Proximity-based mobile social networking: outlook and analysis

Peter Crocker

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive summary</td>
<td>3</td>
</tr>
<tr>
<td>Defining “proximity-based mobile social networking”</td>
<td>5</td>
</tr>
<tr>
<td>Proximity-based social networking application strategies</td>
<td>5</td>
</tr>
<tr>
<td>Connecting on the proximity-based social network</td>
<td>7</td>
</tr>
<tr>
<td>Technology and market structure</td>
<td>10</td>
</tr>
<tr>
<td>Market opportunity</td>
<td>12</td>
</tr>
<tr>
<td>Forecasts</td>
<td>16</td>
</tr>
<tr>
<td>Growth areas and barriers</td>
<td>21</td>
</tr>
<tr>
<td>Industry outlook</td>
<td>23</td>
</tr>
<tr>
<td>How the big four will participate</td>
<td>27</td>
</tr>
<tr>
<td>Opportunities and threats</td>
<td>29</td>
</tr>
<tr>
<td>Segmenting proximity social network applications</td>
<td>31</td>
</tr>
<tr>
<td>Company profiles</td>
<td>33</td>
</tr>
<tr>
<td>About Peter Crocker</td>
<td>39</td>
</tr>
<tr>
<td>About GigaOM Pro</td>
<td>39</td>
</tr>
</tbody>
</table>
Executive summary

Astute mobile application vendors are bringing to market applications that help mobile users connect and interact with people in close proximity. We expect this emerging market — what we call proximity-based mobile social networking — to grow to $1.9 billion in revenues by 2016. This trend not only provides new opportunities for application vendors but also has the potential to disrupt the current social networking market and the architecture of the web.

Figure 1. Proximity-based social networking market forecast: 2011–2016

Source: Smith’s Point Analytics/GigaOM Research
We define "proximity-based social networking applications" as those that use geo-proximity as the primary filter in determining who is discoverable on the social network. This differs from location-based social networks such as Foursquare, which simply broadcast a user’s location to existing friends. By enabling users to meet new people and interact with them and their locally relevant content, proximity-based social networking applications are far more engaging. This experience will drive user adoption, and it presents multiple opportunities for advertisers to interact with potential clients in innovative ways. Brands that can interject themselves into the experience will see valuable returns.

The rise of proximity-based social networking also lays the groundwork for long-term disruption in the mobile landscape. Any movement toward social interaction through proximity networks will drive content to the edge of networks that will be consumed by users through ad-hoc peer-to-peer local area wireless networks. This shift from wide area wireless networking to local area networking will mitigate the data burden on carrier networks while reducing their influence. In turn, this will create opportunities for new players and innovative initiatives by mobile operators.

In the future, proximity social networks will manage and define the social and technical processes that dictate connectivity and interaction among mobile users in the same location. Discoverability and privacy are at the core of these protocols, and vendors are approaching these mechanisms differently. Getting it right will be paramount to determining which vendors survive and which fail. Vendors must overcome some difficulties in order to attract a critical mass of users to create a compelling experience.

Facebook has won the first stage of the social networking market evolution, but it may miss the rise of the proximity network due to its focus on controlling identity.
Defining “proximity-based mobile social networking”

Proximity-based social networking applications enable users to discover new personal connections based on their physical proximity to one another. It differs from location-based social networking or mobile dating because connections are filtered first by proximity. Proximity-based social networking is also designed to connect people in a certain time and place, unlike apps like Foursquare.

Proximity-based social networking application strategies

Proximity is used as the primary filter in discovering new connections, but vendors are also deploying a number of additional factors to filter connections and protect privacy.

Proximity-based social networking discoverability

Proximity-based social networks are approaching discovery from a number of different directions. Two basic parameters define how users of proximity-based social networks discover one another:

- **Time.** Some vendors limit discoverability to users in close proximity at the present time; others limit discovery to users who have been in the same place over the same day or anytime, past, present, and future.

- **Space.** Some vendors limit discoverability to people in the same room, campus, or city. Some applications will rank potential connections based on their proximity to the user.

In mainstream social networks, such as Facebook, Myspace, and Twitter, time and space is not relevant.
Figure 2. Connection discovery strategies

![Diagram showing connection discovery strategies with timelines and spatial dimensions.]

