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# How Service Providers can reassert themselves in the off-portal market

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# Contents

- Executive Summary..... 3
- Service Providers' unique value in the off-portal market..... 4
- But...off-portal businesses feel the pain..... 5
- ...And so do the service providers ..... 6
- Provider services that off-portal businesses want ..... 6
- Revenue opportunity ..... 7
- Conclusion ..... 9
- Appendix A. SOURCES..... 9
- Appendix B. DETAILED GO-TO-MARKET CHALLENGES.....10
- Appendix C. DESCRIPTION OF SURVEY QUESTIONS..... 12



## Executive Summary

During the Internet boom in the 1990s, America Online captured a commanding share of the service provider market by creating a walled garden Internet experience through its dial up service. AOL's strategy was to protect its lucrative dial-up business by "locking-in" customers with compelling content. That worked until broadband access and Internet portals like Yahoo! emerged, creating an open Internet experience that gave consumers freedom to consume content wherever they pleased. AOL watched its dial up business slowly erode, its venture into the content business with Time-Warner failed and it hasn't been able to reassert itself on the Web (PC or mobile) since.

A similar "openness" wave is sweeping the mobile Internet today and it has the potential to disintermediate service providers from the value chain. Several key market trends affect the Mobile Internet:

### **Smarter handsets driving more off-portal traffic:**

Smartphones with full HTML browsers, QWERTY keyboards and larger screens are proliferating. Smartphone sales are forecasted to reach 12% of total worldwide handset sales in Q4 2009 (Gartner). This could potentially undermine the value proposition of service providers' portals, which were originally designed as walled gardens to drive data usage and lock in subscribers. In fact, some of the providers we interviewed said that roughly 50% of feature phone Internet traffic is off-portal while smartphone off-portal traffic can be as high as 100% in some cases. Eventually smartphones will become mass market commodities that will increase off-portal traffic as consumers find it easier to surf the Internet from their handsets.

### **Device manufacturers gaining control over the consumer experience:**

As service providers disband their walled gardens in favor of openness, handset manufacturers are growing their dominance over the value chain. Apple and Nokia vertically integrated their value chains by developing their own devices, operating systems and services. Both offer services (e.g. iTunes, App Store, Ovi) that allow users to consume media and applications directly from on-device portals. They both created a partner ecosystem that allows developers and content providers to distribute digital goods directly to their customers. Apple had approximately 8% market share of the worldwide smartphone market in 2008 while Nokia commanded roughly 44% (Gartner 3/09).

### **Service providers run the risk of disintermediation:**

Apple completely disintermediates providers from the content value chain (aside from the network) by billing customers through iTunes. Other non-provider billing alternatives such as PayPal also threaten service providers' share of the commerce pie. PayPal recently announced that it's opening up APIs that allow developers to integrate payment solutions into their applications and websites. This could diminish the role providers play in the customer relationship. Though the flip side of it is that these innovative companies are increasing mobile Internet and data usage for service providers.

### **Major brands are putting the squeeze on service providers' commerce revenues:**

Major media brands and retailers increasingly utilize mobile as part of their multichannel strategy. They can leverage the power of their brands to promote their mobile services directly to consumers and some can bill for premium content outside of the service provider. For example, Amazon.com offers a mobile version of its MP3 store and allows consumers to purchase items with a credit card registered to their accounts. Amazon's Kindle also disintermediates providers from e-book revenues. While applications like the Kindle increase data ARPU, service providers need to protect their off-portal commerce revenues.

### **Off-portal discovery is a unique opportunity for service providers:**

Discovery and cost of acquisition is a problem for off-portal businesses, especially for little known brands in the long tail. If they decide to advertise the average cost of acquisition is approximately \$15 per subscriber. This delays profitability to the point that some offportal businesses question if it's worth the investment in development and marketing. This is an opportunity for service providers to offer discovery tools that lead to more personalized, targeted marketing.

As mobile Internet traffic and consumption increasingly goes off-portal, service providers need to rethink their strategies to preserve their revenues and brands to avoid going the way of AOL.

## Service Providers' unique value in the off-portal market

Off-portal businesses need the broadest reach possible to maximize the returns of their development and customer acquisition costs. In large markets like the U.S., a bind with one of the largest service providers gives off-portal businesses access to a substantial marketplace. In fragmented markets like Europe, they need connections to multiple providers to reach critical mass. Billing and messaging aggregators (like OpenMarket and Netsize) exist to help off-portal businesses with cross-provider access to markets. Furthermore, in Europe off-portal offerings are defined by the set of capabilities common to service providers. For example, a single service provider's location service is useless as long as other service providers in target markets (which typically have three to six local providers each) don't offer similar location APIs.

