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What is Innovation

Innovation is not just represented by introducing or implementing new ideas or methods. The definition or meaning of innovation can be defined as a process that involves multiple activities to uncover new ways to do things. It should not be confused with creation since this can be defined as the act of making, inventing, or producing something. However, new innovations can be realized with creativity. People need to think outside the box in order to create incremental enhancements.

At this moment, we are positioned in a fast-paced environment where technology is advancing and globalization is increasing. This means that distances only get shorter, and as a result, competition is increasing, customer expectations are more demanding, and disruptions in the economy is more likely to occur. For a business or an organization to realize competitive advantages, it should be able to adapt and innovate the to the changing trends and new generations. Innovations apply for management and organizations on all levels, sizes and in operating in all industries.

Innovations create bigger opportunities and are critical for the survival, economic growth, and success of a company. Innovating helps developing original concepts and is a driver of optimizing operations. Companies that innovate are able to set the organization in a different paradigm in order to identify new opportunities and best methods to solve current problems. In order to realize innovation, leaders should be open-minded and collaborative. Feeling comfortable with uncertainty and manage changes are behavioral components to innovate. Innovative leaders are curious and are optimistic since they dare to take risks. No one knows where innovation will bring the organization or individual.

On the other hand, everyone is an innovator because the innovative ability is in all of us. Since we were born, we innovate by learning by doing. The pitfall is that school have formatted by proving us knowledge us and has diminished our ability to innovate, while the ability to innovate is higher valued because innovation cannot be learned or taught.

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The Five Most Frequently Asked Questions About Managing Innovation

In our many years of practice, we have again and again discussed crucial questions raised by companies and innovation managers. The five most important ones are listed here.

Why is Innovation Management so Important?

Innovation is one of the most important drivers of competition. Trends such as digitalization and the digital transformation of markets require the development of different types of innovations: for example, organizational innovation, process innovation, product development, and the introduction of service innovations. The development of disruptive innovation is a big challenge in innovation management.

What does an innovation manager do?

An innovation manager organizes, structures, and monitors the innovation process of a company. He or she ensures that enough ideas for strategically important search fields are generated and that these are continuously implemented. By taking actions to develop the innovation culture, innovation managers help to increase the innovation capability and, thus, the competitiveness of companies.

How do you Find the Best Ideas?

Companies evaluate ideas according to various criteria such as customer benefit, sales potential, feasibility, and strategic fit. In the idea evaluation phase, management decides which criteria are particularly important for a concrete innovation project. The more advanced a project is in the innovation process of innovation management, the more critical rational evaluation criteria become to help with implementation.

How do you Design a Successful Innovation Management Process?

In innovation management, there is no standard process but a multitude of different approaches. However, they all have a common approach: First, organizations identify opportunities for innovation. This is followed by idea generation and idea evaluation. Ideas and concepts with the highest potential for success are transferred into an innovation roadmap and implemented.

The illustration shows the structure and the different stages of an innovation process that is used in corporate innovation management.

How do you Manage Innovation Successfully?

This illustration shows success factors of innovation management: regular scouting of opportunities, an innovation roadmap, committed employees and structured implementation.Successful innovation management includes

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the evaluation of trends and technologies,

the analysis of hidden customer needs,

a structured approach to idea generation,

and the implementation of innovation projects.

By measuring innovation success, organizations monitor their progress in successfully implementing their innovation strategy.

What are new approaches to innovation management?

Managing innovation successfully requires new approaches besides the traditional innovation process:

Methods such as co-creation, customer co-creation, and open innovation help to identify hidden customer needs.

Concepts like lean innovation ensure smooth and efficient implementation. An important focus is on the development of the innovation culture and the increase of the innovation capability of organizations.
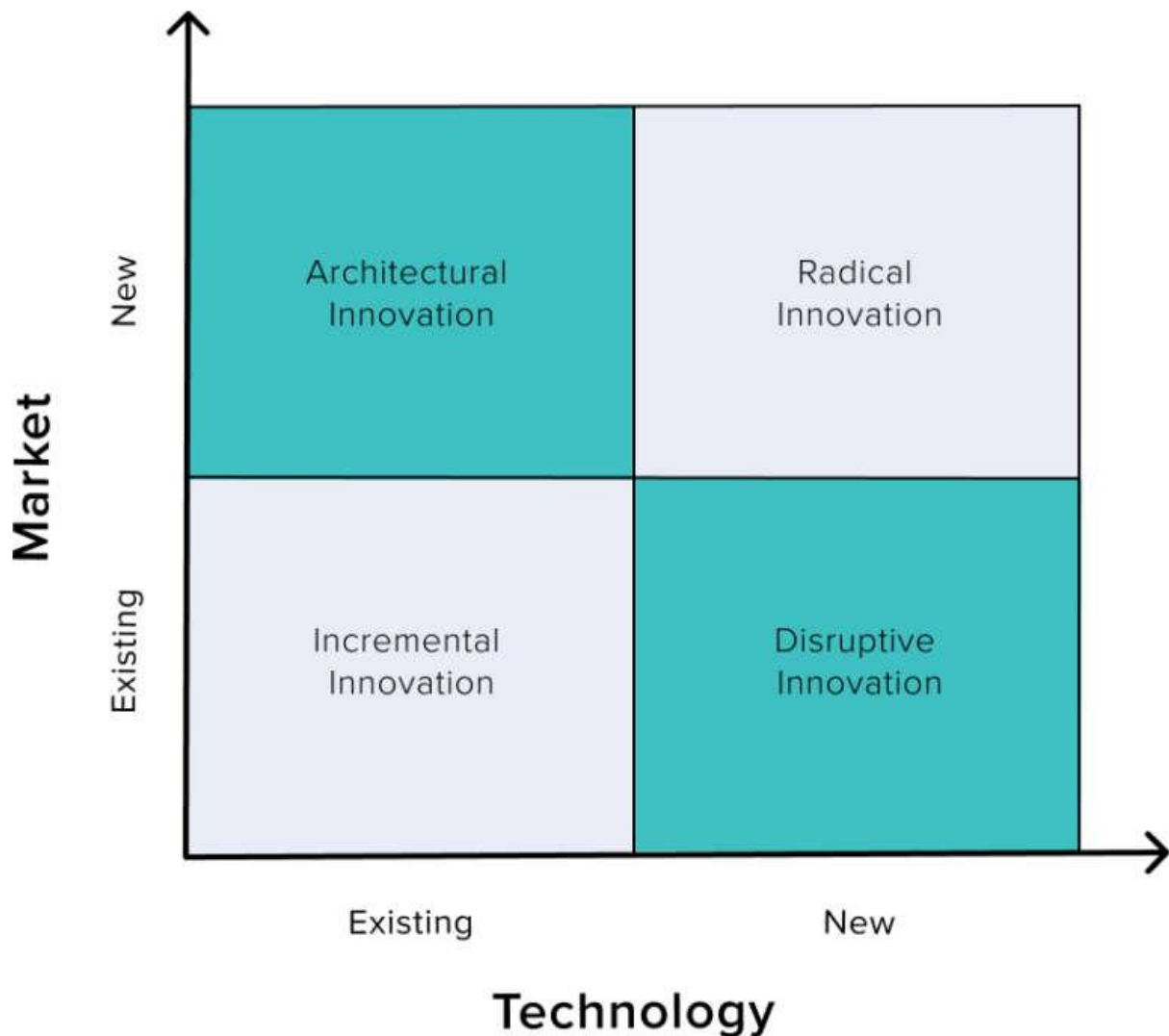
Types of innovation

Over time, we've created a distorted view of innovation as predominantly scientific and highly disruptive. These are both inaccurate assumptions, as is the idea that innovation is the lone work of a generation-defining genius. Instead, the following projects have managed to capture the sheer variety of exactly what can be considered innovation:

The Innovation Matrix

One of the most common ways of looking at innovation is via the Innovation Matrix, which is included below.

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The Innovation Matrix classifies innovations according to both the technology it uses and the market it operates in. Therefore, it allows us to conceive of four distinct forms of innovation:

Architectural innovation

Architectural innovation (also referred to as 'recombinative' innovation) involves taking an approach, technology or methodology from one field to another. This type of innovation is incredibly common, research suggests that around 40% of the patents registered over the past 150 years fall into this camp, with the ratio growing each year.

Examples of architectural innovation

Consider the app Uber. Ride-sharing, geolocation and freelance workers were nothing new. Combined, however, they became a game-changing innovation that served as a standout example of the sharing economy – so much so that the term 'uberisation' has become a term in and of itself.

A slightly less glamorous example but a pertinent one nonetheless: desktop vacuum cleaners. A common household staple, but repurposed for the world of work, desktop vacuum cleaners typify

the concept of adapting a classic product for modern needs. We hope this shows that you don't need to reinvent the wheel to be innovative.

