Use Case: Mobile Targeted Advertising

GAIN AD REVENUES WITH CONTEXTUAL REAL-TIME SUBSCRIBER AND NETWORK INTELLIGENCE

What Is the Value of Mobile Targeted Advertising?
Operators can gain new revenues from mobile advertising by taking advantage of subscriber and network intelligence to better target and personalize ads. Working with advertising networks, advertisers, and content providers, operators can reach target audiences across network types and various end user devices with a network-centric solution that is highly flexible and creative. Additionally, rich media ads can be delivered "toll-free" for higher consumption, with data usage not added to a subscriber’s monthly quota plan and instead billed to the advertiser or advertising network. The effectiveness of the Mobile Targeted Advertising approach is measured by higher click-through rates for mobile ad campaigns which can enhance the revenue potential for operators.

What Problems Does It Help Solve?
Advertisers are always striving to find new and more effective ways to reach consumers. While protecting subscriber privacy, operators can utilize subscriber and network information to help advertisers more effectively target and personalize advertising. More quantifiably effective advertising means higher advertising rates and higher revenue for operators.

Using deep packet inspection (DPI) integrated into the Cisco Mobile Packet Core, the operator gains a view of all mobile internet activity, including application usage, mobile Web browsing, over-the-top video content viewed, and other behavior. This information is securely captured in the Cisco Quantum Analytics Suite. Once the subscriber’s mobile usage is analyzed, it is anonymously classified into demographic and other categories and policies in the operator’s network provide this information along with the phone’s encrypted unique device ID securely to the ad network via an operator-provided API. Advertising media can be text and image banner ads, rich media video in-banner ads, video pre-roll or overlay ads, or in-application ads. Additionally, the operators’ real-time network data can let the ad network know what media would be optimal for current network conditions.

Mobile Targeted Advertising requires intelligent network technologies that control the allocation of network resources based on subscriber plans. Operators also benefit from solutions that provide a fast, easy way to introduce new business models; gather network analytics per subscriber; enable multiple Wi-Fi features; and leverage the application awareness and policy enforcement of the operator’s intelligent mobile packet core.

What Are the Benefits of the Mobile Targeted Advertising?
- Gain new and higher advertising revenue with more personalized, targeted ads
- Monetize new partnerships within the advertising ecosystem of content providers, advertising networks, advertisers, and publishers

Why Cisco?
The Cisco Open Network Environment (ONE) converges physical hardware and virtual software technologies to make the network easier to program, access, use, operate, and manage. Cisco ONE can help you drive new revenues and monetize your network in new and profitable ways. Cisco’s solutions, platforms, and technologies provide a scalable, standards-based intelligent IP architecture that enables you to integrate subscriber knowledge with network and application intelligence in real-time to offer an expanding portfolio of “Use Cases,” which are innovative, revenue-generating applications and services that:
- Drive profitable data revenues by providing user personalization and seamless, secure heterogeneous access across 3G, LTE, and Wi-Fi networks
- Evolve your network into a platform for both direct and third-party partner monetization
- Enable you to establish profitable new business-to-business-to-consumer (B2B2C) revenue models
- Help you enter new, growing markets such as cloud services, content delivery, enterprise services, location-based services, machine-to-machine (M2M) applications, and more

To help deploy mobile Internet solutions efficiently and successfully, Cisco Services offers consulting for design, implementation, integration, and support. For more information, please visit: [http://www.cisco.com/go/mobile](http://www.cisco.com/go/mobile)
Cisco solutions to enable you to deliver Mobile Targeted Advertising along with many other revenue-generating services include:

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<thead>
<tr>
<th>Cisco Solution</th>
<th>Description</th>
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<td>Cisco ASR 5500 Multimedia Core Platform</td>
<td>Part of the Cisco ASR 5000 Series packet core platform, the Cisco ASR 5500 Multimedia Core Platform combines massive performance and scale with flexibility, virtualization, and intelligence so network resources are available exactly when they are needed. The Cisco ASR 5000 Series’ elastic architecture enables its software-based mobile functions to utilize system resources across the entire platform to optimize performance and maximize efficiency. This approach allows operators to deploy more efficient mobile networks that can scale to support a greater number of concurrent sessions, optimize resource usage, and deliver enhanced services. Integrated Deep Packet Inspection (DPI) and value-added services on the Cisco ASR 5000 Series are deployed within the data session instead of requiring it to be off-loaded to standalone platforms.</td>
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<td>Cisco Quantum Policy Suite</td>
<td>A comprehensive policy, charging, and subscriber data management solution that allows service providers to control and monetize their networks and to profit from personalized services. The solution supports the rapid and efficient deployment, management, and monetization of basic and advanced service offerings, such as service tiers, personal price plans, prepayments and a growing array of application-based services.</td>
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<td>Cisco Quantum Services Bus (QSB)</td>
<td>Provides a common bus architecture that allows mediation, connectivity, and communication among and between network elements through a standardized framework. The QSB facilitates network data collection, aggregation and orchestration to augment information in all decision processes. It helps service providers quickly create and modify use cases for monetization while optimizing network costs. It can help introduce new business models by exposing network capabilities and information with SLAs to third-party application and content providers. For example, in addition to enabling secure access by the advertising network to a subscriber’s anonymous targeting information, the operator-deployed Quantum Services Bus can also convey subscriber location information, creating the opportunity for the advertising network to work with local advertisers for location-based advertising. This brings in new advertisers and new revenues for operators, content providers, and advertising networks.</td>
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<td>Cisco Prime Analytics</td>
<td>Provides business and network analytics capabilities that can enable both historical trend and real-time predictive policy decisions. Includes dashboards for data visualization and programmable interfaces to create system alerts in conjunction with policy. It includes indoor location analytics such as foot-fall, dwell time, and more. It includes the ability to leverage the DPI capability within the Cisco ASR 5000 Series of packet core solutions to correlate massive volumes of dynamic usage data and catalog data to deliver up-to-the-minute insights. Provides visibility to marketing to help determine impact of Mobile Targeted Advertising plans, and to create new tariff plans for new revenues and customer retention.</td>
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| Cisco ASR 5000 Series Small Cell Gateway | Provides intelligent Wi-Fi access for subscribers, including support for:  
  - 3GPP Interworking WLAN (WLAN) Packet Data Gateway (PDG) for untrusted Wi-Fi networks  
  - 3GPP Interworking WLAN (WLAN) Packet Data Interworking Function (PDIF) for untrusted Wi-Fi networks  
  - 3GPP evolved Packet Data Gateway (ePDG) for untrusted Wi-Fi networks  
  - 3GPP iWLAN Tunnel Terminating Gateway (TTG) for untrusted Wi-Fi networks  
  - Evolved Wireless Access Gateway (eWAG) for trusted Wi-Fi networks  

For Mobile Targeted Advertising, operators can offer ubiquitous service across 3G, LTE, and Wi-Fi access networks, and can provide seamless collection of application usage, mobile Web browsing, etc. while the subscriber is on a Wi-Fi network to aggregate with other mobile usage for better ad targeting.