INF5261
Development of mobile information systems and services

Project Presentation

Social Mobile

A context analysis and comparative study

by
Lamisi Blackman and Tiwonge Manda

Introduction

Social media being the main form of communication on the web, the moving from a stationary desktop to a mobile unit poses

opportunities and challenges not only for builders of social networking sites, but also for consumers, the accessibility, use and mobility is of varying degree.

Facebook have surpassed 500 million users

50% access Facebook via a mobile device

Introduction

•As of 10 February 2011, the shipment of smartphones to stores worldwide has overtaken that of PCs. In a world where mTech is evolving with the lauch of several brands of mobile devices such phones, smartphones, tablets and other technologies, it has become easier to always be «connected», provided the infrastruture is present.

In different part of the world the penetration of desktops vs mobile devices varies and has largly been dependent on economical factors and technological infrastruture.

Looking at the penetration of phones, in Malawi, one sees people's realisation for the need to communicate. For example, phone credit is relatively expensive, but more and more people are having phones despite earning little.

Research Objectives and Questions

Our objective is:

- Understanding the context of the use of mobile device and social media

•With our study we aim at understanding:

- What opportunities lies in for mobile networks and social media
- How does social networks cater for various mobile devices?
- Which contextual difficulties are present?
- What types of phones are available, and what they be used for?
- Is there a technological opportunity to cater for an unmet need?

Hypothesis

- A smartphone is close to a requirement to get the full experience of social media
- There is a gap that is not filled when it comes to content provision in the context of lower level phones and social media

Methodology and Research Approach

This study has been conducted from an interpretive case study perspective.

Quantitative and Qualitative techniques will be used as methods for data collection and analysis.

Including:

- Questionaire
- Interviews (informal/formal)
- Observations
- Discussions
- Document/Litterature Analysis

Data analysis and Discussion

1) Looking at what mobiles people can afford, in general, what would be the economic gains

2) Different types of devices and what they allow - smart phones, mid-range phones, low-end phones with only sms

3) Fit of phones/m-technologies within use contexts - e.g power supply issues, required literacy levels, learning curves associated with device use

4) Value added services associated with various phone/mobile devices

Malawi	
Service	**Estimated Users per 100 inhabitants**
Mobile cellular subscriptions	15.72
Fixed telephone lines	1.15
Fixed Internet	4.6
Fixed Broadband Subscription	0.02
Norway	
Service	**Estimated Users per 100 inhabitants**
Mobile cellular subscriptions	111.38
Fixed telephone lines	37.06
Fixed Internet	92.08
Fixed Broadband Subscription	34.03

More Statistical Data

Ratio of mobile cellularsubscriptions to fixed telephonelines

Malawi - 13.7:1

Norway – 3.0:1

Mobile cellular subscriptions CAGR* 2004 -2009

Malawi – 61
Norway – 3.4

** = Compounded annual growth rate*

Source: International Telecommunication Union

Even More Statistical Data - Malawi

1. Number of mobile phone operators - 2 (the third is still trying to rollout)

2. Average cost of most popular phone is MKW 2025 (roughly $13.32) - This phone has no internet browsing capabilities.

4. Minimum cost for phones with internet capabilities is MK11000 (roughly $79)

5. Cost of Voice call per minute is MK52 (roughly $0.34)

6. Cost of mobile Internet is MK19 per MB (roughly $0.13)
Minimum Monthly Wage – MK3500 (roughly $23) TBC

Evolving an Ecosystem for context-Aware Mobile Social Networks

Can this be applied to a lower level phone?

WhozThat

- A a system that ties together online social networks with mobile smartphones to answer this common and essential social question.