Radical innovation

Radical innovation is what most springs to mind when we think of innovation, as it involves the birth of new industries and the application of "revolutionary" technologies. As such, while it's also a relatively rare form of innovation, it's credited with allowing society to take substantial leaps forward.

Examples of radical innovation

History is littered with examples of radical innovation, from the Enlightenment and the Renaissance to the Industrial Revolution. All of these periods provoked fundamental questions in how we go about our lives and our relationship to the world about us. Many argue that we are on the cusp of the Fourth Industrial Revolution, with advocates believing that artificial intelligence, 3d printing and the Internet of Things (IoT) will cause a profound shift in everything from transportation to healthcare.

Smartphones are a standout example of radical innovation. What's fascinating about smartphones is that they caused us to backtrack on our fixation on making devices smaller, and ultimately reconceptualise the potential of the traditional handheld device. Whether used for communicating, travelling or shopping online, it is undeniable that smartphones are essential to our day-to-day lives – a defining characteristic of radical innovation.

Incremental innovation

The overwhelming majority of innovations are incremental in nature. Incremental innovation is when a series of small and seemingly insignificant improvements culminates in large-scale organisational change. Incremental innovation is arguably the most accessible form of innovation, as it can often be performed without requiring huge budgets, a large team, or a reorientation of the business's strategy.

Examples of incremental innovation

Some of the world's most recognised companies have maintained their position at the top due to incremental innovation. You may not notice the changes, but many 'legacy' brands have become industry mainstays because they do not allow themselves to become complacent. Take Gilette, for instance. From inventing the world's first 'safety' razor they have slowly but surely refined their product to better suit customer needs.

Another fantastic example of incremental innovation is Amazon. To say that Amazon is a global juggernaut is a staggering understatement, and they have achieved this by steadily perfecting their

service offering. This ranges from introducing next-day delivery to continually experimenting with their web interface, resulting in daily optimisation of the user-experience.

Disruptive innovation

Popularised by the late Clayton Christensen, the term 'disruptive innovation' refers to when an innovation creates a fundamentally new value network. This can be achieved by either creating a new market or by entering an existing market and changing how consumers interact with it.

Christensen's theory sees innovations typically entering the market at a lower performance point, at least when measured by the traditional metrics of that market. They nonetheless offer value in an alternative way to a subset of the market for whom that feature is highly important. This bridgehead is then used to rapidly scale and disrupt the whole market.

From Netflix to Aldi, it is highly likely that you benefit from disruptive innovation on a regular basis. Ultimately, in a competitive market it's the risk-takers that rise to the top, and these two companies are prime examples of disruptive innovation done right. Take a look at our article on examples of disruptive innovation to explore this in more detail.

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Stages of Innovation

Innovation management supports innovation in the various phases: From the creative phase – the so-called "Fuzzy Front End of Innovation" – to the execution-oriented phase of implementation.

1. Stage of ideation: Various creativity techniques are used for idea generation. Methods such as design thinking also help in the early stage. In addition, companies often promote the early stages of innovation management through idea competitions and certain forms of teamwork.
2. Idea development stage: On the way from the initial idea to prototyping, companies often rely on innovation software: teams with different professional skills and thinking styles deepen ideas together by bringing in different perspectives.
3. Stage of innovation implementation: In addition to the standard innovation processes, a number of agile project management methods have been established in recent years. For example, in the development of digital innovations, companies rely on methods such as SCRUM. State-of-the-art innovation software supports companies in all phases of innovation.

1. Stage of ideation

Idea generation follows a systematic approach that is often supported by an innovation process or a continuous improvement process. More and more companies are creating a culture of innovation and introducing continuous improvement managers to support employees in developing their ideas. This process initially includes a step in which a profound understanding of the task is gained. This can be done, for example, through customer interviews or a trend analysis. Questions are developed from this first step in idea generation. In the second step, ideas are generated. In the third step, the concepts are optimized and an implementation plan is drawn up.

One such method of systematic idea generation breaks down the development methodology of the well-known inventor Thomas Alva Edison into comprehensible steps and makes them applicable. In six consecutive steps, you can develop very effective ideas and create concepts that are ready for implementation.

Thomas Edison usually took the following steps:

- Enabling: The search for the right field of innovation
- Defining: Develop search queries and specify search paths
- Inspiring: Search for thoughts and stimuli from other areas
- Selecting: Generate and evaluate ideas
- Optimizing: From the initial idea to the mature concept
- Nurturing: Enrich ideas with various implementation strategies

Idea Generation in Entrepreneurship

Finding new ideas is the key to managing change and innovation. Companies need to find ideas for organizational innovation, to develop innovative products and service innovations. Innovation strategies and digital strategies can only be implemented effectively through successful ideas. Ideas

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are also the key to digital innovation and the development or digital business models. Advanced idea management software and innovation management software makes it possible to define topics for idea generation and collaboratively develop ideas. Success in the various stages is largely determined by the innovation culture and the ability of organizations to overcome barriers to creativity and innovation.

2. Stages of Idea Development

While the stages of idea development may vary across industries and businesses, they all rely on a similar process to advance an idea into reality. Iggi & Gabi (23rd March 2011) break down idea development into four phases which we will apply in the development of AR. The four phases include: Inspiration, Incubation, Illumination and Implementation.

Inspiration Phase

This is when a creator/developer comes up with an idea and will likely have more than one to consider. In order to flesh out an idea and settle on the most relevant idea, one can implement certain guiding strategies, such as:

- Brainstorming
- Mind Mapping
- SCAMPER technique
- Reverse Thinking
- Collaboration

Brainstorming

This process involves assessing one's ideas whether as an individual or a group to settle on an idea that can be a solution to a specific problem. A brainstorm is usually a "brain dump" of different possibilities for the project, without judgement of its relevance to the subject matter.

Mind Mapping

Mind mapping involves creating a visual representation how ideas are related to each other. It allows the creator to assess all ideas from a visual point of view and select which are most relevant. Mind mapping can be fun because it encourages creators to color code, doodle, and find other creative ways to represent their ideas. It creates a mental picture of relationships that are all rooted into the main agenda/idea.

SCAMPER technique

Developed by Bob Eberie, the acronym stands for Substitute, Combine, Adapt, Modify, Put to another use, Eliminate and Reverse.

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This technique allows one to judge their ideas in reference to already existing solutions/products and consider improving upon them or innovating new solutions. The assessment is conducted by developing questions guided by the SCAMPER prompts. This process will allow creators to settle on a relevant idea easily because the process helps illuminate what will work for the existing market or intended audiences.

Reverse Thinking

In this technique, a creator/developer focuses on the possibility of failure. Instead of looking at how best the ideas will work, the creator analyzes ideas in reference to which ideas are likely to fail. This process gives creators a chance to derive a working idea by eliminating the most likely to fail in reference to the market/potential areas of implementation for their ideas.

Collaboration

This process involves a creator leaving their comfort zone and working with people from different backgrounds, knowledge-bases, skills, and experiences to assess their ideas from different perspectives.This method is important in generating ideas because it is inclusive. By combining different insights, a creator can reach a conclusion that addresses a wide variety of issues.

Incubation Phase

In developing your idea, create time to analyze the idea selected in phase one.At this phase, a creator is able to create a plan on how to develop their idea, understand the best app or methods to use to make the idea a reality, as well as determine the best opportunities/industries or context to implement the idea.Each and every solution/design that a creator considers has to have a plan of execution with the target user in mind. The plan acts as a guide to both the innovator/creator and the teams involved in fleshing out the idea. The plan helps make the product a reality and useful to the target market or audience.

Illumination Phase

In the words of Scott Barry Kaufman, "connections automatically, subconsciously collide and then reach the threshold of consciousness." This is the processing/evaluation phase where the creator is able to assess their idea in reference to the plan developed in phase two. They are able to identify weaknesses and work on how best to mitigate them by conducting a critical assessment of their ideas ideas. They also explore all possible ways to create it as well as implement it. Questions to consider include "Why would you not develop it?" and "Why would your target audience/consumer not use it?" This is the stage where the tools to be used and their features are considered in reference to the goal.

Implementation Phase

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Stop thinking and start working — this is the creation phase. At this stage the creator develops what they have already assessed, what you know the market/context is ready for, and what will be usable. Test your creation and allow others to test it as well to ensure that your developed experience has eliminated most weaknesses and/or has addressed all areas of constructive feedback.

3. Implementing Innovation

We're all familiar with stories about breakthrough products, services, and processes—the disruptors that grab the headlines and garner eye-popping valuations. And then there are the entrepreneurs who end up on the cover of Bloomberg Businessweek and write best-selling books about the keys to their success. The message seems to be that, through good timing or genius, innovation is the purview of a select few.

