

naked**innovation**

*uncovering a shared approach
for creating value*

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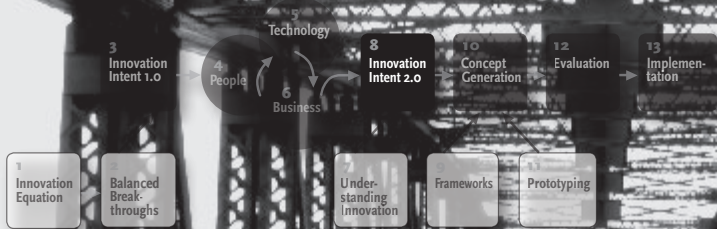
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Reframing the Challenge



We weren't there, so we can only imagine the discussion that took place in the headquarters of GM's Cadillac division at the dawn of the 1980s. Perhaps it was an accountant that first piped up, "Look, guys, we have to do something—these government CAFE fuel standards requirements are going to kill us unless we come out with a smaller car with good fuel efficiency." Then maybe a marketing guy wondered out loud, "Well, you know that all the yuppies have been buying those smaller luxury cars, like BMWs. We should tap into that demographic!" They turned towards an engineer, who pushed back her Farah Fawcett feathered hair and said, "I've got it! We take the standard J-body platform and put some nicer details on it, and presto: a small Cadillac we can build cheaply!"



THE CIMARRON, BY CADILLAC
(1982–1988). R.I.P.

Maybe this wasn't how it played out, but at some point, there were some fateful decisions made by Cadillac that resulted in

another fateful innovation misstep for what used to be one of the most forward-thinking auto brands in the 20th century. Rushed into production, and looking for all the world like a Chevrolet Cavalier dressed in prom-night finery, the Cadillac Cimarron underwhelmed the market, and is now widely regarded as the least successful Cadillac ever made.¹ Tom and Ray Magliozzi's *Car Talk* show on National Public Radio dubbed it the 8th worst car of the millennium.²

But how could that be? After all, the company had elements of the Balanced Breakthroughs model in play: they combined insights from looking at *People* (people are buying small luxury cars, like BMWs), *Technology* (use standardized car platforms to cheaply customize several models from one base), and *Business* (broaden the portfolio of models with a high-mileage car). Again, we weren't in the room, so we can only speculate at how Cadillac misstepped in developing the Cimarron. We think they probably took the first, obvious answers to their research questions as definitive. They didn't seem to consider *why*, or to check if they had asked the right questions. In short they didn't **Reframe**. It is not enough to do a little research and then run off and create a new product—that does not in itself produce innovation.

Back in Chapter 3, we said that you should get started with an initial problem statement, the Innovation Intent 1.0. That early attempt at defining the arena you would be working within led to explorations in three different areas:

- › People
- › Technology
- › Business

¹ Warren Brown, "Gutsy Roadster Says Cadillac Is Back: 2004 Cadillac XLR Roadster," *Washington Post*, August 22, 2004, p. G01.

² Tom and Ray Magliozzi, "What's the Worst Car of the Millennium?" *Car Talk*, <http://www.cartalk.com/content/features/Worst-Cars/>.

These explorations should have resulted in some valuable insights and data in each area. The task now is to see how your findings fit together to point out, with increasing clarity, the direction for your innovation effort. The **Innovation Intent, Version 2.0** is critical to ensure you will be working on the *right problem and opportunity*, with the *right resources and institutional mandate*. Otherwise, you may find yourself with a Cimarron on your hands—something the apparently meets the requirements of surface research (or management's directives) and specifications documents, but ultimately fails to be rewarded by the market.

Problem and Opportunity Drivers

We will get to our revised Innovation Intent by deeply understanding what underlies and contributes to what we have been able to observe in People, Technology, and Business. Just as a doctor needs to treat the underlying disease, instead of just symptoms, so innovators need to respond to drivers of problems and opportunities. Uncovering these drivers can be a fuzzy process, but if you're willing to roll up your sleeves and involve your whole team in wrestling with loosely structured information, you'll get there. Although we think anybody can trace the driven forces that result in problems and opportunities, this is also an area where an outside innovation or design consultant can be of particular help in offering an independent perspective.

We've found that a good way to proceed is with visual knowledge management tools—by which we mean Post-It™ notes (preferably the bigger ones) and markers (and of course, index cards or software-based tools like Microsoft Visio can also work). Start with a separate Post-It for each key insight produced by your research. It helps to keep observed Problems and potential Opportunities separate for now. Working as a team, move the Post-Its around to create clusters of related

Problems and Opportunities. Use a larger Post-It to label the cluster—or if you’re doing this on a whiteboard, you can write in a title.

