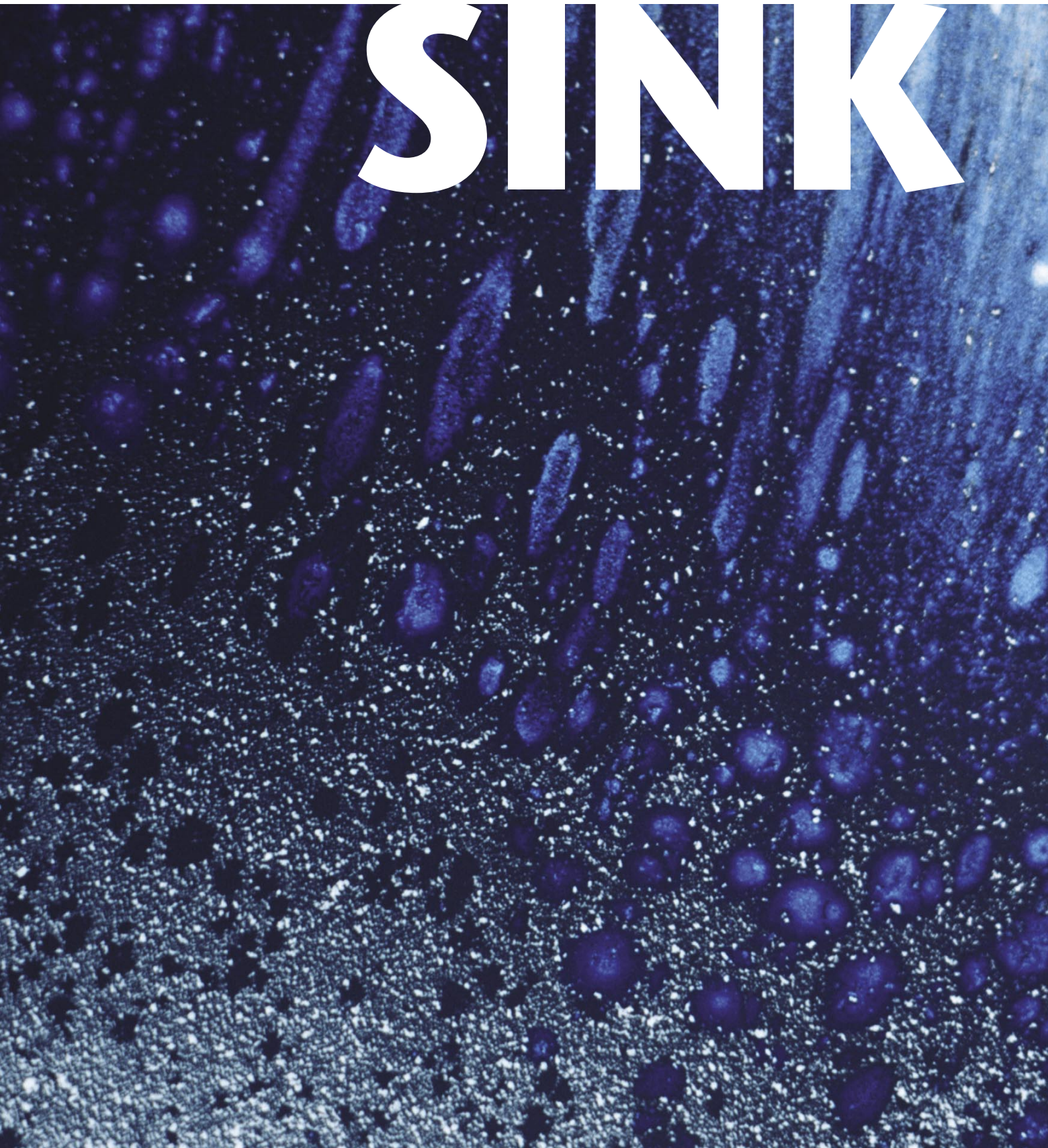GORDON BELL,
MICROSOFT BAY AREA RESEACH CENTER