But at its core, innovation is simply a way to solve problems and create value in new ways. Overhauling an inefficient process, using customer feedback to breathe new life into a stale product—innovations don't have to be splashy or game-changing to lead to sustained organizational success. These small but mighty initiatives seldom come from top management or an "idea lab," but rather from individual contributors and frontline leaders who are closest to the customer and best positioned to understand their needs.

When employees from throughout the ranks learn to see themselves as innovators and take steps to make their ideas a reality, the results can be powerful. In addition to furthering a company's purpose and bolstering its bottom line, employee-driven innovation engages people in ways that carrying out top-down directives never will.

Given the growing interest in innovation, it's no surprise that organizations are looking for clear guidelines on how to implement it. Every innovation is unique. Even so, certain strategies and skills are useful across a range of projects and at all levels of an organization:

1. Spot opportunities for innovation. As innovation expert Greg Satell puts it, "No matter what form innovation takes—short, agile sprints or long-term, grand-challenge investments—innovation is fundamentally about solving problems." As you think about your organization, what problems need solving? Where do opportunities lie? Once you land on some promising ideas, continue to explore them from different angles. By doing so, you may discover even more exciting possibilities.
2. Prioritize opportunities. You don't have infinite time and resources, so prioritize potential innovations depending on where you think you'll get the most bang for your buck. Narrow in on the two or three ideas you think are most worth digging into, testing, and refining. Then express them as hypotheses you can test through targeted experiments.
3. Test your potential innovations. Keep your experiments modest in scope, especially when you're starting out. You may want to begin with "paper prototypes," or simple drawings of the new product or process that your end users can interact with to see what works and what doesn't. They are quick and inexpensive, and they help you figure out where you need to tweak your concept. With each round of testing, move to progressively more complex experiments involving more users.
4. Build support for your innovations. Don't be shy. Make sure the time is right and tell your story to all your stakeholders, including those whose resource backing you need and those

who'll directly benefit from your innovation. You'll want to tailor your approach based on what's important to each person and what you need from them.

5. Learn from your innovation efforts. You've probably heard the mantra "fail fast, learn fast." After each innovation, list what you would do again and what you wouldn't. And don't overthink failure; the key is learn from it and apply those lessons to your next innovation.

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Idea Generation

Ideas form the base from which we start building up. They could be abstract, concrete, or visual. An idea generation technique is a creative process of coming up with solutions and ideas. It also involves developing these ideas and communicating them.

Idea Generation in Entrepreneurship

Entrepreneurship is being able to create and run a business. In entrepreneurship, idea generation is one of the main factors that lead to its success. The idea thought of here should be able to solve a problem. And along with being unique, the idea should also be easy to execute. For example, let's suppose you feel a lot of people have a problem understanding legal jargon and legal proceedings.

So, in this case, your entrepreneurial idea could be setting up a platform that caters to all the legal needs of people and helps them understand it easily.

Idea Generation in Product Development

Idea generation is the first step for any product development. This requires you to look for feasible product options that can be executed. It is a very important step for organizations to solve their problems. It requires you to do market research and SWOT analysis. You should aim to come up with an idea that is unique from your competitors and can be used profitably.

For example, self-sanitizing door handles can be a product that you look at. It is unique and would be in high demand because of the current shift towards a healthy lifestyle.

Idea Generation Process

The process may be different for different organizations and different people. But there are three main steps in the process. It starts with the identification of the question or the problem we need to solve.After which we need to come up with ideas and probable solutions. Finally, in the third stage, we select the most suitable idea and execute it. For example, let's suppose you are opening up a restaurant.

So firstly, you need to identify what question you need to answer. Let's assume you want to decide upon a name for the restaurant. Now you will use different techniques (brainstorming, mind mapping, etc) to come up with ideas for names. In the last step, you will choose the most appropriate name from the different names you came up with within the second step.

Idea Generation Techniques

Now we will see the different idea generation techniques in detail.

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Mind Mapping

It is a technique of presenting information. Here we show the links between the different elements or the pieces of information. The links or connection is usually shown with the help of lines and arrows. It's a visual way of presenting the information. For example, let's suppose you want a name for your new application. You will start by writing the main topic in the center of a paper, which here is the name for your new application. From the center point, you will have arrows pointing out. These arrows will point to the main things to be kept in mind while thinking of a name like guidelines, visualization, productivity, etc.

Now from every key aspect, there will be more arrows pointing out. These arrows will describe the key aspect in detail. Like 'guidelines' will talk about the name being able to express what the application does, following the naming scheme, etc.

Reverse Thinking

As is very clear from the name itself this technique asks us to think oppositely. Instead of working on the problem in front of us, we work on the exact opposite of it. For example, let us assume you want to know 'how to increase your followers on social media platforms. According to this technique, you will instead think of 'how will I not increase my followers on social media platform'.

To this question, you will get answers like, by not posting regularly, or posting low-quality content, etc. Now you just have to reverse your answers. So, to increase followers on a social media platform you should post high-quality content regularly. This idea generation technique works on the concept that it's easier to come up with negative suggestions.

Brainstorming

This technique is quantitative meaning that you come up with a large number of ideas. Here a group comes up with a different probable solution to the problem. For example, if you along with some of your colleagues are trying to come up with a tagline for your product. And each one of you gives your ideas, then that is called brainstorming.

SCAMPER

The word SCAMPER is an acronym.

- S -Substitute
- C – Combine
- A – Adapt
- M – Modify
- P – Put to another use
- E – Eliminate
- R – Reverse

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Bob Eberle developed this technique. Each part of the acronym helps us think and ask questions, which results in generating ideas. For example, if you are a clothes manufacturing company you can think of 'substitute' your current material with a sustainable, eco-friendly option. You could also 'put it to other uses' by recycling the waste material.

Synectic

George M. Prince and Willian J. J. Gordon developed this technique. In this technique, we take apart a thing and then put it back together. This helps us get a better understanding of how things work.

Role-Playing

In this technique, the participants take up roles to play. These roles are different from the ones they usually play. It adds an element of fun and helps get innovative ideas. For example, you could take up the roles of customers and discuss your expectations and what you want from products. This could lead you to stumble upon some good ideas.

Storyboarding

This technique refers to the process of making storyboards to generate ideas. Storyboards use pictures, illustrations, and other information to better present the ideas. For example, suppose you are working on an idea for an advertisement. You can portray the different scenes in the form of a storyboard. This helps you in better visualization and you can make changes accordingly.

Brainwriting

In this technique, a group of people writes their ideas on a piece of paper. After the designated time for writing is over the paper is given to a different person. Now this person reads the ideas on the paper they got and adds their ideas on the paper. This continues until everyone has put their ideas on all the papers. And following this, there is a discussion on each idea.

Forced Relationship

This technique helps to come up with unique ideas. Here you take two unrelated things and imagine putting them together to see what new thing you can come up with. For example, take a calculator and a pencil, these are unrelated to each other. Now try putting them together. You might get some interesting ideas like a calculator with a touch screen and a pencil to write on it and a lot more.

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Collaboration

This technique is self-explanatory. Here you collaborate with others to come up with ideas. If you collaborate with a diverse group of people your ideas will be more unique. This happens because every person brings a different perspective. For example, if you want to increase the sale of a particular product you might want to collaborate with industry experts, specialists, or people working in domains other than sales.

The 5 W's

Who, What, Where, When, and Why are the five W's. Answering these five W's helps us achieve a very holistic view of the topic under discussion. And it is an efficient way to come up with solutions and ideas. For example, suppose you want to create a new product or a service. You can do so by asking questions like, who would use the product, why would people buy it, what would it do, etc.

Listening

People prove to be a very good resource when you are trying to generate ideas. Even those who aren't your employees and customers can be very resourceful. So, you must always go beyond your immediate circle and invest in listening. Socializing with people in your immediate social circle and even those beyond it can be very effective.

Accidental Genius

This idea generation technique believes that writing can help you come up with good ideas. Here writing is believed to be a trigger for ideas. This technique asks you to write freely without any editing. So, whatever problem you are facing just start writing the answer without being concerned about the right or wrong aspect of it.

Visualization

In this technique, we approach the problem visually. This is because visualization makes things easy to understand. And as a result, we can come up with ideas and solutions easily. For example, suppose you want a new setup for your production unit. You can have pictures taken of the current setup and work on it. Looking at the pictures will give you a better idea. You will be able to make changes to the setup so that it increases productivity and saves on time.

Removing Assumptions

There are a lot of assumptions about how things work. This technique requires us to list all the assumptions and then start removing them one by one. These assumptions work as stimuli for us to

come up with new ideas. For example, suppose you want to open a new school with innovative features. First list down all the assumptions you have about a school,

- There should be physical classrooms
- A fixed curriculum decided beforehand
- More emphasis on theoretical knowledge

Now remove each assumption one by now. Let's remove the need for a physical classroom. You could open a school that has online classes or has classes outdoors. In this way doing away with an assumption will help you explore new ideas.

