



InvisibleHand Lowers Bandwidth Margins for Hosts

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If the water company charged by the size of the pipe leading into your home but didn't allow you faucets to control the flow, while you might wash your hands or take a drink now and then, most of that water would run unused down the drain. A water company like that wouldn't be in business for long. But that's the way bandwidth is sold, says Jim Brown, CEO of the Massachusetts-based InvisibleHand Networks. www.invisiblehand.net

While the bandwidth business is not necessarily a losing proposition for Web hosting companies, it lacks the kind of strict efficiency that keeps suppliers of more tangible resources, like water, in business. Bandwidth, says Brown, has always been a fixed expense for hosting providers, and one that must be considerably over-bought to allow for spikes in usage. It is also a perishable resource, and unused capacity simply slips down the drain.

InvisibleHand's solution is its Merkato product, a software platform for the dynamic pricing, selling and allocation of bandwidth. By introducing efficiencies to the bandwidth supply chain, from the buyer all the way to the carrier, Merkato promises to tighten margins for hosting providers, allowing them to purchase less capacity and see more revenue per Megabit. Without the ability in place to dynamically allocate bandwidth flow, Brown calls the current bandwidth supply relationships "a lose/lose situation. The buyers of bandwidth don't like it because they end up paying for capacity they're not using. And the sellers tend not to like it either, because IP bandwidth is a perishable resource."

The Merkato platform allows hosting customers to purchase capacity as they need it, in increments as small as five minutes. Such flexibility can be a significant benefit to all kinds of e-businesses, which are not always able to reconcile the fixed cost of their bandwidth with a fluctuating revenue source. Using the Merkato platform to purchase capacity, an online business with revenues generated by its traffic, like a gaming or content site, can adjust its costs to bring them more in line with revenues. "Variable revenue and variable costs means they can maintain their margins," says Brown.

With customers buying bandwidth to meet demand, hosting providers are able to "value price" capacity, says Brown, based on periods of high demand, in a model similar to long distance phone billing. Rather than passing along the cost of excess bandwidth needed to account for traffic spikes, the hosting provider can smooth out demand, selling idle capacity at a discounted rate.

The Merkato platform operates using separate buying and selling agent software. Buyers interact with the software via a Web browser, selecting a bandwidth purchasing strategy that can range from very simple to very sophisticated.

On the seller's end, providers input how much capacity they're willing to sell, and the price they're willing to sell it for. The buyer and seller agents interact in real-time to deliver capacity to meet the needs of the buyer.

Set-up of the Merkato system, including server costs, requires in the vicinity of \$10,000, says Brown. After that, customers are charged on either a per-user or per-transaction basis.

As a proof point, both for the effectiveness of the marketplace and for the fact that hosting customers would be interested in purchasing bandwidth this way, says Brown, InvisibleHand started a new company, a hosting provider built on the Merkato software, called StreamingHand <http://www.streaminghand.net>

In just over a year, says Brown, StreamingHand has grown to profitability, now serving 45 customers, which see an average savings of 30 percent on their bandwidth charges. And in addition to being proof of the software's effectiveness, and the revenue it generates, InvisibleHand is realizing other benefits to StreamingHand.

The Merkato platform is currently in use by colocation and exchange provider Telehouse America. The company has set up a bandwidth marketplace, in which StreamingHand is a participant as both a buyer and a seller.

"Because of StreamingHand, the Merkato platform comes with a new customer," says Brown, "which helps exchanges like Telehouse achieve critical mass."

Brown believes the success of the Merkato platform will come as service providers are driven away from the "fundamentally flawed and unsustainable" circuit-based business model. "The capital markets for service providers are closed," he says. "These companies need to figure out new ways to generate revenue."

<http://www.thewhir.com/features/invisible-hand.cfm>