

MONETIZING MOBILE APPLICATIONS

HOW TO MAXIMIZE INVESTMENT,
MOVE UP THE VALUE CHAIN AND
EXPAND INTO NEW MARKETS

STRATEGIC WHITE PAPER

Network providers are well aware of the challenges presented by today's mobile growth. But this surge in traffic also represents growing opportunity for information, entertainment and business value that mobile networks are poised to deliver. To take advantage of this powerful business opportunity, network providers need faster, easier, more efficient ways to build applications. This new approach introduces application programming interfaces (APIs) as a product development tool that makes it easier to work with a growing range of partners, while keeping the network secure. The right strategies can enable networks to increase revenues, deliver new services and maintain customer satisfaction while becoming an active participant in the growing ecosystem driven as a result of the Web.

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1. INTRODUCTION

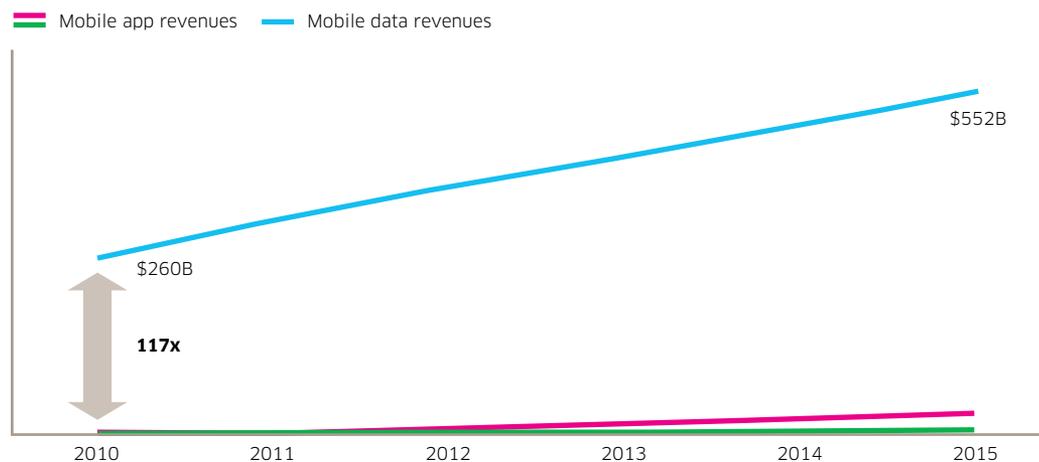
Global mobile traffic will become 30 times greater in just five years, according to Alcatel-Lucent research. The industry is well aware of the cost and capacity challenges of this explosive growth. However, the continuing expansion of data traffic also represents a tremendous opportunity for Service Providers, because it indicates the ongoing demand for what networks can deliver. With that in mind, network providers need more effective ways to take advantage of this demand — including new strategies for monetizing mobile applications. This paper examines how network providers can speed and streamline their process for developing successful applications, while building an effective eco-system for reaching out to new markets.

2. IT'S TIME TO REGAIN CONTROL OF THE NETWORK

Mobile data revenues are expected to grow from \$260 billion in 2010 to \$552 billion in 2015. In the current business model for network providers, shown in Figure 1, revenue from monthly data plans is more than 100 times the revenue generated by mobile applications. Many users activate mobile data plans so they can use applications, then find additional uses for their data services afterward. So a large portion of the return for mobile applications comes from the mobile data revenues that they drive.

Today, it can take 12 to 18 months for network providers to take a project from concept to deployment — and valuable market opportunities are lost along the way. Given the key role of mobile apps in driving mobile data usage, this time-to-market must be reduced significantly, so network providers can operate and compete at the speed of the Web.

Figure 1. Carrier business model



Source: Gartner

2.1 Going beyond today's time-consuming development process

To reduce time-to-market, network providers need to make fundamental changes in how they build mobile apps. This means using APIs to open up and publish network assets for trusted application developers, so the innovation demanded by the market can occur in a very flexible way on the app side, with no need to touch or change the core network. As a result, the current development cycle of 12 to 18 months can shrink to 6 to 8 weeks. To scale, network providers also need to build a new ecosystem for apps, whether it's for their internal developers, their strategic partners or a broader community of independent application developers. It's important to distinguish these three groups, because they have different roles to play in monetizing mobile applications, as explained later in this paper.