Idea Generation Tools

Technology has made our work easier and continues to do the same. We can make use of tools and technologies to generate ideas as well. Today there are many such tools available to us. For example, there is Pinterest, Mindmeister, Freeplane, Idea Generator, Stormboard, Mindomo. Where Mindmeister helps you to make mind maps, Stormboard has features like whiteboards, sticky notes, and others that make brainstorming very efficient. So, we will highly recommend the use of these tools for efficient and effective idea generation.

Sources of Idea Generation

Sources of idea generation are the people and places from where you get your ideas. Several internal and external sources help to generate ideas. Employees and the research & development department of the company are great internal sources.Whereas, external sources are also very helpful. These are customers, suppliers, competitors, distribution channels, government, educational institutions, and focus groups.

Examples of Idea Generation

Ideas are present all around us. We see a lot of big and successful companies doing well. They all started with an idea. For example, Airbnb was started when two designers had spare space and hosted travelers. With Uber it was two entrepreneurs, trying to figure out how to reduce transportation costs.

Importance of Idea Generation

Idea generation is a very important activity, without which we would have nothing to work on. This activity also proves to be very beneficial for all the parties involved. The organization gets a lot of innovative ideas to work upon, the employees get to be a part of the bigger picture. There's an increase in creativity and a lot of effective solutions are generated.

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Idea Generation Activities

There are a lot of activities that help stimulate idea generation. These different activities are of two types, Internal and External activities. For internal activities, there are online and offline platforms where you can have discussions. We can also conduct timely sessions and workshops. These activities broaden our knowledge and with this increased understanding we can think better. Participation in events, doing courses, and conducting competitions are external activities. These external activities are helpful because they expose us to a lot of different people and different ideas. This, in turn, helps us come up with ideas of our own.

Idea Generation Workshops

Workshops consist of discussions and activities of any given topic like public speaking, watercolor painting, etc. So, when we talk about idea generation workshops, they have activities that help stimulate our idea of generating abilities. These workshops help improve your skills to come up with good ideas. Many companies conduct idea generation workshops for their clients. Some of these companies are edge+, Lighthouse, and MTI^2.

Conclusion

Ideas are the building blocks for all innovation. They are what we work on, so the first step of starting with anything new is finding that idea. We must make use of the different tools and techniques available to us to come up with quality ideas. We can even use workshops and activities, to improve this skill. So, what are you waiting for? Let's get creative!

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Essentials of innovation

Strategic and organizational factors are what separate successful big-company innovators from the rest of the field. It's no secret: innovation is difficult for well-established companies. By and large, they are better executors than innovators, and most succeed less through game-changing creativity than by optimizing their existing businesses.

Yet hard as it is for such organizations to innovate, large ones as diverse as Alcoa, the Discovery Group, and NASA's Ames Research Center are actually doing so. What can other companies learn from their approaches and attributes? That question formed the core of a multiyear study comprising in-depth interviews, workshops, and surveys of more than 2,500 executives in over 300 companies, including both performance leaders and laggards, in a broad set of industries and countries (Exhibit 1). What we found were a set of eight essential attributes that are present, either in part or in full, at every big company that's a high performer in product, process, or business-model innovation.

Since innovation is a complex, company-wide endeavor, it requires a set of crosscutting practices and processes to structure, organize, and encourage it. Taken together, the essentials described in this article constitute just such an operating system, as seen in Exhibit 2. These often overlapping, iterative, and nonsequential practices resist systematic categorization but can nonetheless be thought of in two groups. The first four, which are strategic and creative in nature, help set and prioritize the terms and conditions under which innovation is more likely to thrive. The next four essentials deal with how to deliver and organize for innovation repeatedly over time and with enough value to contribute meaningfully to overall performance.

Essential	Question
Aspire	Do you regard innovation-led growth as critical, and do you have cascaded targets that reflect this?
Choose	Do you invest in a coherent, time- and risk-balanced portfolio of initiatives with sufficient resources to win?
Discover	Do you have differentiated business, market, and technology insights that translate into winning value propositions?
Evolve	Do you create new business models that provide defensible and scalable profit sources?
Accelerate	Do you beat the competition by developing and launching innovations quickly and effectively?
Scale	Do you launch innovations at the right scale in the relevant markets and segments?
Extend	Do you win by creating and capitalizing on external networks?
Mobilize	Are your people motivated, rewarded, and organized to innovate repeatedly?

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To be sure, there's no proven formula for success, particularly when it comes to innovation. While our years of client-service experience provide strong indicators for the existence of a causal relationship between the attributes that survey respondents reported and the innovations of the companies we studied, the statistics described here can only prove correlation. Yet we firmly believe that if companies assimilate and apply these essentials—in their own way, in accordance with their particular context, capabilities, organizational culture, and appetite for risk—they will improve the likelihood that they, too, can rekindle the lost spark of innovation. In the digital age, the pace of change has gone into hyperspeed, so companies must get these strategic, creative, executional, and organizational factors right to innovate successfully.

1. Aspire

President John F. Kennedy's bold aspiration, in 1962, to "go to the moon in this decade" motivated a nation to unprecedented levels of innovation. A far-reaching vision can be a compelling catalyst, provided it's realistic enough to stimulate action today.

But in a corporate setting, as many CEOs have discovered, even the most inspiring words often are insufficient, no matter how many times they are repeated. It helps to combine high-level aspirations with estimates of the value that innovation should generate to meet financial-growth objectives. Quantifying an "innovation target for growth," and making it an explicit part of future strategic plans, helps solidify the importance of and accountability for innovation. The target itself must be large enough to force managers to include innovation investments in their business plans. If they can make their numbers using other, less risky tactics, our experience suggests that they (quite rationally) will.

Establishing a quantitative innovation aspiration is not enough, however. The target value needs to be apportioned to relevant business "owners" and cascaded down to their organizations in the form of performance targets and timelines. Anything less risks encouraging inaction or the belief that innovation is someone else's job.

For example, Lantmännen, a big Nordic agricultural cooperative, was challenged by flat organic growth and directionless innovation. Top executives created an aspirational vision and strategic plan linked to financial targets: 6 percent growth in the core business and 2 percent growth in new organic ventures. To encourage innovation projects, these quantitative targets were cascaded down to business units and, ultimately, to product groups. During the development of each innovation project, it had to show how it was helping to achieve the growth targets for its category and markets. As a result, Lantmännen went from 4 percent to 13 percent annual growth, underpinned by the successful launch of several new brands. Indeed, it became the market leader in premade food only four years after entry and created a new premium segment in this market.

Such performance parameters can seem painful to managers more accustomed to the traditional approach. In our experience, though, CEOs are likely just going through the motions if they don't use evaluations and remuneration to assess and recognize the contribution that all top managers make to innovation.

2. Choose

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Fresh, creative insights are invaluable, but in our experience many companies run into difficulty less from a scarcity of new ideas than from the struggle to determine which ideas to support and scale. At bigger companies, this can be particularly problematic during market discontinuities, when supporting the next wave of growth may seem too risky, at least until competitive dynamics force painful changes.

Innovation is inherently risky, to be sure, and getting the most from a portfolio of innovation initiatives is more about managing risk than eliminating it. Since no one knows exactly where valuable innovations will emerge, and searching everywhere is impractical, executives must create some boundary conditions for the opportunity spaces they want to explore. The process of identifying and bounding these spaces can run the gamut from intuitive visions of the future to carefully scrutinized strategic analyses. Thoughtfully prioritizing these spaces also allows companies to assess whether they have enough investment behind their most valuable opportunities.

During this process, companies should set in motion more projects than they will ultimately be able to finance, which makes it easier to kill those that prove less promising. RELX Group, for example, runs 10 to 15 experiments per major customer segment, each funded with a preliminary budget of around $200,000, through its innovation pipeline every year, choosing subsequently to invest more significant funds in one or two of them, and dropping the rest. "One of the hardest things to figure out is when to kill something," says Kumsal Bayazit, RELX Group's chief strategy officer. "It's a heck of a lot easier if you have a portfolio of ideas."

Once the opportunities are defined, companies need transparency into what people are working on and a governance process that constantly assesses not only the expected value, timing, and risk of the initiatives in the portfolio but also its overall composition. There's no single mix that's universally right. Most established companies err on the side of overloading their innovation pipelines with relatively safe, short-term, and incremental projects that have little chance of realizing their growth targets or staying within their risk parameters. Some spread themselves thinly across too many projects instead of focusing on those with the highest potential for success and resourcing them to win.