Discoverability

- Virtual Social Network
  - Facebook
  - MySpace
  - Twitter

- Proximity Network
  - Loco Ping
  - Highlight
  - Lokast
  - Grindr
  - Buzz
  - WhoisHere

Source: Smith's Point Analytics/GigaOM Pro
Connecting on the proximity-based social network

Once users are in the proximity network and have discovered one another, mechanisms are required to support interaction and enable more-permanent connections. Vendors are developing different strategies and features that facilitate users getting to know one another and maintaining contact once they are no longer in the same proximity. As users discover and learn more about one another, their connection becomes more permanent and additional details about identity can be revealed. Many vendors will enable users to discover one another in the proximity network, build trust in an elastic network, and take their friendship further by including them in their social network, revealing their true identity. The three stages of this process are discussed after Figure 3.

Figure 3. Identity-management strategies

*Source: Smith’s Point Analytics/GigaOM Pro*
The proximity network

The proximity network is the stage at which users are most anonymous and can only be discovered by people around them.

The elastic network

Once users begin interacting with one another in the proximity network, they enter the elastic network. The elastic network is slightly more permanent than the proximity network, as it persists beyond the current time and space. While in the elastic network, users begin building a relationship through a number of mechanisms, including SMS messaging, voice or video calling, and interacting with one another’s content on the network. Users can also be added to buddy lists within the proximity-based social network without revealing too many personal details.

Because users have to opt in to continue to interact, the elastic network is disposable and only lasts for a finite period of time if interaction diminishes. Applications also deploy algorithms that introduce two users who should connect based on interests and characteristics, expediting the process of moving from the proximity network to the social network. Once two users have sufficiently interacted and have built trust, they move to the more permanent social network.

The social network

In the social network, a user’s full identity and contact info are revealed. At this point the relationship is more permanent and can grow on a number of different levels, both in cyberspace and in the real world. In many cases, proximity-based social networking applications also integrate existing connections as discoverable. The ability for users to take connections from the proximity network to the elastic network to a more permanent social network is an important mechanism for creating value for both users and advertisers. The act of making a new friend creates a significant positive emotional response. This response is an immediate reward for users. As relationships grow and blossom, the emotional response elicited by both parties becomes stronger. If brands can inject themselves in the process of moving connections from a proximity-based network to the elastic network, social network, and beyond, they will create a deep, lasting, and positive impression of their brand.
As this market evolves, the social networks of today will look significantly different tomorrow. New connections made in proximity and elastic networks may not end up on the Facebook platform but will stay in the network where they were formed, disrupting the social networking market.
Technology and market structure

The convergence of new technologies and the innovative use of established ones are enabling proximity-based social networking. The following pages will examine a few of these.

Location and proximity technology

A number of device components are being combined with new technologies to improve the experience of proximity-based applications.

Pinpointing a user’s precise location is a vital part of proximity-based social networks and has presented challenges in the past. The accuracy of GPS is, of course, improving, but other components coupled with sophisticated algorithms are enabling even more precise location and proximity results. For example, application developers are analyzing data from microphones on two separate user devices to match ambient noise and determine if those devices are in the same room. Cameras are being used in similar ways by measuring lighting. Mobile platform vendors are also opening APIs that allow application vendors to track location in the background. This technology allows applications to track where users are in relation to one another without any action from the user such as checking in.

Peer-to-peer networking technology

The interaction of users in close proximity creates the opportunity for them to exchange data and content directly. A number of technologies are emerging that facilitate this capability to pass data between two devices without accessing a wide area network.

- NFC technology can quickly read small amounts of data from devices and passive tags.
- Wi-Fi Direct allows any device that is Wi-Fi Direct–enabled to function as a Wi-Fi router.
- LTE Direct is another technology being developed at Qualcomm, and it will support proximity networks of the future. LTE Direct can discover relevant, proximate applications in an autonomous and battery-efficient manner.
Another development that will have an important impact on proximity applications is the open-source project AllJoyn. This technology, which is being developed at the Qualcomm Innovation Center, allows devices to create ad-hoc peer-to-peer wireless networks using Bluetooth and Wi-Fi without the need for a centralized network. Users in close proximity can then discover one another and connect automatically.