2.2 Making effective use of APIs

APIs open up opportunities for creating new mobile applications with more diverse features, while simultaneously speeding and simplifying the development process. They enhance creativity by allowing content and data to be easily shared across mobile applications and web communities. For example, photos and content uploaded to any web site can be shared on social network sites like Facebook — or embedded in a LinkedIn profile. Content can be dynamically posted. Or user information can be shared to outside applications through an open API as a way to deliver new functionality. Netflix, for instance, has increased member acquisition by being able to market enrollment on third-party sites like The New York Times. That is, they can target movie lovers who are reading New York Times movie reviews and cross-sell Netflix services in a more personalized and cost-efficient manner.

APIs speed time to market by allowing these developments to be executed without any back-end system engineering or connections. Instead, the API is exposed through Web services, and information is posted onto the site. Changes can also be accomplished easily through the API, with no long development cycle.

3. NEW STRATEGIES FOR DOING BUSINESS

To establish monetization strategies for mobile applications, network providers first need to identify their target audiences and their intent, as shown in Table 1. The term “head” refers to high-value internal apps and services that either address the mass market or a niche market. “Shoulder” refers to applications that allow network providers and their trusted partners to address vertical industry opportunities. “Long tail” addresses mass market applications by making network capabilities easily accessible for independent web, mobile and “widget” developers.

In general, the intent for the head will be to maximize return on investment. For the shoulder, it will be to move up the value chain, and for long tail, it will be to expand into other markets. Each type of application requires a different go-to-market strategy.

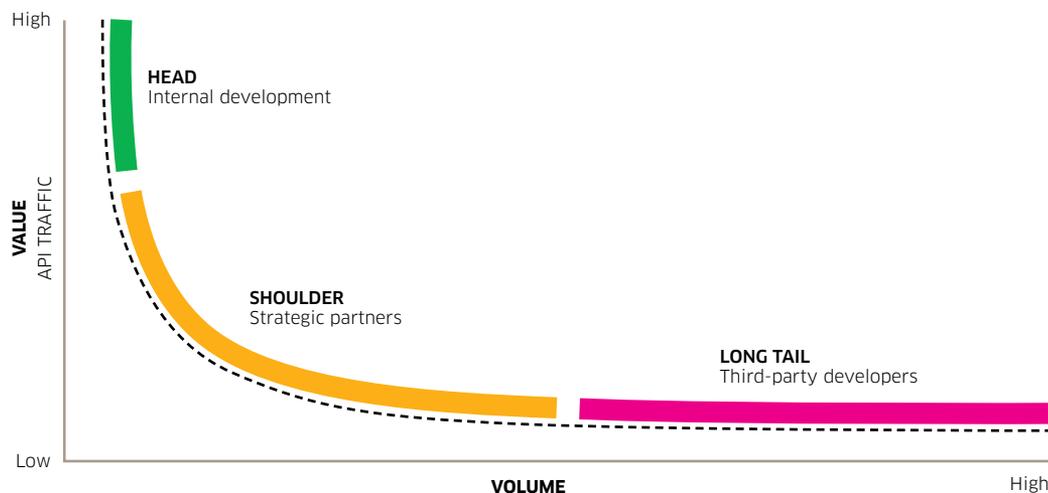
Table 1. Identifying audience and intent