SINK

or SWIM

Know when it's time to bail

A diagnostic to help
you measure organizational
dysfunction—and take action

There are endless survival challenges for newly created businesses. The degree to which a business successfully meets these challenges depends largely on the nature of the organization and the culture that evolves within it. That's to say that while market size, technical quality, and product design are obviously crucial factors, company failures are typically rooted in some form of organizational dysfunction. To help investors recognize signs of trouble before catastrophe strikes, I started working more than a decade ago on the Bell-Mason Diagnostic, a quantitative evaluation method that includes a set of rules for examining a company and comparing it with an "ideal" organization.
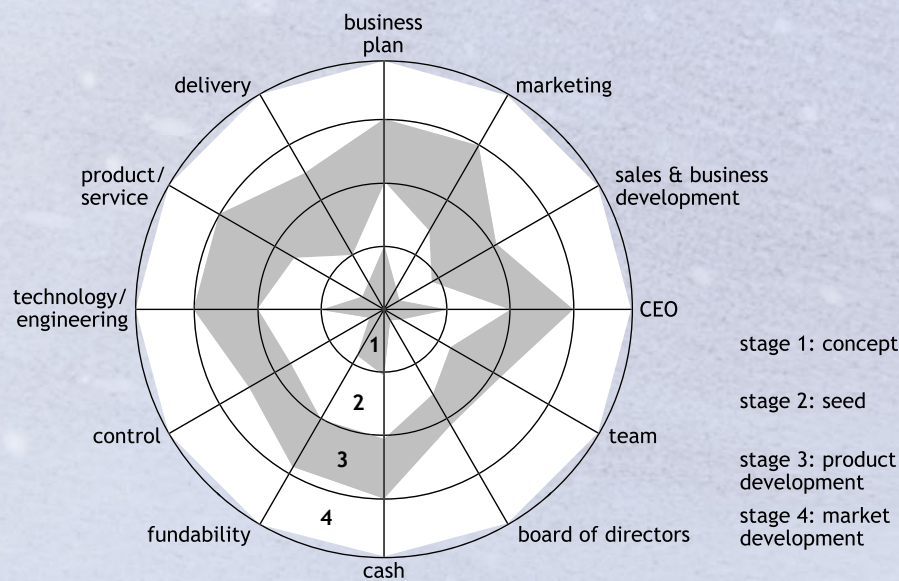
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Although designed specifically for people who invest capital in new ventures, the diagnostic can also be used just as effectively by those whose investments come chiefly in the form of time, energy, and imagination. In fact, anyone contemplating joining a startup—or considering whether to stay with one—can read the diagnostic and answer the questions to determine whether the company they have in mind is in reasonably good health.

There are, of course, hundreds of different ways for new ventures to fail. This article describes a few of the particularly common forms of organizational dysfunction, with reference to the Bell-Mason Diagnostic to help frame each example.

High-Tech Ventures[1] offers a more comprehensive view of the Bell-Mason Diagnostic for those looking for tools to measure the health of a startup organization over time. *The Venture Imperative*[2] describes the much more difficult challenges involved in creating new ventures from within larger organizations. Both books define key heuristics for successful ventures and then use them to describe operational patterns often indicative of impending failure.

THE BELL-MASON DIAGNOSTIC

The Bell-Mason Diagnostic assesses the health of an enterprise at four critical stages of organizational development (which, not surprisingly, are closely related to similar stages in the much more familiar product-development cycle):
1. Concept
2. Seed
3. Product development
4. Market development

These four stages correspond to key product, market, and corporate development milestones—

The Bell-Mason Picture of an Ideal Startup

stage 1: concept

stage 2: seed

stage 3: product development

stage 4: market development

FIG 1

This relational graph shows the status of an ideal startup at the conclusion of each of its four stages of growth. Each core dimension of activity is shown as a spoke in the graph, with the spokes separated by 30 degrees. Answers to sets of questions pertaining to each of the 12 dimensions are scored, and those values change (or "evolve") from the center of the circle to its circumference as the company progresses through its four stages of growth. Each of those stages is represented by one of the concentric circles radiating out from the center.

and are measurable and predictably sequential. What's more, for those companies that manage to maneuver successfully through these four stages, there's a fifth stage, known as "steady state"—that happy juncture in the process where high-tech startups become stable, solidly established, sustainable, and yet still capable of continued growth.