**Figure 4. AllJoyn heterogeneous network**

![AllJoyn network diagram](image_url)  
*Source: Qualcomm*

With devices capable of easily discovering and connecting directly to one another, latency is reduced and location data from multiple devices can be triangulated to improve accuracy. The technology can also be used where wide area networks are overburdened, such as at sporting events or concerts.

By combining proximity social networking with peer-to-peer networking and ad-hoc networks, application vendors have the ability to create private data proximity networks to run applications. These ad-hoc peer-to-peer networks enable users to bypass carrier networks to exchange data, putting proximity social networks in a position to control this data flow.

Augmented-reality technology will also help make proximity-based applications more engaging.
**Market opportunity**

**Gamification of the world.** Users and developers of mobile applications are visualizing the mobile phone as more than a device to access the digital world. They also see it as a way to experience the physical world in new and interesting ways. Scavenger-hunt and augmented-reality applications are integrating the world into games. Mobile game users will continue to look for new gaming experiences and ways to interact with other users and the world around them, driving demand for proximity-based applications.

The emergence of augmented-reality games will fuel the concept of gamification of the world. AR technology makes the world a backdrop for any game, providing an environment for proximity-based social networking users to interact and play. A great example is a virtual tennis game created for a Fanta marketing campaign. Users can rally with a virtual tennis ball in an augmented-reality environment using the motion sensors in their phone. The game requires two players to be in close proximity of each other, making proximity-based social networking application a perfect channel to drive discovery of the app and brand reinforcement.

**New connections.** Current social networks enable current friends to connect with one another, but they do not provide mechanisms for users to make new friends. This creates an opportunity for applications to connect people who have not met before but who are in close proximity.

**Engagement beyond check-in.** The check-in app drives users to a certain location to collect rewards and coupons, but once the user has reached the location, the social experience ends. Even if friends have checked in at the same location, they may not be in proximity due to the time delay of these applications and the lack of a mechanism for checking out. The check-in app is more about stating your location to your social network than socializing at the location. Proximity applications allow users to share an experience in real time and in a specific place. Sharing experiences in the real world can make them more fun, increasing user engagement.

**Mobile dating sites**

Leading online dating sites such as eHarmony and Match.com have launched mobile versions of their applications. They are including location as a parameter for compatibility matching. Also, location-based social networking site Badoo, which has over 160 million users across the globe, launched an iPhone app
in the summer of 2010 and an Android app in March 2011. Badoo allows users to browse pictures of other users, which can be filtered based on their geographic area. While this application has lots of similarity to proximity-based social networking applications, it does not focus on finding people in a user’s specific proximity but rather allows users to browse the user base, which is organized by location. The site is very popular in Russia and Brazil.

Mobile metrics company Ground Truth found that mobile dating users spent 12 minutes and 44 seconds per week on mobile dating sites. Based on data collected between the first week of June 2010 and the last week of July 2010, the company also discovered that each session lasted 49 seconds. Mobile dating sites will condition users to become more comfortable interacting with nearby strangers they meet on the mobile web. This popularity will translate to broader proximity-based networking applications.

**Pull vs. push marketing**

Users of proximity-based social networks are exploring the world around them and are looking for new people to interact with. This mindset makes users of these applications more likely to engage with brands on their own instead of brands pushing marketing messages. Even check-in apps push marketing messages. Users collect points by checking in on Foursquare and Liking something on Facebook, in effect pushing marketing messages to their friends.

**Value to advertisers**

Data from proximity-based applications can provide advertisers insight into the behavior of consumers. Proximity applications can also track user movements in order to better understand how people move and buy in the real world, much the same way they do on the internet.

The stickiness of brands is also enhanced with proximity social networking. If brands can become a part of the thing that connects two people at a physical location, the psychological effect can be lasting. With users connecting with one another based on limited personal information, such as the fact that they frequent the same place and they like a particular brand, that brand and place become a part of this new connection. Those details are still part of the relationship even when it progresses into the social network and more personal information is revealed.
Business models

Proximity-based social network application vendors are developing business models that generate revenues from both advertisers and end users.

Brand-financed business models

Location-based advertising within proximity-based applications is a popular strategy for driving revenues. Proximity-based social networks leverage users’ personal data and location to present highly targeted ads and offers. Vendors have also tried charging merchants for access to preference and location data to provide more-personalized service.