	HEAD	SHOULDER	LONG TAIL
Potential audience	<ul style="list-style-type: none"> • Customers: B2B or B2C • Employees • Internal business units • M2M • Niche markets 	<ul style="list-style-type: none"> • Existing partners • New distribution partners • Co-branding opportunities • Industry verticals (healthcare, travel, financial) • M2M 	<ul style="list-style-type: none"> • Independent developers • Web, gaming, mobile and widget developers • Bloggers, media entities, analysts • M2M
Intent: options	<ul style="list-style-type: none"> • Core network exposure • Improved customer access and retention • Focus on core competency • Simplicity for internal developers • Internal ROI • Competitive differentiation • Brand reinforcement • Time to market 	<ul style="list-style-type: none"> • Platform exposure • Strategic partners High touch collaboration • Driving enterprise value • Enterprise/IT specialists • Support for multiple pricing models • Co-branding opportunities • Time to market 	<ul style="list-style-type: none"> • Increased lead generation • Higher-level abstraction • New distribution channels • Low touch/self-service • APIs as a product • Simplicity for all developers

3.1 Starting from inside out

When most companies think of “open APIs,” they start from the outside in — looking at long tail developers, then strategic partners, then internal developers. However, there are huge differences in the actual monetary value created from those channels, as illustrated in Figure 2. A solid API strategy and platform addresses all three audiences and can manage them relative to the value they create.

Figure 2. Mobile applications are not created equal



The most successful and innovative companies use open APIs from the inside out. They focus first on API adoption by internal app developers, then by strategic partners, followed by long tail developers. While long tail developers can generate innovations that show new paths forward — and extend distribution opportunities for applications — the majority of revenue is going to come from apps built by internal developers and by strategic partners in key verticals.

3.2 Recognizing API opportunities

To monetize mobile apps, network providers need to consider how APIs can enable them to make better use of their existing assets, including valuable subscriber data such as geo-location, handset usage and other consumer profile information. For example, this data could be used to enhance core consumer offerings, give enterprise customers better ways to increase productivity or generate additional revenue streams through new business models.

Because network providers cannot take risks with sensitive subscriber information, they need to follow the best practice of working from the inside out, first using APIs to enrich apps developed internally or with trusted partners. Then they can expand to broader markets, once the APIs have been carefully tested.

The following sections explain how APIs can be used to monetize each of the three key areas.

3.3. How to monetize the head

Internally developed mobile applications need to appeal to a network provider's core consumer market, helping to enhance revenues, reduce churn and maximize investment. For example, multi-screen video solutions could deliver TV and video on demand to tablets and smartphones, or new mobile commerce services could be provided. These applications can be monetized in the following ways, particularly if easy access is provided for customers.

- Mobile applications can be bundled with data to add value. In this case, the customer may pay more, but certainly not less.
- For some niche services, subscriptions can also work, if the value to the subscriber is worth paying an additional fee, above the data plan. This is difficult to achieve on a mass market basis, and market segmentation must be well done to connect successfully with demand and willingness to pay.
- A two-sided business model can also be used, such as a co-branded offer where the partner pays or no one pays directly because both partners benefit. These models typically employ a highly targeted marketing approach.

Instead of pay-per-use and transaction-based payments, service providers benefit from promoting subscriptions for their high value apps and services, as it generates a steady money flow (and most people feel comfortable with a flat fee for their high value services versus an unpredictable variable cost).

3.4. How to monetize the shoulder

Network providers can use mobile applications to engage their strategic partners more deeply — and create value for their customers. This means providing capabilities that reduce costs, speed time to market and deliver more personalized services. For example, the customer data held by a large hotel chain could be combined with network intelligence to create valuable mobile applications for the travel industry.

Through this type of offering, network providers can move up the value chain. But they must rethink how services are brought to market. In particular, they need to offer an infrastructure and unique network capabilities, while allowing the application to be built easily and more economically on top. The following methods facilitate this kind of streamlined development.

- Software as a service infrastructure can reduce development time and speed innovation.
- Partner implementation costs can be reduced by eliminating custom development, while new partner onboarding can be more efficient. With APIs functioning as standard widgets — for example, for billing — economies of scale can be achieved.
- Multiple business models can be used to make everything simple and standardized to the needs of specific industries. The models can range from pay-per-use and tiered user volume to flat monthly fees. APIs create an opportunity for network providers to resell services to non-subscribers at scale. For example, charges are estimated at \$.0002 per transaction on Twitter, Facebook and Google.

