Hype Cycle for Innovation Management Techniques, 2021

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Initiatives: Executive Leadership: Innovation Management; CIO Leadership of Innovation, Disruptive Trends and Emerging Practices; Enterprise Architecture and Technology Innovation Leaders

> Innovation management techniques are always evolving and maturing year over year. Executive leaders should study this Hype Cycle to understand the trends in techniques and approaches that can help maximize the value and impact of their innovation programs across the organization.

Analysis

What You Need to Know

Innovation management is a discipline that enables organizations to generate and execute on an ongoing stream of new ideas that create value. Because every organization has unique goals, the exact design and delivery of the innovation programs and initiatives to achieve those goals will be different for each organization. Executive leaders and others responsible for innovation (including chief innovation officers, CIOs, CTOs, CDOs, or heads of strategy) can use this Hype Cycle to identify the innovation techniques most likely to deliver success in all stages of the innovation process.

The Hype Cycle

Innovation management is a relatively mature discipline with a wide range of well-established techniques, as highlighted by the large number of entries clustered on the right hand side of the Hype Cycle. Even those at the Peak of Inflated Expectations, such as innovation ecosystems and innovation storytelling, are not new techniques, but rather underused approaches enjoying a surge of attention from organizations that haven't taken advantage of them in the past.

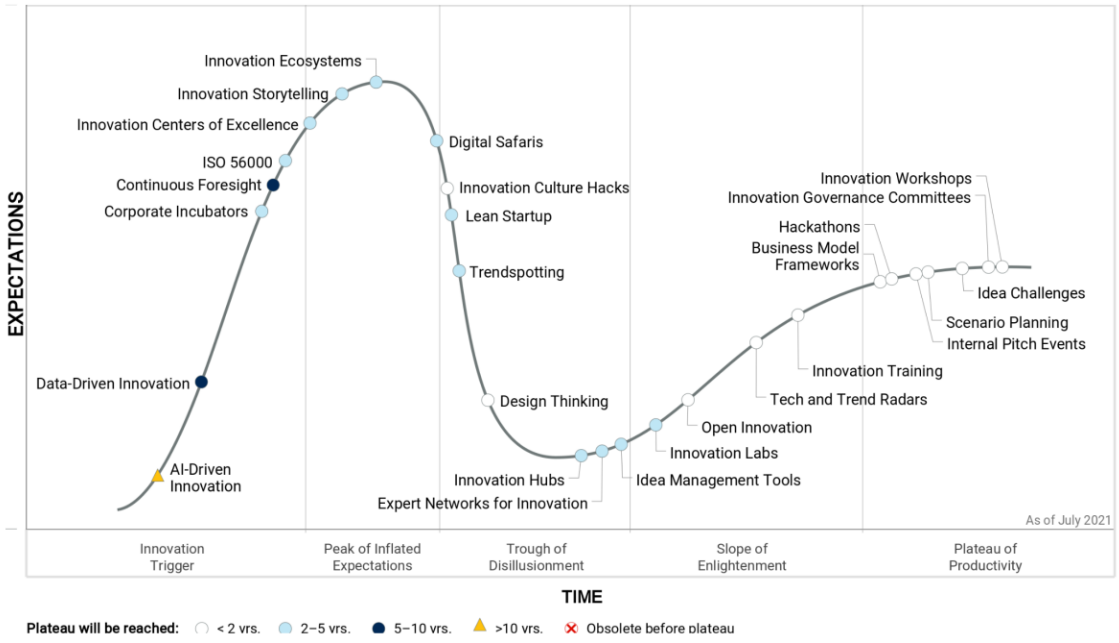
Even though many of these techniques are mature, it doesn't mean that they are easy to do well. Executive leaders and innovators must pay attention to selecting techniques that will best serve their innovation goals, following best practices and avoiding common pitfalls.

The techniques included on this Hype Cycle are the ones that generate recurring interest from clients to Gartner's expert inquiry service. We have also included some that are just emerging, but offer the potential for significant improvements to the innovation process (such as artificial intelligence [AI] and data-driven innovation). They cover organizational aspects of designing innovation programs, and key stages of executing the innovation process:

- **Organizing for innovation:** Corporate incubators, innovation centers of excellence, innovation ecosystems, innovation hubs, innovation labs, open innovation, innovation governance committees
- **Improving the innovation process and culture:** AI-driven innovation, International Organization for Standardization (ISO) 56000, innovation culture hacks, innovation training
- **Strategy and opportunity identification**: Data-driven innovation, continuous foresight, innovation storytelling, digital safaris (field trips to other innovative organizations), trendspotting, tech and trend radars, business model frameworks, scenario planning
- **Idea generation:** Expert networks for innovation, idea management tools, hackathons, internal pitch events, idea challenges, innovation workshops
- **Evaluation and experimentation:** Lean startup, design thinking

See Organizing for Innovation: Maturing From Accidental to Intentional Innovation and Executing on Innovation: Design the Process From Idea to Value for additional information on innovation techniques.

Figure 1: Hype Cycle for Innovation Management Techniques, 2021



Source: Gartner (July 2021)

Downloadable graphic: Hype Cycle for Innovation Management Techniques, 2021

The Priority Matrix

While most of the innovation techniques in this Hype Cycle are well established, they are not yet business as usual. In many organizations, even techniques that have been around for decades, such as scenario planning and innovation workshops, are only used intermittently, often driven by a single enthusiastic executive or manager. Most of the techniques have a lag time in terms of years to mainstream adoption of less than two years, or two to five years, to reflect their potential to become more fully embedded into broader management practices and tools. Continuous foresight, and data-driven and AI-driven innovation have longer time frames as they are earlier in their maturity and adoption.

On the benefit axis, most of the techniques are designated moderate or high impact, although their actual effectiveness is highly dependent on how they are implemented and whether they become part of a sustainable organizational competency. AI-driven innovation is potentially transformational in its ability to drive high-impact innovation at scale through the discovery of new ideas and rapid progress through the innovation pipeline.