Special offers and daily deals will be important sources of revenues for proximity-based applications. Group-buying strategies can be deployed, and deals can also be offered when users discover one another and interact on a proximity-based social network. For example, if two users interact within a proximity-based social network, a buy one, get one free offer can be presented to bring the relationship into the real world. Groupon, the most-popular group-buying service, generated an average of $47 in revenues per active user of the service in 2011. The ARPU for total subscribers of the Groupon services is $10.70.

User-financed strategies

Proximity-based social networks are implementing freemium strategies; in-app purchases of virtual products are also popular. Users can purchase virtual flowers or virtual cocktails to send to other users on the social network. Leaders in this space such as Zynga generated about $.31 ARPU in 2012. The ability for a user to pay for improved discoverability is also a strategy that app developers are using to generate revenues. In a crowded bar or trade show, this function will provide value to users who are interested in making as many connections as possible. Badoo, for example, has been very successful generating revenues with this strategy: The company’s annual ARPU for 2011 is roughly $.76.

Transaction-oriented business models

Transaction-based business models are also being explored. Users of proximity-based social networks can list items or services to be bought or sold and can be presented to other users in close proximity. One
example of a company pursuing this strategy is Zaarly, a mobile and desktop-based marketplace that allows users to connect to exchange goods and services nearby.
Forecasts

The process of forecasting such a nascent market as the proximity-based social network market is imperfect and challenging. We have made our best estimates based on ramp rates of location-based social networking players, existing proximity-based networking applications, and the forecasted growth of mobile social networks.

Proximity-based social networking apps

We believe that the ramp rate of proximity-based social networks will be slower than check-in apps that are popular today. The intrinsic value of proximity-based applications will take time to be realized by users and lead to incremental addition of new users. Regardless of growth challenges, we expect 226 million users of proximity-based social networks in 2016.

The ramp rate of existing and emerging players in this market provides valuable insight into the current demand for proximity-based social networking applications.
Figure 5. Proximity-based social networking ramp rate

Source: Smith's Point Analytics/GigaOM Research
Figure 6. Total proximity-based social network users forecast: 2011–2016

Source: Smith’s Point Analytics/GigaOM Research

ABI Research forecasts 1.7 billion mobile social networking users by 2016. We expect proximity-based social networking users to represent 13 percent of this market. The ability of social networking site Badoo to attract 160 million users based on the concept of meeting new people online gives us further confidence that there is a demand for proximity-based social networking applications.
The localized nature and interactive capability of proximity-based social networking should help these applications attract high revenues per user. The opportunity to generate revenues through virtual goods — currently a $3 billion market — will also drive increased ARPU in the proximity-based social networking market.

Leading social networking sites generate from $5 to $7 of revenues per user today, and we expect proximity-based networking apps to see ARPU in the middle of this range, due to the more-focused and more-localized advertising opportunities that proximity-based social networking apps present. The ARPU of total subscribers of group-buying services such as Groupon equates to $10.70, which also factors into our ARPU assumptions for proximity-based social networking applications.
Figure 7. Average annual revenues per user of proximity-based social networks forecast: 2011–2016

Source: Smith's Point Analytics/GigaOM Research

Figure 8. Total proximity-based social networking revenues forecast: 2011–2016

Source: Smith's Point Analytics/GigaOM Research
Growth areas and barriers

Barriers

Privacy and safety concerns

Protecting users’ privacy and providing a safe and comfortable environment for users to discover and interact with one another are significant challenges. Brands’ respectful use of data made available by proximity-based applications is also an important factor. The irresponsible use of customer data or the perception of the aggressive use of personal information will stifle growth.

Creating network effects for social networking apps

The greatest challenge for any network is to reach critical mass. The network has no value if there is no one participating. This is particularly challenging to presence-based social networks like LoKast, since users must be on the network and in the same place at the same time to be discovered. Many apps face a lack of user density. This problem is greatest for apps that are focused on making connections in the same proximity within a narrow time frame. Applications that have less-stringent filters on discoverability of other users and that leverage existing social networks are more able to overcome the challenge of reaching critical network mass, generating value for users.

Another way that vendors are working to solve this problem is by running the application in the background so it can alert users when others on the network come into the same area. Applications are also integrating spaces to make apps more engaging when other users are not nearby. Users can create spaces on the internet that are tied to a certain location where they can post content. Once other users enter this predetermined location, they can interact with the posted content, which can have location context, as well as interact with others in proximity.