The Five Whys

With each cluster (and yes, it’s OK if it’s a cluster of one insight), try to figure out what the underlying driver is. We use the term “driver” instead of “root cause” because we like to avoid implying that it’s the *only* cause... but at the same time, we’re going to be using one of the techniques of root cause analysis: the **Five Whys**, developed originally by Sakichi Toyoda, and used both within Toyota Motor Corp. and as part of the Six Sigma process.¹ The idea is to look at an observed effect and ask *Why?* five times—with each iteration trying to probe more deeply. (It doesn’t always have to be five times, but Toyoda’s research suggested that five *whys* usually gets to the core issue—plus it’s easy to remember.) Here’s an example:

- | | |
|--|-----------------------------|
| › Personal savings rates have been declining since the 1980s. | <i>Original Observation</i> |
| › Why? People are spending more than they used to. | <i>First Why</i> |
| › Why? It’s more fun to spend money than to save it. | <i>Second Why</i> |
| › Why? People get a more immediate and personal benefit by spending money than by saving it. | <i>Third Why</i> |

- | | |
|--|-------------------|
| › Why? The risk of future calamity seems much further off. | <i>Fourth Why</i> |
| › Why? The perceived level of prosperity has risen, along with lifestyle expectations. | <i>Fifth Why</i> |

This isn’t a magic technique that will guarantee answers—like many other phases of the innovation process, the Five Whys is a context for your team to have a good discussion about underlying drivers. Ideally, you will find one or two drivers that explain multiple observations, insights, and opportunities—that’s partly why it’s best to ask the Five Whys on clusters, rather than individual insights. To be a little more rigorous in your analysis, we also suggest that when you think you’ve identified a Problem or Opportunity Driver, you test it with the following additional five questions:²

1. What proof do I have that this driver exists? (*Is it concrete? Is it measurable?*)
2. What proof do I have that this driver could lead to the observed problems or opportunities? (*Am I merely asserting causation?*)
3. What proof do I have that this driver actually contributes to the observed problem or opportunity? (*Even given that it exists and could be a causal factor, how do I know it wasn’t actually something else?*)
4. Is anything else needed, along with this driver, for the observed effect to occur? (*Is it self-sufficient? Is something needed to help it along?*)
5. Can anything else, besides this driver, lead to the observation? (*Are there alternative explanations that fit better? What other risks are there?*)

¹ You could also call this the “Act Like a Five Year Old” method.

² The Five Whys method has fallen out of favor in the engineering context it started in, because it is seen as insufficiently rigorous. Strengthened by these additional questions, suggested by Bill Wilson (<http://www.bill-wilson.net/b73.html>), we think it works sufficiently well for innovation discussions.

You may even need to do some further research to validate the drivers you've identified. Fair enough—remember, this is an iterative process.

We recently applied problem/opportunity driver analysis to a project for a consumer electronics company. They believed they needed to provide better customer support to users of one of their products, because people were frustrated at the difficulty they had with a particular feature—and we thought the project might be about a better user manual, or a newsletter that would explain the features better. We had a lot of observed problems and potential opportunities to work with, falling into the following clusters:

- › Customers were rating the company's products lower on satisfaction surveys than they had before
- › Customers were recommending the product to their friends less than in previous years
- › Customers described the way a different product was doing a great job in meeting a similar media access need, in another context
- › Many customers described being originally attracted to the product by particular features described by the salesperson
- › Although the product was supposed to be easy to use, most customers couldn't figure out how to use those features

Our team spent several hours rearranging Post-It notes and asking *Why? Why? Why?* until we identified two drivers:

- › **Problem Driver:** The product was being marketed as simple and easy to use, but was not actually that easy to use, leading to frustration

- › **Opportunity Driver:** The widespread use of new kinds of portable media devices presents an opportunity for home-based consumer electronics to work better with them

Our innovation project thus was focused on addressing these underlying issues, rather than just trying to fix the observed problems.

Let us alert you to a common temptation in innovation projects: leaping hastily to a single solution. While it is true that inspiration can strike any time, we also have found that premature solution development can distort both research and analysis, and persuade you that you really need, say, a new website, when perhaps what you need is a less-glamorous direct mail campaign (or even not a marketing effort at all—maybe you need a different product). You know the old saying about people with hammers seeing everything as a nail. When you feel a brilliant concept coming to mind, jot it down and put it in a “parking lot” for future consideration. Stay focused on the reframing—you can come back to your idea later.