Table 1: Priority Matrix for Innovation Management Techniques, 2021

(Enlarged table in Appendix)

Benefit	Years to Mainstream Adoption			
	Less Than 2 Years	2 - 5 Years	5 - 10 Years	More Than 10 Years
Transformational				AI-Driven Innovation
High	Design Thinking Innovation Governance Committees Internal Pitch Events Open Innovation Scenario Planning	Corporate Incubators Innovation Centers of Excellence Innovation Ecosystems Innovation Hubs Innovation Labs Lean Startup Trendspotting	Continuous Foresight Data-Driven Innovation	
Moderate	Business Model Frameworks Hackathons Idea Challenges Innovation Culture Hacks Innovation Training Innovation Workshops Tech and Trend Radars	Digital Safaris Expert Networks for Innovation Idea Management Tools Innovation Storytelling ISO 56000		
Low				

Source: Gartner (July 2021)

On the Rise

AI-Driven Innovation

Analysis By: Arun Chandrasekaran, Brian Burke

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition

AI-driven innovation refers to the use of artificial intelligence technologies in the process of innovation. AI-driven innovation could either be in the form of new inventions like new drugs or material discovery in specific domains, or could be used to boost agility and efficiency in an end-to-end innovation process pipeline across use cases and industries.

Why This Is Important

Advancements in the field of AI have the potential to directly influence both the creation and optimization of a wide range of products and services, with important implications for organizations through better productivity, agility, workforce rebalancing and ability to outpace competition. While these changes themselves are critical, AI also has the potential to change the innovation process, making it more efficient, streamlined, data-driven and responsive to changing market needs.

Business Impact

The near-term business impact of AI will be in these innovation process areas:

- Trend identification, pattern matching and technology scouting
- Idea generation and testing practical feasibility of an idea based on potential and constraints
- Prototyping an idea, often using agile, lean methodologies
- Generative designs for the idea by iterating against user preferences by target customers (demographics, gender, race)

AI's long-term impact will be in the area of generative product/service development.

Drivers

Increasingly, organizations are turning to AI technologies to accelerate the innovation process overall, and perhaps most significantly to augment the ideation process with generative AI approaches.

The following are key business drivers for AI-driven innovation:

- **Faster and better ideation and prototyping:** The usage of AI removes data and information processing constraints in the ideation process. Recent advances in areas such as synthetic data and AutoML have made it feasible to apply AI to the ideation process to increase its overall robustness and augment human decisions. By poring through massive quantities of information, and through pattern recognition and other techniques, AI systems can generate more ideas. Innovation is about generating ideas so that there is a wide pool of hypotheses that can be tested before moving into a prototype phase — the usage of AI can create a wider funnel of innovative ideas.
- **Ability to create breakthrough products:** Recent advancements in areas such as reinforcement learning have given rise to exciting new use cases in areas such as robotics (contextual awareness), chemistry (optimizing molecular reactions) and autonomous vehicles.
- **Generative AI being used to augment ideation processes:** While there are game-changing opportunities like drug discovery and material science, generative AI is also being used to optimize the engineering of prototype parts or in designing buildings to optimize for light, space and efficiency.

Obstacles

AI can augment the innovation process in many areas with varying success, largely dependent on the maturity of the technique:

- Creating a decision framework on where to use AI in the innovation process and what techniques to employ, and ensuring adequate availability of data and other resources is a major obstacle.
- Trend identification and pattern matching tools are based on natural language processing technologies, which Gartner classifies as emerging, with some commercial products available but not yet fully proven.

- Many opportunities that exist for ideation leverage generative AI techniques, which Gartner classifies as embryonic and are mainly in lab development, and in many cases are unstable.
- AI tools to test feasibility are domain-specific and at varying levels of maturity.
- Using generative design for prototyping is viable and the technology is relatively stable, but critics argue that, among other design issues, too many options result in "overchoice" and slower decision making.

User Recommendations

- Shortlist specific areas where the usage of AI will augment your innovation process and allow you to bring products to market faster and less expensively. Start with more proven areas, such as trend identification, technology scouting and idea generation, which have higher business relevance and easier operationalization.
- Focus on solving the two critical challenges with the application of AI for innovation — managerial and employee training on AI, and demystifying the AI decision process through better access to quality data and model explainability.
- Focus on AI as a tool for human augmentation in the innovation process and set expectations regarding generative AI being a futuristic scenario.
- Encourage experimentation to gather hands-on experience on the feasibility of various AI use cases for innovation.
- Work with startups and vendors that can offer commercial solutions to address specific innovation process challenges, rather than "building AI."

Gartner Recommended Reading

Innovation Insight for Generative AI

Top Strategic Technology Trends for 2021: AI Engineering

Data-Driven Innovation

Analysis By: Tsuneo Fujiwara, David Pidsley

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition

Data-driven innovation (DDI) refers to the use of data and analytics (D&A) to develop or foster new products, processes, organizational methods and markets. D&A can drive both the discovery and execution of innovation, achieving new business models, products and services with a confirmed business value.

Why This Is Important

DDI improves the speed and success rate of digital innovations by studying data and data correlations, and gaining insights from analyzing data. Given the volume and ubiquity of data, DDI may be a more pragmatic way to innovate compared to the conventional idea-based innovation starting with design thinking or human-centered design. Data itself can also bring value that could be sold/licensed.

Business Impact

The speed and success rate of digital innovations are improved by DDI. This means more efficiency in innovating new digital products and services. Increasing migration of socioeconomic activities to the internet, lower data collection, storage and processing costs, and the generation and use of vast amounts of data are all helping the adoption of DDI.

Drivers

- DDI can have a high impact to entire industries, and this same power can be applied to the digital innovation process itself. A human-centric innovation process starts with idea generation, such as through design thinking, followed by idea evaluation, such as pass/fail testing or A/B testing. A DDI process is a data-enhanced innovation process that makes D&A augmenting the human being a primary consideration in these steps.
- Digital business acceleration is increasing migration of socioeconomic activities to the internet, lowering data collection, storage and processing costs, resulting in the generation and use of vast amounts of data. Rich, immediate and reliable data provide a mechanism for innovation ideas generation and evaluation, pushing toward DDI.

Obstacles

- DDI goals must be aligned to the business goals in order for the DDI to create business value. Culture of innovation should be established in order to plan and execute DDI.
- Collaboration between the D&A team and innovation team must be established (see Applied Infonomics: 7 Practices for Chief Data Officers to Monetize Information Assets).
- DDI requires analytical modeling capabilities to be developed in the innovation team, to model the complex situation, which is usually quicker in data, instead of constructing mock-ups.
- In order to productize the innovation to create business value, the innovation should be transferred to the appropriate business unit(s) that is (are) ideally involved from earlier on.

