Usage Processing for Usage-based Billing

Transform Markets

A multi-national enterprise was selling into a nearly saturated market that had nominal growth potential and fierce competitors. The solution for growth? Transform the market dynamics and basis of competition by providing a usage-based service instead of an expensive, capital-intensive one-time purchase. As a result, the manufacturer opened an untapped Tier 2 market where competitors could not compete. It became a service company charging for images by the scan, who is now growing its business over 50% a year.

Manage Usage Complexity

Billing customers for how much they use sounds simple enough. But collecting that usage and processing it at scale is anything but simple. Spreadsheets and manual effort are commonly used to pull data from the monitored system, reformat the data, and then load the data into a billing system once per billing period so it can be billed or invoiced. This manual approach can work at low volumes, but your risk increases exponentially as volume rises and the number of people involved grows.

Decisions to Consider

Questions to Ask Your Vendor:

- How is usage data collected?
- Where is usage data formatted, mediated, and rated – in your billing system, in a spreadsheet, in another system?
- What mediation and rating capabilities are offered?
- Can usage be re-priced?
- Can usage be pooled across accounts?
- Can usage thresholds trigger customer alerts?
- Is manual effort or spreadsheets required to collect, format, mediate, or rate usage?

Aria Benefits

- Automates usage processing
- Provides control over the entire process
- Supports more monetization models than other Cloud billing providers without coding
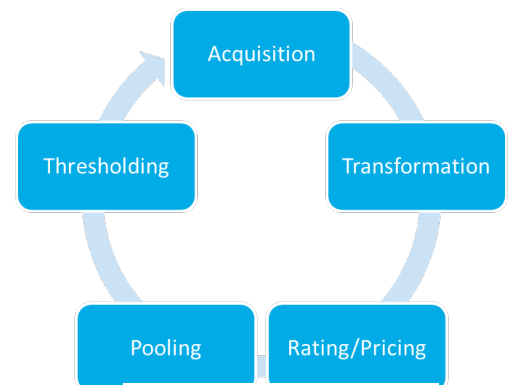
You have a lot of choices and decisions to consider when it comes to usage-based billing. Beyond collecting usage data, you need to decide how to price it: flat rate, standard tiered, volume tiered, fixed rate per tier, or many more. Usage can accumulate and be pooled across departments or accounts; for example GBs of storage or wireless family data plans. Overage charges can be applied when usage thresholds are crossed, or payments applied mid-billing cycle. The key to success is automating the process with a flexible system to ensure bills are correct and customers are engaged around their usage before an unexpected bill arrives. Figure 1 shows the 5 stages in the consumption/usage lifecycle:

Acquisition – how usage data is acquired from source systems
Transformation – how usage data is transformed or reformatted so it can be understood and prepared for further processing
Rating/Pricing – how usage is rated or priced based on selected monetization model (flat rate, standard tiered, volume tiered, etc.)
Pooling – how/if usage is aggregated or pooled across company departments, resellers, or other account attribute to impact the price charged
Thresholding – how customers are engaged during their billing cycle around their usage/consumption patterns. How will they be alerted when their usage crosses a fixed month-to-date, period-to-date, percentage, or other value?


Figure 1 – Usage

Usage Pricing Choices

Consumption or usage-based billing comes with many pricing choices. Telecommunications companies call this "rating" – where monetary values are assigned to units of usage. A great usage-based billing system will enable you to easily change the associated pricing or monetization model to test innovative pricing and capture new market segments. Figure 2 shows some of the usage options Aria supports. These options can be combined and layered together with basic subscriptions and one-time purchases to create truly unique offerings your competitors can't match. The three usage monetization models include:

