





# Innovation Tool




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# Alf Rehn

## SEANNOVATION

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# 1. What is innovation?

Innovation – it's complicated. On the one hand we're all very good at listing great innovations. On the other it's not always easy to say exactly *what* makes something an innovation. An innovation needs to be new, and it needs to be useful, at least on some level, but beyond that? A new kind of candy can be an innovation, and the iPhone was, and so can an entirely new kind of seafaring vessel. But what unites these?

There is no one thing that defines an innovation, as the word refers more to a quality than an innate characteristic. A service or a product is innovative insofar that it stands apart in novelty and/or usefulness from other, comparable services or products. Thus a candy that tastes of tomato can be an innovation, as it (hopefully) is the only such candy, just as a radical new engine with no pollution can. Innovation does in this way refer to something that isn't necessarily good or bad, just different. We could talk of innovative forms of torture (although we seldom do) just as we can talk about innovative business models. The key element in innovation is thus not whether a new thing is better or worse, but whether it stands apart and is accepted by those who are meant to use or utilize it. This said, we can attempt a definition of innovation:

*An innovation is a new solution to an existing or new problem, which is accepted and used in a market or similar field.*

An innovation should thus be new (or old, forgotten, and then rediscovered), offer a solution, and be accepted by a market or (in e.g. the case of social innovations) the field. This is what differentiated innovation from *inventions*, which may well be new solutions, but which aren't always accepted and adopted. To create an innovation, then, you need imagination, to think of novel solutions, creativity, to adapt these to real-world problems, and communication skills, to get the innovation accepted by those who are meant to use it. In addition you often need technical and management skills to realize the creative idea, and marketing skills to sell the final innovation. No wonder this stuff is hard!

But while it is hard, it is also critically important, both for society and individual organizations. For the latter, innovation is critical because it in the long run is one of the few things that can ensure that an organization retains a competitive position, i.e. that it can stand apart from other organizations doing similar things. For society, innovation is important because it brings progress and development. Without innovation, both organizations and societies from stagnate. Again, this doesn't mean that all innovation is good – we've all seen very silly innovations and wondered why some problems persist – but that innovation on the whole is needed for dynamic organizations and societies.

## Study questions

1. What have some of the most important innovations in history been?
2. What can make a good invention fail as an innovation?
3. What's the most crucial competency for innovating successfully?

## Further reading

Dogdson, M. & Gann, D. (2010), *Innovation – A Very Short Introduction*. Oxford: Oxford University Press.

Rehn, Alf (2017), *Innovation*. Stockholm: Liber. (In Swedish)

## 2. Small steps and big leaps

When we talk about innovation, it is important we're clear about what amount of innovation we're talking about. In innovation studies, we separate between *incremental* innovation and *radical* innovation. The first of these refers to innovations that take something existing and improve them in some manner – we might for instance think about a somewhat improved profile of a classic screw propeller. A radical innovation, on the other hand, is an innovation that breaks with traditional ways of solving a particular problem, and introduces something wholly new. A classical example of the latter would be the internet, which revolutionized both how people communicate and how information can be distributed globally.

It is important to note that this difference does not mean that one of the forms is necessarily "better" than the other. Although we often pay more attention to radical innovations, and although they are easier to identify as being innovations – as they stand out more – the fact of the matter is that incremental innovation can be just as impactful. Where radical innovation can create a lot of value very rapidly, it is also far more risky, whereas incremental innovation is safer and can generate lots of value by continuous improvement. Most organizations will want to have a measure of both – several projects that generate incremental innovations, and a few that aim for radical ones.

At times, the two also function in concert. Consider penicillin. It was famously discovered and concentrated by Alexander Fleming in 1928, but variations of antibiotics have actually been used since ancient times. Further, people had been talking about and experimented with penicillin since at least 1870 (the name penicillin has been used since 1871). What Fleming did was that he learnt how to isolate it, and tried to create a stable form that could be mass produced. This wasn't achieved until WWII, when industrial penicillin production finally became possible. So, even the radical innovation of antibiotics actually required incremental innovation! Discovery was one thing, understanding another, enabling production a third – whilst there were radical leaps, the incremental steps in between shouldn't be ignored.

