MUSUBI: DISINTERMEDIATED INTERACTIVE SOCIAL FEEDS FOR MOBILE DEVICES

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Social App Platform

FB Android SDK

Facebook Graph

800 Million Users
Bad for Consumer

- Loss of Privacy
  - Unsuitable for business, financial, health apps

Outrage as Facebook changes its privacy rules AGAIN to share users' phone numbers and home addresses with third party companies

By DAILY MAIL REPORTER
Last updated at 8:58 PM on 2nd March 2011
Bad for Consumer

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- Monopolies
Bad for Consumer

- Loss of Privacy
  - Unsuitable for business, financial, health apps

- Monopolies

- Loss of Competition
Bad for Consumer

- Loss of Privacy
- Monopolies
- Loss of Competition

Zynga Dependency on Facebook

That reliance has raised investor concerns: In July, Facebook instituted a virtual payment system dubbed Facebook Credits, under which the social network takes a 30% cut of all game-developer revenue. The system has affected Zynga, which experienced a 95% drop in its profits last quarter.
Social Mobile App Platform

Goal: Best Ecosystem!

- Can be used
  - for any purpose
  - by anybody
  - on any device / service
  - (Like SMS)

Disintermediation of communication

- No “baggage” – no tax on data
- Based on encrypted messaging
Best Ecosystem:
Disintermediated Communication

Users
- Data ownership
- Fun
- Friends

Developers
- Social graph
- Open platform
- Virality
Today’s Social Networking

Global Social Graph

TCP/IP
ESP: Secure, disintermediated comm

Problem 1:
Phones cannot talk to each other
→ Encrypted messages based on public keys
Social App Platform
Social Kit for Mobile Apps: Identity Firewall

Problem 2:
Global social graph
→ Decentralized graph (address book)
→ Enable decentralized apps
Mobile is ready for a boost

- What can you do with your contact book?
  - Phone calls, SMS, MMS
- What about group interactions?
- What about AMS (Application Messaging Service)?
  - How do I run a game with the address book?
  - How do the messages get to my friends?
Musubi: Social App Platform

- Extend the capabilities of the address book
  - Maintain friends’ keys
  - Group messaging
- Applications
  - API for developers
  - Also compatible with non-Musubi
Demo
Current state of Mobile Development

- Building a multiplayer Tic-Tac-Toe game?
  - Integrate Facebook Connect
  - Setup messaging server
  - Build core app
- How can we get this to just
  - Build core app
SocialKit

- API that gives developers:
  - Access to friends
  - Ability to send/receive messages
- Identity Firewall
  - Feeds as access control
  - Minimal contact information
- Two supported platforms
  - Native
  - HTML5
Types of Applications

- Basic editing
  - Sketch
Types of Applications

- Collaborative data pooling
  - Todo Bento
Types of Applications

- Group viewing
  - Slide Bento
Types of Applications

- Turnbased Multiplayer
  - Popular style of game, well suited for mobile
  - We have abstraction to make this easy to make
  - WordPlay
# Chart of lines of code

<table>
<thead>
<tr>
<th>Application</th>
<th>~Social Kit Lines of Code</th>
<th>Total Lines of Code</th>
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Virality

- Social Networks are key to success now, better than
  - Paid ads
  - Being at the top of the app list
Virality

- We make non-social, quiet apps viral
  - Picsay flow + shared via picsay
Cost of infrastructure

- People don’t need as much data replication
  - We can keep our messages ephemeral
  - Makes the infrastructure lighter weight
  - Replication vs storage
Conclusion

Private

Public

Facebook Logo
Conclusion

Private

Public
Conclusion

- Monopolies are obvious
  - Never good for the consumer
  - We built an alternative model to explore

- http://mobisocial.stanford.edu/musubi