The market is crowded

The concept of SoLoMo, or the convergence of social, location, and mobile applications, has emerged, creating a myriad of startups looking to cash in on this trend. Any individual company will be challenged to gain attention from users to reach critical mass.
**Scalability of business models**

The hyperlocal nature of proximity-based social networking applications makes local businesses important revenue sources for advertising. Marketing to small businesses is inherently expensive.

**Geography**

We believe certain areas of the world will see a more rapid adoption of proximity-based applications. The innovative use of smartphones in the U.S. and Korea will be important factors in driving the usage of proximity-based social networking applications. In the Middle East, the anonymous nature of proximity-based social networking is attractive to users. The tight social and political controls on individual expression are believed to be driving demand for an outlet to express personal views and beliefs anonymously.

In Japan, due to the pressure to find a spouse before the age of 25, proximity dating services have been used regularly since 2003. Users have become accustomed to interacting with people around them whom they don’t know and will presumably take to applications that base discovery on proximity. The social culture in South American countries such as Brazil, where people are more open to meeting strangers, is also a driver in this region.
Industry outlook

Reaching critical mass

The proximity-based social networking market had something of a false start. Color has pivoted away from proximity as a social networking filter, and Conga refocused on compatibility scores to make connections. These high-profile strategy revamps have left the market pondering whether proximity is the way forward for social networking.

It takes time to create critical mass within a network. Limiting the discoverability of social networking participants to users who have signed up on a closed network and who are in the same place at the same time significantly restricts the growth potential of these networks. Vendors that have relaxed some of these filters have seen traction in the market. Some applications such as WhosHere and Grinder have organized users by proximity but have not limited discovery to only users in close proximity. These apps have attracted users who are active on the site. By ranking users on a site, someone is always discoverable.

Vendors will have to decide whether to build their own network based on proximity or leverage existing networks such as Facebook, Twitter, or Foursquare. Those looking to quickly gain users and add value will leverage existing networks. More-patient vendors that are looking to build a network that they control will pursue strategies where users are added on a more incremental basis. These strategies will include creating a concentration of users in densely populated and technically savvy towns, cities, and college campuses. Vendors building their own networks will also relax the criteria for discovery of other users. In some cases, vendors will experiment with throttling proximity ranges, so users may limit discovery to people who are currently present or expand the range to include people much further away. Integrating location-specific content into the application is another way vendors can make their apps more engaging and mitigate the empty-room syndrome.

Creating critical mass in a network is a challenging task, but it’s not insurmountable. It requires patience, precise tactical execution, and persistence. Those that stick it out will be in a much stronger strategic position, as they control the customer and the content that they create.
Ad-hoc peer-to-peer networks of the future

As the demand for network bandwidth increases, proximity-based social networks will be well-positioned to help manage ad-hoc local area networks. As games are played and content is shared across proximity-based social networks, these vendors will be in a position to help offload data from the wide area network to an ad-hoc network while managing trust, security, and privacy for the users on the network. If networks can control the discoverability of users and the content, they will have a bigger competitive advantage and significant power in the ecosystem.

Discovery across networks

The number of proximity-based networks is only increasing, and this surge will lead to a fragmented market that is segmented by geography. Networks will be built based on dense, technically savvy geographic areas, and vendors’ influence and dominance will be centered on the geographic areas they target. The opportunity to exponentially grow interaction will lie in the ability for members of disparate networks to discover and interact with one another across networks. With different discovery and privacy policies, this will present a challenge to keep users abreast of how to protect their privacy across these networks.

Proximity as a feature of all social networks

In the short term we do not see established social networking players adding proximity features to their applications. Facebook has built its strategy around identity and providing a platform for users to share information about themselves. This approach is not conducive to proximity-based social networking apps that are designed around anonymously interacting with others in proximity. This problem came to light after Facebook bought Glancee and experimented with a friend-finder feature on the site, which was quickly pulled. Companies such as Facebook have also been challenged to develop a succinct mobile strategy.