Returning back to our day, we might say that it is easy to be led astray by both forms of innovation. As stated above, many think of radical innovation as being "real" innovation, simply because it stands out more. On the other hand, companies can also become too enamored with incremental innovation, preferring relatively risk-free projects and well understood development paths over the more difficult bets on radical innovation. It can also, particularly with innovations that involve elements from several different knowledge areas (such as combining medical knowledge and industrial production, or seafaring knowledge and understanding business models), be difficult to grasp the interplay between incremental and radical innovation.

## Study questions

1. Can we ever define an exact limit when an innovation ceases to be an incremental innovation, and becomes a radical one?
2. Why are people more excited about radical innovations than incremental ones?
3. What, for an organization, would be the right balance between incremental and radical innovation projects? 50-50, or with a distinct emphasis on one kind?

## Further reading

Drucker, P. (2014), *Innovation and Entrepreneurship*. London: Routledge.

### 3. Products or services?

It is of course never enough to know how much you're innovating, if you don't know in what area you're doing it. In innovation studies one classically differentiated between product innovation and service innovation, as development in these two sectors function quite differently.

When people think about innovation, they normally think about product innovation. New products, be these the latest smartphone or a gigantic tanker, are easy to spot and refer to in the discussion about innovation. Technology-driven product development has also been one of the key value and welfare producing forms of innovation through the ages. Just consider something as everyday as the photocopier (even today, although it's being supplanted by the printer). Before the creation of this, creating copies of e.g. an office memo meant either using far less efficient forms of copying (such as the mimeograph) or even that office workers had to type up several copies by hand. The photocopier revolutionized office work, freeing e.g. typists to do more valuable work.

Products can of course be innovated upon in several different ways. A new innovation can come with hitherto unimagined functions (consider the first phone with a camera), but can also be "just" faster, more efficient, or smaller. When thinking about product innovation it is important to consider what kind of improvement actually brings about real value for the end user, so as not to fall into the "innovation for the sake of innovation"-trap. Here, the difference between incremental innovation (improving an existing product along known dimensions) and radical innovation (creating an entirely new kind of product to solve a specific problem) comes to the fore.

But products are of course only part of the picture. Today, we increasingly talk about the need for service innovation, i.e. innovative ways to solve problems in non-material ways. Service innovation covers all the ways in which novel approaches to e.g. aid, sell, buy, solve for, educate or otherwise service a customer can generate value. Back in the day, if you needed to find a place to sleep in a foreign city, you could either book a hotel, a hostel, or get in trouble once you'd arrived, thereby getting a place in the local jail. Now, with services like Airbnb, you can find a room or an apartment to sleep in/at that would previously have been impossible to find.

Service innovation might well seem "fuzzier" than product innovation, as there are less things to point to, and as the innovation may well be more of a mindset or a change in behavior than a technology as such. This doesn't make service innovation any less important. In fact, it is often the case that a new technology only becomes truly valuable once someone has figured

out a service that utilizes it in the most efficient way. Further, many industries see that just creating more technologies doesn't bring the most value to end-users. Consider the business of elevators and cranes, for instance. Most users are fairly comfortable with the current functionality of these technologies, but may well be interested in better, faster services for the same – it's not all that interesting for the user *how* they work, but that they work...



## Study questions

1. What do your end-users most want from an innovation – that it does something that wasn't possible before, or that it does the same thing, but quicker, cheaper, or more efficiently?
2. In service innovation, is it always the case that the service offered needs to be better?
3. What product innovations cannot work without service innovations to make them useful?

## Further reading

Kelley, T. & Whitman, J. (2007), *The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm*. New York: Crown Business.

Kimbell, L. (2015), *The Service Innovation Handbook: Action-oriented Creative Thinking Toolkit for Service Organizations*. Amsterdam: BIS Publishers.

## 4. Process, systems, and business model innovation

One of the great innovations of our time is intermodal freight transport (and the containers at the heart of this). It is particularly interesting when we start considering what kind of innovation it is. It isn't a product innovation, really, as big metal boxes obviously existed before the introduction of standardized shipping containers. But it isn't really a service innovation either, as the end-user really doesn't see all that much of a difference. What we can see here is a case of *process innovation*, a kind of innovation where one rethinks and remodels the process through which something is produced or e.g. transported. The end customer might see a difference in things like speed or price, but not necessarily be aware how this has come to be. This is an often forgotten form, and e.g. incremental process innovation might to some not even look like innovation at all. At the same time, process innovation can be even more transformative than product innovation. Just consider distillation. Originally invented in India, developed in Egypt but radically improved by the Arab chemist Al-Kindi, it gave us alcohol, but also a method through which e.g. fuels could be refined and industrial production of many substances made possible. The process might only interest specialists, but the end-products have brought joy to many...