Service providers have the potential to unleash a substantial amount of value to off-portal businesses. They possess

subscriber information that could be used for targeted marketing. Their networks are full of capabilities (location, messaging, presence, etc.) that could be exposed to drive more innovative applications and services. Their portals are valuable real estate for off-portal advertisers trying to drive traffic to their mobile sites. And of course their billing systems provide a safe and easy way to process payments. However, service providers are slow to expose services beyond billing and messaging, and to a limited extent location. This puts them at a disadvantage to companies like Apple and Google that provide off-portal businesses many of these capabilities already – albeit on a limited number of devices.

The following table lists types of off-portal customers and some of the services they might need. This is not a comprehensive list.

### Off-portal customer categories

**Off-Portal customers**      **Customers' offerings**      **Potential provider services**  
(See description of services below table)

|   |   | Billing | Messaging | Discovery | Sub Info | Location | Mobilization |
|---|---|---------|-----------|-----------|----------|----------|--------------|
| Mobile content retailers (e.g. Thumbplay) | Sell premium digital content (e.g. ringtones, full-track music, graphics) | •       | •         | •         | •        |          | •            |
| Infotainment (e.g. CNN)                   | Distribute free content (e.g. news, weather, sports)                      |         | •         | •         |          | •        | •            |
| Ad agencies (e.g. Ogilvy)                 | Advertise to mobile subscribers   |         | •         | •         | •        | •        |              |
| Brands/Media (e.g. MTV)                   | Extend channels from Web & TV to mobile                                   | •       | •         | •         | •        | •        | •            |
| Social networks (e.g. Facebook)           | Extend experience to mobile   | •       | •         | •         |          | •        |              |
| Developers (e.g. Electronic Arts)         | Sell applications (e.g. games, productivity, etc.)                        | •       |           | •         | •        | •        | •            |
| Enterprises                               | Communicate with customers, employees                                     |         | •         | •         | •        | •        | •            |

**Billing** - Off-portal payments (i.e. charging off-portal commerce transactions on behalf of third parties to subscribers' phone bill or pre-paid account)

**Messaging** - SMS/MMS usage for interactive campaigns (e.g. interactive TV), alerts, advertising, etc.

**Discovery** - Using service provider's portal for advertising, search, recommendations and URLs that link to off-portal sites

**Customer info** - Account status/type, payment and chargeback history, parental control information

**Location** - For applications such as targeted advertising, driving directions/navigation, between local alerts...presence is also a form of location services that can be used for social networking applications

**Mobilization** - Help with designing and managing mobile sites and campaigns, and can include hosted content management and delivery service

### But...off-portal businesses feel the pain

Amdocs recently interviewed a number of companies involved in the mobile Internet business. Companies included service providers, off-portal merchants, media companies, analysts and OpenMarket, the largest U.S. aggregator, which is part of Amdocs. Part of the primary research also included a survey of off-portal businesses in the U.S. and Europe, the majority of which are OpenMarket customers (described in Table 1). The focus of the survey was around off-portal commerce. We found off-portal businesses face a number of business challenges. See Appendix B for more details.