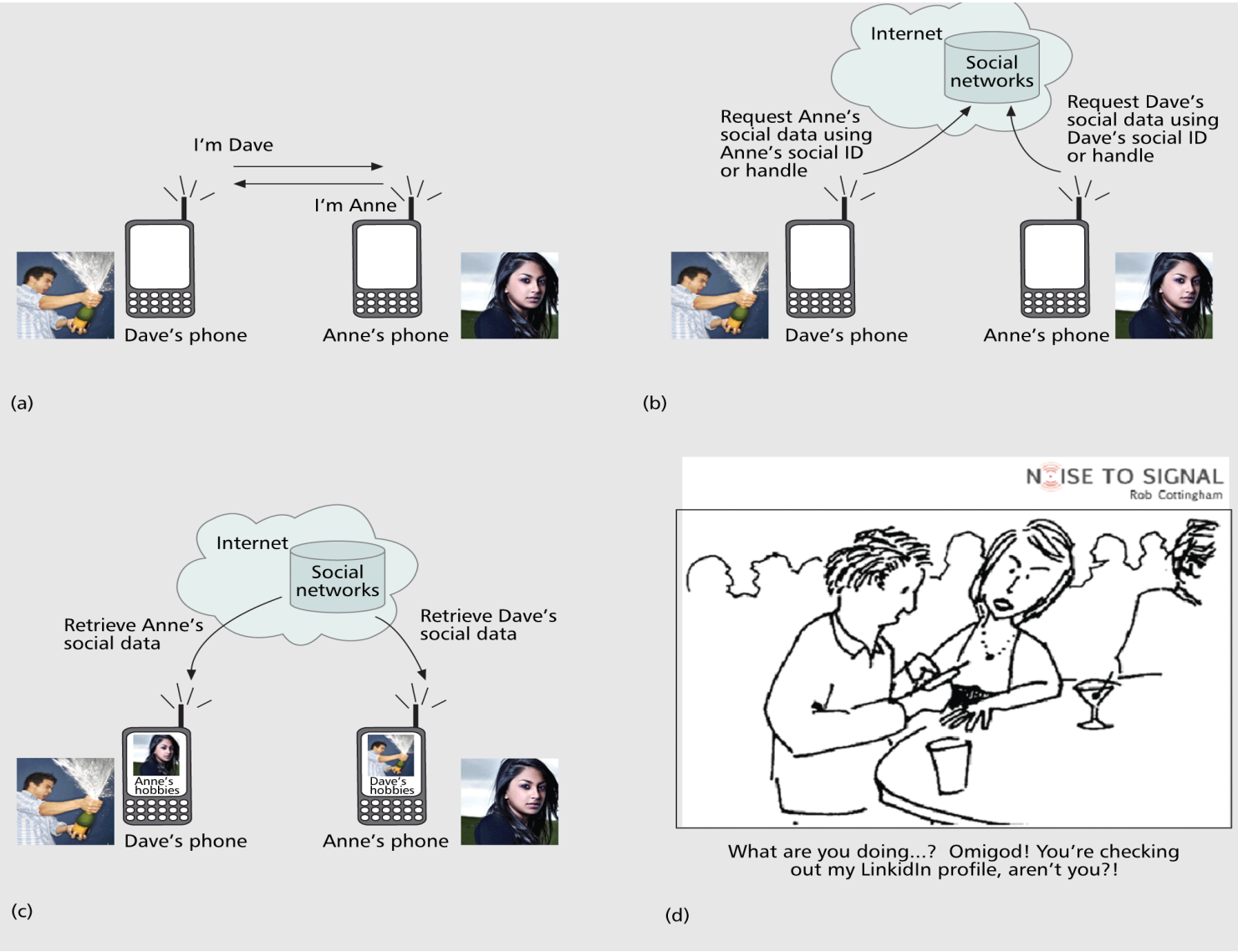
Who is that?

WhozThat

WhozThat is motivated by the idea that bringing this rich contextual information from online social networks into the real world of local human interactions substantially enriches local social interaction.

Example:
Coffee bar setting

WhozThat


I'm Dave
I'm Anne
Dave's phone
Anne's phone
(a)
Internet
Social networks
Request Anne's social data using Anne's social ID or handle
Request Dave's social data using Dave's social ID or handle
Dave's phone
Anne's phone
(b)
Internet
Social networks
Retrieve Anne's social data
Retrieve Dave's social data
Anne's hobbies
Dave's hobbies
Dave's phone
Anne's phone
(c)
NOISE TO SIGNAL
Rob Cottingham
What are you doing...? Omigod! You're checking out my LinkidIn profile, aren't you?!
(d)

WhozThat

Value Added:

The ability of mobile social networking (MoSoNet) technology to substantially lower the barriers to social discourse by minimizing unfamiliarity could revolutionize human social interaction.