User Recommendations

- Leverage DDI processes when creating a new product or new service for digital innovation, including business model innovation. Separately, data itself could become a digital product when it has value in itself. Given the volume and ubiquity of data, DDI may be a more pragmatic way to innovate compared to the conventional idea-based innovation starting with design thinking or human-centered design.
- Utilize the predictive analysis capability enabled by artificial intelligence (AI) techniques, and conduct a series of experiments against the analytical model to evaluate the innovation idea for different scenarios or types of events. It assesses the innovation using data and analytics, reducing the risk of failure. Generative AI capabilities can also produce novel scenarios.

Gartner Recommended Reading

Quick Answer: Why Does Data-Driven Innovation Matter?

Accelerate Digital Business Through Data-Enhanced Innovation Process

Applied Infonomics: 7 Practices for Chief Data Officers to Monetize Information Assets

Essential Product Management Practices to Monetize Data and Analytics Assets

Emerging Technologies: Realize the Potential of Information Assets by Turning Them Into New Products

Client Question Video: How Can We Organize for AI?

Corporate Incubators

Analysis By: Michelle Bazargan

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition

Corporate incubation is an enterprise-led innovation accelerator that provides early-stage ideas with the support and guidance they need to develop business models that will be released to the market under the corporate entity. The incubator acts as a catalyst for the corporation to stimulate innovation and develop a pipeline of successful new ventures. It provides facilities, advice, training, funding, and market and scale capabilities.

Why This Is Important

Growth through innovation is the surest route to sustaining business performance. The pace of disruption has accelerated, and enterprises often struggle with operating models that are purely focused on running the day-to-day operations that deliver immediate results. Corporate incubators can help balance this by nurturing disruptive ideas that can launch new products, services and business models, creating long-term sustainability for enterprises.

Business Impact

The benefits of corporate incubators include helping:

- Increase employee engagement and build innovative culture through collaboration.
- Expand the company's strategic vision and new markets' development of new value propositions and business models.
- Create an environment that facilitates creating and learning and grants access to new ideas, skill sets and technologies.

- Expand the enterprise network and gain new insights to help companies solve problems more cost-effectively and at a lower risk.

Drivers

- Strategic vision to discover new markets
- Goal to drive radical or adjacent innovation in a slow-paced enterprise
- Fast-paced disruptive industry or sector that needs to accelerate the innovation time market
- Need for innovation assets such as patents, technology, inventions or other IP

Obstacles

- Lack of clear business objectives or purpose such as staying competitive in the marketplace or creating new revenue streams
- Lack of executive leadership buy-in and investment to scale innovative solutions
- Not being clear on how far you want to branch out from your core business
- Lack of expertise and skills on the team to properly identify, nurture and execute innovation ideas
- Lack of an incremental systematic process for corporate incubation

User Recommendations

When considering corporate incubators, executive leaders should:

- Have the vision and intention of delivering radical and disruptive innovation to drive transformational growth in the industry or sector.
- Ensure executive leaders and the board are committed to investing in a separate business unit that is committed to growth through innovation as a long-term competitive edge.
- Be more aggressive with a plan when the enterprise is in a highly disruptive and competitive industry or sector to drive long-term business sustainability.

Gartner Recommended Reading

Don’t Survive, Thrive! Leverage Crises and Scarcities to Accelerate Business Innovation

Reimagine Innovation With an Adaptive Innovation Ecosystem Framework

Deciding When to Innovate With Ecosystem Partners

Continuous Foresight

Analysis By: Marty Resnick, Frank Buytendijk

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition

Continuous foresight leverages the best practices of strategic/corporate foresight and futurism to continuously identify business models and strategies, and determine how to adjust either or both to create future success. Continuous foresight is a methodology applying a discipline to identifying and assessing trends and projections, as well as backcasting from desirable futures. Continuous foresight will help support the process of preparing for and responding to a world of continual change.

Why This Is Important

There is no doubt we are all living in a time of disruption and uncertainty. Organizations know that there are many disruptions and trends that need to be responded to and better yet, anticipated. Organizations can use continuous foresight as a definite way to connect the dots between acquiring trends through turning those findings into action.

Business Impact

Taking a disciplined approach to continuous foresight will act as a catalyst to introducing new strategies, business and operating models, and technology responses.

This will lead to:

- Hiring leaders that focus on continuous foresight.
- Innovation labs and trendspotting groups will grow across industries.

- The role of the chief futurist will become prevalent.
- Demand for tools will increase that facilitate trendspotting, innovation management and continuous foresight.

Drivers

IT leaders must make decisions and increasingly these decisions have to be made in complex environments — where there are many unknown unknowns. Organizations need to make key decisions and strategic choices that are impacted by:

- Political attitudes, institutions and legislation shifting the political environment.
- Factors in the economic environment locally and globally that influence businesses and governments.
- Attitudes, behaviors and lifestyles of individuals and groups in a society.
- Ethical expectations, behaviors, duties and biases of people and companies toward one another and society.
- Changes in laws and governmental policies and regulations to reward or punish particular behavior.
- Technical, political, economic, cultural, ethical and legal changes supporting environmental protection and sustainability.

The ability to track, synthesize, and respond to all of these possible disruptions, and the drive for resilience and future-fitness is why continuous foresight continues to increase in adoption.

Obstacles

- IT leaders tend to focus solely on short-term needs, when it is equally important to plan for how to come out of this crisis. They will need to make decisions now in terms of technology investment and technology innovation initiatives to prepare well for postcrisis challenges and opportunities.
- Many organizations performing continuous foresight and trendspotting do not have a defined, or formal, process. Most use an ad hoc approach. This leads to a disjointed effort that risks not taking full advantage of the positive impact a formal trendspotting approach will have on overall strategic planning.
- Leaders may continue to ignore or devalue nontechnology trends. This will limit the adoption of continuous foresight and will result in gaps in the strategic planning process because inputs are incomplete.

User Recommendations

- Uncover potential blind spots providing anticipatory strategies for responding to multiple types of disruptive forces.
- Use four action sets — we call the ASAP model (acquire, synthesize, advocate and prepare) — providing a common methodology across the organization for tracking and responding to disruptions.
- Develop a toolkit of trend analysis techniques to plan for an actionable response to disruptions.
- Assign actions based on the nature and certainty levels of the future horizons for each disruptive trend, and continuously monitor impacts of those actions.
- Revive trendspotting efforts to assemble trends that will impact your technology strategy decisions as the organization begins to rebuild and renew.
- Adopt Tapestry (TPESTRE) analysis to identify relevant accelerators and inhibitors including: technological, political, economical, social/cultural, trust/ethics, regulatory/legal, and environmental factor trends.
- Educate strategic planners in continuous foresight principles.