Another kind of "invisible" innovation is *systems/systemic innovation*. Here we talk less about a specific process or individual services, but instead the manner in which numerous processes and technical innovations can be brought together into the creation of a radical rethinking of how something is done, produced, or performed. The astute reader will immediately realize that this too seems to describe intermodal freight transport! This is also one of the difficulties with both these terms – different people use them in slightly different ways, and they can often have some overlap. The benefit of thinking about systems innovation, however, lies in how it enables us to think about situations where one innovation is dependent on others to function. Merely standardizing shipping containers wasn't enough, but when this was combined with innovations in ships and in harbors, not to mention adapted to train systems and global logistics, immense value could be created.

To this comes a third form of innovation, one that has been one of the most talked-about in the recent years – *business model innovation*. This refers to innovation that cares less about the product or service being sold or offered, and more about how this can be commercialized and monetized. The typical example here would be Spotify (and other similar streaming services). In ancient times (at least if you ask my kids), people bought music piecemeal, on records or tapes. An album was a product to be sold, possible with a few singles to boot (the album, which combined both hits and filler material, can be seen as an early business model innovation!). Spotify turned this business model on its head, and instead offered a subscription where a monthly payment gave you access to almost unlimited amounts of music.

In this way, we might consider things like subscriptions, freemium models (where the basic product is free, but you pay for extras), and sharing economy services (where you e.g. rent unused space or other resources to others in periods you do not need them) as business model innovations – if they are new to the industry they're introduced in...

These three are thus variations on where and how you innovate. They might be less obvious than a new product, but can be very important. In addition, as many focus so much on product or service innovations, these can be fields where you can surprise the competition.

## Study questions

1. Can a systems innovation be incremental, or will it by its very nature be radical?
2. Why is introducing business model innovations often difficult for larger companies?
3. How can an organization start focusing more on process innovations?

## Further reading

Levinson, M. (2008), *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*. Princeton, NJ: Princeton University Press.

Osterwalder, A. & Pigneur, Y. (2010), *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Hoboken, NJ: John Wiley & Sons.

## 5. Disruption

One of the most talked about forms of innovation during the last two decades has been “disruptive innovation”. This might seem like just another way to say radical innovation, but actually points to a very specific process through which innovations can emerge. The concept is closely identified with Clayton Christensen, a management professor at Harvard, as he was the person who coined the term. Christensen was interested in why big corporations so often missed out of innovative new technologies or ways of working, and started studying disruptive shifts in industries, stating that the issue might not be that corporations didn't see the new innovations, but rather that they didn't seem all that important in the beginning.

What Christensen noted was that innovations aren't always bold fully formed, and that they may at first attract a very different market than the usual industry players were interested in. A classic case of this, and one of Christensen's early examples, was the steel market. When so-called mini mills first entered the market, they could only produce low-quality rebar steel. The established industry players were happy to let mini mills have this market, as it was a low-margin commodity, and did little to counter this new competition. But as the mini mills became better at producing steel, they moved on to higher-margin products, whilst the established companies focused more and more on the highest margin ones. Over time, though, this meant that the mini mills became ever bigger, with the previously dominant companies being driven out of the market. This process Christensen called disruption.

A disruptive innovation, then, is one that offers a new product or service to a previously underserved or -appreciated market, often so that the first versions of the product or service are cheap, low-quality, or with limited functions. The first digital cameras, for instance, produced very low quality images, and were of no interest to professionals. However, once the technology got cheap enough, digital cameras started interesting young amateurs who didn't care as much about perfect images than they did about fun and ease of use. And as technology improved, more and more people followed the early adopters into digital photography – disrupting the analog business, as well as the business for film!

To understand disruptive innovation, then, is to understand shifts in technology, and how a challenger can emerge from only serving the lower ends of the market. It is also an important reminder about how an innovation doesn't necessarily need to start out as a “better” product or service, but can in fact also be a “worse” but cheaper one.

## Study questions

1. What's the difference between a disruptive product innovation and a disruptive service innovation?
2. Just how much worse of a product or service are customers prepared to accept if it is cheap enough?
3. At what point should a company start reacting to a disruptive competitor – immediately, or when they have started to make inroads in the market?

