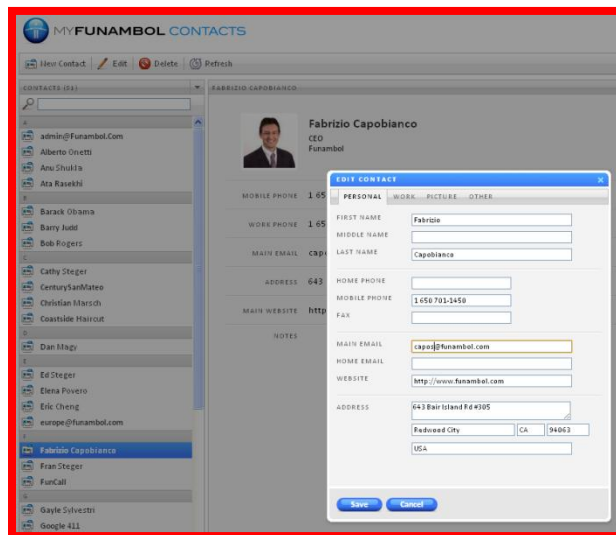


End Game of the Mobile Address Book

Act Now or Forever Risk Confusing and Losing Your Users



December, 2009



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I. Introduction

A new generation of smartphones has elevated the address book to the center of the usability universe for many users. It is no longer just a static list of people and phone numbers but a central hub for mobile services, including voice, messaging, location, social networking and media.

In addition, the mobile address book is no longer just a standalone app. It has become actively linked via the cloud to systems that people use everyday, such as email, social networks and PCs.

The iPhone initiated the address book renaissance with MobileMe that synced phone contacts via the cloud with the web and desktops. Palm, Motorola, Nokia, Microsoft and Android accelerated the mobile cloud address book trend. This caught many mobile operators off guard and left them scrambling for a response. Rather than let iPhone dominate their relationship with consumers (similar to how RIM/BlackBerry did this with enterprise users), a common operator response was to embrace other smartphones such as Android.

Unfortunately, this is the proverbial jumping from the frying pan into the fire. Many device makers have copied Apple's approach of a cloud-based address book to attract users to their services, diminishing the role of the operator. If operators do not quickly regain control of the address book, they risk confusing their users -- should I sync my contacts to Google, my device maker's cloud or my operator? Without rapid intervention, their users will defect in greater numbers, hastening their dumb pipe fate.



This paper discusses important questions facing operators, such as what they should do about the mobile address book. It examines trends affecting the address book, what others are doing and how this impacts the value chain. Given the changing characteristics of the mobile address book and an attendant change in user expectations, the paper describes the unique value that operators can provide.

Funambol has synced billions of contacts in tens of millions of mobile address books. We understand address books and mobile syncing better than anyone -- our motto could be, "mobile cloud address books r us". We were instrumental with creating and evolving the SyncML (OMA DS) standard that is at the core of mobile syncing. We are also the leading mobile open source project that supports billions of devices, and our commercial software has been adopted by the top companies in mobile due to our address book and mobile sync expertise. It is this experience that enables us to describe the future of mobile address books.

II. Trends

Address books have come a long way. Consider the following:

- The number of address books that people use has increased from one to ten+. It started with a black book or rolodex and grew to include Outlook, your mobile phone, webmail and several social networks. Address books are increasingly found in systems such as:
 - Consumer email e.g. Google (Gmail contacts), Yahoo! Mail, AOL Mail, Hotmail
 - Enterprise/work email e.g. Outlook and other email clients
 - Social networks e.g. Facebook, twitter, MySpace, Orkut, StudiVZ, bebo
 - Professional networks e.g. LinkedIn, Plaxo, Xing
 - VoIP services e.g. Skype, JAJAH, Vonage, Google Voice
 - Photo sharing e.g. Flickr, Picasa
 - Mobile cloud sync e.g. MobileMe, Nokia Ovi, myFUNAMBOL
 - Teleconferencing e.g. WebEx, dimdim
 - CRM and contact management e.g. Salesforce.com, SugarCRM, ACT!, Highrise
 - Online banking

They are also being increasingly found in a broad range of wireless devices and embedded systems, including cameras, navigation units, cars and refrigerators. Many of these are connected to the cloud, which makes merging and sharing contacts more important.

