

Opportunity Genesis: Telecommunications Innovation; Avoiding a Billion Dollar Mistake

Client: *Global 100, Japanese Technology Leader*

Challenge: Working with the New Ventures Director, the mission was to assist in the development of a targeted commercialization strategy for a new wireless technology. The client wanted to jump on the wave of wireless broadband deployments that held the promise of major returns for early movers in the market. The client just completed a successful field trial of the technology platform in New York City, and felt ready to launch a new venture to commercialize the technology across the United States. What was lacking was an application focus and deployment roadmap. **You want to create growth opportunities from your technology innovations. You need a path to market to ensure commercial success.**

Diagnosis: A quick review of their test data underscored that the client had developed superior wireless data communications technology that yielded reliable broadband speeds, wide network coverage and high security. What was not clear from the tests were which early adopter segments would value the technology. Also missing was a path to profitable commercial deployment.

The client was convinced of the commercial viability of the technology. This conviction did not come from a careful analysis of the market applications, needs drivers and ability of their technology to deliver on those needs. Rather it came from the huge investment momentum and rapid rollout of competitive, but technically inferior services. At the time of our analysis, Metricom's Ricochet competitive service, the hot competitor, had over \$1 billion in investment, including backing by Paul Allen, co-founder of Microsoft. Deployments of the Ricochet Metropolitan Area Networks were rolling forward in 10 cities, and an additional 10-20 were in planning. The Ricochet concept looked like a winner, and the client had the technology edge to beat them.

In order to support the client's plan to take on the Ricochet network, and find the strong commercial traction points for their technology, Product Genesis employed our Opportunity Scan (OS) methodology. This approach allowed the client to see the critical success factors of competitive environment, navigate market

dynamics, and assess user needs prior to developing an innovation plan. **You really have to understand the market landscape thoroughly before you start investing in innovation.**

Methodology: Product Genesis' Opportunity Scan is a powerful set of tools. Its first group of modules provides a framework to capture a snapshot of "what's really going on here." Because new technology markets are dynamic, a healthy degree of skepticism is recommended when evaluating market assumptions. Rather than taking for granted that Ricochet was a winning proposition, we compared the client's technology and service concepts against Ricochet, and emerging Wi-Fi standards (802.11a, b, g). We also compared incumbent and emerging messaging and cellular technologies (2.5 and 3G) on their ability to deliver on value propositions for more than 50 potential business and consumer applications. Technology and service combinations were scored on both the key application requirements, and on the critical adoption factors identified for target user groups. This comparison scoring is an essential part of the methodology, which forces an unbiased evaluation of the competitive threats.



The analysis was sobering to the client. While their technology and services concepts scored well against Ricochet, no technology/service combination was a clear winner against the emerging Wi-Fi technologies on the data applications, and the expanding cellular options on the voice and data crossover applications. There was no "killer app" to drive adoption of the client's technology, and no clear reason why Ricochet was attracting the level of investment or apparent adoption. **The assumptions that Ricochet was a winner may be fatally flawed!**

Results: Based on our analysis, the client began to monitor Metricom's projections. They deferred their own rollout investment, planned for \$1 billion in Q2-2001, and instead pursued a licensing approach for capitalizing on their technology investment. By July of 2001 Metricom had filed for Chapter 11. It became clear that after more than a billion dollars they had not achieved a profitable critical mass in the marketplace. There was no "killer app" to drive adoption of the data centric technology, at least not one that would support a dedicated, closed wireless data network deployment. **Through the careful analysis of competitive alternatives, we were able to guide our client to avoid following the crowd in a billion dollar mistake.**