



The Ultimate Guide to

GROWING A CULTURE OF INNOVATION...

or Tomatoes

How to help your team discover needs and nurture your next big innovation

By Chris Hammond | Director of Insight & Innovation, Kaleidoscope

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A close-up photograph of a person's hands wearing purple gardening gloves, holding a small green seedling with soil in a mesh pot. The person is wearing a teal long-sleeved shirt. The background is dark, rich soil.

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Introduction

Look on the Internet, newsstands and in bookstores and you'll find "how to innovate" information everywhere. With so much on the topic, why does creating a culture of innovation remain so elusive for so many companies?

It's not that organizations lack smart people—it has to do with the ecosystem, processes, environment and organization around those smart people. It might be time to get ourselves back to a basic idea like growing a healthy and sustainable garden...

Nurturing innovation is a lot like growing tomatoes. If you want to enjoy a fresh-from-the-vine tomato, it takes hard work and all the right ingredients. You must start with good seeds and plant them in healthy soil. The seeds need water and sunlight. You need to look after and nurture the seedlings when they first break through the soil. Weeds, bugs and pests should be kept at bay. Fertilizer might be required as well.

And, no matter how much you want to enjoy that tomato in April, it takes time to let the seed germinate, grow and mature into a vine that produces lush, healthy tomatoes.

Developing a **sustainable, repeatable culture of innovation**, like growing tomatoes, requires certain essential ingredients. Let's take a look at each element to discover how to increase our innovation harvest.



Seeds

Discovering Unmet Needs

Just as with gardening, innovation calls for a bit of digging. How can you help your team uncover unmet needs begging to be fulfilled? Here are several best-practice innovation methods for any size organization or challenge:

- ▶ **Make time to observe people in the context of their daily situations.** From a process point of view, we call this observational research and contextual inquiry. What we recommend is careful observation of people at work, play and at home to reveal problems that are not being adequately solved or un-met needs. Context is everything when you're hunting for struggles and challenges. Mauro Porcini, Pepsico's Chief Design Officer, tells Fast Co. Design, "People won't give you the solution. You need to observe them, understand them, then make arbitrary decisions and invent for them. It's that fine balance that is so subjective and qualitative and is difficult to define."
- ▶ **Look for duct tape.** "Duct tape is humanity's quick fix for meeting and solving life's unmet needs," says Larry Barbera, design fellow at Kaleidoscope. Researchers can observe an environment, looking for "duct tape" or the compensating behavior fixes that people have cobbled together that point to an unmet need.



- ▶ **Ask, then listen.** Observational research's companion method is contextual inquiry. While in the environment with your users, answer follow-up questions to understand why people do what they do. Don't be rigid in your questioning, leave a certain amount of flexibility. Let your participants wander, share and go unanticipated places. By listening to their answers, we can better understand the need. Keep solutions out of the conversation. If they are delivering a solution, ask follow-up questions to get at the why behind the behavior. Keep in mind that people may not be able to articulate what they need but can pinpoint what isn't working in their daily lives. For example, in some work for one of our medical device client partners, the project started with a particular solution in mind. Through our research, it became clear that they had missed the need. Our careful contextual research led to a major direction change, but the product won in the market and ultimately provided a better experience for the users.
- ▶ **Tap into what you know.** Inc. magazine tells the story of Rebecca Hough and her father Tom Hough, who founded MTC transformers, a company that makes electrical transformers. By considering other future uses for transformers, they and their engineers developed a plug-less system for charging electric cars. The charging station mounts on the driveway or garage wall and eliminates the hassle of plugging a car in at home, similar to how a charging pad charges your iPhone. A receiving device on the vehicle undercarriage accepts the electrical energy transmitted whenever the vehicle is parked. And no physical connections are needed.
- ▶ **Go beyond the known.** Try asking pointed "how might we" questions in brainstorm sessions like "How else could this product or service be used?" "When else could it be used?" "Who else could use it?" In workshops, we find this technique is effective for getting to the basic problem statement.