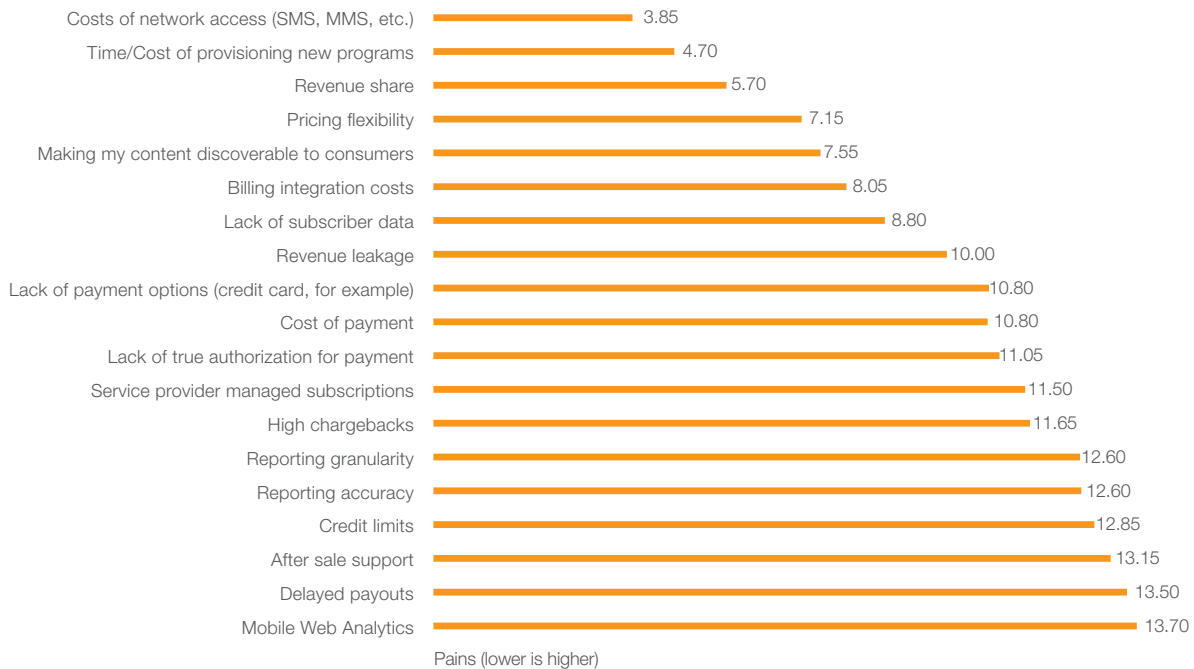
Off-portal businesses, particularly smaller merchants and developers, face significant barriers to entry. Going to market, which involves everything from on-boarding, provisioning, campaign approval and legal reviews, can exceed 30 days at best. Industry guidelines from trade groups such as the Mobile Marketing Association exist, but most service providers have their own provisioning process, audit/penalty incentive programs, etc., which adds complexity when distributing across multiple providers. Furthermore, discovery and customer acquisition costs can be cost prohibitive, especially for “long tail” companies.

Off-portal businesses use ad networks, print and online media and aggregators to promote their products. However, customer acquisition costs average \$15 each so smaller businesses need the ability to do targeted marketing.

Off-portal businesses also face growth challenges. Service provider revenue share still remains remarkably high (approximately 35-40%), which means off-portal businesses have less to reinvest in innovation. Premium SMS doesn't offer merchants the flexibility to price their products as they wish and is largely responsible for the high transaction failure rates affecting the industry (approximately 30% in the U.S. currently). Double opt-in (“Are you sure you really want to purchase this?”) is causing transaction “breakage.” U.S. providers typically refund transactions (approximately 17%) indiscriminantly to satisfy customers. Lastly, merchants have little visibility into transactional information and typically aren't paid for up to 90 days. Often this leads to settlement disputes with service providers.

In the survey, we asked off-portal businesses to rank order a list of business challenges from highest to lowest. The following chart shows the average responses, with lower numbers indicating a higher pain.

Figure 1: Off-portal business pains average rankings from 2008 survey



### ...And so do the service providers

Service Providers have their fair share of challenges as well. Onboarding off-portal businesses and allowing them to create offers and services involves manual workflows, which slows time to market and increases costs. Once partners are provisioned, partner management can be costly. Settlements and reporting take time and resources. Providers also incur high audit and monitoring costs to ensure that off-portal business are complying with their policies. Legal costs are also high as a result of aggressive marketing tactics by some offportal businesses. This is especially prevalent in the U.S. and creates a brand risk as well.

Revenue leakage is another big challenge. Transaction failure rates affect service providers as well as off-portal businesses. Providers currently leave 30% of revenues on the table due to errors such as subscribers exceeding spending limits, ineligibility for premium billing or network

issues to name a few. Similarly, refunds cost providers as well. U.S. providers incur between \$6-10 each time subscribers call customer support, which far exceeds the small price paid for a \$0.99 song. And because of their tendency to issue refunds indiscriminately, they leave even more revenue on the table. European service providers on the other hand typically route all support calls to merchants.

As service providers start to open network and BSS/OSS APIs to off-portal businesses to drive innovation, they face a number of other challenges. Exposing APIs such as location creates a liability risk due to stringent consumer privacy laws. It also creates a risk that network capacity could be overloaded, disrupting the customer experience. Providers need policy enforcement mechanisms to ensure that partners comply with service level agreements. Furthermore, there is a lack of standards providers can follow for securely exposing APIs to third parties.