## Further reading

Christensen, C. (1997), *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston: Harvard Business School Press.

Christensen, C., Dillon, K., Hall, T. & Duncan, D. (2016), *Competing Against Luck: The Story of Innovation and Customer Choice*. New York: HarperBusiness.

## 6. Innovation audiences

An astute reader will by now have realized that all of the innovations that we've been discussing have, in fact, been commercial ones. They've either been created for consumers or for industry, as these two are the most common audiences and markets for innovation. This, however, doesn't mean that they're the *only* audiences or markets for the same. Consider, for instance, *social innovation*. This refers to innovations that aim to improve the life and circumstances of people in need, and are not designed to generate additional profits. Instead, a social innovation could be something like basic income, which would (according to some) improve society by combating inequality and making the social safety-net less bureaucratic. Here, the audience for the innovation wouldn't be just rich consumers, but in effect everyone in society, including those who are least well off.

This is an example of the importance of thinking about *who* we innovate for. Often, innovation seems focused primarily on the same consumers and the same industries. We assume that the primary audience for innovations is white, more often than not male, middle-class or over, and Western. Alternatively, innovations in industry are often geared towards big, established companies or, in some areas, hip startups. Individuals or companies that do not live up to these norms can often see themselves excluded from the innovation discourse.

At the same time, this means that the potential for innovation may well be greatest here, among underserved innovation audiences! This is basic market economics; if everyone is trying to sell to one group of customers, the chances of success are always going to be better selling to another, ignored, group. If everyone is targeting men, innovative companies should try to target women. If everyone is trying to attract rich customers, a more innovative approach might well be thinking about attracting poor ones (remember what you read about disruption?). Another notion, lately championed by Kim and Mauborgne in their book *Blue Ocean Shift*, is to focus on "noncustomers", i.e. groups that for one reason or another isn't a customer. What can we innovate to make somebody use e.g. shipping services, who traditionally never has?

To think in terms of innovation audiences, then, is to challenge who we innovate for and who we think we should be thinking about when innovating. It might also be about thinking about the difference between the end-user and the payer – and how to impress each one in their turn. In social innovations, for instance, the payer may well be a government or an NGO, whilst the end-user may be destitute – requiring the innovator to be able to both create value for the latter and to do so in a manner that is palatable and within budget considerations of the former.

## Study questions

1. Who in your industry would be a “noncustomer”?
2. What can companies learn from the work done in innovating e.g. the social sector?
3. What kind of innovations may we be missing out on by focusing too much on the known audiences for innovation?

## Further reading

Baird, R. (2017), *The Innovation Blind Spot: Why We Back the Wrong Ideas and What to Do About It*. Dallas: BenBella Books.

Kim, W. & Mauborgne, R. (2017), *Blue Ocean Shift: Beyond Competing*. New York: Hachette Books.

## 7. Managing innovation

This far we've mainly focused on what innovation is, and in which forms it comes. It should however be noted that the tricky thing isn't necessarily to recognize or categorize an innovation, but to create one to start with! The discipline of innovation management focuses on the processes that (supposedly) aid companies and other organizations in turning ideas into actual innovations. This might sound like a daunting prospect, but at the core, this is merely about choosing what to pursue, how much resources to dedicate, and *when to stop*. In reality, it gets more complicated, but for a basic understanding of innovation management, this will do.

The first thing that an organization needs to decide is how much resources (financial and human) to dedicate to innovation projects/research and development. In some industries this is a very small percentage (the chemical industry averages 0,5-2% of total revenue), whilst it can be substantial in others (in software and IT the averages lies around 15% of total revenue). Once a budget is allocated, an organization needs to decide on a portfolio mix. Lots of small projects or a few big ones? A 50/50 split between smaller projects and big ones? Another weighting? There is no one right way here, so every organization needs to find its own balance.

After at least some idea of mix has been agreed upon, one needs to select projects. It is usually so that there are far more ideas for projects than is feasible to pursue, so this selection-process can be quite difficult. Once one has decided on which projects to start up, and allotted resources to them, one needs to decide at which points in time one checks up on their progress, often so that one at each of these checks decides to discontinue a group of projects, letting only the most successful ones continue. This, together, is known as a *stage-gate process*, where innovation projects pass through "gates" at various stages of their lifecycle. The ones that survive the entire process will hopefully be viable innovations!