The techniques are a great place to start to uncover unmet needs—the seeds that can bear fruit. Of course, not every seed will produce a prize-winning tomato, but you'll never know if you don't plant it.

This brings to mind the humorous and alleged Henry Ford quote, *"If I asked my customers what they wanted, they would have said a faster horse."* While people struggle to articulate the future, through observation and probing questions we can understand both the what and the why of people's actions and behaviors that define consumer truths.



Healthy Soil

Diversity helps ideas germinate

Soil might look like just one thing: dirt. In reality, even a small clump of soil consists of organic matter and literally billions of other organisms like bacteria and fungi. This diversity of life forms creates an environment where seeds can sprout and put down roots.

Your innovation "seed" will flourish in a diverse environment, too. A culture of innovation thrives where people with varying points of view can unpack the unmet need into its most basic physiological, physical and emotional elements.

So how do you bring diverse opinions to your company?



- ▶ **Intentionally harvest people of different points of view and life experiences** when you build your teams for projects—especially if you’re innovating for a global market. If your team is functionally organized, go talk to a different department. If your teams are cross-functional but aligned to a given technology, seek out members from other teams. According to Kaleidoscope design fellow Larry Barbera, “It takes a team to pull off excellence. Just as cross pollination is nature’s way of sharing the genetic qualities of plants, cross pollination enables teams to produce the strongest, best fruits. We need to ‘cast’ teams to offer diverse thinking.”
- ▶ **Use “acquired diversity”** to provide an edge. Leaders who develop an appreciation of backgrounds and experiences, be they “through age, cultural, socioeconomic, nationality or sexual orientation differences—are significantly more likely to behave inclusively than leaders who lack it,” a Center for Talent Innovation (CTI) report explains.
- ▶ **Foster a “speak up culture”** (more on that in chapter 4). As Ed Catmull writes in *FastCo.*, “Our decision making is better when we draw on the collective knowledge and unvarnished opinions of the group.”
- ▶ **Tap into all of your people.** For example, an experimental psychologist brings something very different than a biomedical engineer or a marketing person. All views are important and key to delivering delight to the user. Simon Simek in *Leaders Eat Last* wrote about 3M, where “the cross pollination of ideas—combined with an emphasis on sharing across product lines—has led to an atmosphere of collaboration that makes 3M a place where employees feel valued.” At 3M, Simek says, employees are encouraged to present new ideas at internal Tech Forums, which are regular gatherings of peers from other divisions.



Nutrients

Seedlings need nourishment, space and support

Growing plants need nutrients, water and sunlight. They also need room to leaf out and support to lean on as they grow. The culture of innovation also thrives in open environments with plenty of wall space to hang up photos, insights, concepts and more creative inspiration. Seeing everything at once helps visualization so that disparate insights and technologies can be connected. The tools, equipment and space to facilitate ideation and prototyping are essential to support the idea as it takes shape.

How do you ensure a thriving innovation culture?



- ▶ **Pick a suitable location.** Creative spaces can take many forms, but be sure to have plenty of vertical space for pin boards, white boards, even large sheets of foam core and push pins. Include space to build and materials to use. These materials can be as simple as pipe cleaners, modeling clay, Lego bricks, foam core, or blue foam and a saw.
- ▶ **Try giving your space a name,** Nike's Innovation Kitchen is a great example. The name sets it apart. Cover long tables with rolls of paper so team members can write or sketch ideas quickly and cooperatively.
- ▶ **Make all ideas visible.** Take your pictures from research, your inspirational images, your research findings and insights, hang them up, look for the patterns. Use string to literally "connect" the dots of ideas: you may discover unmet needs where ideas connect. Seeing photos, quotes, available tech and all the data in one place can create magic and make it much easier to relate seemingly disparate elements.
- ▶ **Dedicate space for testing and prototyping.** Larry Barbera, design fellow at Kaleidoscope adds, "Just like healthy soil, it takes the right environment to germinate innovation." Depending on you industry and field, dedicate a room as a workshop or lab and fill it with supplies for prototyping. In our case we have a wet lab for medical device prototype testing and a workshop. Make 3D printers readily available.
- ▶ **Build a quick, inexpensive prototype** with benefits that you think will meet consumers' needs. Give structure and form to the ideas and concepts, remembering that your first iteration will not be the last.
- ▶ **Test often** with prototypes in hand, get out and test your concepts with users. Failed features and concepts are a learning tool to make it better and deliver solutions that meet the needs identified in the research.