### Provider services that off-portal businesses want

In the survey, we asked respondents to similarly rank a list of provider services in order of importance – a lower number

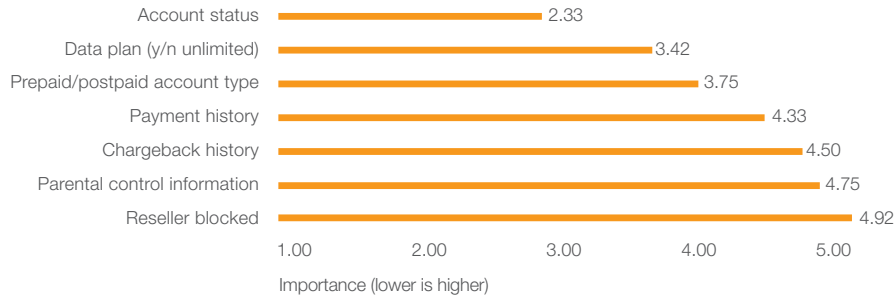
indicates higher importance. A table describes the services below the chart. See Appendix B for descriptions.

Figure 2: Services that are most important to off-portal businesses



The most important services are clearly billing, reporting, high throughput messaging and pricing flexibility. Similarly, we asked respondents to rank a list of customer information in order of importance – a lower number indicates higher importance. See Appendix B for descriptions.

**Figure 3: Customer information that off-portal businesses want**

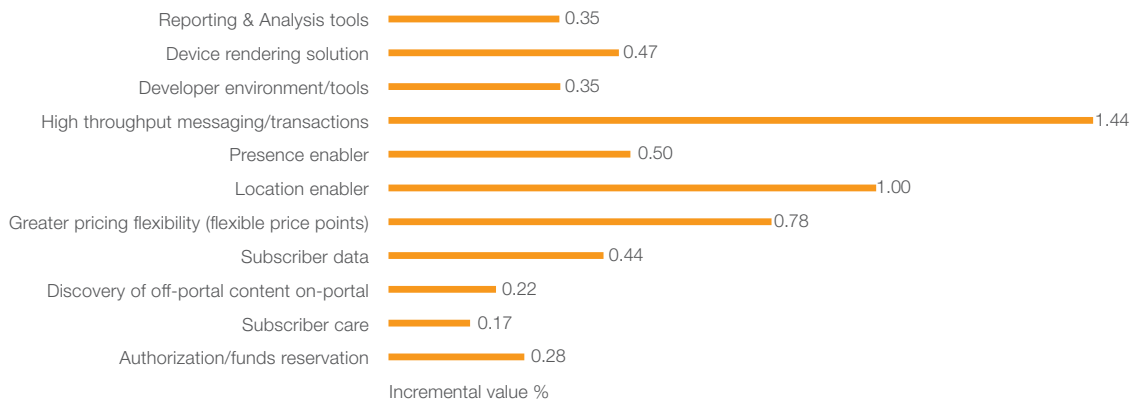


### Revenue opportunity

The million dollar question is how service providers should monetize third party enablement services. We explored two models in the survey. First, we asked respondents how much they'd be willing to pay incrementally for each of the services in Figure 2. We removed billing since it's already a universally offered service. The following chart shows

they're most willing to pay for higher throughput messaging, location and more pricing flexibility. The numbers are the incremental percentage content providers would pay to service providers on top of billing (e.g. they would pay 1.44% more for higher throughput messaging).

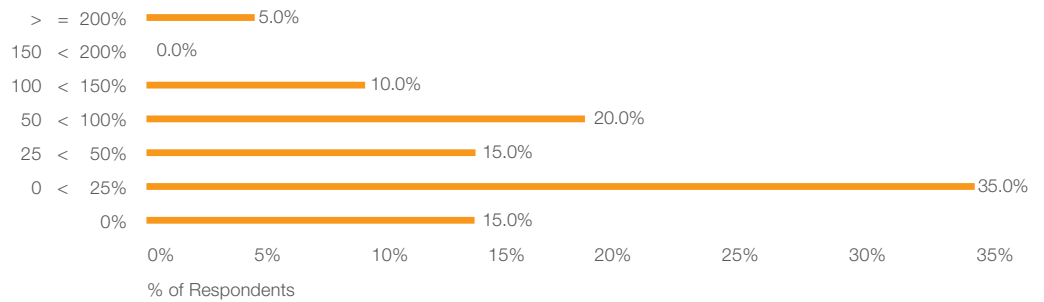
**Figure 4: Willingness to pay for services beyond billing**



Second, we asked respondents how much additional revenues they could generate if they had free access to the services in Figure 2 – except billing. On average,

respondents claimed they could generate up to 50% more revenues.