Check-in apps such as Foursquare will be more aggressive in adding proximity to their applications, as location is key. As users lose interest in checking in to gain points, these apps will have to look to new strategies to keep users engaged when they reach a location and check in. Check-in apps also have established networks of users as well as networks of places where users check in, increasing the probability that other users of proximity-based apps will be in the same place at the same time.
Once users of social networks begin interacting more with their environment and looking for stimulation outside of their existing social networks, mainstream social networks will embrace proximity social networking. Mainstream social networks will also integrate lessons learned from innovators in the space, including insights into discovery, privacy, and mechanisms that allow users to interact, make new friends, and safely reveal their true identity. More friends equal more connections and more channels for brands on Facebook to spread their message.

Niche proximity-based social networks that maintain user profiles will presumably survive for the foreseeable future. Grinder, a network focused on gay males, is a good example, provided it is able to protect its users from bad actors.

Proximity applications will help drive demand for augmented-reality applications

One of the barriers to the adoption of augmented-reality applications is making users aware of an AR experience that is available nearby. Unless users proactively explore the world through an AR browser, they are likely to miss new AR experiences. Through social networking with users in close proximity, AR experiences will be easier to discover. For example, Virtual Graffiti is one technology that could enhance the experience of proximity-based social networking. Users interacting in a common location can leave messages only visible through an AR browser. Igobubble’s strategy of connecting content with locations fits well with an AR experience, heightening the potential for the technology.

Friend finder vs. OTPA vs. presence networks

The number of over-the-top proximity applications (OTPAs) that are emerging in the market is growing rapidly due to the low barriers to entry. While these applications can quickly be populated with data and users, they have limited long-term competitive advantages. Without control of user data, the only real assets of these applications are the algorithms created to match users.

A handful of friend-finder applications have attracted respectable user bases, but this process takes time. The barriers to entry in this segment are increasing as established vendors make new inroads. New entrants will focus on building user bases by targeting specific geographic areas.
Vendors pursuing presence-based strategies will struggle as the dynamics for building critical mass and managing discovery and privacy are worked out. This strategy is the most complicated but also potentially the most scalable in terms of geography, functionality, and stickiness. Presence network vendors are pursuing strategies focused on sharing content with others in proximity versus just communication. This strategy will drive demand for bandwidth and ad-hoc peer-to-peer networking, and it has the potential to threaten the current client-server model used by current social network vendors.
How the big four will participate

Apple

Apple is known to have filled a patent for a proximity-based social networking application that lets users discover content on one another’s phones. While Apple files a number of patents, this particular one shows that it is thinking about the proximity-based networking concept. The large number of iPhone users and the company’s control of their ecosystem provide Apple an opportunity to quickly reach critical mass with a proximity social network. Apple also has control of the mobile device and can drive users toward peer-to-peer networks where the mobile device is at the center of the network.

Amazon

We expect Amazon to have a significant presence in the proximity-based marketing application market, but its participation in proximity social networking will be limited. The company already has a price-comparison application that merges online and offline shopping. Users can scan a bar code or search by video, voice, or text to find an item on Amazon that matches one in the store to compare prices. Any proximity-based social networking applications will most likely revolve around recommendations and perhaps price comparisons based on users in the area. Amazon is also well-positioned to facilitate transactions within the proximity network. Although the company’s competencies in logistics will not come into play, its brand and ability to ensure transactions will be valuable.

Google

In 2009 Google launched Latitude, a product that grew out of the acquisition of Dodgeball, which allows users to see where their friends are.

We believe that Google will be more open to proximity-based social networking with Google+ than its competitor, Facebook. Proximity may be a feature that can differentiate Google+ from Facebook, and Google’s business model is more about search and discovery outside of your social graph while Facebook’s competitive advantage is having control of the user’s identity.
Facebook

We do not see Facebook aggressively entering the proximity-based social networking space, as it focuses more on the web and identity. One path that may lead Facebook toward more-anonymous social networking is its desire to expand into less-developed regions. As the company looks to grow its presence in the Middle East, it may discover the value of anonymity.

The potential shift in the social networking world from centralized, narcissistic broadcasting toward peer-to-peer social interaction with proximity being the basis of discovery presents a potential threat to Facebook. The emergence of local area ad-hoc networks will become an increasingly important medium for sharing personal content with people in proximity. This shift could potentially lead to users demanding more control of their content and requiring it to be stored locally on their devices. This trend will move content away from the centralized client-server model currently used by Facebook, reducing the company’s control of user-generated content. Proximity-based social networks will also control discovery of this content, hence disenfranchising Facebook.

