Corporate Structure for Technology Infrastructure

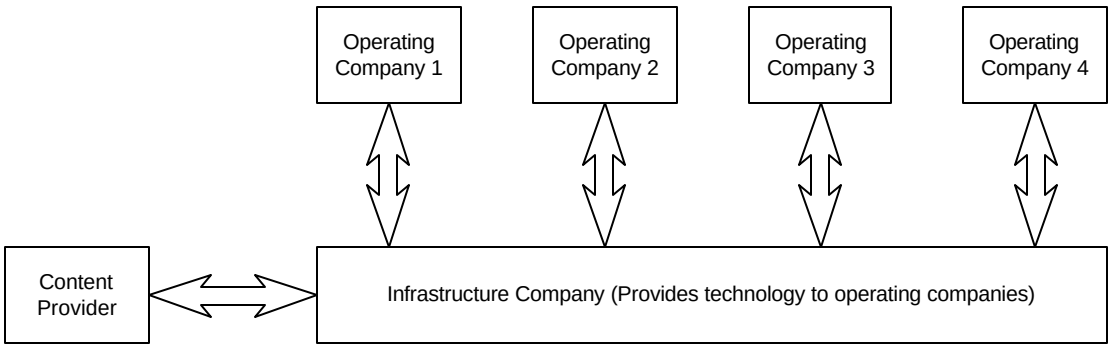
Companies that develop technology in new market areas face risk from not applying the technology in a manner that is understood or useable by their targeted market – or they may be facing the risk that the technology is ahead of the market demand. The base technology may be sound, but a company that misses its market usually does not have a second chance.

Follow-on companies that take advantage of the learning experience of the now-defunct first company to market have a greater chance of success. This document discusses a time-tested approach that the author has applied to an Internet startup as a means of minimizing risk and broadening the number of participating partners, while maintaining flexibility for future mergers and acquisitions in the industry.

Monolithic Corporations vs. Holding and Operating Companies

Innovative, technically based companies that develop discontinuous new paradigms expose themselves to several types of risk: market not ready, value proposition improperly articulated, market grows slower than expected, etc. Most of the risk lies with the customer-facing aspects of the business. The innovative technology and processes underlying and supporting the customer-facing business can in most cases be repurposed into supporting other potentially viable customer-facing businesses.

Separating the technology infrastructure developed by the company from the customer-facing business produces a group of related companies, as shown below. This diagram is modified from an actual diagram developed for a client:



In the diagram above, four possible operations companies are envisioned, all leasing their technology from the holding company. Each operations company has a different business model. The interface for each operations company to the infrastructure is common, however.

The valuation of the group of companies is frequently much greater than if all the assets and activities were held in one company. One reason for this is that risk (which depresses valuations) is partitioned into operating companies. Another reason is that the value of each company is tightly bound to its mission. Should a company prove to be

unprofitable, it might be replaced or shut down without affecting the other companies. By explicitly showing each company's value, the value of the entire group of companies is more readily demonstrable. AT&T's recent desire to split itself is an example of this, as is the historical example of the increased values of the Seven Sisters upon the breakup of Standard Oil in the last century.

The operations companies would pay for fixed and variable costs incurred by the infrastructure company, plus a one-time setup charge, plus a base cost per month. Any applicable royalties for content would be computed by the infrastructure company, but would be paid instead directly to a content provider. The infrastructure company would not be responsible for the content flowing through it (like telcos.) The motivation here is for the operating companies to assume all risk.

Infrastructure Company

The infrastructure company (actually a holding company) would develop and maintain functional components for the operating companies under an ASP model. Any development specific to one operating company's needs would either be developed by the infrastructure company at arms length, or by an outside company using the APIs published by the infrastructure company.

The infrastructure company would not need to build a brand, and would not be exposed to market risk.

Operating Companies

Each operating company would have a different business plan, and would seek to build individual brands. Risk from customer-facing operations would be held solely by the individual operating companies.

Barriers to entry and time to market for successive operating companies would be less than vertically integrated companies. Operating companies might compete against each other, using different business models. Arms length parties might launch customer-facing operating companies in competition to those launched by the original founders, but the founders would still benefit since they would own the infrastructure company that would provide products and services to all customer-facing companies.

Conclusion

Using technology holding companies to separate out the risk incurred by customer-facing ventures is not new. In general, however, Internet companies have not used this tried-and-true corporate strategy. Now that the dot-com bubble has burst, investors have a renewed interest in business fundamentals. One should expect to see more holding companies in the Internet marketplace as the business use of the Internet continues to mature.

Comments from Readers

From a CEO

"Interesting premise. I suppose in most companies, the cost of the Web infrastructure should be shared, and yours is a clever way to think about it. We use development to create the many layers needed based on a common infrastructure and use operations to run it. The tricky part is how formal to make this structure and the chargebacks that could go with it."

Mike responds: In the right circumstances the improved focus and ability to manage risk that this corporate strategy provides more than compensates for the extra overhead.

From a senior software architect

"I get the idea: instead of making an internal division of the company along responsibility lines ('this group is responsible for productizing along these lines'), make the division completely explicit in the corporate structure.

"There are probably lots of good reasons for doing this. I can see three right away:

1) A much more easily understood bonus / performance structure. One thing I absolutely hated in a previous company was that my profit sharing was based on the entire company. My project, the one that I ran, did amazingly well. The rest of the company did lousy. And my bonus suffered.
2) It makes it easier to do things that are not necessarily fully in the interests of the other operating companies (which might be prevented in a single corporation).
3) It simplifies the whole merger/acquisition/recombination thing.

"The diagram is a lot like BEA/Weblogic and the people who build EJB-backed web sites. There are lots of specialized little companies that use EJBS to build web sites and they go after little tiny sectors of the market. So they're like operating companies, except BEA/WebLogic does not own them

"Question: what difference whether BEA/WebLogic owns them or not? Unless the operating companies are meant to preclude other, external partners, the infrastructure brand could be quite important."

Mike responds: Great comments! I like the analogy to BEA. I would like to point out that BEA incorporated WebGain, which is a separate but closely related business. WebGain's VisualCafe product line was acquired from Symantec partly due to its close coupling with WebLogic. The WebGain example doesn't completely fit in with the thrust of this article since it is not an operating company that utilizes a infrastructure provided by BEA.

With respect to brand, I accept your comments with a caveat; when I worked as a regional manager of a Canadian distribution firm, our goal was to be invisible to end users – we only wanted to be known to our customers, the retailers. So it should be with infrastructure firms; their brand should remain within the industry that they serve. It's very expensive to build brand, and the level of expenditure required to build brand to the general public would mean that marketing costs would become the infrastructure company's largest expense. Good examples of pure infrastructure companies are Exodus and Digital Island.

About the author

Michael Slinn is a technical business strategist. He consults in the Internet Business to Business (B2B) and Business to Consumer (B2C) arenas, and focuses on server-side architecture and technical/business strategy.

No longer can executives make high-level decisions without regard for technology and simply direct their technical staff to execute - the business strategy must be integrated with a technical strategy. This is particularly true in Internet startups and business makeovers. Michael facilitates the development of a total business technology concept. Few people can sit in a technical / marketing / business discussion and contribute in all areas, but that is Michael's unique strength.

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