

Why Redknee?

Monetize new data revenue streams with a flexible rating engine that rates on content, application/protocol, subscriber information, dynamic and static parameters, buckets, time and day or IMS services

Proven solution deployed worldwide by Vodafone, O2 Group, Rogers Wireless, Digicel, TSTT, MTC-Vodafone, Telfort and more


Minimize data and content revenue leakage with real-time rating and charging capabilities

Segment subscribers with targeted price plans and have the capability to run promotional campaigns on demand

Reduce CAPEX & OPEX for all IP services with a single converged rating and charging engine for prepaid, postpaid and hybrid accounts

Supports IP services in 3G networks, pre-IMS, IMS and Online Charging System (OCS) environments

Exceptional integration expertise and proven interoperability with multiple vendors such as Nortel, Starent, Cisco, Ericsson, Motorola and more



High-speed IP connectivity and advanced devices are fueling a new wave of innovative multimedia services that revolutionize the end user's experience. Redknee's IP Rating & Charging Solution monetizes mobile content and data streams from application level down to the packet level with differential rating and charging.

Optimize data revenues with personalized price plans

Market Need

The move by telecom networks from circuit-switched to packet-based IP infrastructures to cut costs and expand service offerings is well under way. Operators are keen to launch a range of new innovative multimedia services such as peer-to-peer instant messaging, mobile TV, online gaming, VoIP, file sharing, whiteboard sessions and much more.

These new IP services have the potential to drive new revenue streams for operators, but how can operators make the experience convenient enough for users to increase uptake and ultimately achieve critical-mass adoption?

This evolution of the communications industry has serious impacts on OSS/BSS as operators are limited to traditionally restrictive pricing by volume, time or flat rate price plans. Without real-time rating and charging capabilities with deep packet inspection, operators are exposed to revenue leakage and are unable to capitalize on the total revenues that IP services bring. Operators need a rating and charging solution that overcomes the following barriers:

- Flat rate price plans that do not personalize plans for different user groups (families, enterprise, residential, group users)
- Revenue leakage from non real-time rating and charging (mediation platforms)
- Capped incremental revenue from traditional voice and messaging services
- No policy control* and inefficient management of network resources

Effective charging and intelligently rating new services in an IP environment is critical for operators to ensure efficient revenue collection. Removing OSS/BSS barriers paves the way for both operators and subscribers to reap the benefits of monetizing and personalizing IP services.

Redknee's Solution

Redknee's IP Rating & Charging is a proven solution that enables operators to monetize new revenue streams with powerful rating, charging and policy management.* Designed to evolve with an operator's business requirements, the solution flexibly rates, provides personalized bundles and performs bearer level packet analysis.

With exceptional expertise in integration, Redknee's IP Rating & Charging can use its own packet inspection blades or seamlessly integrate with third-party deep packet inspection modules and intelligent GGSN/PDSN.

Mobile data and content aware rating and packet inspection allow operators to segment their subscribers and meaningfully work with third-party content providers to maximize revenue potentials through any combination of on and off-net, in real-time or online. This brings new revenue into the business and increases mobile data usage across the subscriber base through the creation of personalized IP service bundles and price plans targeted at different user groups.

Take a look at how leading operator MTC-Vodafone is successfully increasing the adoption of mobile TV and video services. With a "no upfront cost" strategy, where subscribers pay no activation fee and no SMS fee to request or receive a download, MTC-Vodafone was able to penetrate the market and entice subscribers to easily try their new service. Redknee helped monetize MTC-Vodafone's mobile TV service by enabling their rating and charging solution based on the duration of the download.

* For more information on policy control, please refer to Redknee's Policy Decision Rules Server solution bulletin.