In reality, many things conspire to make this process far less simple in practice. Not all projects are started at the same time, so you are always working with many projects in parallel. You can't really decide on a portfolio mix until you've seen the projects, yet without an idea of such a mix you can't really select projects. Deciding which projects to discontinue is never easy, as progress through the different stages can be very different for different projects. Still, successful innovation management means navigating these complexities, in situations of high uncertainty.



## Study questions

1. In the situation your industry is in, would it be more important with many small innovation projects or a couple of really big ones?
2. Is it better to kill innovation projects early, when they've spent less, or later, giving them more of a chance to succeed?
3. What different aspects decide how much resources a company should dedicate to innovation projects?

## Further reading

Trott, P. (2016), *Innovation Management and New Product Development (6th ed.)*. London: Pearson.

## 8. Time and strategy in innovation

For a company, the issue of innovation also needs to take into account the different time- scales within which it can emerge, and the way in which a company can think strategically and long-term about it all. While we often talk about innovation as if it emerged instantaneously, the reality of the matter is that all innovation projects take time, and some take much more than others. Whilst it is possible to develop incremental innovations in short bursts, e.g. by brainstorming, scrums, or hackathons, more comprehensive innovations can take years to develop – in extreme cases even decades. What this means is that we simply cannot think about innovation as something that “just happens” (or doesn't), but rather as something with complex temporalities.

To start, an organization needs to think about innovation long before they actually need it. As the process of developing and launching e.g. a new product can take 12 months even in ideal situations (the development of the iPhone took two years, for instance), this needs to be started when current products are still popular and selling well. This can lead to internal conflicts, as those working with current offerings can resent focus being shifted towards something uncertain and untested. Whilst this goes on, one might also need to run smaller and faster innovation projects to support the current offering, which in turn can lead to conflicts between the different innovation projects, as these are in effect fighting for the same resources.

In situations such as this it is vital that the organization has a clear strategy, and a clear vision regarding how different kinds of innovation projects fit in with this. It is also necessary for top management to have a clear idea of how the varied schedules of innovation projects with different scopes fit in with the bigger picture of the organization. If incremental innovation projects are too tightly clustered, this can lead to problems with supply chains, whereas if they are too spread apart this can lead to issues with marketing. The task of fitting the different (and at times unpredictable!) timescales of innovation with the other processes of the organization is an important part of both innovation management and strategy more broadly.

What this also highlights is that innovation is not, although this is sometimes forgotten, detached from the other, more day-to-day aspects of running an organization. Innovations need to fit into existing supply chains and distribution channels, or these may need to be radically revamped. Accounting systems and marketing channels need to be taken into account. Innovation and strategy also need to be developed concurrently, with feedback loops between the two.

## Study questions

1. At what point in the lifecycle of a product should a company start investing in a radically innovative (and therefore substituting) one?
2. What should an organization do when innovations do not fit with the current strategy?
3. If there's conflict between current offerings and innovation projects, how is this best dealt with?

## Further reading

Lafley, A. & Martin, R. (2013), *Playing to Win: How Strategy Really Works*. Cambridge, MA: Harvard Business Review Press.

Rumelt, R. (2011), *Good Strategy/Bad Strategy: The difference and why it matters*. New York: Profile Books.

## 9. Leading innovation

In practice, it isn't enough to merely plan and manage innovation. In order to make innovation happen in an organization, there needs to be leadership that supports innovation. This in its turn means something more than merely supplying resources and a management structure. Innovation leadership is very difficult to pinpoint, yet much suggests that without adequate such, no amount of resources and innovation management will make an organization innovative.

Leadership involves issues such as creating a vision, taking a stand, and providing inspiration. In the area of innovation this means defining exactly what is meant by innovation in a specific context, and motivating people to engage with this. Where innovation management is about control and limitation, innovation leadership might be described as encouraging specific types of risk-taking, and ensuring that management processes do not become too dominant or oppressive. Simultaneously, innovation leadership deals with setting ambitious innovation agendas, rather than supporting innovation for innovations sake.

As every organization is unique when it comes to their context and capacity, there is no one kind of innovation leadership that will work for every organization. Some organizations may be more in need of encouraging risk-taking, while others may well be comfortable with taking risks, yet not clear regarding what kind of innovation and what level of ambition they should be dealing with. Here, leadership is exceptionally important in order to vocalize and explicate the just what innovation is supposed to mean for this specific organization.