Sample Vendors

FIBRES; Futures Platform; ITONICS

Gartner Recommended Reading

Inventing the Future With Continuous Foresight

A Tapestry (TPESTRE) of Trends for Strategic Planning

ISO 56000

Analysis By: Nick Jones

Benefit Rating: Moderate

Market Penetration: Less than 1% of target audience

Maturity: Emerging

Definition

ISO 56000 is a family of guidance standards addressing many aspects of innovation management including innovation processes, partnerships, terminology, strategic intelligence, idea management, assessment, intellectual property management and measurement.

Why This Is Important

Innovation is a key competitive differentiator for most organizations, and most organizations believe they could be more effective at innovation. Surveys suggest that organizations that adopt a structured approach to innovation are more successful than those that don't. The ISO 56000 family of guidance standards provides a framework for many of the key practices required for innovation success.

Business Impact

ISO 56000 is a family of eight guidance standards written in a highly generic manner so as to be relevant to a wide range of organization types and sizes. The first standards in the family were published in 2019; the last are scheduled for 2023. Topics addressed are:

- Terminology
- Innovation management systems/processes
- Innovation partnerships
- Innovation management assessment

- Intellectual property management
- Strategic intelligence management
- Idea management
- Operational measurements.

Drivers

- All organizations need to innovate, and most have opportunities to improve the way they innovate, which, in turn, creates better business performance.
- The ISO standards provide an objective and broadly relevant definition of good practice for many aspects of innovation. As such they can support benchmarking, improving internal processes, and evaluating service offerings and partner capabilities.
- Experience or qualification in ISO 56000 standards will likely become recognized as a desirable skill when recruiting staff for innovation positions.
- Standards provide a consistent terminology and understanding for internal and external partner communications and user/vendor communications.
- Standards provide a way to assess tools, technologies and services to support innovation.
- ISO is a respected standards body with broad international acceptance, and the ISO 56000 standards family is aligned with both OECD and WTO recommendations.

Obstacles

- ISO 56000 standards are currently guidance standards, not auditable standards. So, in their current form, they aren't intended to support formal certification. However, auditable standards are under development, and auditing and assessment services based on ISO standards are available from some third parties.
- Guidance standards don't provide an out-of-the-box solution. They're definitions of good practice, not process models. Organizations needing to implement an innovation process from the ground up will need additional consulting and process support.
- Adopting ISO-compliant processes doesn't guarantee you'll be a more innovative organization.
- ISO guidance standards are written in a somewhat abstract manner that isn't always easy to use.
- The ISO standards are new, some of them aren't even published yet. So the pool of organizations that can provide training, consulting or compliant products is small.

User Recommendations

- Obtain copies of the ISO standards and use them to benchmark innovation- and strategic-intelligence-related processes and practices, and to assess the quality of innovation-related tools, partners, and services.
- Demand ISO compliance when buying innovation auditing and assessment services.
- Migrate to ISO equivalents as they become available if you are an organization using national innovation standards and guidelines predating the ISO 56000 family.
- Align features with the relevant ISO guidance standards if you are a vendor selling innovation-related products and services.

Gartner Recommended Reading

What Does the ISO 56002 Innovation Standard Mean to You?

How Executives Can Design an Innovation Process That Brings Ideas to Value

At the Peak

Innovation Centers of Excellence

Analysis By: Tsuneo Fujiwara, David Cearley

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Definition

The innovation CoE is one approach to provide structure, centralized knowledge and dedicated resources to innovation management. It is a competency or capability center run by a group of experts. It is usually built around critical processes, technologies or applications to help the company eventually become more innovative. It's a team, shared facility or think tank that provides best practices, leadership, research, training and/or support for innovation-related competencies.

Why This Is Important

An innovation CoE contains expertise in the organization related to innovation. This may include individuals conversant in design thinking or other innovation methodologies. Creating a CoE can be done without adding new resources, by drawing on disparate expertise within the organization. It becomes a focal point for internal resources that could be pooled together and shared among groups. This sharing of resources increases efficiency while creating more consistent experiences for innovation.

Business Impact

CoE brings benefits to an organization such as:

- Ensures efficient use of resources to facilitate innovation projects
- Establishes standard approaches for innovations
- Reduces operation costs by eliminating inefficient practices
- Provides a focal point and repository for information related to innovations across the organization
- Leverages expertise on innovation models, methods and methodologies from across the organization

- Shares and captures viable techniques, and supports individual and team learning

Drivers

An innovation CoE is a lightweight approach that does not mandate its use, but rather highlights its capabilities to support independent innovation efforts. However, when acting as a hub for innovation, it can gather information about otherwise disconnected efforts.

There are many ways to bring people together to support or facilitate innovation, including the creation of a dedicated innovation lab or an innovation CoE. The innovation CoE can be a more ad hoc, formal structure or a dedicated team. An innovation CoE can evolve to or complement a more formalized innovation lab:

- More often than not, teams within an organization find themselves working in silos as organizations get more complex. In such cases, these teams work without sharing knowledge with one another, despite the evolution of their skills.
- A CoE creates a structure through which members can measure, experiment and drive each other toward excellence. Its sole purpose is to drive innovation and improvement.
- Companies implement CoEs for several reasons, which revolve around implementing, managing and using new technology, or adapting, managing and using a specific or new concept or skill.
- CoEs are used in specific instances within an organization, but they're worth exploring in cases where the organization needs specific capabilities, specialized knowledge and central oversight, such as innovation.
- Similarly, a CoE will help the organization where knowledge is difficult to acquire, or capability is relatively homogeneous yet still important to the business.
- An innovation CoE can be used to research innovative products, services and business models that are aligned with the company's business strategies.
- An innovation CoE promotes a culture of innovation in the organization.

Obstacles

Some of the obstacles to a good CoE practice or implementing a CoE include:

- Complacency: This comes from the "if it's not broken, don't try to fix it" attitude. Companies taking such an approach may be struggling with the fear of the unknown.
- Complexity: Some companies may say they don't have the time, expertise or even the experience to understand and implement a CoE.
- Conservatism: Companies that take a conservative approach believe they have a lot at stake and play the wait-and-see game before they can mitigate their risks.
- Isolationism: "We are the experts — bring your issues to us and we'll take over" mentality when the CoE is insulated. This will create resentment.
- Bureaucracy: CoEs that focus only on the tactical mechanics of process and become bureaucratic often fail.
- Lack of business focus: CoEs that are too disconnected from the business lose focus. Innovation CoEs must track trends across tech and non tech areas, and look for an integrative approach.