These tendencies get reinforced by a sluggish resource-reallocation process. Our research shows that a company typically reallocates only a tiny fraction of its resources from year to year, thereby sentencing innovation to a stagnating march of incrementalism.1

3.Discover

Innovation also requires actionable and differentiated insights—the kind that excite customers and bring new categories and markets into being. How do companies develop them? Genius is always an appealing approach, if you have or can get it. Fortunately, innovation yields to other approaches besides exceptional creativity.

The rest of us can look for insights by methodically and systematically scrutinizing three areas: a valuable problem to solve, a technology that enables a solution, and a business model that generates money from it. You could argue that nearly every successful innovation occurs at the intersection of these three elements. Companies that effectively collect, synthesize, and "collide" them stand the highest probability of success. "If you get the sweet spot of what the customer is

struggling with, and at the same time get a deeper knowledge of the new technologies coming along and find a mechanism for how these two things can come together, then you are going to get good returns," says Alcoa chairman and chief executive Klaus Kleinfeld.

The insight-discovery process, which extends beyond a company's boundaries to include insight-generating partnerships, is the lifeblood of innovation. We won't belabor the matter here, though, because it's already the subject of countless articles and books.2 One thing we can add is that discovery is iterative, and the active use of prototypes can help companies continue to learn as they develop, test, validate, and refine their innovations. Moreover, we firmly believe that without a fully developed innovation system encompassing the other elements described in this article, large organizations probably won't innovate successfully, no matter how effective their insight-generation process is.

4. Evolve

Business-model innovations—which change the economics of the value chain, diversify profit streams, and/or modify delivery models—have always been a vital part of a strong innovation portfolio. As smartphones and mobile apps threaten to upend oldline industries, business-model innovation has become all the more urgent: established companies must reinvent their businesses before technology-driven upstarts do. Why, then, do most innovation systems so squarely emphasize new products? The reason, of course, is that most big companies are reluctant to risk tampering with their core business model until it's visibly under threat. At that point, they can only hope it's not too late.

Leading companies combat this troubling tendency in a number of ways. They up their game in market intelligence, the better to separate signal from noise. They establish funding vehicles for new businesses that don't fit into the current structure. They constantly reevaluate their position in the value chain, carefully considering business models that might deliver value to priority groups of new customers. They sponsor pilot projects and experiments away from the core business to help combat narrow conceptions of what they are and do. And they stress-test newly emerging value propositions and operating models against countermoves by competitors.

Amazon does a particularly strong job extending itself into new business models by addressing the emerging needs of its customers and suppliers. In fact, it has included many of its suppliers in its customer base by offering them an increasingly wide range of services, from hosted computing to warehouse management. Another strong performer, the Financial Times, was already experimenting with its business model in response to the increasing digitalization of media when, in 2007, it launched an innovative subscription model, upending its relationship with advertisers and readers. "We went against the received wisdom of popular strategies at the time," says Caspar de Bono, FT board member and managing director of B2B. "We were very deliberate in getting ahead of the emerging structural change, and the decisions turned out to be very successful." In print's heyday, 80 percent of the FT's revenue came from print advertising. Now, more than half of it comes from content, and two-thirds of circulation comes from digital subscriptions.

5. Accelerate

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Virulent antibodies undermine innovation at many large companies. Cautious governance processes make it easy for stifling bureaucracies in marketing, legal, IT, and other functions to find reasons to halt or slow approvals. Too often, companies simply get in the way of their own attempts to innovate. A surprising number of impressive innovations from companies were actually the fruit of their mavericks, who succeeded in bypassing their early-approval processes. Clearly, there's a balance to be maintained: bureaucracy must be held in check, yet the rush to market should not undermine the cross-functional collaboration, continuous learning cycles, and clear decision pathways that help enable innovation. Are managers with the right knowledge, skills, and experience making the crucial decisions in a timely manner, so that innovation continually moves through an organization in a way that creates and maintains competitive advantage, without exposing a company to unnecessary risk?

Companies also thrive by testing their promising ideas with customers early in the process, before internal forces impose modifications that blur the original value proposition. To end up with the innovation initially envisioned, it's necessary to knock down the barriers that stand between a great idea and the end user. Companies need a well-connected manager to take charge of a project and be responsible for the budget, time to market, and key specifications—a person who can say yes rather than no. In addition, the project team needs to be cross-functional in reality, not just on paper. This means locating its members in a single place and ensuring that they give the project a significant amount of their time (at least half) to support a culture that puts the innovation project's success above the success of each function.

Cross-functional collaboration can help ensure end-user involvement throughout the development process. At many companies, marketing's role is to champion the interests of end users as development teams evolve products and to help ensure that the final result is what everyone first envisioned. But this responsibility is honored more often in the breach than in the observance. Other companies, meanwhile, rationalize that consumers don't necessarily know what they want until it becomes available. This may be true, but customers can certainly say what they don't like. And the more quickly and frequently a project team gets—and uses—feedback, the more quickly it gets a great end result.

6. Scale

Some ideas, such as luxury goods and many smartphone apps, are destined for niche markets. Others, like social networks, work at global scale. Explicitly considering the appropriate magnitude and reach of a given idea is important to ensuring that the right resources and risks are involved in pursuing it. The seemingly safer option of scaling up over time can be a death sentence. Resources and capabilities must be marshaled to make sure a new product or service can be delivered quickly at the desired volume and quality. Manufacturing facilities, suppliers, distributors, and others must be prepared to execute a rapid and full rollout.

For example, when TomTom launched its first touch-screen navigational device, in 2004, the product flew off the shelves. By 2006, TomTom's line of portable navigation devices reached sales of about 5 million units a year, and by 2008, yearly volume had jumped to more than 12 million. "That's faster market penetration than mobile phones" had, says Harold Goddijn, TomTom's CEO and cofounder. While TomTom's initial accomplishment lay in combining a well-defined consumer problem with widely available technology components, rapid scaling was vital to the product's continuing success.

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"We doubled down on managing our cash, our operations, maintaining quality, all the parts of the iceberg no one sees," Goddijn adds. "We were hugely well organized."

7. Extend

In the space of only a few years, companies in nearly every sector have conceded that innovation requires external collaborators. Flows of talent and knowledge increasingly transcend company and geographic boundaries. Successful innovators achieve significant multiples for every dollar invested in innovation by accessing the skills and talents of others. In this way, they speed up innovation and uncover new ways to create value for their customers and ecosystem partners.

Smart collaboration with external partners, though, goes beyond merely sourcing new ideas and insights; it can involve sharing costs and finding faster routes to market. Famously, the components of Apple's first iPod were developed almost entirely outside the company; by efficiently managing these external partnerships, Apple was able to move from initial concept to marketable product in only nine months. NASA's Ames Research Center teams up not just with international partners—launching joint satellites with nations as diverse as Lithuania, Saudi Arabia, and Sweden—but also with emerging companies, such as SpaceX.

High-performing innovators work hard to develop the ecosystems that help deliver these benefits. Indeed, they strive to become partners of choice, increasing the likelihood that the best ideas and people will come their way. That requires a systematic approach. First, these companies find out which partners they are already working with; surprisingly few companies know this. Then they decide which networks—say, four or five of them—they ideally need to support their innovation strategies. This step helps them to narrow and focus their collaboration efforts and to manage the flow of possibilities from outside the company. Strong innovators also regularly review their networks, extending and pruning them as appropriate and using sophisticated incentives and contractual structures to motivate high-performing business partners. Becoming a true partner of choice is, among other things, about clarifying what a partnership can offer the junior member: brand, reach, or access, perhaps. It is also about behavior. Partners of choice are fair and transparent in their dealings.

Moreover, companies that make the most of external networks have a good idea of what's most useful at which stages of the innovation process. In general, they cast a relatively wide net in the early going. But as they come closer to commercializing a new product or service, they become narrower and more specific in their sourcing, since by then the new offering's design is relatively set.

8. Mobilize

How do leading companies stimulate, encourage, support, and reward innovative behavior and thinking among the right groups of people? The best companies find ways to embed innovation into the fibers of their culture, from the core to the periphery.

They start back where we began: with aspirations that forge tight connections among innovation, strategy, and performance. When a company sets financial targets for innovation and defines

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market spaces, minds become far more focused. As those aspirations come to life through individual projects across the company, innovation leaders clarify responsibilities using the appropriate incentives and rewards.

The Discovery Group, for example, is upending the medical and life-insurance industries in its native South Africa and also has operations in the United Kingdom, the United States, and China, among other locations. Innovation is a standard measure in the company's semiannual divisional scorecards—a process that helps mobilize the organization and affects roughly 1,000 of the company's business leaders. "They are all required to innovate every year," Discovery founder and CEO Adrian Gore says of the company's business leaders. "They have no choice."