Which isn't to say that you don't need to have some sense of where your potential solutions will lie. In fact, a healthy exploration of the different varieties of solutions may well help you reframe some Proposed Innovation Challenge into a solidified Innovation Intent. That's where the Ten Types of Innovation (from the previous chapter) can be an invaluable tool—even as you consider the problem/opportunity drivers. With your clustered insights before you, review the Ten Types, and see which drivers might relate to each one, either as a way of addressing them, or as a way of deepening your understanding of some particular driver itself. For our consumer electronics company above, we realized that part of the problem with the feature/ease-of-use gap was that their business model was about selling the product,

one-time, whereas their customers' level of expectation was much more in line with a service: I just want simple, easy access to media around the clock, and I'm even willing to pay a monthly fee if it would deliver the distinctive value of in-home ease of use. The Ten Types of Innovation are a powerful lens through which to view your project, and can reveal unexpected connections and gaps in the promise you have made to your customers.

Innovation Scale—How Ambitious Are You?

As you begin to see the parameters of your Innovation Intent emerge, your team must also ask itself two key questions:

How aggressively can we innovate?

At different stages of a product's lifecycle, and with different levels of risk tolerance, there are different scales of innovation:

Innovation Scale	Market Lifecycle Stage	Innovation Category	Requirements
New Platform New Product	Early High risk and high reward <i>Examples: XBOX or Google Search</i>	Disruptive Innovation Focus on macro industry trends and technology investment and development	Significant corporate commitment of time and resources at many levels of the organization
Product Line Extension	Mid-life Category growth has flattened, and commoditization is increasing <i>Examples: Office 2007 or Google Academic</i>	Sustaining Innovation Focus on product performance, customer need, process efficiency, and user experience in product and sales	Moderate corporate resources, support from stakeholders of current products, mostly within a business unit or the like
Incremental Change	Mid-life to End of Life The category is taken for granted; customers buy largely on price <i>Example: Windows service releases</i>	Incremental Innovation Focus on easy feature improvements, marketing and business model tweaks	Minimal corporate resources, generally the domain of an individual product team

Further discussion of innovation scale can be found within Geoffrey A. Moore's *Innovating Within Established Enterprises* and Clayton M. Christensen's *The Innovator's Dilemma*, from which we've adapted the table above.

Different scales of innovation come with different kinds of expectations, risk levels, and requirements. We should clarify that each kind of innovation is legitimate, as long as it is aligned with business, people, and technology—distinctive value can be produced even in small amounts. Earlier, we disparaged the apple-tini, but there's many a profitable bar or nightclub whose profits are anchored by a line of fruity-tinis. Not everything has to be an iPod or Velcro.

Now is a good time to decide how strong your team can “push” on the innovation project before you. A lot of this will depend on the guidance you have received from management (or shareholders, if you are management), so then you also must ask:

Do we have sufficient institutional mandate and support to accomplish the innovation task we see emerging?

Just because you see a good opportunity, and have some good ideas for pursuing, doesn't mean that your company is willing to invest in the development. It may not be the right strategic move, or it may simply be more than they want to do at the moment. In the midst of the Internet boom, we developed a comprehensive business plan for a large-scale Internet portal targeting our employer's key market—it would have been a first-of-its kind play, and had already garnered the support of reputable leaders in Silicon Valley. But it would have taken too

¹ Not that we're complaining—in light of the dot-com bubble bursting a year later, it was probably just as well we hadn't pursued it.

much focus off of existing efforts, and despite the expected benefits, was put on the shelf.¹

Sometimes there are sacred cows within a company that resist modification, until you know just the right person to get on your side. You may not be able to launch a full-scale innovation effort to entirely change the product, but you might be able to do a more modest research and prototyping effort. The result could be a clear and compelling vision of the benefits for more significantly tackling the opportunity in a future development—in effect, helping point the direction so that the next team (whether you are on it or not) will have an easier task.

By now, your team’s work area is probably littered with Post-It notes, the whiteboards are covered with scribbles, and you may be all “talked out.” If so, you’re doing fine—coming to agreement on the fundamental question of Innovation Intent is quite difficult. Take a break if you need to, because there’s one more step: putting it all together.

Putting It Together: Innovation Intent, 2.0

Return now to your initial framing of the project: Innovation Intent 1.0. Hopefully you’ve been adjusting it along the way as you’ve learned more. Now is the time to make sure it fully reflects the insights you’ve gained through research and team conversations. In addition to revision what you already had, version 2.0 adds two more questions at the end:

What started as a working hypothesis is now grounded by insights and your increasing familiarity with the problem space. You may even have shifted the problem space to one that is obvious to one that hasn’t yet been noticed by anyone else—an incredible opportunity to provide unique value. And without specifying *how* you will do it, the Intent points your company towards opportunity, even if it requires stretching your capabilities.