This means that an innovation leader needs to be able to state what level of innovation an organization is supposed to engage with, and what the *innovation audience* of the organization should be. Whilst this should also be detailed in the selected strategy, the leader should be the medium through which this strategy is communicated and made meaningful.

Often this requires of the leader a capacity to *lead by example*. By showing, through action, exactly which kinds of innovation the organization should engage with and be aiming for, a leader can engender and stimulate a conversation about innovation in the organization. This also means that innovation is something that needs to be *communicated*. By selecting specific innovations as examples of excellence, a leader can send a powerful signal to her/his organization about what is meant with the often generic exhortation of "innovate more".

Similarly, it is the job of the leader not to allow the organization to get too comfortable or caught up in hubris regarding the capacity to innovate.

Innovation is a continuously changing thing, and leaders are required so that organizations keep changing with the times and keep questioning their own place in the market. Without such leadership, even the most innovative organization can slow down, get too pleased with itself, and get itself ready to be disrupted.

## Study questions

1. How can a leader best communicate that failure is acceptable in the hunt for innovation?
2. Should leaders at times talk against innovation, and in what contexts might this be?
3. How can a leader make innovation into something meaningful for the entire organization?

### ***Further reading***

Collins, J. (2009), *How the Mighty Fall: And Why Some Companies Never Give In*. London: Random House.

Sinek, S. (2011), *Start With Why: How Great Leaders Inspire Everyone To Take Action*. London: Penguin.

## 10. Innovation cultures

No matter how good your management processes (and leaders) are, an organization's innovation capacity comes down to its employees. It is among these that ideas are generated, nurtured, and developed, and without a culture in place that supports this, no amount of management will make an organization innovative. Many of the things that are known to hinder innovation – being overly risk averse, confirmation bias, and the hubris of historical success – are deeply rooted in an organization's culture, and need to be addressed in this level.

A culture that wishes to be innovative needs to support learning and experimentation, allow people and teams to fail (in order to encourage risk-taking), and have incentives that encourages people to innovate. If, for instance, the organization has a culture where failure, even minor such, leads to recriminations and e.g. a stalled career, there will be such powerful dis-incentives for innovation that only very few people will attempt it. If, on the other hand, the organization has a culture that celebrates trying to do something new (e.g. by throwing a party when an innovation project fails), and shows that it will reward risk-takers, this will lead many more people to try out novel experiments.

In a similar manner, an organization with a culture that actively seeks out new information and new areas of activity, will almost automatically be more innovative than one where the culture insists on sticking to "best practices" and "what we've always done". While it is understandable that a culture would emphasize safety and the knowledge and competencies it already has – this, in a way, is what cultures always do(!) – it tends to be cultures that also value curiosity and learning that show a greater degree of innovativeness.

To this comes the critical issue of *diversity*. No single cultural dimension has shown itself to be as important for overall innovation capacity than this. Simply put, the more diverse the organization and the teams therein, the more likely it is to innovate. Diversity here refers to a broad range of dimensions. Whereas diversity when it comes to gender, ethnicity, and age is very important, we should also here consider diversity of backgrounds and experiences. If we for instance have a team of white male engineers, adding on female engineer or engineers with different ethnicities (or female engineers with different ethnicities) will doubtlessly increase the teams chances of finding novel solutions. However, it may well be that an even greater effect could have been achieved by adding on a white male designer or philosopher, as this could introduce ways of looking at a problem that engineers (regardless of gender or ethnicity) might not think of. An innovative organization thus attempts to play around with diversities of different kinds, trying out different mixes.

## Study questions

1. How can an organizational culture be made more comfortable with failure?
2. How does incentive systems (e.g. bonuses and promotions) affect an innovation culture?
3. Is there such a thing as "optimal" diversity for an innovation team?

## Further reading

Catmull, E. & Wallace, A. (2014), *Creativity, Inc.: Overcoming the Unseen Forces That Stand in the Way of True Inspiration*. New York: Random House.

Hill, L., Brandeau, G., Truelove, E., & Lineback, K. (2014), *Collective Genius: The Art and Practice of Leading Innovation*. Cambridge, MA: Harvard Business Review Press.

## 11. Open or closed?

Most notions about innovation works from the implicit assumption that innovation is something done within an organization, shielded from outside observation. There is however a discussion about how innovation can develop by allowing others, external to the organization, to collaborate on innovation, in various ways. This has become known as open innovation, as opposed to the closed system that much corporate innovation is.