User Recommendations

- Create a CoE as a focal point for promoting innovation broadly across an organization.
- Populate the CoE team with leaders and experts in select innovation areas. These team members can continue holding other positions or working in their roles part time or full time.
- Specify the area of focus or capability of the innovation CoE, which should be aligned with the business goals.
- Define the purpose of the innovation CoE, which can include providing research, training and oversight of employees, offering guidance, supporting the organization through best practices and governing the organization on proper resource allocation.

Gartner Recommended Reading

Innovation Case Study Spotlight Series: NTT DATA's Go-To Innovation Techniques

Infographic: Use Case Prism to Learn Go-To Techniques From the Innovation Heavyweights

Innovation Storytelling

Analysis By: David Pidsley

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition

Storytelling is the sharing of stories to deliver innovative ideas in compelling, easily assimilated forms. Stories are intended to prompt interaction, discussion and collaborative decision making. Journalistic or reportage style stories aim to inform or educate, often using data to describe a business change or innovation, diagnose a challenge, predict an outcome or prescribe actions. Storytellers commonly link characters, time or events via a narrative story arc to engage the audience.

Why This Is Important

Information, narrative and context are key to socializing ideas. Storytelling inspires organizations with descriptive, diagnostic, predictive or prescriptive ideas, use cases or scenarios. It shows the art of the possible, convinces decision makers of benefits of emerging trends and technologies, spreads a culture of innovation, and illustrates an innovation program's impact. Told in person or remotely, stories can be textual, slideshows, audiovisual, annotated dashboards or infographics.

Business Impact

Too many decision makers still overlook, ignore or avoid innovations delivered to them. This can be a cultural issue; however, there is also a simpler factor at play: how ideas are delivered. In many cases, even where the idea sparks interest, it may lack the context required to drive a decision. Storytelling can help break down managerial inertia and apathy toward innovation by adding context and making it more accessible. This applies to all organization sizes, industries and functions.

Drivers

- Storytelling is an important technique within innovation programs whenever there's a need to create a compelling vision, to engage and convince an audience, to simplify an innovation challenge, or even to improve the odds that an innovative idea will get funded.
- Storytelling can employ many communication techniques and channels and may additionally involve formal storyteller roles on the innovation team. Common use cases for storytelling within innovation programs that are driving it's move forward include the following.
- Creating a compelling vision to inspire the workforce with a shared vision of the future, for example, the U.S. Navy used storytelling to create a 20-year vision video to inspire the workforce around innovation and their overall mission (see Innovation Case Study Spotlight Series: Naval Information Warfare Center Pacific's Go-To Innovation Techniques).
- Engaging a business audience in a compelling way to gain buy-in, such as to explain the business value of a use case, using complex information, or the business value of a particular use case or scenario, for example, Discover Financial Services has full-time storytellers on its innovation team for this purpose (see Innovation Case Study Spotlight Series: Discover Financial Services' Go-To Innovation Techniques).
- Simplifying communication for an innovation challenge or a complex topic.
- Improving success rates for scaling ideas by broadly socializing the advantages.

Obstacles

- Employees need to learn, be trained or have coaching to move away from their comfort zone of slideshow tools and other traditional communication techniques in order to benefit from storytelling.
- Identifying or hiring strong storytellers may be a challenge for innovation teams, so the team may need to draw on existing internal communications functions or engage external expertise.
- Storytelling activities must balance generating enthusiasm with communicating the realities of what can be achieved and in what time frame.

User Recommendations

- Establish and use storyteller roles on the innovation team to help deliver stories to internal business audiences, particularly in organizations that are “IT instigators,” exploring emerging trends and technologies and then positioning suitable use cases and industry scenarios with the business.
- Co-create a five-, 10- or 20-year vision video to inspire the workforce around the art of the possible for the organization and to serve as a guiding North Star for the innovation program.
- Simplify communications within an innovation challenge by using a short video story format to explain the “ask” of contests and themes, and the purpose of innovation campaigns.
- Tell “a day in the life” story for each key role showing the impact of innovations and technologies once they are adopted and in use.
- Make rich, data-driven stories an extension to your use of charts, reports and dashboards. Provide a richer delivery of evidence supporting an innovative idea by adding data visualizations, narrative and context. Develop and instill the mix of data visualization design, narration and presentation skills needed to support effective storytelling.

Gartner Recommended Reading

Storytelling in Three Acts: A Guide to Persuasive Communications

Selling Digital Transformation: A CIO’s Guide to Crafting Better Stories

A CIO’s Guide to Better Storytelling and Presentations

How to Create a Persuasive Pitch That Attracts Interest and Investment

Making an Effective Pitch: The Development Process

Innovation Ecosystems

Analysis By: Nick Jones, Michelle Bazargan

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition

Innovation ecosystems exploit partnerships to accelerate innovation, reduce risks, leverage shared capabilities, share costs and access a larger pool of ideas. Ecosystems may take many forms, including commercial or academic partnerships, shared R&D facilities, or government initiatives.

Why This Is Important

Many digital business models are ecosystem-oriented; examples include smart cities, smart homes and marketplaces. Innovations in such areas can often leverage ecosystems, especially when an individual organization might lack the skills, resources or information to fully develop an idea. Such ecosystems can span startups, academics, vendors and competitors. For example, in 2020, players that would normally be competitors in the pharmaceutical industry came together to collaborate on vaccines.

Business Impact

The benefits of an ecosystem approach to innovation include:

- Shared development and funding reduces the risk to individual participants.
- Access to a larger pool of ideas and expertise.
- Reduced time to market.
- Addresses innovation issues that go beyond technology, such as business models and value sharing.
- Enables innovations that couldn't be achieved by an organization acting on its own.