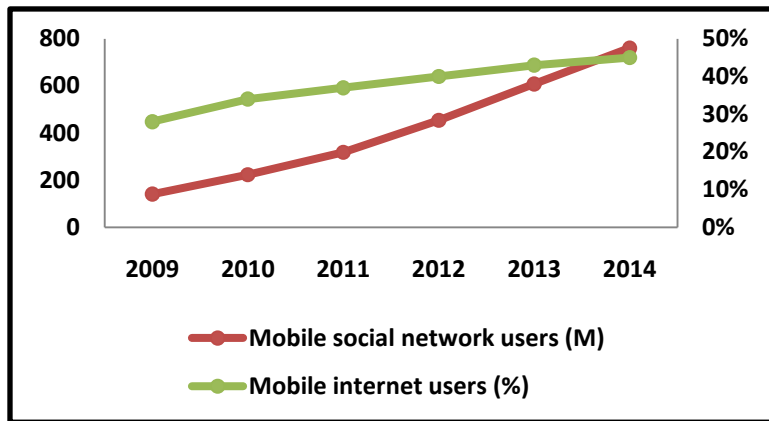
- The quantity of contacts has grown dramatically -- friends, colleagues, work contacts and IM buddies. We estimate that the average contacts per person has increased from 45 to 180 over the past few years.

- The number of communication channels that people use has also significantly increased, and this increases the complexity associated with **each** contact. Ten years ago, people had two or three phone numbers (fixed line, mobile, fax) and one email address. Today, people may have six phone numbers (private, two business numbers, car, two mobile numbers), four email addresses, social network and IM (Skype/AIM, Yahoo) IDs, Google latitude location and other service IDs.
- In addition, the frequency with which people's contact info changes has rapidly accelerated, from perhaps once in awhile to many times per year, as people join social networks, use VoIP, etc. This requires constant updating in multiple places and makes losing one's phone book not just a minor inconvenience but a major ordeal.

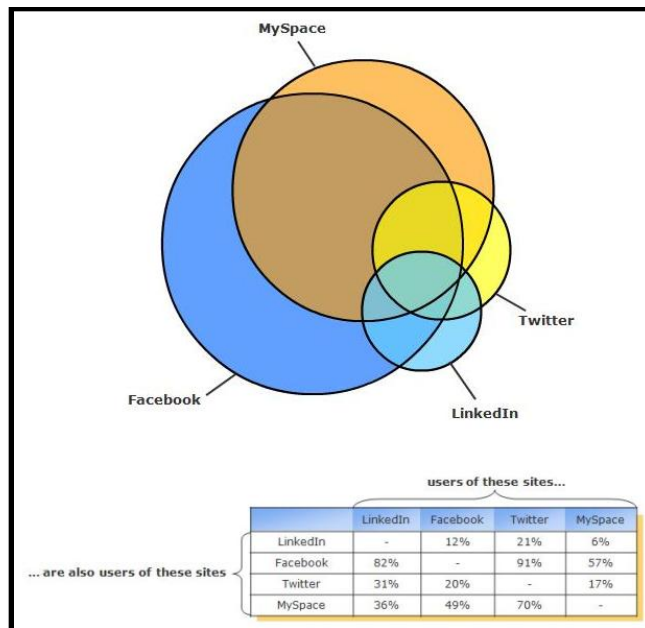
Consider the new generation of smartphone address books. They aggregate and unify messaging for contacts. Some arrange contacts into groups e.g. family, friends, business associates. Others augment contacts with social networking content e.g. status, photos and videos, from Facebook, Twitter and LinkedIn. Others include location and presence e.g. where a contact is and if they are reachable via IM. The modern, social address book has been born.