Across the various stages, the Bell-Mason Diagnostic allows you to measure and graphically plot an organization's performance in 12 relatively independent dimensions of activity, namely:

1. Technology/engineering
2. Product or service
3. Manufacturing, product support, and delivery
4. Business plan
5. Marketing
6. Sales and business development
7. CEO
8. Team
9. Board of directors
10. Cash
11. Fundability
12. Overall management control

Startups are evaluated in each dimension according to rules of good practice distilled from experience with more than 600 companies. The results for each stage are then plotted on a 12-dimensional radar chart, as shown in figure 1.

Note that growth occurs in each dimension as the company progresses from one stage to the next, but not necessarily at the same rate. That's because at certain stages of development, different dimensions are disproportionately significant. Still, by the time a company has reached the end of the product development stage, it

needs to be pretty well-rounded.

In all cases and at all stages, the heuristics applied are specific and measurable. For example, some of the questions asked in the earliest stage include:
• Is the technology sustainable?
• Can it be converted into a product that customers buy—or is it just a feature?
• Are more than two planned breakthroughs required?
• Have real customers been identified for the product?
• Is there a compelling buying rationale that has been market-tested?
• Is there an x plan (where x = engineering, support, marketing, sales, and a plan for company evolution)?

You would be astounded to learn how often such simple yes/no questions are answered, "No!"

Contrast this with the "gut-feel" common wisdom that has guided investor and employee decisions for as long as there's been a high-tech industry, with reference to fabled rules of thumb such as:
• People, people, people.
• Market, product, team.
• I look for the vision above all else.
• A big wave carries a lot of surfboards.

The difference between relying on subjective observations like these and taking a more quantitative approach is demonstrated by the experience of Nanyang Management. Between 1995 and 1998 this venture capital firm conducted 29 systematic analyses.[3] A regression analysis later showed a near-perfect correlation between actual business performance and the indicators revealed through application of the Bell-Mason Diagnostic.

THE ROOTS OF DYSFUNCTION
More often than not, organizational problems stem from

TABLE 1

Dysfunctional Conflicts and Their Actors

Issue that generates conflict	Organizations involved
Definition of the product	Engineering/Marketing
Definition of customer/market segments' sales productivity; customer information	Marketing/Sales
Product pricing	Finance/Marketing/Sales
Delivery and/or support of the product	Sales/Support/Channels
Resolving product or customer problems	Engineering/Channels/Support/Sales
Quality	Finance/Production/All departments
Managing department sizes and/or budgets	Finance/All departments
Downsizing	BOD/CEO/All departments

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the inability of a CEO to form an effective team across all the crucial corporate functions, including: engineering, marketing, sales, support, finance, and administration. In any organization building a new product or service, conflict inevitably arises over issues such as those indicated in table 1. The collisions frequently start with product definition as marketers, who often come from engineering backgrounds, clash with the engineers responsible for actually designing and building the product. And should a significant quality problem ever arise, conflict is

likely to spread across the entire organization—engulfing even the board of directors—as the damages are assessed and the underlying mistakes are rooted out and closely analyzed.