After all, as Thomas Edison said, "I have not failed 700 times. I have not failed once. I have succeeded in proving that those 700 ways will not work. When I have eliminated the ways that will not work, I will find the way that will work."

**Are your seeds planted?
It might be time to build a fence...**



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Nurturing

Leaders—like gardeners—protect their seedlings from harm

You wouldn't invite hungry rodents and pests into your tomato garden. Likewise, a strong leader in a culture of innovation protects nascent concepts from negativity and naysayers. You don't want people to stomp on or tear up your evolving products.



Smart leaders facilitate respectful candor and allow for helpful input. The Center for Talent Innovation (CTI) suggests encouraging a “speak-up culture” where:

- ▶ Everyone, even quieter team members, is encouraged to have equal input.
- ▶ Team members are given the opportunity to make decisions.
- ▶ Positive risk-taking is allowed.
- ▶ Constructive and supportive feedback is offered.

Equal stake in a new innovation calls for equal rewards.

Consider ways a team can share in the credit for successes. CEO of futurethink, Lisa Bodell, highlights a program that rewards employees who share innovation ideas through a game.

At the UK’s Department for Work and Pensions, employees post ideas to a central system and earn points for those submissions. Co-workers can invest their points in ideas they find appealing. The department rewards the person who suggested the idea—and those employees who “backed” it—with even more points when an innovation is implemented.

So, you’ve protected your seedling from harm. That’s great, but it’s not ready to give you tomatoes yet.



Patience

Take time to incubate innovation

Rarely are the first concepts the best solutions to meet a need. At the beginning of an initiative, we don't know what we don't know. Time ripens tomatoes and also allows for concepts to germinate; prototypes to be built, tested, revised and re-tested. In the innovation process your goal is to:

- ▶ **Observe and assess** your customers' reactions to the prototype you've created. Use observation and study to track how people actually use the product. Find out what they like and don't like about the product.
- ▶ **Apply the lessons learned.** Given what your customers have told you, what are the next best steps to take in refining your prototype?
- ▶ **Prototype. Test. Repeat.**

Plan for failure at this stage of the game. A smart gardener knows when to prune a plant back, when to move a failing plant and when to give up on a plant that's just not right for the climate. To get the best tomatoes—and the best innovations—you may have to try and try again.

James Dyson built more than 5,700 prototypes and toiled for 15 years to perfect his bagless vacuum cleaner.

Our prevailing wisdom is to fail fast and fail cheaply so you can try a new tack. Smart innovators will allow time in the process to learn from failures—maybe even celebrate them. Intuit, for example, actually bestowed a failure award on a team whose unsuccessful concept resulted in valuable learning.

From failure to success, here's to excellence in innovation... and fresh B.L.T.'s.



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About Us

Chris Hammond is director of insight and innovation at Kaleidoscope, an innovation and product design firm headquartered in Cincinnati, with five locations and more than 80 employees. The firm creates products and experiences that grow businesses and improve lives by leveraging expertise at the intersection of consumer insights, technology and health and wellness.

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to see if a workshop or innovation audit is right for you.

Chris Hammond

Director of Insights

Kaleidoscope product design and innovation consultancy

Chris@kascop.com

1.800.930.5793



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