Redknee's value proposition

VALUE PROPOSITION	REDKNEE	Router-Based Inspection	Mediation Vendor
Single correlation point for multiple mediation elements		✗	✗
Personalized IP services experience		✗	✗
Integrated Policy Decision (PDF)		✗	✗
Zero-rate Bearer / Transport		✗	✗
Converged Prepaid / Postpaid platform for all IP Services		✓	✗
Content and Value-based Pricing		✓	✗
True Real-Time Rating & Charging Engine	✓	✗	

“Redknee’s real-time billing solution provides MTC with the flexibility to deploy, support and charge for a range of value-added services, including SMS, MMS, GPRS, content downloads and data applications, while enhancing the subscriber experience and opening up new high-value revenue streams.”

— Mr. Haitham Al-Khaled
Deputy Director-Business
Development Division,
MTC-Vodafone

Packet analysis opens up new revenue streams

Operators with traditional mobile data rating and charging cannot provide a distinction between the different types of content. This forces operators to offer only a flat rate plan or limits them to pure volume and time elapsed schemes. Redknee’s IP Rating & Charging is capable of mobile data and content aware rating that is based on and not limited to:

- Volume
- Duration
- Destination IP
- Port
- Subscriber service
- Quality of service
- Event
- Roaming status
- URL
- MSISDN
- Access technol-
- Buckets

Redknee’s deep packet inspection capability gives operators more insight to identify types of data traffic at the application protocol level, including:

- WAP 1/2.x
- Streaming (RTSP)
- Email
- Web
- MMS
- Telnet/FTP

This combination allows the operator to truly correlate value to data and content offerings through differential rating, enabling operators to open up new revenue streams and maximize them.

Prevent Revenue leakage

Existing OSS/BSS do not have the real-time ability to rate or hotline subscriber data sessions, especially on a differential or per-flow basis. IP Rating & Charging proactively minimizes revenue leakage, errors and fraud by handling balance management, service verification and monitoring subscriber activities in real-time. Services can be blocked by configuring a flexible combination of destination profiles (URL, IP address, port) and/or specific application protocols. There are no more surprises as operator now have full control to block and permit services individually based on the subscriber status.

Personalize all subscriber segments

With flat rate pricing, some subscribers are either deterred from trying new services or others take advantage of the available bandwidth. Operators can avoid this situation by segmenting their subscribers. IP Rating & Charging enables operators to target different groups of users with customized price plans. For example, operators can attract corporate groups who demand always-on connectivity and use high-end data services with bucket rating, cross bundling of services and flexible content-aware (protocol, URL, IP address) rates.

Parents can utilize IP Rating & Charging’s personalization capabilities to implement parental control options. IP Rating & Charging provides parents with control over global black and white lists. This can be based on URL and subscriber information such as age with parental opt-in/out or parents can restrict the amount of usage by the number or size of downloads.

Regardless if subscribers are prepaid, postpaid or hybrid, all user segments can experience truly customized personalization. IP Rating and Charging increases ARPU through differential rating, allowing subscribers to understand exactly what they are paying for.

Content correlation

Attract more subscribers and content providers with the ability to rate with granularity down to the packet level, making mobile portals profitable.

IP Rating & Charging also has the ability to distinguish charges between bearer transport and the event. Zero-rating bearer flows allow the operator to charge only for the data event (MMS, download, etc.) without double-charging the subscriber for the transport. This predictable charging behaviour makes mobile portals more attractive and contributes to increased mobile data usage across the entire subscriber base.

Exceptional integration expertise

IP Rating & Charging is 3G and IMS-ready through support for online charging and policy management for multimedia IP services via standardized Diameter interfaces. Redknee was one of the first to commercially launch IMS compliant Online Charging Systems (OCS). With proven integration of prepaid platforms and deployment experience with various GGSNs worldwide and successful IOTs with major network equipment providers over Diameter interfaces, Redknee has taken a leadership role.

Supports pre-IMS and 2.5G networks

Redknee’s RADIUS based solution supports all 2.5G and pre-IMS networks for operators who do not have an intelligent GGSN/PDSN or for those who want to utilize packet inspection blades from either Redknee or a third-party.