Even without the impetus of an acute conflict, organizational dysfunction can develop purely on the basis of disrespect between key groups or distrust among certain department leaders. Although it's not necessary that everyone on a team "like" each other, it is imperative that they respect one another, are able and willing to communicate with each other, and are solidly unified around a common set of business goals. Otherwise, the venture is doomed. Indeed, when intense disrespect becomes obvious at the highest levels of an organization, it can create fissures that ultimately reduce a 10+ billion-dollar company to rubble, as was evidenced in the demise of Digital Equipment Corporation.[4]

Organizational conflict in its own right is healthy and natural—especially with regard to the tension that seems inevitably to arise between engineering and marketing. The seed of that particular conflict rests in the fact that while the engineering team's goal is to develop something that hasn't existed before, the goal of marketing is to meet the immediate, present-day needs of customers while also anticipating their

Profile of a "Vaporware" Company
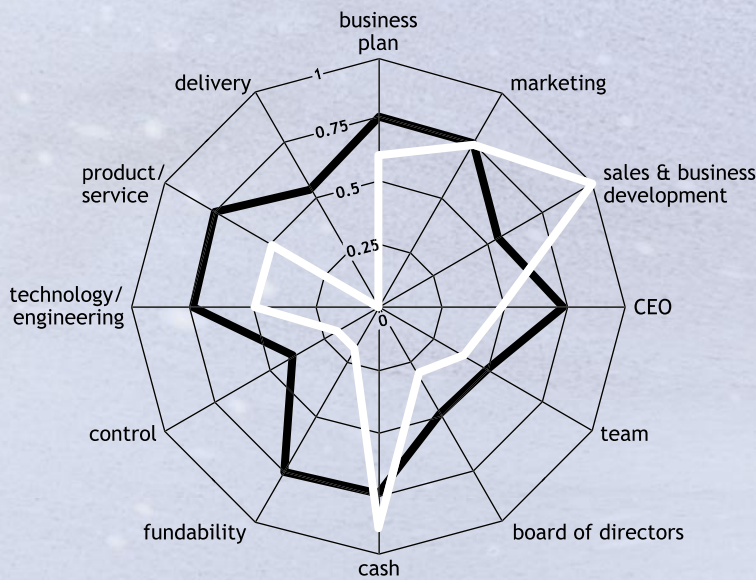
At the point when the company depicted in this relational graph reached the product introduction stage, it still had no tested or salable product, owing largely to a weak engineering organization managed by an inexperienced CEO, who in turn was backed by a dysfunctional team.

FIG 2

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future growth requirements. Thus, the more unfamiliar and "new" a product from engineering proves to be, the harder that product is likely to be to market. Still, there is no reason for the resulting conflict to escalate into a company-consuming problem so long as it's managed effectively.

Whenever products do bomb, most of the functional "misses" can be traced back to incompetent engineering or marketing, or simply to a lack of integration between the two efforts. Ultimately, however, the real responsibility for any of these problems has to be borne by the CEO and the board of directors for failing to exhibit the necessary leadership to constructively guide and manage the conflicts that naturally arise across functional areas.

With this as backdrop, then, let's look at a number of classic failure scenarios. If any of these seem uncomfortably familiar—particularly if they appear to describe a company in which you're currently involved—you may wish to seriously consider whether your time and/or money are being put to their best possible uses.

THE VAPORWARE PHENOMENON
Although the term *vaporware* seems to have been with us for just about as long as the high-tech industry itself, we actually have the company depicted in figure 2 to thank for it. Suffice it to say, should you ever come across another company with a similar profile, run—don't walk—in the opposite direction.
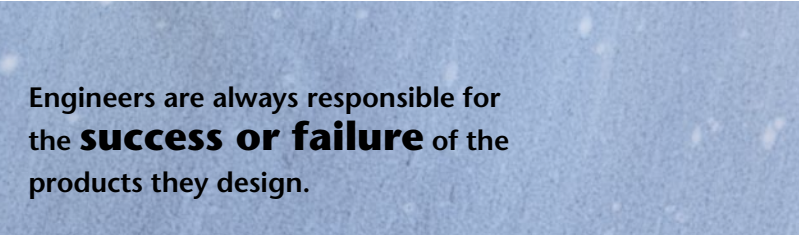
The founders in this case, including the CEO, all came from sales backgrounds. That helps to explain how, at a time when the power of desktop systems was such that it was barely possible to generate a single-function product, this group produced a specification calling for the combination of multiple personal productivity capabilities. Although they managed to sell that plan to a gullible group of venture capitalists, their problems started in earnest once they attempted to hire an engineering team to build the product. Given the management team's overall inexperience in essentially every organizational function outside of sales, it's not surprising that a strong engineering team could not be readily assembled. Then, to compound matters, while the engineers who were on board struggled (unsuccessfully) to build the product, salespeople were already out taking orders.

