# Documenting Consumer Banking Experience Research In China

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## Abstract

We describe documenting a research project by NCR, in collaboration with one of China's biggest banks, to understand the banking and financial experiences of consumers in China. The process focuses on collecting stories and quotes from our mobile diary participants as well as fieldwork interviews with both customers and staff. Our objective was to understand the lived realities of these end-consumers and front-end service providers, encouraging empathy and more consumer-centric solutions. The research also contributed to design concepts targeting improvements in consumer experience.

## Author Keywords

Financial; remote research; methodology; ethnography; HCI; mobile diary; consumer experience

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI):

## Introduction

This research project by NCR's Research Ethnography Design (RED) team based in Singapore was to acquire detailed consumer knowledge on the usage and adoption of financial services in China. RED is a multi-disciplinary team including sociology, industrial design,

Figure 1: Translation capabilities of WeChat helped initial understanding.



Figure 2: Customers waiting for the bank teller

business, and psychology, and our work focuses on understanding the customers' world within the self-service industry through research, with a penchant for ethnography.

The objective was to identify areas for service innovation addressing the needs of Chinese consumers, via collaboration with an existing Chinese bank client.

## Research Approach

Throughout the research we employed a mixture of methods such as face-to-face interviews, diary studies, 'phone interviews, auto-ethnography, contextual observations, and secondary research. Coordination of documentation was a challenge, due to preferences of different researchers and various methods adopted, from analogue (pen, paper) to digital (Evernote, WeChat, photo-captioning, etc.).

### Mobile Diary from Singapore

While negotiating access to the bank, we conducted a month-long diary study with participants[1] via smartphones, given the high penetration in China [4]. Specifically, using WeChat, as it is widely available at no cost. We wanted to avoid participants purchasing, facing learning difficulties, as well as take advantage of their familiarity with WeChat. WeChat was chosen for its popularity and reach [1], privacy control where participants can delete their posts within a timeframe, translation capabilities (Fig.1) and ease to export chat data. Weibo, a microblogging website, known as the

hybrid of Twitter and Facebook, was considered but not selected due to the inability to easily export posts.

Participants were asked to share their daily expenses, environment and reflections on their transactions in a combination of photos, videos, audio, or text messages, before, during, or after a financial activity, which may include paying for meals, withdrawing money or visiting a banking website.

### Fieldwork in China

We gained access to 3 branches over 7 days in Hangzhou, an emerging tier 2 city in China. The research included observations in the teller area (Fig 2), self-service area (Fig 3), signing up for bank accounts by researchers, auto-ethnography on usage of banking channels and kiosks, interviews with staff and customers about their banking experience, as well as usage of different banking channels.

## Documentation for mobile diary

The design of the study was an iterative one, with tweaks made to improve data quality, such as sending personalised questions and alternating reminders and tips to prompt participation. The distance between the researchers and participants meant we had to make sure we addressed all ethical concerns [3].

When receiving photos revealing bank account balances, we had to constantly negotiate [2] via reminders, and emphasised to participants their rights to confidentiality and freedom to edit photos (Fig. 4) with sensitive information such as bank account details.

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1 Participants from ages 25 to 57, living in cities in various parts of China from tier 1 cities such as Tianjin and Shanghai to tier 3 provinces such as Shandong and Liaoning
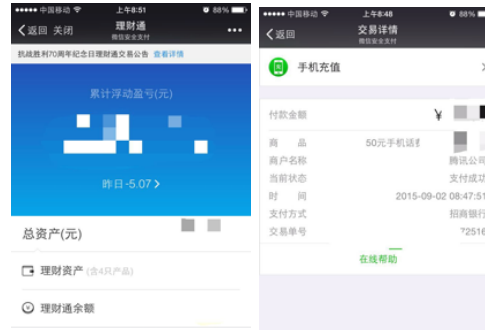
Figure 3: Security patrolling the self-service area



Figure 6: Participants were given a personalised report as an incentive for participation



**Figure 4**: Edited screenshots, posted by participants.

As the data was digitally managed through each participant's account, we cut down significant time for organisation, and could access images and posts through each individual chat gallery or participant's social wall (Fig.5). This gave us solid overviews of the participants, their lifestyles and preferences, without us having to interrogate them.
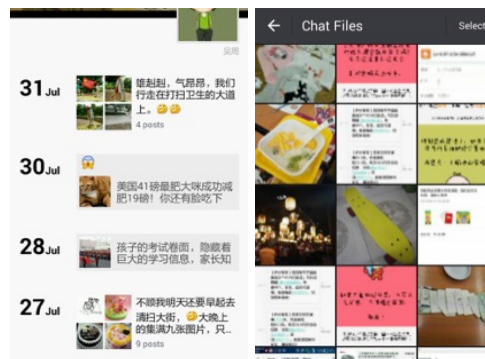


**Figure 5**: Participants' WeChat wall (Left) and chat image gallery (Right).

Chats are exported to text and subsequently input in Excel for coding purposes. To avoid dilution and

nuances being lost in translation, posts were kept in Mandarin. But researcher's interpretations and keywords in English were added to most sentences for ease of communication. These interpretations are cross-checked with native Mandarin speakers (varying from friends to professional acquaintances) to preserve meaning.

Arranging chats by time, we gained a visual sense of when participants are most active, and tailored the timing of personalised questions. These were meant to draw out more information from participants who stopped short of elaborating their documented experiences.

- "You mentioned heading to the supermarket with your credit card. Are there specific benefits of using a credit card?"
- "I noticed your posts hardly mention about shopping online. Do you usually shop online?"

On Excel, color-coding and association analysis was conducted to draw similarities or particularities, though an activity could be described with varying terms, given different Mandarin slang and terminology, increasing the difficulty of analysis by solely by frequency.

### Documentation for fieldwork/interviews

A mixture of audio recordings of interviews, photography, video recordings of surrounds/activities, and a mixture of both handwritten and digital notes were made. As Internet access was sporadic and restricted, notes were preferably kept native as opposed to using a shared platform like Dropbox or Google Docs.

Interviews were conducted in Mandarin with the help of a local fixer as researchers lacked proficiency in the language. Audio recordings helped immensely to document details that might be lost during the time taken for researchers to note down interviews.

Initial documentation was classified by property and time of day, for convenience of referencing and collating, given all 3 field researchers collected data across all formats. For ease of referencing, more important image files were labelled by their activity. Subsequently, we re-organised photos through folders by activity (e.g. usage of a video teller, queuing for the teller, activating mobile banking) to facilitate clustering.

## Outputs

Representation of the research was done via multiple outputs catering for the various audiences. For the client, the research process and relevant insights pertaining to consumer experience were called out in a report (Fig. 6), written in two languages, followed by design concepts and recommendations targeting each insight.
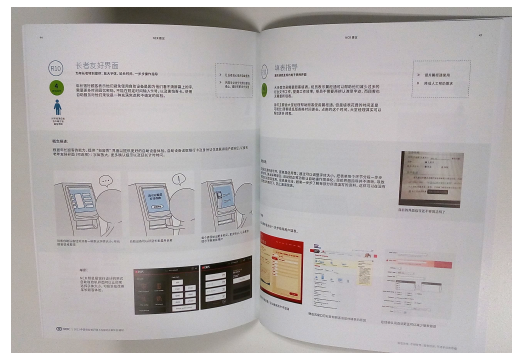


**Figure 6**: Deliverable, with recommendations, for the client.

For NCR, a selection of consumers stories were made into digestible postcard formats for internal dissemination, as well as ease of future referencing. PowerPoint documents were made periodically to present progress as well as keeping a log of the research process.

## Acknowledgements

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