A major trend is that leading device manufacturers have introduced smartphones with cloud-based address books that act as gateways to their mobile services. Once users become accustomed to the convenience of accessing contacts and services via their address books, they are unlikely to switch. This presents a major challenge for mobile operators who see a big part of their future coming from mobile services. As operators relinquish this vital entry point and allow others to establish their services, it makes it that much more difficult to woo users back.

Another major trend is that contacts are becoming dynamic, 'live' entities that are linked via the cloud with other systems. As these charts indicate, mobile social networking usage is exploding, and most users access multiple social networking sites e.g. Facebook and Twitter, not just one.



Source: eMarketer, Nov 2009



Source: Anderson Analytics Jul 2009

Linking 'live' contacts helps keep contacts up-to-date and allows users to see more information that previously required accessing multiple places. This is a great convenience for mobile users, as devices do not make it easy to open multiple windows and sessions, like on a PC.

As people access multiple social networking sites as well as use email systems and other sources of contact data, this represents a major opportunity for operators. Users generally do not only want information only from Google, Facebook or Twitter, but from multiple sites. They can benefit from the convenience of aggregated contact information and content, which can be best provided by an operator, rather than one of these content providers.

At the same time, the influx of contact data creates significant new challenges. For example, some people want to keep personal and business contacts separate, others want them mixed. Some people want to filter contacts from other systems to keep them from their phone e.g. it might be ok to have hundreds of contacts on a PC but not that many on your handset. Avoiding information overload and managing this data becomes more important, and presents another opportunity for operators.

The propagation of address books, with their increased role on mobile devices, places a greater premium on the importance of 'owning the address book' and not relinquishing it to others. The opportunity, and challenge, is to provide the right level of information, usability and services that are appropriate for the user's context.

III. Operator Address Book: Strategic or Tactical?

Operators once had a virtual lock on their subscriber address books. They helped pioneer the mobile address book as a necessary enabler of voice services. Yet operators have gradually been relegated to a backseat versus other address book providers.

In the past, if someone lost or upgraded their mobile phone, they often looked to their operator to restore their contacts to a new device. With today's smartphones, however, many address books are automatically synced to the cloud, which has the dual advantage of allowing contacts to be linked with other data, as well as enabling contacts to be backed up and transferred to new devices and systems, without an operator. This is a classic case of technology disrupting the value chain.

As a provider of mobile services, operators must provide an address book as a core capability. Voice services still remain largely their province, even as VoIP and non-cellular networks such as Wifi threaten to erode the value of cellular voice. It is hard to imagine a mobile operator not providing an address book that ties together all of their services. In this respect, the address book remains one of their most strategic assets. Unfortunately, there is a major war going on to own the address book, and there are serious challengers, Google being greatest among them.

Important questions for operators are how capable do their address books need to be, how do they relate to other address books, and what unique capabilities can they provide?

IV. System of Record

Most people do not want to spend a lot of time managing an address book. It should just work the way they think it should. It should be easy to access and contain updated information. The problem is, as time goes by, this has become increasingly difficult.

With the proliferation of electronic address books, it is likely that people will attempt to simplify things by maintaining one primary electronic source of contacts as their 'system of record'. This will be the system that they trust and keep updated, and that they want backed up in case of emergency. People will grow to view other address books as supplemental that exist for convenience rather than permanency.

A critical opportunity for mobile operators is to ensure that subscribers view their address book as 'the one' i.e. the primary address book they keep for life. To exceed competitive offerings, operator address books must:

- Be completely easy-to-use and intuitive, on phones, the web and elsewhere
- Integrate with all of their services, while providing an open design
- Sync all common sources of contact information and systems via the cloud
- Provide a modern web portal to allow users to access contacts via the operator website
- Provide a superset of relevant contact information
- Automatically backup contact information
- Make it simple for users to exchange contacts with other devices and systems

These are further explored in the next section.