WhozThat

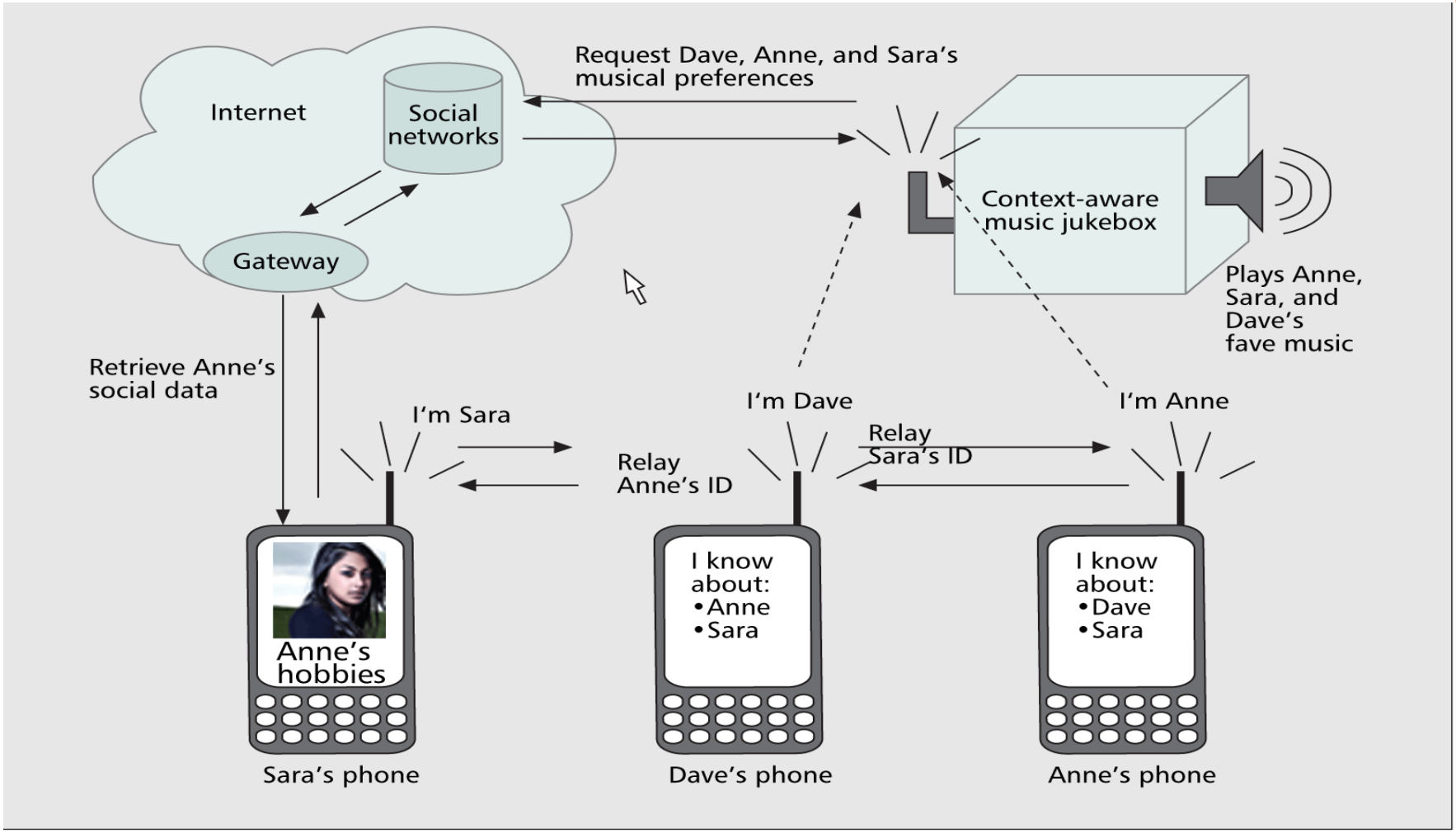


Figure 3. *The WhozThat ecosystem can evolve to incorporate the following: 1) local context-aware services, such as. a music player that generates a playlist based on the social IDs advertised by nearby devices; 2) multihop relaying; and 3) gateway services.*

Discussion

SmsRapid: is a free and open-source framework for dynamic data collection, logistics coordination and communication, leveraging basic short message service (SMS) mobile phone technology.

Mpesa – mobile banking

1881 – phone directory

Technologies: USSD

USSD (unstructered Supplementary Service Data)

is a protocol used by GSM cellular telephones to communicate with the service provider's computers. USSD can be used for WAP browsing, prepaid callback service, mobile-money services, location-based content services, menu-based information services, and as part of configuring the phone on the network

USSD messages are up to 182 alphanumeric characters in length. Unlike SMS messages, USSD messages create a real-time connection during a USSD session. The connection remains open, allowing a two-way exchange of a sequence of data. This makes USSD more responsive than services that use SMS

Source: Wikipedia

Technologies: SIM ApplicationToolKit

is a standard of the GSM system which enables the Subscriber Identity Module (SIM) to initiate actions which can be used for various value-added services.

SIM Application Toolkit consists of a set of commands programmed into the SIM which define how the SIM should interact directly with the outside world and initiates commands independently of the handset and the network. This enables the SIM to build up an interactive exchange between a network application and the end user and access, or control access to, the network. The SIM also gives commands to the handset such as displaying menus and/or asking for user input.

STK has been deployed by many mobile operators around the world for many applications, often where a menu-based approach is required, such as Mobile Banking and content browsing.

Source. Wikipedia

Facebook for SIM by Gemalto

http://youtu.be/_u98wGKS7u0?hd=1

Thank you!

Comments?