Drivers

Drivers for adopting ecosystem approaches to innovation include:

- The growth in ecosystem-oriented business models involving many collaborating participants
- A need to reduce the cost and risk of complex innovations
- A need to access a larger pool of ideas to drive innovation
- A need to reduce time to market for complex innovations

Obstacles

Obstacles to innovation ecosystems are mostly related to the challenges of managing collaborations between organizations with different goals and cultures. These include:

- Managing co-created intellectual property
- Allocating and sharing funding and benefits
- Culture clashes among the participants
- Internally focused mindset in some organizations that prefer to go it alone
- The challenge of defining a clear operating model and legal basis for collaboration
- Shift in mindset that profits are shared across multiple participants

User Recommendations

CIOs, CTOs, enterprise innovation leaders and executive leaders should consider innovation ecosystems as a component of their overall innovation strategy to be used when:

- Conducting any innovation activity that could benefit from an external perspective, such as when evaluating vendors or tracking startups.
- Exploiting an innovation that demands an ecosystem business model.
- Lacking the expertise, market information or funding in the organization to develop an idea alone, or wants to spread the risks associated with an innovation more widely.

Gartner Recommended Reading

Reimagine Innovation With an Adaptive Innovation Ecosystem Framework

Digital Safaris

Analysis By: Dave Aron, Alicia Mullery

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition

A digital safari involves visiting multiple organizations (in person or virtually) to learn about, engage in and develop a deeper understanding of their digital initiatives, innovations and/or transformations. Visits may last from a half-hour (e.g., a startup pitching at a VCs premises) to a full day (e.g., a tour of innovations from a digital giant), over contiguous days or spaced out over time, and may include presentations, demonstrations, hands-on experiences, Q&A and facility tours.

Why This Is Important

We are in an extended period of change, volatility and uncertainty in the world in general, and specifically in how information and technology change economies, businesses and ways of winning. Innovation is highly unevenly distributed around industries and geographies. Digital safaris are a powerful way to broaden innovation thinking.

Business Impact

Digital safaris can initiate breakthrough innovation by combining learning new concepts, approaches and technologies, with insights into how to implement them successfully from target organizations visited. Traditionally, digital safaris are conducted physically, which has the benefit of complete immersion and focus, but virtual and hybrid safaris increase the breadth of organizations that can be visited with limited extra effort.

Drivers

- The explosion in volume and variety of digital innovation cases studies applicable across multiple industries
- The newness of many of the new technologies and paradigms creating adoption risk, making learning from existing successes and failures even more attractive
- The need to break down traditional thinking patterns and corporate echo chambers in the face of new possibilities
- The move toward remote and hybrid working, lowering the bar (in terms of cost and effort) of running a digital safari
- Similarly, the ability to virtually visit multiple geographies and industries virtually, from the comfort of the participant's (home) offices

Obstacles

- Economic pressures to focus on activities that clearly provide short-term financial and other measurable business outcomes (which, of course, applies to many innovation investments)
- The reputation of historic, poorly planned study tours that are, and are seen as, fun and interesting, but not designed to create specific lessons or outcomes
- Getting time-poor executives to participate, especially if the safaris are physical, not virtual
- In some cases, focusing on target organizations in the same industry, incurring competitive confidentiality issues

User Recommendations

- Design digital safaris, a powerful tool in driving more outside-in thinking in enterprise innovation, to achieve the potential benefits.
- Plan crystal-clear goals for digital safaris, including target outcomes and activities following the safari. Articulate this in a business case, and invest in building broad buy-in to them.
- Use these goals to design and optimize the timing, physical/virtual/hybrid nature, target organization and participants.
- Prepare the participants so that they get the most out of the safari by setting expectations, arranging preparatory reading and encouraging a mindset of challenge.
- Schedule follow-up activities to build on the findings from the safari, to ensure diffusion of findings and actionable outcomes.
- Be prepared to rapidly evolve your enterprise's approach to digital safaris as you learn from each.

Gartner Recommended Reading

Use Digital Safaris to Expand Your Innovation Horizons

An Interview With Ageas' Daniela Adaggi: "Digital Safari" Experience for Leaders

How Executives Can Design an Innovation Process That Brings Ideas to Value

Infographic: Use Case Prism to Learn Go-To Techniques From the Innovation Heavyweights

Sliding into the Trough

Innovation Culture Hacks

Analysis By: Tsuneo Fujiwara, Darren Topham, Jackie Fenn

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition

A culture hack is a small adjustment to an individual's behavior where that change will create a larger, more wide-ranging change in the culture of the organization. Innovation requires culture that empowers innovators to be creative and innovative.

Why This Is Important

The lack of an innovative culture is an obstacle to digital business success. Culture hacks are quick ways to impact the behaviors we do repeatedly in some specific way. Hacking the culture means focusing on a single point where the culture is vulnerable to change, and altering it. The best hacks create a culture where employees are empowered to innovate every day.

Business Impact

Recommended approach is to take small cultural actions that deliver big innovation benefits, which are actionable, low effort (but not low courage), immediate (within 48 hours), visible and emotional. Innovation culture hacks should result in moving toward a culture where innovation is part of "business as usual." Innovation culture hacks are a small adjustment to the innovation culture, which could be a quick win to ensure innovators remain motivated and continue to perform at their very best.

Drivers

- Innovation culture hacks help to develop a culture of innovation that benefits the organization by offering a quick win, such as providing a common understanding that experimental failure is celebrated equally with success as a means of learning.

- Innovation culture hacks focus on a single point where the culture is vulnerable to change and alter it. Six potential topics to explore include: How do we increase risk tolerance in our team/organization? How do we increase the speed of our decision making and empowerment? How do we properly recognize failure as essential? What behaviors and actions get people rewarded/promoted? What behaviors and actions get people punished? What beliefs drive leadership actions?

- As an example of culture hacking to recognize failure as essential, keep failed prototypes on display in the enterprise. Contradict the notion that failing is undesirable, even in the pursuit of innovation. People avoid taking risks; thus, innovation stagnates. The physical reminders of old, failed prototypes remind people that the road to greatness is full of failures, and displaying them sends a signal that failure in the pursuit of innovation is allowed.

- A number of culture metrics can be set up and tracked to indicate how well the enterprise culture might be progressing toward an innovative culture. These include the amount of creative space given to individuals (time), individuals' innovation inclination (interest), and team incentives and empowerment. They also iclude employee turnover and employee satisfaction, the level of predictability the organization is comfortable giving up (risk) and the ability of the organization to change its ways in the name of innovation (learning).

Obstacles

- Culture is perceived as amorphous and difficult to change, leaving many executive leaders to shy away from trying. Generic statements like "we need our culture to be more innovative" compound the problem because they lack specificity and bite.

- Changing the culture involves recognizing that innovation is not always separate from day-to-day operations. Executive leaders need to identify specific behavioral goals of a cultural change effort, in the current organizational context that shapes the choices.

- Because it tends to be a localized, grass-roots initiative, culture hacking can lose momentum and impact if executives and managers do not initiate and encourage an ongoing commitment.