V. Operator Value

Operators are in an optimal position to provide a better address book than anyone else. This is due to their knowledge of their customers and their established infrastructure for billing, customer service and personal assistance via retail outlets and call centers. Operators can establish their address book as the dominant one by following these guidelines:

- Be the trusted, independent repository. Operators should position their address book as the center of their subscriber lives, including mobile, online and offline use. It can be the central repository of everything important that people want to know about contacts. As phones become more powerful and capable of accessing and storing more content, it is important to sync all of this content. The key is to provide users with the perception that it is their address book and that they are in full control of their data and content.
- Don't Try to Be Google. Operators should acknowledge that they are not going to emulate Google -- they do not know everything about you and will not use this information as such. As time goes on, more people will become concerned with how much Google knows about them. This is not a conspiracy theory, it's a privacy issue ; many people would rather not have one commercial organization know too much about them. Operators should maintain that they are not following in Google's footsteps by developing overly detailed profiles about people and their contacts. This neutrality would appeal to many.
- Innovation. Who knows more about the phones used by a family or business? These phones are likely to consist of different makes and models. Only an operator knows, and they can uniquely offer innovative mobile cloud address book capabilities for heterogeneous handsets. These might include shared address books, where people can optionally allow others to view or edit shared contacts and content.

The more utility provided, the more likely people will use their address book. This could take the form of new services that make it easy to print mailing labels, send electronic occasion notices, invite people in their address books to events, and much more.

- **Device independence.** Today's mobile address books are highly device specific, while non-mobile address books are not mobile enough. Even though there are many common fields used in contact applications, when you are dealing with billions of phones, and non-phone address books, there are many inconsistencies that make it difficult to sync accurately. The challenge is to be the best at accurate synchronization, which will become recognized by users as a significant quality of service. An open source solution provides the best approach to broad device compatibility and accurate syncing.
- **Open service integration.** Tight integration with an operator's core services is key, while still retaining openness. This increases the probability that users will use your services, as this will be convenient and natural. At the same time, it provides people with the freedom to use different services so they don't feel trapped.
- **Seamless interoperability.** It should be easy to sync contact data with other address books and systems, so they flow smoothly into your address book via the cloud, without creating duplicates. This elevates your address book to be the system of record.
- **Backup and security.** It is critical that customer data is always backed up and is secure, and is always available to be restored and transferred with other devices.



In sum, a winning strategy for operators is to leverage their unique knowledge about user phones to offer value-added capabilities such as shared address books and aggregated content. This enables operators to differentiate themselves, increase user satisfaction and create a springboard for future service revenue.



VI. Address Book of the Future

If you are an operator, you must act fast to provide a mobile cloud address book. What's your fastest path to success? This is a classic build vs. buy. In the interest of time, it makes more sense to buy a packaged solution that meets your needs rather than reinvent the wheel.

We encourage operators to take an in-depth look at the Funambol open source mobile cloud sync platform that can quickly provide the capabilities needed to control your address book destiny. Funambol's secret sauce is open source. We offer the only open source mobile cloud address book. Its benefits are the broadest device compatibility, ultimate control and flexibility, lowest risk, fastest time to market and greatest value. To learn more, please contact our sales team at <http://www.funambol.com/contact/contactsales.php>.

VII. About Funambol

Funambol is the #1 mobile open source project in the world and the leading provider of open source mobile cloud sync and push email for billions of phones. Our solutions are based on the most important industry standards for mobile synchronization (SyncML aka OMA DS) and device management (OMA DM). Our open source software has been downloaded millions of times by 50,000 developers in 200 countries, which helps ensure that our software supports the latest devices most quickly. Our commercial software has been adopted by the top companies in mobile, including many of the largest device manufacturers, operators, service and content providers, software companies and system integrators. Funambol is headquartered in Redwood City, CA (Silicon Valley) with R&D in Europe. For more information, please visit our website at <http://www.funambol.com>.

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