Facebook’s failed experiment with its friend-finder feature exemplifies the challenges the company is facing from nimble mobile-focused social startups. The company also shuttered its Places feature. While Facebook has forayed into the proximity-based social networking and location check-in apps, it has brought onboard the Gowalla team after the service was shut down, signaling that it is not finished experimenting in this space.
Opportunities and threats

Carriers

The expected trend toward more-localized data transfer through NFC chips and ad-hoc networks reduces the demand for wide area networks provided by wireless carriers. We expect that the growth of proximity-based social networking and the emergence of NFC-based applications will bring data closer to the edge of the network, reducing the demand for the centralized network services provided by wireless operators. Once users discover one another, facilitated by proximity networks and carrier networks, users can move off the carrier networks and interact directly.

Messaging is one area in particular where proximity-based social networking will threaten carrier offerings. Social networking messaging has already shifted some SMS messaging to the web, but operators are still adding value through network access. In a more localized network environment, users are messaging and exchanging content directly using Wi-Fi Direct without any need for the wider web. Content can also be shared this way without the need to access the cellular networks. SMS is not going away by any means. However, users are spending more time interacting with their immediate environment and will likely be less focused on interacting with friends who are miles away. This will further reduce the demand for carrier-based messaging.

While proximity social networking and peer-to-peer networking threaten carriers, the technology also presents some opportunities. As carriers build out 3G and 4G networks, proximity-based social networking may help drive usage and growth. The hyperlocal nature of the technology and ability of usage to spread quickly in localized areas will help carriers drive demand for newer networks in areas that have recently been upgraded.

Carriers have the opportunity to embrace proximity-based social networking and participate in the process of managing permissions and controls on how peer-to-peer networks are set up through proximity social networking. MetroPCS is aggressively deploying location social networking strategies by shipping Loopt on its phones. This not only caters to early adopters (young people who are also MetroPCS’ target market) but also provides the company insight into the idiosyncrasies of how to manage discovery, privacy, and safety on these emerging networks.
**Handset manufacturers**

The growth of proximity-based social networking applications provides opportunities for handset companies to increase sales of more-sophisticated devices. The growth of proximity-based applications will also drive demand for augmented-reality applications, which require proximity sensors such as gyroscopes and accelerometers to function.

**Software and content vendors**

As application vendors fight to gain users’ attention, adding a proximity feature to any application can increase users’ interactivity. Security and privacy technologies will provide an opportunity for software vendors to add value. The rise of the proximity-based social network will also add new distribution channels for location-relevant applications and content.
Segmenting proximity social network applications

Three types of proximity-based social networking applications are emerging in the marketplace:

- Friend-finder apps
- Over-the-top proximity applications
- Presence-based social networks

Friend-finder applications

Friend-finder applications are designed to help users find new friends based on their proximity to one another. Potential connections are often ranked by proximity and matching of personal characteristics. Friend-finder applications usually use direct communication strategies to move users from the proximity network to the social network, and they have the greatest similarities to mobile-dating apps.

OTPs

OTPs are similar to friend-finder applications but provide a proximity layer on top of existing public data available on the web. An OTPA will mine data that social networking users have made available on the web through existing social network profiles. Proximity is combined with this data, and proprietary algorithms suggest new introductions.

Presence-based social networks

Presence-based social networks are applications designed for users to interact in the here and now. These applications focus on connecting users around a certain shared experience such as a wedding, concert, or sporting event. Users are able to discover one another at a shared time and space in the proximity network and can continue to interact after the event within the elastic network.
Table 1. Three types of proximity-based social networking applications

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<thead>
<tr>
<th>Friend finder</th>
<th>Presence-based social networks</th>
<th>OTPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BuzzE</td>
<td>LoKast</td>
<td>Sonar</td>
</tr>
<tr>
<td>WhosHere</td>
<td></td>
<td>Street Spark</td>
</tr>
<tr>
<td>Grindr</td>
<td></td>
<td>Highlight</td>
</tr>
<tr>
<td>Full Circle</td>
<td></td>
<td>Banjo</td>
</tr>
</tbody>
</table>
Company profiles

NearVerse/LoKast

Based in New York City, NearVerse was founded in 2008 and launched LoKast in March 2010. The company raised $1 million in VC funding from Meakem Becker in April 2011 and relaunched its app in May 2011.

