Android Based Trip Planner Application

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ABSTRACT: Due to the consistent growing number of tourists around the world and the increasing use of online services to plan trips, this paper investigates the group tourists’ trip planning requirements and how technology might support this group planning process. We investigated 12 groups’ real trip planning behaviour and requirements through a diary study and a follow-up interview. The experiment was designed and analysed based on Activity Theory, a theoretical construct commonly applied in human computer interaction (HCI) and computer supported cooperative work (CSCW). From our preliminary findings, we report group’s trip planning requirements in three aspects: division of labour & information search, intra-group communication, and culture difference (i.e., Chinese users’ characteristics). To facilitate group tourists’ planning experience, this paper concludes HCI design implications from three perspectives: tourism information presentation, facilitating intra-group communication, and requirements with another user of choice.

KEYWORDS: Tourism; group planning; tourists’ requirements; cross-cultural; HCI design

I. INTRODUCTION

Tourist’s trip planning process and decision-making has been studied for the last three decades [1]. With the increasing availability of using online tourism information, researchers have investigated the role of social media [2] and the importance of electronic word-of-mouth [20] during trip planning. One characteristic that distinguishes group and individual trip planning is that group planning involves intra-group dynamic interaction (e.g., information exchange, communication and discussion among group members); group members cannot avoid intra-group interaction when making group travel plans [4]. Therefore, this research aims to investigate group tourists’ trip planning requirements to guide the HCI design so that technology can better facilitate a group trip planning experience. This paper presents our work in progress that explored hidden needs through empirical study, and summarised design requirements.

II. METHODOLOGY

In order to synthesize group tourists’ planning requirements for HCI design, we decided to explore group behaviour, and adopted Activity Theory (AT) [14] to guide our analysis. The aim of our experiment was to study group tourists’ trip planning in terms of Division of labour, Rule, Community, Tool, and Outcome, shown in Figure 1. It also aimed to investigate the group tourists’ requirements, and any unique requirements from Chinese users. Our approach involved a diary study and a follow-up interview.
III. EXPERIMENTAL RESULTS

Trip planner engine works well with some limitation in the algorithm. Clustering algorithm can be enhanced by modified it and add some new parameters to modeled it as close as real trip. We use database to store object destination data, checking process of existing data takes more time to generate journey. For future works, we can modify the algorithm and add new parameters such as: moving time, choose of transportation, and more preferences.

IV. CONCLUSION

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