User Recommendations

- Stop using the word “innovation.” Call it “problems to be solved,” even if the problems are innovative and require creativity. People tend to naturally focus on problem solving, so “problems” triggers a less skeptical reaction.
- Identify behaviors that limit innovation and the confidence to experiment, such as risk aversion.
- Build innovation credibility by targeting ongoing incremental innovation and short delivery time frames.
- Test if the organization is going where it was planned to go. That means not only identifying best-case outcomes but also determining in advance what progress and success look like, and what milestones the organization expects to see in day-to-day behaviors via setting and tracking culture metrics.
- Embrace multiple approaches to enable behavior change, including shifting mindset and metrics, training on innovation techniques and approaches, and organizing activities to generate and progress ideas. Enable these through designing and executing innovation culture hacks.

Gartner Recommended Reading

Foster a Culture of Innovation Using a Two-Layered Roadmap

Culture Crush: Design Your Roadmap for a Culture of Innovation

The Culture Hacking Roadmap

The Art of Culture Hacking

Lean Startup

Analysis By: Arun Chandrasekaran

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition

Lean startup is an innovation technique that accelerates the speed of product development and enables rapid testing and aligning business model fit. First developed by entrepreneurial startups, it is now successfully being adopted in the IT organizations of large, mature enterprises, which are seeking to emulate the principles of intrapreneurship, validated learning, innovation accounting and build-measure-learn.

Why This Is Important

Lean startup is a customer-centric, methodical approach to solving enterprise uncertainties. It prioritizes experimentation, customer feedback and iterative design as core parts of the innovation process to accelerate time to market. A lean startup approach can enable large enterprises to enter new markets or product categories, or help them compete better against upstarts in their core product categories. The foundation of lean is a scientific and agile way of decision making.

Business Impact

- Lean startup enhances the probability of successful innovation through a methodical approach to product development.
- The lean startup mindset, if successful, can have a dramatic impact on an organization's culture and ability to innovate. It could allow enterprises to adopt a lean startup mindset more broadly across several business areas.
- In an environment filled with volatility, a lean mindset can reduce uncertainty and enable large enterprises to respond to changing circumstances faster.

Drivers

- The build-measure-learn mindset, where product building is geared toward a minimum viable product with immediate feedback from customers and iterative design from it, allows organizations to constantly evolve and in the right direction.
- Lean startup provides an effective and low-risk space to try radical new ideas and technologies, which are critical for organizations of all sizes to make audacious, but calculated, bets.
- The need for rapid prototyping and product build is critical so that large enterprises can better compete with nimble startups.
- Enterprises need to develop the ability to bring new products or services to market with scarce resources, both in terms of people and funding.
- Digital leaders want to experiment with new business models with lower risk, and in tune with customer expectations and changing market dynamics.
- To be successful as a digital business, IT leaders need to use data-driven decision making as a core part of the entire innovation value chain.
- Enterprises are striving to be like startups — validate the direction of the product at every step, which enables early “pivoting,” rather than waiting until the end when change is too hard or too late.

Obstacles

- Lack of a talent pool of managers and employees who embody the lean startup mindset.
- Organizational inertia — Large enterprises have a strong culture that favors matrix organizational structure, sequential processes and preplanning of the entire product development process, which goes against the core ethos of what “lean startup” is all about
- Heavy project governance — Lean startups will fail if the scope of governance is rigid and heavy.
- Inflexible business models or even disagreement on business models — Lean startup success is not just about fast, iterative product development, but is also predicated on pursuing creative business models that could be seen as cannibalistic to the core business of enterprises. Due to the innovator’s dilemma, these business models may often not be pursued.
- Lean startups fail when decisions are made based on authority and not data.

User Recommendations

- Determine if the lean startup methodology is appropriate for you by analyzing your ability to commercialize the ideas and your capability to build competitive differentiation through it.
- Start small, with an innovative team on a pilot project that has limited complexity, and create an early "moment of truth."
- Get the business teams involved, and make them part of the methodology, rather than the project being perceived as an IT-only endeavor.
- Gain executive support and endorsement through practical demonstrations and educational briefings.
- Use external experts to provide training and understanding of how lean startup methodologies can be applied across the organization.
- Separate this team from the core business so that it can truly pursue lean principles without being unencumbered by the business model or mindset of the larger organization.
- Establish a clear timeline and metrics for success, but be willing to pivot or course-correct based on customer and market feedback.

Gartner Recommended Reading

Apply Lean Practices to Effectively Manage a Product Through Its Life Cycle

How Executives Can Design an Innovation Process That Brings Ideas to Value

Use Digital Factories to Drive Deep Optimization Across the Enterprise

Trendspotting

Analysis By: David Cearley, Marty Resnick, Samantha Searle

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

Trendspotting is the acquisition and evaluation of trends that may impact the organization. A trend describes an observation or prediction about changes in the environment that gain momentum occurring over time and can be observed. Trends can be historical observations or an extrapolation into the future with predictions on the direction or speed of change.

Why This Is Important

Trendspotting is an important activity that filters, contextualizes and brings order to the cacophony of observations and predictions about trends. Trends identify future issues or events that may impact strategy. Trendspotting is a critical technique for navigating uncertainty and guiding scenario planning. It establishes governance and communication mechanisms to collaborate with constituencies inside and outside the organization regarding trends and support the innovation process.

Business Impact

Trendspotting identifies how trends give rise to potentially disruptive developments.

- By assessing the impact of disruptions, organizations can evaluate the strategic relevance and drive more deliberate outcome-driven innovation.
- Trendspotting provides recommendations that identify which trends and disruptions may have an impact on the business and how to respond to them.
- Organizations that use trendspotting, use trends as input into strategy planning for the business.

Drivers

Trendspotting is early mainstream as a key part of strategic and innovative planning; however, it has the potential for broader, in-depth use.

- We expect adoption to increase as trendspotting becomes recognized as a critical technique for navigating uncertainty and guiding scenario planning.
- Gartner has seen an increase in CTOs looking to establish an office of the CTO that includes trendspotting capabilities.
- Companies with a trendspotting capability are less likely to be blindsided by unexpected events.

- Trendspotting is also a risk mitigation strategy.