So as we review the company's final scorecard, we find an organization that had a reasonable product idea, albeit one that couldn't be implemented in its entirety. With an inexperienced CEO and a weak board of directors in charge, things started to unravel as the company found it couldn't hire an A-team capable of building anything even vaguely resembling the specified product. Finally, the company committed the ultimate folly of staffing up with salespeople before it had a product to sell. Consequently, the company had fully burned through an ample supply of cash before it had the foundations of a product, and the management team soon learned that there were no prospects for additional investments anywhere in sight. We all know what happened next: The company crumbled and was swept up into the dustbin of history, leaving the term *vaporware* as its only real legacy.

FIELD OF DREAMS: BUILD IT AND THEY WILL COME
Our next scenario of doom involves a story often told—a technology-focused company that repeatedly fails to define a successful product because of a lack of meaningful marketing input (see figure 3). Misguided product specifications are the inevitable result since the developers are not once forced to account for the needs and aspirations of actual users. Accordingly, they simply go ahead and build something that offers the sorts of features they

Engineers are always responsible for the success or failure of the products they design.

themselves find appealing. The result is a product that only its developers could love. Everyone else is perfectly content to ignore it.

The problem is compounded as the company adds more salespersons in a desperate attempt to increase sales through brute force. Inevitably, the company succeeds only in accelerating its cash-burn rate. Certainly, management and the marketing group are largely to blame for this by virtue of their failure to specify design parameters according to carefully studied market requirements. But I tend to fault the engineering team for relying on obviously deficient (or perhaps even nonexistent) marketing input at the time of product definition. Ultimately, in fact, engineers are always responsible for the success or failure of the products they design!

OUTBREAK OF FOUNDER DISEASE
Here's another scenario that's probably all too familiar. The company has just completed the difficult job of transforming a promising technology into a working product. This, of course, signals the time to vigorously

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expand efforts in a number of areas—market development, distribution, sales, production, and support being among the most important. In some cases, members of the board might take this as their cue to replace the founders with "management professionals" who have "done it before."

Typically, this confronts the founders with a Faustian bargain: Either they can help the new management team prepare the company for acquisition or an initial public offering, or they can simply leave, sans stock. Most, not surprisingly, opt to stick around for the big payoff. But that doesn't mean they're happy. In fact, most of the core people who helped to found a company, while deeply committed to its success, are also fundamentally unwilling to yield power to newcomers.

So the new CEO who was hand-picked by the board ends up facing the unenviable task of creating a new management team made up largely of original founders reduced to diminished roles. This is a sure recipe for passive-aggressive behavior and a poisonous, sullen atmosphere. As a consequence, the new CEO is almost surely doomed right from the start. The company itself may soon sink into a morass, as senior executives work—consciously or unconsciously—to sabotage the newly arrived outsiders. It doesn't take long for a sickness like this to spread throughout an entire company culture. Any recovery may prove extremely protracted and painful—with perhaps a succession of CEOs and a number of original founders ultimately being sacrificed before things finally get turned around.