Organizational changes may be necessary, not because structural silver bullets exist—we've looked hard for them and don't think they do—but rather to promote collaboration, learning, and experimentation. Companies must help people to share ideas and knowledge freely, perhaps by locating teams working on different types of innovation in the same place, reviewing the structure of project teams to make sure they always have new blood, ensuring that lessons learned from success and failure are captured and assimilated, and recognizing innovation efforts even when they fall short of success.

Internal collaboration and experimentation can take years to establish, particularly in large, mature companies with strong cultures and ways of working that, in other respects, may have served them well. Some companies set up "innovation garages" where small groups can work on important projects unconstrained by the normal working environment while building new ways of working that can be scaled up and absorbed into the larger organization. NASA, for example, has ten field centers. But the space agency relies on the Ames Research Center, in Silicon Valley, to maintain what its former director, Dr. Pete Worden, calls "the character of rebels" to function as "a laboratory that's part of a much larger organization."

Big companies do not easily reinvent themselves as leading innovators. Too many fixed routines and cultural factors can get in the way. For those that do make the attempt, innovation excellence is often built in a multiyear effort that touches most, if not all, parts of the organization. Our experience and research suggest that any company looking to make this journey will maximize its probability of success by closely studying and appropriately assimilating the leading practices of high-performing innovators. Taken together, these form an essential operating system for innovation within a company's organizational structure and culture.

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Rules of innovation

When it comes to innovation, the single most common piece of advice may be to "think outside the box." Constraints, according to this view, are the enemy of creativity because they sap intrinsic motivation and limit possibilities.

Sophisticated innovators, however, have long recognized that constraints spur and guide innovation. Attempting to innovate without boundaries overwhelms people with options and ignores established practices, such as agile programming, that have been shown to enhance innovation. Without guidelines to structure the interactions, members of a complex organization or ecosystem struggle to coordinate their innovative activities.

How, then, can organizations embrace a more disciplined approach to innovation? One productive approach is to apply a few simple rules to key steps in the innovation process. Simple rules add just enough structure to help organizations avoid the stifling bureaucracy of too many rules and the chaos of none at all. By imposing constraints on themselves, individuals, teams, and organizations can spark creativity and channel it along the desired trajectory. Instead of trying to think outside the wrong box, you can use simple rules to draw the right box and innovate within it.

Simple rules cannot, of course, guarantee successful innovation—no tool can. Innovation creates novel products, processes, or business models that generate economic value. Trying anything new inevitably entails experimentation and failure. Simple rules, however, add discipline to the process to boost efficiency and increase the odds that the resulting innovations will create value.

Simple rules are most commonly applied to the sustaining kind of innovation, often viewed as less important than major breakthroughs. The current fascination with disruption obscures an important reality. For many established companies, incremental product improvements, advances in existing business models, and moves into adjacent markets remain critical sources of value-creating innovation. The turnaround of Danish toymaker LEGO over the past decade, for example, has depended at least as much on rejuvenating the core business through the injection of discipline into the company's new-product development engine as it has on radical innovation.

Simple rules can also be used to guide a company's major innovations. In the early 2000s, for example, Corning set out to double the number of major new businesses it launched each decade. A team evaluated the company's historical breakthrough products, including the television tube, optical fiber, and substrates for catalytic converters. By identifying the commonalities across these past advances, the team articulated a set of simple rules to evaluate major innovations: they should address new markets with more than $500 million in potential revenue, leverage the company's expertise in materials science, represent a critical component in a complex system, and be protected from competition by patents and proprietary process expertise.

What simple rules are (and aren't)

Simple rules embody a handful of guidelines tailored to the user and task at hand, balancing concrete guidance with the freedom to exercise creativity. To illustrate how simple rules can foster innovation, consider the case of Zumba Fitness.1 That company's fitness routine was developed when Alberto Perez, a Colombian aerobics instructor, forgot to take his exercise tape to class and used what he had at hand—a tape of salsa music. Today, Zumba is a global business that offers

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classes at 200,000 locations in 180 countries to over 15 million customers drawn by the ethos "Ditch the workout. Join the party."

Zumba's executives actively seek out suggestions for new products and services from its army of over 100,000 licensed instructors. Other companies routinely approach Zumba with possible partnership and licensing agreements. In fact, it is deluged by ideas for new classes (Zumba Gold for baby boomers), music (the first Zumba Fitness Dance Party CD went platinum in France), clothing, fitness concerts, and video games, such as Zumba Fitness for Nintendo Wii. Zumba's founders rely on two simple rules that help them quickly identify the most promising innovations from the flood of proposals they receive. First, any new product or service must help the instructors—who not only lead the classes but carry Zumba's brand, and drive sales of products—to attract clients and keep them engaged. Second, the proposal must deliver FEJ (pronounced "fedge"), which stands for "freeing, electrifying joy" and distinguishes Zumba from the "no pain, no gain" philosophy of many fitness classes.

These two principles for screening innovation proposals illustrate the four characteristics of effective simple rules. First, Zumba's rules are few in number, which makes them straightforward to remember, communicate, and use. They also make it easy for the founders to describe the kinds of innovations most likely to be chosen and to explain why specific ones weren't. Capping the number of rules forces a relentless focus on what matters most, as well. Zumba's success depends on the passion of its instructors and the differentiation of its offering from less playful exercise options. The rules encapsulate the essence of the company's strategy.

Second, effective simple rules apply to a well-defined activity or decision (in Zumba's case, selecting new products and services). To promote innovation, many executives embrace broad principles— like "encourage flexibility and innovation" or "be collaborative"—meant to cover every process. To cover multiple activities, rules must be extremely general, and often end up bordering on platitudes. These aspirational statements, while well intentioned, provide little concrete guidance for specific activities. As a result, they are often ignored.

Third, simple rules should be tailored to the unique culture and strategy of the organization using them. Many managers want to transplant rules from successful companies without modification—a big mistake (see sidebar, "Pitfalls to avoid when making rules"). Finally, simple rules supply guidance while leaving ample scope for discretion and creativity. Zumba's simple rules provide a framework for discussing and identifying which innovations are attractive but are not mathematical formulas where you enter the inputs and the answer pops out. The best simple rules are guidelines, not algorithms.

Zumba's rules illustrate a common way that simple rules facilitate innovation—by helping companies select and prioritize the most promising new ideas. McKinsey research shows that the choice of which innovations to pursue is a critical factor influencing a company's ability to innovate successfully (see "The eight essentials of innovation," McKinsey Quarterly, April 2015).

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Although Zumba may seem like a quirky example, even the most serious research labs can use simple rules to select innovations. The Defense Advanced Research Projects Agency (DARPA), for example, is one of the world's most innovative organizations, routinely producing breakthroughs such as brain-controlled prosthetics and climbing gear that allows soldiers with full combat loads to scale vertical walls without using ropes or ladders. DARPA's achievements are even more impressive when you consider that the agency has a technical staff of only 120—about half the size of the Pentagon cafeteria staff. The agency uses two simple rules to evaluate which innovations to back: a project must further the quest for fundamental scientific understanding and have a practical use.

Simple rules can also help ensure that creativity is aligned with strategy, for an innovation process unmoored from strategy often produces intriguing ideas that fail to leverage corporate resources and capabilities. These innovations, viewed as risky distractions, rarely secure the support and resources required for execution. The strategy of the sportswear business Under Armour is to compete on technical innovation, and its simple rules reflect this. Every year, it hosts its Future Show, where thousands of entrepreneurs vie for a chance to pitch their ideas to management. The most recent Future Show, the Connected Fitness Innovation Challenge, was aimed at building "the next generation of game-changing digital experiences through apps and wearable technology." The rules for the competition, reflecting this strategy, require that an innovation should integrate with MapMyFitness (an exercise-tracking company Under Armour acquired in 2013), emphasize inspiration and insight over information, and address a customer need within select areas, such as wellness or team sports.

In addition, simple rules can help ensure that innovations create value, by balancing novelty with the need to keep a lid on costs. The Zátiší Catering Group runs three of the highest rated restaurants in Prague, as well as a high-end cafeteria business serving the Czech operations of multinational clients. In the past, the chef at each cafeteria enjoyed complete autonomy to introduce new dishes, which proliferated so much that the company produced almost 1,000 distinct ones a year. This culinary creativity came at a cost. The chefs often used exotic, out-of-season ingredients. They rarely coordinated meal planning across cafeterias, which prevented the company from capturing economies of scale in purchasing. The relentless drive for novelty meant that the chefs rarely repeated popular meals, even when customers requested them.

The CEO wanted to make sure the chefs weren't generating novelty for its own sake but rather innovating in a way that created value. He assembled a team of chefs and cafeteria managers, who developed simple rules to guide menu selection. One rule was that three of the five dishes offered every day must be proven bestsellers, which built demand for meals. (This was important because customers could always go out for lunch if they didn't like the cafeteria food on offer.) Others were that no fewer than two dishes a day had to be available at all of the company's cafeterias and that 90 percent of the produce must be fresh and sourced locally. Chefs could still experiment with new dishes, but their creativity fell within parameters ensuring that the overall menu was profitable. Within a few months, revenues were up by one-third and profits doubled.