**Figure 5: Off-portal revenue growth potential if additional services are exposed for free**



The fee-based model could lift service providers' off-portal revenues by up to 6% if we add up the total for all services. The free model could lift revenues by up to 18% if we multiply providers' current revenue share (35%) by

50% industry growth. Clearly respondents prefer the latter business model, but are somewhat willing to pay extra for specific services.

## Conclusion

Service providers should approach the off-portal market similar to how Salesforce.com approached the cloud computing trend with its Force.com platform. Salesforce.com made a large investment in its infrastructure over the years and recognized it could monetize it by offering platform as a service to smaller third parties looking for a quicker way to market. Likewise, providers should view their networks and business support systems as monetizable assets that can offer substantial value to the off-portal ecosystem. To create a viable third party enablement offering, providers should consider the following:

- Open access to network services to foster more innovation, while implementing policy enforcement to ensure network integrity.
- Promote off-portal discovery services (e.g. banners, recommendations and positioning in the search engine) more aggressively to emphasize the value of their portals.
- Offer targeted marketing as a service to third parties – essentially outbound advertising.
- Automate all operational activities (e.g. partner onboarding, settlements) to speed time to market and reduce overhead.
- Be open to offering network APIs free, while perhaps charging fees for more bandwidth intensive services such as higher throughput messaging and location. “Freemium” business models may be another way to offset costs.
- Offer off-portal merchants more flexibility to create their own offers and support any price point and business model.
- Improve visibility into transactional data in order to minimize refunds and resolve partner reconciliation issues.

Service providers have an opportunity to reassert themselves in the off-portal market in order to protect their future revenue streams and strengthen their competitive position. They should embrace the trend toward open networks by playing the role of a third party enabler that fosters continual innovation. They should make it easier for their subscribers to access content and services they want instead of policing the experience. They can reclaim their leadership role and avoid disintermediation by being the trusted broker between off-portal businesses and consumers.

## Appendix A. SOURCES

This white paper is based on the following resources:

1. Online survey Amdocs conducted with 20 off-portal businesses in the U.S. and Europe. The majority of them are OpenMarket customers.
2. Interviews with analysts, service providers and content providers in the U.S. and Europe.
3. Interviews with subject matter experts in Amdocs’ OpenMarket business unit (the largest U.S. messaging and payments aggregator) and Content Services team in Europe.

## Appendix B.

### DETAILED GO-TO-MARKET CHALLENGES

| Activity  | Current Process / Technology   | Pains/Gaps   |
|---|--|--|
| <p><b>Connecting to the service providers' billing and messaging services</b></p> | <p>Off-portal businesses typically sign up with an aggregator (e.g. Open Market) which has a direct billing and messaging relationship with operators.</p>   | <ul style="list-style-type: none"> <li>• Manual workflows lengthen time to market.</li> <li>• Industry guidelines (MMA, CTIA) exist, but each carrier has their own playbook, provisioning process, audit/penalty/ incentive programs, etc.</li> </ul>   |
| <p><b>Creating premium SMS campaigns</b></p>                                      | <p>Aggregator typically submits application, facilitates approvals and provisions content provider on service providers' networks. Legal review and provisioning involve manual workflows.</p>   | <ul style="list-style-type: none"> <li>• Program launches can typically take in excess of 30 days. Need more streamlined workflows and approval process.</li> <li>• Lack of pricing flexibility for premium content transactions. Need to support all business models.</li> <li>• Carrier revenue shares make profitability and innovation difficult for content providers.</li> <li>• High transaction failure rates due to imperfect premium SMS billing methods.</li> <li>• High customer acquisition costs further erode profitability.</li> </ul> |
| <p><b>Discovery</b></p>   | <p>Off-portal businesses can use an agency or ad network who buys inventory in mobile, Web and print media. Aggregators such as OpenMarket offers ad insert capability. Larger off-portal businesses can pay service providers for positioning in their search engines, advertising on portal, recommendations and URLs.</p> | <ul style="list-style-type: none"> <li>• Customer acquisition costs ~\$15 per subscriber, creating a significant barrier to entry.</li> <li>• Long tail off-portal businesses with smaller budgets need more targeted marketing.</li> </ul>  |
| <p><b>Payments processing</b></p>   | <p>Aggregator typically handles payments and settlements via integration with a service provider's billing platform, which authorizes funds, processes payments, enables refunds and provides transaction information for reporting.</p>   | <ul style="list-style-type: none"> <li>• Transaction failure rates ~40% in the U.S.</li> <li>• Double opt-in causing transaction breakage (i.e. "Do you really want to purchase this?").</li> <li>• Need to replace premium SMS with direct billing integration (e.g. WAP billing) to improve user experience and minimize revenue leakage.</li> </ul>   |

