

## Case Study of Innovation Risks

**Speeding up innovation requires a systematic approach. Unfortunately, this also demands a risk-taking economic climate and long-term investments, as this case study shows.**

---

### Core Topic

Knowledge & Content Mgmt., Collaboration  
& E-Learning: Knowledge and Intellectual  
Capital Management

### Key Issue

How will enterprises achieve a return on  
investment in knowledge management?

Starlab BV was a private research laboratory founded by Walter De Brouwer, with campuses in Brussels and Barcelona. The mission of Starlab was to engage in open-ended, pure research and then bring the resulting innovations to life in real situations. The company was active with several technology domains. In each domain, in addition to pure research, Starlab cooperated with industry partners to ensure innovations were leveraged systematically. Additionally, Starlab offered analytical and computational skills and tools that guaranteed significant productivity increases.

Some initial successes (e.g., i-Wear) and sponsors (e.g., Adidas, AT&T, France Telecom, Orange, Philips, Samsonite) indicated that the Starlab model for innovation was feasible. Then came the economic slowdown, which called for a risk-averse funding approach by venture capitalists, triggering a chain of events that culminated in Starlab filing for bankruptcy in June 2001.

**Problem:** The speed of the net economy and the pace of change of technologies require a more-disciplined approach to the process of innovation. Leaving it unmanaged, loosely managed or just to the traditional corporate laboratories or incubators doesn't reach the expected productivity in the volume of innovation, and doesn't meet the demand for significant investments in skills and tools. Most successful companies tend to be very conservative and innovate by incremental steps, which typically results in very little real breakthrough products and services.

**Objective:** The Starlab proposition (vision) was that the next wave of major innovation would come from innovations based on broad multicultural, multidisciplinary research, rather than on research that was narrow and deep. Consequently, Starlab collected a diverse group of academics. Their proposition was

### Gartner

Entire contents © 2002 Gartner, Inc. All rights reserved. Reproduction of this publication in any form without prior written permission is forbidden. The information contained herein has been obtained from sources believed to be reliable. Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Gartner shall have no liability for errors, omissions or inadequacies in the information contained herein or for interpretations thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice.

that if you got enough very clever multidisciplinary thinkers together, something great would eventually occur. This is a very high-risk/high-reward strategy based on the assumption that, while breakthrough innovation may occur infrequently, it will probably only work occasionally; but when it does work, the rewards could be huge because the innovation may well be truly revolutionary.

### **Approach:**

1. Starlab assembled a full-time team of 111 researchers from 36 countries with expertise in 40 disciplines — including emotics, neurobotics, chaotic computing and transarchitecture; all the researchers were charged with developing a list of innovative projects.

2. The research model was to form consortia with industry (e.g., i-Wear) plus internal consortia consisting of a collection of researchers. Part of the reward/motivation system was that when an internal consortium was formed to work on a problem, the participants would get a percentage of the company that would be spun out if the innovation succeeded.

3. Starlab put a lot of effort into the social and community aspects of research. It created a community within which research could occur. For example, it moved families, as well as researchers, to Belgium, and found jobs in Starlab for researchers' family members. Even the reward system was intended to promote collaborative research and commitment to the project.

**Results:** Initially, Starlab's proposal found a good level of acceptance. The reason was that in the previous few years, the Internet "euphoria" had brought with it the perception that a new, fresh "boom age" was starting and Starlab's proposition was consistent with it. After a few years, the group developed a few consortia, started a number of spinoffs and developed several technologies ready to be presented to the market.

It's arguable that if Starlab could have found funding for another five years, the innovations might have paid off. The problem is that the "hit rate" with the Starlab multidisciplinary research model is probably very low. In the "dot-com" attitude that prevailed in the last couple of years, venture capitalists were looking for short-term payback, not long-term, high-risk/reward investments. The "hot" economy of the second half of the 1990s was part of Starlab's problem because it set expectations of fast rewards, which are unlikely in the Starlab model.

Due to the June 2001 bankruptcy, many of Starlab's initiatives have collapsed, and the company itself only exists on the Web and through some of the initiatives it helped start. Starlab's approach may be correct, but critical problems began to arise when the economic climate changed, and while the demand for additional investments in designing, constructing and marketing the new products was still high.

**Critical Success Factors/Lessons Learned:**

- The business model demanded a risk-taking climate — a climate able to support the significant, upfront investments and uncertain business case and limited quantitative projections regarding levels of reuse of research, cost of the project and return on investment.
- The business model and the company strategy were not well synchronized. Management and investors assumed the business model meant that the time to reach the break-even point was relatively short (i.e., the dot-com model), but the initiatives were run as though time and money were not issues, which is the mentality for a basic research model.

**Bottom Line:** Starlab was a brave experiment with a very high risk/very high reward model of innovation. Its innovation model may indeed be valid, but in an economy that prizes fast returns and has become increasingly risk-averse, Starlab was unable to find courageous enough investors to prove the hypothesis.