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Rules requiring the reuse of existing materials or components are a particularly helpful way to balance efficiency with novelty. LEGO, for example, insists that designers reuse a certain number of existing pieces when developing a new play kit. That rule balances the need for novelty with control over the number of unique pieces (and the associated manufacturing and logistics costs).

Simple rules for how to innovate

Zumba and DARPA use simple rules to select innovations. Other organizations use them to decide how to pursue innovations. Individuals, teams, and organizations can codify their experience and data into simple rules to guide the innovation process in the future.

Consider the case of Tina Fey, who, with eight Emmy Awards, is one of the most successful comedians of her (or any) generation. In an insightful (and very funny) New Yorker article, she distilled the lessons she learned from working on Saturday Night Live into simple rules she used to produce her next show, 30 Rock.2 The rules, largely focusing on managing creative people, include "never tell a crazy person he's crazy," which acknowledges the link between eccentricity and creativity and the need to handle such people carefully. Another rule is "when hiring, mix Harvard nerds with Chicago improvisers and stir." The former experiment with clever ideas; the latter, such as members of Chicago's famed Second City improvisational-comedy group, have a keen sense of what will work in front of an audience. While CEO of Burberry, Angela Ahrendts followed a similar rule to ensure that key teams balanced analytical employees with creative types.

Companies can also codify innovation-process rules based on the experience of others. ONSET Ventures was a pioneer among accelerators designed to help early-stage start-ups.3 When the founders established the firm (in 1984) they tried to identify which criteria were important to success by gathering information on 300 early-stage investments, both successful and failed, that had been funded by existing Silicon Valley venture capitalists. They found that a handful of variables accounted for over three-quarters of these outcomes and codified the key insights into five simple rules to incubate start-ups.

The best predictor of failure, according to this research, was sticking doggedly to the original business plan. The business models of successful start-ups, in contrast, nearly always underwent at least one major revision (and countless minor tweaks) before they stabilized. This insight led to the first rule: all start-ups must fundamentally change their business model at least once before receiving their next round of funding. Research also taught ONSET's founders that start-ups were more likely to succeed if they waited until after the business model had stabilized before bringing a new CEO on board. That way, the founders and investors could specify the precise skills and expertise the CEO would need to scale the business.

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Techstars, a top-ranked accelerator with 18 programs around the world, also uses simple rules to help start-ups get off the ground. The program in Chicago, for example, insists that portfolio companies can have only five key performance metrics at any point. These measures shift over time as companies develop, but the hard cap on five forces a ruthless prioritization at every step in the process.

Help members of a community innovate together

Innovation is rarely the product of lone inventors. More frequently, it emerges from the interactions of members of a community or ecosystem, who extend and build on one another's ideas. Communal innovation entails a deep conflict, however. By freely sharing ideas, members of an ecosystem can collectively create more value through innovation. Yet the open exchange of ideas can make it harder to protect intellectual property and potentially dampens incentives to innovate. Legal intellectual-property protection, such as patents or copyrights, mitigates this tension in many industries but doesn't work in all settings. Simple rules can protect intellectual property in situations where legal remedies don't apply.

Consider the case of magicians, for whom secrecy is everything.4 If another magician steals your tricks, he steals your unique selling point, especially if he doesn't credit you. Even more worryingly, if the public learns how tricks are performed, the illusion is ruined for the audience. So it's essential for magicians to ensure that others can't use their proprietary magic and that the public doesn't know how they perform tricks widely shared within the professional community. Magicians cannot rely on the law to protect their intellectual property—they would have to reveal the details of a trick to patent or copyright it.

Instead, magicians rely on simple rules. The rule prohibiting the use of a trick that has not been widely shared, published, or sold to you protects magicians who want to keep their magic proprietary. Another rule—an old trick that hasn't been used for a long time belongs to the person who rediscovers it—revives classic magic for new generations. Finally, and most important, the golden rule of magic is "never expose a secret to a nonmagician." Those who violate these rules are ostracized by the magic community, including the owners of clubs, who book acts. Simple rules are common in communities (including those of chefs, stand-up comedians, and crowdsourcing) that rely on innovation but do not or cannot use the law to protect their intellectual property.

Sometimes innovation requires working with partners, and simple rules can help here too. Consider the case of Primekss (pronounced "preem-ex"), a European construction-supply company that is trying to disrupt one of the world's most traditional industries—concrete—with a product that not only allows for thinner layers and less cracking but also cuts the carbon footprint by up to 50 percent. (The production of cement, the critical ingredient in concrete, is the third-largest source of greenhouse carbon dioxide.)5 After Primekss won a construction-industry innovation award, the founder was approached by over 100 contractors, but he estimated that the company could evaluate, train, and support only a few new relationships every year.

To select partners, the company developed a set of simple rules. Instead of putting new partners into head-to-head competition with existing ones, Primekss decided to select them in geographic

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markets with no current operations. A second rule was that a potential partner should have a Laser Screed machine, a state-of-the-art concrete-spreading system that signaled technical sophistication and commitment to quality. Another rule—partners must sell the concrete within three months of signing a contract with Primekss—ensured that the relationship would be a high priority for partners. In the first year after implementing these principles, Primekss doubled its rate of new partnerships that succeeded and quadrupled its licensing exports.

Too much constraint can stifle innovation, but too little is just as bad. A blank sheet of paper sounds nice in theory. In practice, pursuing novelty without guidelines can overwhelm people with options, engender waste, and prevent the coordination required for collective innovation. Simple rules can inject discipline into the process by providing a threshold level of guidance, while leaving ample room for creativity and initiative.

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Innovation Framework

Doblin Inc. was founded in Chicago in 1981 and has since become the innovation unit of Deloitte. The Doblin Innovation Framework is a famous model that asserts all types of innovation consist of the same basic elements. The framework groups ten elements into three main areas of innovation:

- The Configuration: this area covers the business model, network, structure, and processes of the organization.
- The Offering: This area covers the critical aspects of the product performance and systems.
- The Experience: This area covers the business's outward-facing elements, including the brand, customer service, marketing channels, and customer engagement.

This framework helps illustrate how innovation occurs across various parts of the business model. Let's take a look at some of the critical distinctions the Doblin Innovation Framework uses to explain the innovation component in any business.

Product Innovation

There are two types of product innovation in Doblin's framework, which make up the Offering. Product performance closely aligns with traditional views of innovation. A company can innovate on a product's features or functionality to improve the user experience and overall quality. Alternatively, you can create entirely new features. The second type of product innovation is Product System, which is the process of creating complementary products and services that add value to your core products. For example, Apple has a lot of accessories for the iPhone, which can add value by helping consumers use the product more efficiently.

Process Innovation

This type of innovation looks at an organization's internal processes to identify ways of improving how you develop and deliver products and services. An often-overlooked area, processes are vitally important to the longevity and success of any company. While there are added costs when you focus on improving internal processes, there is massive potential for a high return on investment (ROI). Your business can pursue this incremental innovation strategy to create better products and streamline business operations to become more efficient and productive. Also, as the changes are internal, you can gain a competitive advantage. Some examples of process innovation include process automation, standardization, lean methodology, predictive analytics, and crowdsourcing.

Service Innovation

Service innovation seeks to enhance the utility, performance, and perceived value of a company's offering. By putting the customer first, a business can eliminate issues in the customer journey to create a more enjoyable buyer experience and smoother route to conversion. In this type of innovation, customer satisfaction is paramount. Done right, you can use outstanding service to forge a fantastic brand reputation that sets your company apart from your competitors. According to

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SuperOffice, 86% of buyers will pay more for a great customer experience. Some ideas for service innovation include free trials, money-back guarantees, and self-service systems.

Technological Innovation

Regardless of your industry or products, technology is likely to be a pillar of your business. If it's not, you might struggle to survive in your market in the future, let alone thrive. While The Doblin Innovation Framework doesn't specifically highlight technological innovation as one of its 10 elements, several categories inherently relate to technology, including Profit Model, Process, Channel, and Customer Engagement. By embracing AI, machine learning, data science, and automation, your business can innovate in each of these areas to improve its internal processes and external communications. Ultimately, these advances will positively impact productivity, sales, marketing, and customer service.

Marketing Innovation

Marketing innovation seeks new or improved ways to promote, explain, and advertise your products and services. As with many other aspects of business, the marketing channels that provide the best ROI are constantly changing. The Doblin Innovation Framework highlights Channel Innovation as a key aspect of The Experience. For years, the business has become more about segmented audience targeting and personalization. Companies endeavor to provide customers with a tailored service that caters directly to their needs and interests. As companies constantly research their target audience and analyze behavioral data, they can use incremental innovation and A/B testing to refine the content, language, tone, imagery, and messaging across each channel. Over time, this innovation enables a business to offer an engaging, seamless experience, even as people move from one channel to the next.