## Appendix B.

### DETAILED GO-TO-MARKET CHALLENGES

| Activity   | Current Process / Technology   | Pains/Gaps  |
|--|--|---|
| <b>Reporting and settlements</b>                           | Aggregator provides reporting and settlements services.  | <ul style="list-style-type: none"> <li>• Receivables can take up to 90 days which delays revenue recognition for off-portal businesses.</li> <li>• Lack of transparency into transaction/refunds leads to reconciliation issues. Need for near real-time reporting..</li> </ul> |
| <b>Customer service and refunds</b>                        | In the U.S. service providers provide first line of support and typically refund indiscriminately to preserve customer satisfaction. In the EU and China, the service provider directs calls to the content provider support line.           |   |
| <b>Compliance and audits</b>                               | The service provider typically outsources compliance audits to an external company (e.g. WMC Global)   | <ul style="list-style-type: none"> <li>• Legal costs and brand risks an issue in NA due to aggressive marketing tactics by some off-portal businesses. Off-portal businesses should assume legal responsibility.</li> <li>• Audit and monitoring costs are high.</li> </ul>     |
| <b>Access to network services and customer information</b> | Location is primarily the only service offered beyond billing and messaging, albeit on a limited basis. Some service providers are standardizing location based on emerging standards /initiatives such as the Joint Innovation Laboratory.. | <ul style="list-style-type: none"> <li>• Service providers still concerned about liability and network capacity issues. Need for policy enforcement.</li> <li>• Lack of standards exposing services to third parties.</li> <li>• Consumer privacy issues</li> </ul>             |

## Appendix C.

### DESCRIPTION OF SURVEY QUESTIONS

| Service, gaps and pains                   | Description  |
|---|--|
| Billing                                   | Off-portal payments (i.e. charging off-portal commerce transactions on behalf of third parties to subscribers' phone bill)                           |
| Reporting and analysis tools              | Near real-time transaction reporting, failures, refunds, etc.  |
| High throughput messaging/transactions    | More bandwidth for campaigns such as interactive TV  |
| Greater pricing flexibility               | Support for any price point and business model, a-la-carte, subscriptions, etc.  |
| Subscriber care                           | Route support calls to content provider – since they're in a better position to build relationships with customers; give content provider refund API |
| Developer enablers                        | SDK, network APIs, forums, customer access for beta testing, etc.  |
| Subscriber data                           | Account status, data plan, prepaid/postpaid, chargeback history, parental controls, etc.   |
| Presence enabler                          | Online status  |
| Location enabler                          | Subscriber location information  |
| Device rendering                          | Transcoding Web pages and delivering premium content in correct format   |
| Authorization/funds reservation           | Secure funds before delivering content   |
| Discovery of off-portal content on-portal | Recommendations, search engine placement, advertising  |
| Account status                            | Subscriber activation status   |
| Data plan                                 | Subscription to data plan, unlimited   |
| Prepaid/postpaid account type             | Subscription type  |
| Payment history                           | Tracking payments that individual customer made to a requesting content provider   |
| Chargeback history                        | Refunds credited back to individual accounts   |
| Parental control information              | Access control to certain types of content   |
| Reseller blocked                          | Ensure reseller has access to operator's billing system  |



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## About Amdocs

For 30 years, Amdocs has ensured service providers' success and embraced their biggest challenges. To win in the connected world, service providers rely on Amdocs to simplify the customer experience, harness the data explosion, stay ahead with new services and improve operational efficiency. The global company uniquely combines a market-leading BSS, OSS and network control product portfolio with value-driven professional services and managed services operations. With revenue of \$3.2 billion in fiscal 2011, Amdocs and its over 19,000 employees serve customers in more than 60 countries. **Amdocs: Embrace Challenge, Experience Success.** For more information, visit Amdocs at [www.amdocs.com](http://www.amdocs.com)

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