Figure 2 – Usage Monetization Models
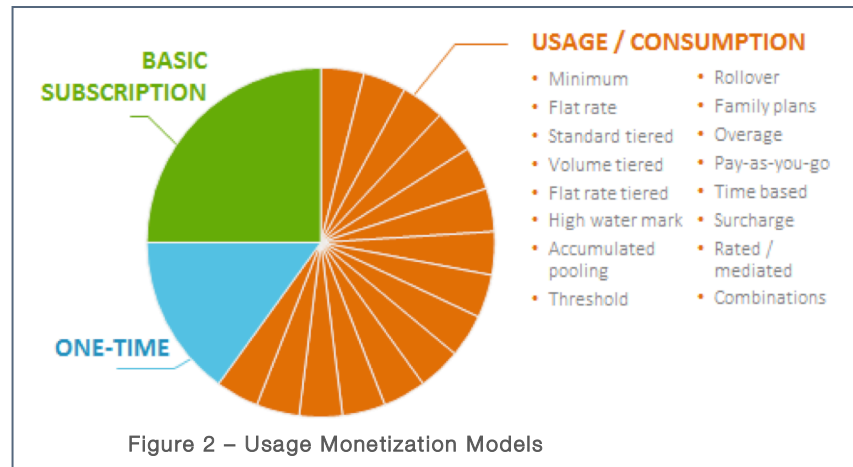
Pre-Paid – Users create a credit balance with the ability to draw down the balance until it hits a minimum amount. Once hit users can be charged or given the option to make a change to the account.

Minimum – Accounts have a minimum threshold before billing takes place. If it's 25 USD or Euros, the customer or account can accrue up to that amount without any billing taking place. After the minimum threshold is crossed, a charge is created which can be billed or collected via electronic payment.

Tiered – Usage is priced with discounts or surcharges built in for higher usage. Electric bills are typically done this way, pricing usage in standard tiers where each unit is charged at a standard rate within that tier. As usage crosses tiers, the standard rate changes for the next tier. Volume-tiered usage is slightly different, as all usage is re-priced when usage crosses a tier threshold. Tiered usage that gets less expensive is great for encouraging customers to move more usage to you and away from competitive offerings.

How Usage can Work – Customer Example

A multi-national provider charges its customers for access to its data. Based on the granularity (detail) and size of data requested the pricing changes. The provider offers nearly 100 different plans covering over 100 different services, with thousands of inputs feeding into tiered rate schedules that ultimately produce a monthly bill. Usage notifications keep customers up-to-date throughout the month so they can alter their usage if It makes sense.

> Beware: Many other billing systems force you to transform the usage data before loading it, effectively making the acquisition and transformation steps manual processes.

Aria automates the entire consumption/usage lifecycle (Figure 1) for this customer because manual spreadsheets just cannot keep up with managing this amount of data. Aria's Workflow acquires (collects) data from the host system at preset intervals. Aria then automatically transforms the host data for rating and pricing using workflows, decision tables, and rules. After transformation, usage data is priced and/or pooled depending on the plan. Pooling enables multiple customers or accounts to take advantage of shared usage volume to ultimately pay less for the data (higher usage in this case costs less, unlike electricity). Notifications by region, currency, account type, and message are sent based on account usage and pooled account usage to provide clear customer visibility. Customers can also access near real-time usage stats via a self-service application that accesses Aria to display the usage detail. And, if a plan is changed, usage can be re-priced to take advantage of the plan change. The advantages? You do not need to modify your other systems to support usage-based billing, eliminating the need to manage manual, error-prone processes.

About Aria

Aria, the number 1 ranked cloud billing provider, helps enterprises monetize and grow recurring revenue at scale. Proven by the world's most demanding businesses, including AAA NCNU, Constant Contact, Falck, Hootsuite, Pitney Bowes, TDC, and VMware, Aria's cloud billing and monetization platform helps enterprises modernize their revenue operations with a better way to manage offers, customer accounts, billing and financial processes. With Aria, enterprises get to market faster with a wider variety of products and services, retaining more customers and maximizing lifetime value. To learn more visit ariasystems.com.