3.5. How to monetize the long tail

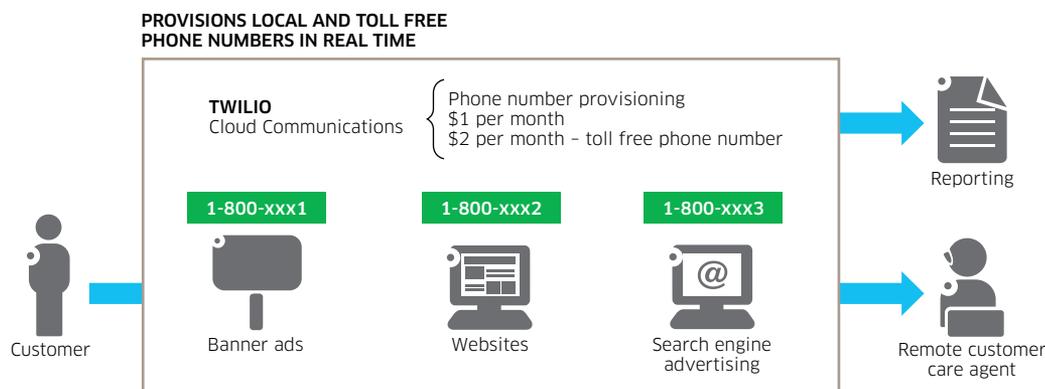
To reach a broader range of customers, network providers need to engage third-party mobile application developers who can create new value that attracts more customers. The key requirements for engagement include simplicity, flexibility and speed. In other words, network providers need a low-touch strategy that makes it faster and easier for developers to succeed in building innovative applications that benefit the network provider's own business.

The following methods take a wholesale approach to providing the necessary simplicity and standardization, based on easy-to-use APIs. This approach provides security for the network, while making it easier to incorporate selected network capabilities within third-party applications. However, it's important to recognize that APIs are a product — and therefore need to be well documented, packaged and promoted.

- Uncomplicated access to a network provider's APIs is critical to achieving mass adoption. APIs can be monetized directly or provided free of charge as a way to extend the network provider's platform. Either approach helps grow business.
- Writing the best possible documentation is the quickest way to enable partners to use the APIs. It needs to be very clear and thorough about what can and cannot be done with the APIs. This clarity helps maintain simplicity and establish trust, which is an important part of serious business development.
- Because developers are entrepreneurs, they generally prefer simple usage-based pricing models that allow costs to scale with their product.

Although Twilio is not a network provider, they offer infrastructure APIs that businesses use to create their own tailored voice and text applications. Companies leveraging Twilio's API infrastructure are creating powerful, useful applications that provide better customer experiences and generate real revenue. Twilio offers an excellent example of a wholesale business approach that makes it easy to use their APIs, as shown in Figure 3.

Figure 3. Providing simplicity for developers



3.6 Measuring success

To assess the success of each strategy, network providers need metrics for business impact, consumer experience and program participation.

Business impact, for example, measures customer retention, revenue, the success of new projects and partners and whether costs have been reduced.

- Consumer experience assesses various aspects of network performance, such as latency, availability and how each subscriber is using the network. It can also measure the time required to display results by API, which is important to developers.
- Program participation looks at the ecosystem required to deliver leading mobile applications. It could measure the percentage of active partners, APIs in use by application, the number of services used by each partner and API call volume growth.

These metrics address today's more complex marketplace by adding measurements that may not be used for voice- and data-based business models.

4. THE ALCATEL-LUCENT ADVANTAGE

By moving from closed to open business relationships, network providers can gain greater benefit from the explosive demand for mobile data. Alcatel-Lucent offers solutions to facilitate this transformation, every step of the way. Based on the Application Enablement vision for bringing together Web innovation with network intelligence these solutions give network providers streamlined ways to build exciting new applications, build a new eco-system of partners, implement innovative business models — and reach new markets.

For more information about Application Enablement, go to www.alcatel-lucent.com/ae

To listen to the Monetizing Mobile Apps Webinar, visit Light Reading at:
http://www.lightreading.com/webinar.asp?webinar_id=29742&site=lr_mobile

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