Social Innovation

The last type of innovation we'll highlight is one that few businesses can choose to ignore today. Social innovation—or Network Innovation as per the Doblin Framework—is the strategy of leveraging popular social topics and current trends to generate new ideas and build a bigger audience. This approach allows the company to tap into the thought-pool of the public without great expense. By aligning with the social narrative on topics like environmentalism, equality, or democracy, companies can position their products and services with a broader audience's social values and principles. Beyond that, network innovations enable companies to take advantage of other companies' processes, technologies, and channels. In essence, social or network innovation is open innovation at its best.

Business Model Innovation

Innovation Management

The business model is the way a company functions and earns money. The business model innovation encompasses innovations in strategy, marketing, supply chains, value creation, pricing or cost structures.

Organizational innovation

Organizational innovations affect the process and organizational structure. These can be organizational process innovations or management innovations, e. g. new tools for measuring customer satisfaction or optimizing delivery processes to reduce costs.

Environmental innovation

All innovations that contribute to improving the environment are environmental innovations. This concerns for example environmentally friendly products, contributions to environmental protection or the avoidance of emissions.

Technology innovation

As the name implies, these are technological innovations, such as the creation of products and services. In principle, they are also process innovations. These include, for example, production processes or IT technologies for apps. Product innovations, quality improvements or cost savings often go hand in hand with process and technology innovations.

Innovation Management

Innovation Management

Innovation management is a focal point for many businesses today. If it's not a priority for your business, you risk stagnant product offerings and may succumb to the ever-present threat of disruption. While every company may have great ideas, only those organizations with a strategy and effective leadership can turn those concepts into business growth and success.

In this chapter, we will discuss innovation management to understand the importance of managing new ideas. By the end, you'll have the knowledge you need to not only map out your vision for strategic innovation but also to execute on that vision.

WHAT IS INNOVATION MANAGEMENT?

Innovation management, or an innovation management system, is the process of managing new ideas, from ideation to taking action and making them become a reality. This approach has four distinct steps:

1. Generating - Brainstorming and employee input to uncover hidden concepts.
2. Capturing - Recording ideas in a way that is easily shareable with key stakeholders.
3. Evaluating - Discussing and criticizing innovative ideas to see if they fit your needs.
4. Prioritizing - Deciding which innovative ideas will be executed to maximize time and other resources in your company.

Innovation management informs—and is informed by—high-level business targets that generate significant value for your organization. Certain actions and practices will result from your innovation, just as your innovation will follow as a response to your business vision and problems that arise.

In order to implement effective innovation management processes, you need excellent communication between employees at all levels and a collaborative environment to uncover additional innovative ideas.

WHY IS CORPORATE INNOVATION MANAGEMENT MORE IMPORTANT THAN EVER?

Companies that don't innovate will inevitably die, just like Blockbuster, Borders, Polaroid, and Kodak. Note that these aren't mom-and-pop stores or early-stage startups—they are giant brands that had a wealth of resources, and they once dominated their industries. If brands like these can die from a lack of innovation, then any company can. But innovation alone is not sufficient—it requires a collaborative culture that encourages employees to put forward great ideas and supports those with an entrepreneurial spirit.

Otherwise, these employees have little incentive to speak out and offer their insights whether they're in the trenches or a higher-level management position. By managing and encouraging

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innovation, you can discover new products, reduce costs, and enhance your development process significantly. Organizations that don't embrace innovation management also risk bringing outdated solutions to their market. This limits your ability to stay ahead of the competition. Blockbuster failed to promote innovation, instead of relying on their outdated model of in-store rentals and purchases for movies and video games. Netflix was able to disrupt Blockbuster by first offering DVDs shipped directly to your door. Soon after, Netflix pivoted once again by providing digital streaming for a large catalog of entertainment options.

By ignoring the industry's inevitable evolution, Blockbuster dug its own grave despite having all the resources it needed to retain its dominant market position.

KEY PILLARS OF INNOVATION MANAGEMENT

There are four key pillars to innovation management: Competency, Structure, Culture, and Strategy. As any new idea can be viewed as innovation, it helps to have these pillars in mind to stay organized.

Let's take a closer look at each pillar:

Competency

Your core competencies are the things your company does best internally, as well as better than the competition. However, doing something well does not mean that it is important because your competencies may not always align with your market's wants and needs.

In terms of innovation management, it's helpful to distinguish your employees' competencies from those of your organization at large. Your employees may have one-off competencies that apply in narrow contexts. In contrast, your organizational core competency revolves around its ability to direct and organize these capabilities around a market solution.

Therefore, for organizational competency, you should look for the following abilities:

1. Working with external partners and stakeholders.
2. Maximizing the value of your current resources.
3. Setting concrete long-term and short-term goals.
4. Strategic management systems to achieve goals and review progress.

It helps to have someone within your organization that already has experience with innovation management. However, with the right mindset and focus on improving your company's competency in this area, you can turn it into a major strength.

Structure

Whereas competency has to do mainly with capability, structure refers to the systems and business processes present within the organization. Innovation control is essential, and the structure is what

makes it possible. The right structure is greater than the sum of its parts. It can empower your organization to operate more efficiently and produce more powerful ideas.

For instance, if management treats employee ideas as if the employees were proposing a significant, wholesale change all at once, the managers may be skeptical and dismissive. Such an attitude would mean many ideas may never be heard, or they will be rejected without a fair hearing. The fewer barriers between an innovative idea and your core customers, the better. Innovators are, by definition, rule breakers—departing from the traditional ways your organization does things.

Culture

When it comes to managing innovation, your culture will either magnify your success or severely detract from it. The right culture attracts and maintains innovators, whereas the wrong culture turns them away.

The first key in promoting a pro-innovation culture is how you encourage specific behavior while discouraging other behavior. Behaviors and cultural aspects that aid innovation include:

1. The Best Idea Wins - A culture that assures employees their ideas will be evaluated on a meritocratic basis will foster greater innovation. Instead of bottlenecks and hierarchies determining which ideas to embrace, anyone can move the organization forward if their proposal aligns with business goals.
2. Speed to Market - In today's world, it's often the company that brings an idea to the market first that wins because you can capture market share before competition heats up. You can also iterate on products and services with a faster lifecycle.
3. Ongoing Learning - Encourage employees to take their learning seriously. Teams who are always learning maintain sharp minds and can identify opportunities to innovate more readily.
4. Failure as Part of the Process - One of the biggest barriers to sustainable progress is the idea that a proposed solution that didn't work out was somehow "bad." Not all ideas will be greenlighted, and that's okay — but your team needs to know that (and hear it explicitly from your organization's leaders).

Innovation Strategy

In short, your strategy is the long-term planning you have in place for your organization to reach your financial and other goals.

With the right strategy, you can launch new ideas with confidence and select the right path forward from several options. Without a clear strategy, you risk running in circles or pursuing concepts or campaigns that don't serve your company over the long run.

Strategy also involves resource allocation, and it should inform your innovation management process based on your available resources. This allocation may change over time as you shift more (or less) resources toward developing new ideas.

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Innovation Risks

Risks of the Innovation Process and their solutions

Technological Failure Of The Innovation –

The biggest risk any company takes in the innovation process is whether or not the new product or idea will work once it is launched. To manage this risk, the company may carry out trials on a small scale to test its effectiveness. So, if this is done, the necessary adjustments may be made to avert any huge losses once the product is mass-produced.

Financial Strain –

The innovation process is faced with the challenge of draining out the company resources. This is because of the returns that are usually long-term as opposed to immediate. So, if this is done, averting the necessary adjustments may be made to avert any huge losses once the product is mass-produced.

Market Failure –

Failure in the introduction of new products or technology to the market means that demand would be low and therefore the innovation is not viable commercially. Hence, you should undertake extensive and in-depth market research before committing limited resources to its development and production.

Redundancy –

With trends in the market, a profitable innovation today may be redundant shortly. Therefore, there must be constant research on how to improve the existing systems, and the factors influencing them to stay a step ahead.

Lack Of Capacity For Implementation –

Lacking the structural and financial capacity to roll out the innovation is always risky. You may choose to look for partners who will assist in your area of lack and thus overcome the challenge.

Organizational Risks –

These risks involve the structuring and running of the business. So, following proper planning and allocation of resources helps to ensure this does not happen.

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Unprecedented Risks –

They may involve changes in policies or political instability whose ripple effect spills over hindering the effectiveness of the innovation. Therefore, the business needs to keep a contingency plan to buffer it against such unseen events.

End