Now, the term open innovation is rather vague (you might even say open-ended), and actually refers to a number of ways in which organizations can interact with outside actors. Henry Chesbrough, who coined the term and has written extensively on it, originally defined it as "a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology". In practice, however, the term has mostly been associated with various ways in which organizations attempt to entice outside talent (or the broader public) to help in their own innovation endeavors.

Methods for open innovation are manifold, but have included things such as idea competitions that are open to external actors, utilizing platforms like Innocentive to outsource or *crowdsource* solutions to specific problems, or arranging things like "hackathons" where e.g. students can come in and rapidly attempt to create an innovative solution for the company. By using such methods, a company can get a much broader and more diverse number of people looking at their problems, and thus at least in theory increase their chances of coming up with an innovation. As these methods are often also much cheaper than e.g. hiring a number of consultants to do the same, they have been met with a lot of interest from industry.

A core question in this has always been "how open is open?". An idea competition, for instance, doesn't require for the company to do much more than devise and market the same, as well as setting up a little prize money. Variations of this have been done long before the term became popular, and one can ask whether it opens up the organization at all, or if it is simply another form of data gathering. Proponents of open innovation have been more excited about what happens when a company e.g. give outside actors access to their internal data (such as e.g. price or environmental data), allowing for these to generate insights the company might not have found on their own.

In practice, companies have mostly experimented with open innovation, and still keep much of their internal information safely closed, as well as their main innovation projects top secret. Whether this will change, and the promise of open innovation realized, only time will tell.



## Study questions

1. What kind of problems are best suited for open innovation?
2. Who should own the rights to an innovation if the idea for it came from the outside?
3. What kind of management processes will open innovation projects require?

## Further reading

Chesbrough, H. (2005), *Open Innovation: The New Imperative for Creating And Profiting from Technology*. Cambridge, MA: Harvard Business Review Press.

Chesbrough, H. (2010), *Open Services Innovation: Rethinking Your Business to Grow and Compete in a New Era*. New York: Jossey-Bass.

## 12. The innovation habit

In the end, the greatest challenge remains: How can one make innovation “the new normal”, something an organization does consistently and habitually? History is filled with organizations and companies that were remarkably innovative for a time, only to get mired in risk-averse, conservative thinking. What history is not full of is organizations that managed to stay innovative over longer periods of time. In pondering this we should remind ourselves of the fact that innovation, even though it sounds like a well-defined phenomenon, is in fact a very relative and contextual one. What was innovative in the 1980’s will seem laughable today, and today’s innovations will in 50 years be laughed at. Lovingly, but still.

This is why organizations tend to lose out on innovation. They create an innovation, maybe several, but then become very wedded to these. They try to improve upon their successful product or service, but do so primarily to protect the same, not to challenge it. Time passes, and it becomes evermore important to stick to the knitting, the thing you already know, the thing that you’re comfortable with. All the while, other, nimbler organizations are trying their very best to disrupt the industry – and you.

It is no simple thing to create an innovation habit. It means constantly attacking your own products, your own services, your own processes and models. It requires constant unlearning, and may well mean the firing of your most important and most valuable customers. It means listening to people you think are uninformed, or foolish, or both. It means throwing yourself into a series of experiments you’re pretty sure will fail. And it means doing it all over again every few years.

Innovation isn't easy, and it isn't pretty. If it was, everyone would be doing it, all the time. Instead, it is often something done by those who have nothing to lose, and nowhere else to go. It is often done by people who are outsiders, eccentrics, kooks. It often happens in the most improbably ways. But outsiders become insiders, and the improbable becomes not just probable, but normal. To rediscover that energy, that desperation, can be incredibly hard, yet it is something organizations need to be prepared to chase.

We started all this by saying “Innovation – it’s complicated.”. It sure is. It’s difficult enough to do once, and to turn it into a habit might even seem paradoxical. Yet organizations can change, and can try to take the challenges, the imagination, the attempts to overthrow all the old ways into at least something one discusses.

In the end, there is no recipe for this. Each organization, each individual must find their own ways to keep up continuous change. Each company must strive to either disrupt or be disrupted. Even if it is expensive. Even if it is hard. Even if it means we have to throw away knowledge and competencies we’ve worked for a decade to acquire.

Innovation – it’s complicated.

### ***Further reading***

Rehn, A. (2019), *Saving Innovation*. London: Kogan Page.



Innovation Resource  
Moderating Tool

