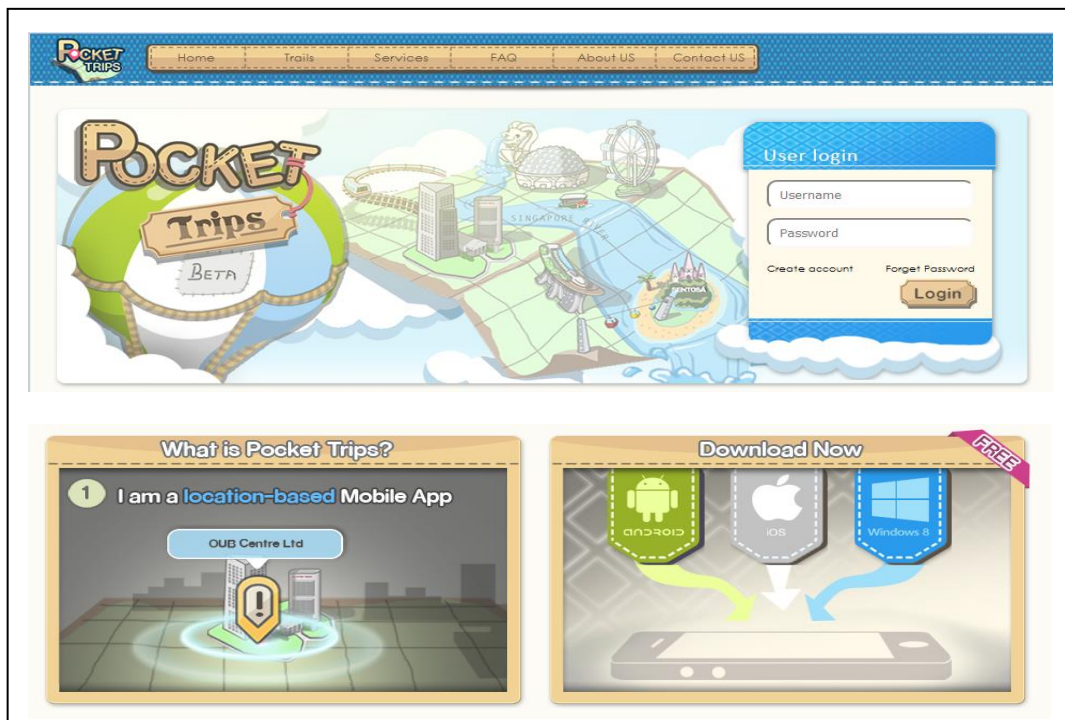
Figure 1: Jalan Besar Food Trail Map and Details

The following details correspond to the numbered locations on the map:

1. **Old Rochor Beancurd**
27 Foch Road, Hoa Nam Building, #01-03
Previously known as Min Traditional Beancurd, Old Rochor Beancurd uses a recipe stretching back to the 1950's under the Famous Rochor Beancurd Brand, co-founded by the grandmother of the current owner of Old Rochor Beancurd.

2. **Kok Kee Wanton Noodle**
27 Foch Road, Hoa Nam Building, Lavender Food Hub
Previously located at Lavender Food Square, the famous Kok Kee Wanton Noodle brand moved to its current location when its previous premises were closed down.

3. **Punggol Nasi Lemak**
371 Jalan Besar, #01-01
With 35 years of history, the Punggol Nasi Lemak brand is famous for its wide variety of side dishes. Highly accredited by several food magazines and television programs.

4. **Cheng Mun Chee Kee Pig Organ Soup**
24 Foch Road
The history of this shop can be traced back to 1972 when the founder, Mr. Chow Mun Chee, came up with the recipe of pig organs and mustard greens

5. **Beach Road Scissor Cut Curry Rice**
229 Jalan Besar
Originally a hainanese dish, Beach Road Scissor Cut Curry Rice was one of the pioneers of bringing the dish in with a local flavor. It has over 80 years of history

6. **Kong Kee Mutton Soup**
277 Jalan Besar, Sin Yew Huat Eating House
Kong Kee Mutton Soup was originally located at the junction of Kitchener road and Jalan Besar, but shifted to the current location to accommodate with larger crowds.

7. **Swee Choon Dim Sum Restaurant**
183-191 Jalan Besar
Swee Choon Dim Sum Restaurant, with almost 40 years of history, is one of the most famous Dim Sum restaurants in thee country.
Recognized for its contribution to Singapore's unique food heritage, the restaurant was presented with a certificate of recognition in 2011

8. **Berseh Food Centre**
166 Jalan Besar
The location of several famous food stalls, the Berseh Food Centre is an iconic landmark in the Jalan Besar area.

Figure 2: Example of Pocket Trips Mobile-trail apps.

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