Innovation Intent | Version 2.0

The problem we are trying to solve

For whom

Why it matters

How other solution attempts have failed

What will make our solution different

The greatest opportunities

The biggest risks

This isn’t like setting a traditional business goal—rather, you are defining the space in which you will focus your creative energies on creating new and unique value for your customer. Let’s consider the example of Cemex, the third largest cement maker in the world. At some point, an executive in their Mexico City headquarters might have said, “We need to sell more cement. Let’s leverage technology and effective marketing systems to gain market share and global prominence.” But that wouldn’t have pointed towards any particular innovation, especially in a mature (and some would say, boring) commodity market like cement.

Instead, they carefully studied their home market, and discovered a vast, underserved community of potential cement buyers all around them. Many homeowners in Mexico build (and add on to) their own homes, working intermittently as they have time and funds available. Getting cement delivered by a traditional company was a scheduling and financial nightmare. With insights into the role of a Mexican home as a patrimony

CEMEX Innovation Intent | Version 2.0 *(hypothetical)*

The problem we are trying to solve

Make home building and expansion easier

For whom

Working class families in cities

Why it matters

Housing is the most important, and largest, investment families will make, and Cemex can both be an essential partner that contributes to the community, and capture a loyal market segment.

How other solution attempts have failed

No other cement provider has treated homeowners differently than corporate clients; nor have they attempted to make cement purchasing more convenient or easier to afford.

What will make our solution different

We will use technology and just-in-time methods to bring fresh cement closer to our customers, and marketing and financing mechanisms that reduce inconvenience and financial barriers.

The greatest opportunities

We will be the first to provide this service—it is wide open for innovation. The solution will require a certain amount of scale to replicate, so we will have few competitors.

The biggest risks

This will be difficult to execute, and we have to do it well enough at launch so that customers trust us.

for future generations, the concept of neighbors sharing their labor to help all members of the community gradually improve their lives, and the potential for new technology to re-energize a tired business, Cemex might have written their Innovation Intent as shown opposite.

This, at least, is our guess at what they might have written. What we do know for sure is that over the last ten years, Cemex has turned out one innovation after another, including:

- › A program called Patrimonio Hoy (“Building Heritage Today”) that helps homeowners with financing building projects as small as a single-room addition to their home,
- › A tie-in with the traditional *quinceañera* (15 year birthday celebration for Mexican girls) that turns a gift into a contribution toward the family’s home

What If There May Not Be a Solution at All?

If money and time are no object, almost any problem can be solved (even the lack of a Cubs World Series victory). But there are usually constraints in the real world. Sometimes during the reframing step it becomes apparent that the project, as currently configured, will be unlikely to succeed. Now is the opportunity to change the project (you could throw more money at some of the constraints, or reduce the scope of the solution). Or, pull the plug on the whole deal. An honorable departure from the field before combat begins saves resources so you can fight again later.

- › A satellite-linked network of cement trucks circulating around Mexico City that can dispatch an on-demand cement delivery within 20 minutes

The Innovation Intent is an opportunity to envision the end result of your innovation effort, while still providing a measure of thoroughness and rigor in considering *why* it merits attention and *how* it will be successful.

Just because it's short doesn't mean the Innovation Intent is easy to formulate—actually, it suggests that every word should be carefully considered. But the results are powerful: each word then helps you focus your efforts on solving the right problem, in a way that truly provides value to your customer, while leveraging appropriate technology, and fitting with your business' strategic direction. You can also use your Innovation Intent as a quick filter for concepts that might be proposed in the next few steps.

Remember to be generous and optimistic. As an innovator, whether on a large or small scale, you are bringing forth something new that has the power to transform the day-to-day experience of your customers. You're not only solving a Problem because it's a chance to make money, but because it truly is a Problem.

Working through the team discussion to arrive at your Innovation Intent 2.0 may take a while. You may also discover that the result may look obvious. A lot of profound insights or innovations look obvious after-the-fact—consider the sandwich, or erasers on the ends of pencils. If they had truly been obvious, they wouldn't have had to be invented. So don't let anyone minimize the value of what you've done.

Now, you and your team should really take a break. Come on, you've earned it. You'll be setting the context for, and then creat-

ing, new concepts next, so you'll need all your creative energies refreshed.