HIT-AND-RUN PLAN
The "brand" entrepreneur,

Life Without Adequate Marketing Input
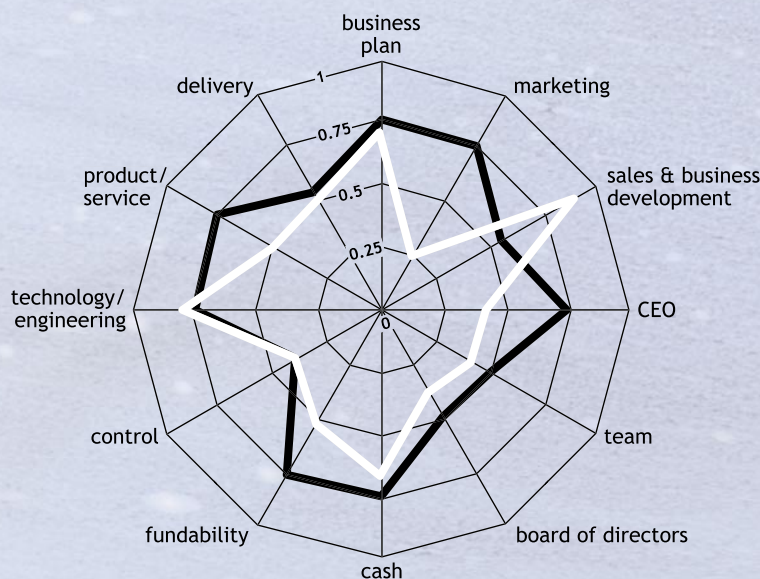
At the point when the company depicted in this relational graph reached the product introduction stage, it still had no tested or salable product, owing largely to a weak engineering organization managed by an inexperienced CEO, who in turn was backed by a dysfunctional team.

FIG 3

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especially in Silicon Valley, always seems able to obtain enough capital to start a new company—even when armed with only a decidedly marginal idea. Once the money is in hand, all that remains is to hire an experienced, mercenary team that's done it all before and has what it takes to quickly get the entrepreneur back in business. From there, the game plan gets exceedingly simple: Produce a product and then, at all speed, prepare to sell the company either to a larger company or to the public at large through an initial public offering.

So what's wrong with this picture? Only this: While revered entrepreneurs who've already launched three or more companies may have succeeded in making hundreds of millions of dollars for themselves and early investors, they almost certainly have never managed to create a sustainable, profitable company for shareholders. Which is to say that most of the company's investors and virtually all of its employees are apt to get left holding the bag not long after things just start looking pretty interesting. So the note of caution I urge here is to always beware of celebrity entrepreneurs.

SUMMARY

Startup organizations that fail are, for the most part, those that prove unable to deal with the complexity of technology and the fast pace of technological change while simultaneously growing as organizations. As technologists, our instincts usually lead us to look for design flaws or problems in underlying technologies when trying to understand the sudden collapse of a company. Although these problems can almost always be found, the real roots of the trouble usually can be traced back to basic human foibles and problematic organizational dynamics.

More often than not, the core problem proves to be any or all of the following:

• A weak or overly controlling CEO
• Inadequate marketing (or, in some cases, a total lack of marketing)
• The inability to integrate engineering and marketing

All three—which, by the way, are hardly mutually exclusive and often, in fact, found to be fellow travelers—are themselves rooted in distrust. There are those company leaders, for example, who simply can't let go of some particular responsibility largely because they have no confidence that anyone else can do the job properly. Sometimes that fear has a real basis—as in an organization where people have already amply demonstrated their incompetence. But that's not the whole of it because dysfunction can flourish in even the most competent of organizations as a consequence of greedy, self-absorbed

people who haven't the slightest intention of sharing any power, glory, or reward with anyone at anytime.

For anyone considering taking (or holding onto) a stake in a company, it all comes down to recognizing basic weaknesses in human character and understanding how those flaws can contribute to dysfunctional organizational behavior. The ability to measure and quantify the most telling of those company behaviors is what the Bell-Mason Diagnostic is all about. And should the diagnostic

Dysfunction can flourish
in even the most competent of organizations as a consequence of greedy, self-absorbed people.

serve to reveal a disturbing picture of how your organization works, the way in which you go about responding to that insight may also give you a much better sense of what you are all about. Q

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