The application is a location-based content-sharing application that lets users connect with others within close proximity and share content. Users create a profile and add content they want to share. When LoKast users are in close proximity to one another, they can discover content within one another’s LoKast profiles. When the application relaunched in April 2011, the ability to create spaces that can be completely private was added. With the relaunch, LoKast also incorporated AllJoyn, a Qualcomm technology to enable the application to create peer-to-peer ad-hoc networks using available wireless technology such as Bluetooth and Wi-Fi. By using non-3G cellular networks, LoKast reduces latency and increases location accuracy.

Figure 9. LoKast

LoKast will generate revenues through in-app advertising and capturing a share of in-app transactions.
Future outlook

LoKast’s greatest challenge will be to reach critical mass on its proximity network. One way the company is hoping to grow its network is by creating user density on college campuses. LoKast is currently recruiting ambassadors on campuses to help drive user adoption. The adoption of an ad-hoc network feature is unique to LoKast and will help in performance in comparison to other apps. Building an expertise around peer-to-peer networking also puts Nearverse in a unique position to drive demand for these networks and control content discovery.
WhosHere

Founded in 2008 and based in San Mateo, Calif., WhosHere is the name of the app developer and the proximity-based social networking app by the same name. Launched in September 2008, the application currently has 5 million users, and by June 2011 it had generated a total of $1 million in revenues. Fifteen million text messages are sent through the application every day. In August 2011 the company closed its first round of VC funding, led by Lightbank, the Chicago-based VC firm started by the co-founders of Groupon.

The proximity-based social networking application allows users to anonymously interact with other WhosHere users though free text messaging, image messaging, and in-app VoIP. The application allows users to discover 200 users who have similar interests and ranks them based on relative proximity. Users are only able to see the names of other users and can only discover users who are currently in close proximity or have been within the past three hours.

Figure 10. WhosHere

WhosHere generates revenue through advertising as well as by selling premium features. One revenue-generating feature is the virtual plane ticket that lets users pay to virtually change their location to discover new people in another part of the world. Virtual plane tickets are priced at $1.99 for one ticket and $2.99 for two tickets. In May 2012 the company launched a video-chat feature that permitted users to see and talk to other users, allowing new connections to build trust and move the relationship forward.
Future outlook

The high number of users and interaction is an important advantage for WhosHere. This is presumably due to its early launch in 2008, before other vendors and prior to the saturation of the mobile app market. While the look and feel of the application needs some work, the infusion of capital will help the company spruce up its UI.

Sonar

Sonar is a New York City–based proximity social networking app that allows users to discover connections within their social graph that are in close proximity. The application launched in the spring of 2011.

Sonar mines data from social networking sites, and, using algorithms, the application connects users in a common social graph who have similar interests and are in close proximity. Location is acquired through check-in on the Sonar app or through other check-in services like Foursquare or Facebook Places.

Figure 11. Sonar

One way the company plans to generate revenues is through charging users to increase their visibility on the network, making it easier to be discovered and make connections.
**Future outlook**

In order to overcome the challenges of building a proprietary network, Sonar has leveraged social networking data that is already available on the web. While this works in the short term, Sonar does not control any of the data that powers its site. This limits the company’s ability to grow significantly and survive over the long term.

In order to be successful, Sonar will have to partner closely with social networks, giving up some of its value to these entities that control personal identity.
About Peter Crocker

Peter Crocker is the founder and principal analyst at Smith’s Point Analytics, a full-service market research and consulting firm focused on the mobile and wireless industry. He has five years of experience in the mobile and wireless market both as an analyst and as a marketing professional. Prior to founding Smith’s Point Analytics, Crocker was a senior analyst with VDC Research, covering the enterprise mobility and mobile software markets. In addition to his experience following the market as an analyst, Crocker has been instrumental in building business and guiding strategy at mobile software startups including Pyxis Mobile and Medxforms. Crocker also has a background in financial service and consulting and holds an MBA from the College of William and Mary. He has been a regular contributor to online and print publications such as Mobile Enterprise magazine and Rethink Wireless.

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