Obstacles

- Our research reveals that trendspotting is often an informal, ad hoc and niche activity.
- Organizations sometimes neglect to perform a more detailed trendspotting analysis that would enable them to determine when and how to respond to a trend, rather than make the simple decision of whether to implement a technology that supports a trend.
- A recent Gartner survey revealed that 62% of organizations doing trendspotting today are using an ad hoc approach while only 22% have a detailed and defined process.
- Forty-five percent of CTOs proactively invest in technology that has not been specifically requested by the CIO or CEO. Trendspotting that is not closely aligned with business needs is ineffective.
- Without a trendspotting capability, CTOs are unlikely to detect potentially valuable emerging trends that the organization was not already considering.

User Recommendations

- Develop a method to identify trends and contextualize them for the business. It should examine nontechnical as well as technical trends using the tapestry (TPESTRE) model that considers technical, political, economic, social, trust, regulatory and environmental trends.
- Create an inclusive program that identifies trend scouts and defines the rules.
- Assess the potential impact of a trend from the perspectives of people, business and the IT department.
- Consider the dynamics surrounding the trend, such as level of hype, and active work in venture capital and startups.
- Use scenario planning to validate how a trend can help seize new opportunities, such as business model innovation, improved customer experience or product/service innovation.
- Make trendspotting an ongoing process. Some disruptions are not obvious and will only manifest over time. There are inflection points and wild cards that shake up an industry. The sooner these are spotted, the more prepared an organization will be to respond.

Gartner Recommended Reading

Use a Trendspotting Method to Identify the Technology Trends You Need to Track

Hype Cycle for Emerging Technologies, 2020

Create Your Own Hype Cycle With Gartner's Hype Cycle Builder

A Tapestry (TPESTRE) of Trends for Strategic Planning

Tool: Template for Developing Impactful Trend Cards

Design Thinking

Analysis By: Brian Prentice, Irving Tyler

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

Design thinking is an ideation methodology extracted from the broader, multidisciplinary design process used in the creation of physical and digital products.

Why This Is Important

Design thinking within innovation management is an ideation methodology extracted from the broader, multidisciplinary design process, and generally delivered through a workshop format. It promotes investment in empathetic learning of the customers/stakeholders as the key step to ensure the right problems are defined before innovative actions are taken to deliver solutions. Design thinking ensures a human-centered approach, and works to minimize uncertainty and risk in innovation efforts.

Business Impact

Design thinking directs the focus of innovation teams toward the human aspects of any given challenge or opportunity. Design thinking helps business innovators explore multiple solutions and to incorporate different perspectives throughout the innovation effort. It is particularly useful in tackling what are known as “wicked problems” — these are issues that are difficult to solve because of incomplete, contradictory and changing factors that are not easily recognized.

Drivers

- People-centricity — Design thinking starts with people. It’s oriented to see an organization’s business process through the lens of its stakeholders rather than seeing these stakeholders as nodes in a process diagram or users of technology. This simple reorientation in perspective leads to dramatically different insights, and applies to both customer-facing and internal operational innovations.

- Diversity of perspective — The quality of output from design thinking increases in line with the diversity of the people participating in the effort. Different perspectives added significant value in interpreting people-centric data and drawing accurate conclusions.

- Outside-in orientation — Design thinking, if done properly, forces participants to look beyond the obvious spans of control or attention. Design thinking helps organizations see how they fit within the broader context of their customer’s goals or see the organization’s operations through the eyes of people at the frontlines.

- Integration with design practices — While design thinking isn't contingent on making a new product or service, when it does, there is seamless integration into a broader design process. In fact, most design thinking occurs through workshops run by members of design teams who understand the connection between design thinking as an ideation methodology, and design as a process of producing products and services to solve problems for people.

Obstacles

- Cutting corners on research — Design thinking is a process of applying unique analysis techniques to data coming from usage reports and, more importantly, observational research. This data can be time-consuming and expensive to produce. Too often, workshops proceed without any research. Such workshops quickly devolve into empathy sessions, which are more likely to echo existing biases than to create an accurate picture of reality that is needed to drive innovation.

- Design confusion — A common pitfall is to conflate design thinking with the design process. Design thinking, then, ends up as a training program instead of a repeatable ideation technique. The hope is that running staff through a couple of days in a design thinking workshop will mean no incremental investments are needed building internal design capability or retaining design agencies. The end result are design thinking workshops that have neither any follow-through activity nor any hope for design capability.

User Recommendations

- Direct design thinking toward clearly articulated business problems where stakeholders can be identified, and business value can be measured. Complex, “wicked” problems are fine; however, without proper grounding, design thinking can result in very creative insights that are unactionable.
- Don’t skip observational, “empathetic” research — ensure research work proceeds any design thinking initiative.
- Establish high diversity within design thinking participants for robust resulting insights.
- Leverage the investments in internal design talent to establish an ongoing program of applied design thinking and to ensure qualified designers are leading design thinking workshops.
- Link, where possible, design thinking workshops to broader design initiatives in order to increase the chances of ideation moving into an actual production process.

Innovation Hubs

Analysis By: Arun Chandrasekaran

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition

An innovation hub comprises a system of connections that puts the enterprise at the center of a hub, together with startups, incubators and accelerators to transform innovative ideas into technologically feasible solutions. Innovation hubs are often housed in specific geographic concentrations to accelerate ideation, gain access to talent, nurture unique culture and encourage entrepreneurship.

Why This Is Important

The innovation landscape is dynamic. Internal R&D is often insufficient to create innovative ideas to gain business advantage. Hence, firms are increasingly turning to innovation hubs as catalysts for open innovation. Ideas generated inside and outside the company are used in the development of use cases and prototypes from new technologies. Innovation hubs bring multiple participants together in a physical location to accelerate problem solving, idea generation and quality of innovations.

Business Impact

Creating innovation hubs is a great way to quickly innovate in a company and to mimic the “fail fast and learn” mentality of startups. Successful innovation hubs can accelerate the ability to enter into new market segments, as well as defend existing strongholds. Innovation hubs strive to bring an ecosystem of best resources, ideas and talent together to achieve the best possible outcome. However, their success isn’t guaranteed and requires execution prowess of the highest order.

Drivers

- **Open innovation:** The goal of the innovation hub is to become a central place where innovative ideas can be gathered and developed. Innovation hubs strengthen the link of knowledge transfer and the possibility of future collaborations outside a company’s own R&D.
- **Better access to talent and resources:** Access to talent from external ecosystem participants, who can contribute to and scale ideas through novel methods.
- **Faster time to market:** By collaborating with an ecosystem of participants, organizations can accelerate new idea generation, prototype and bring commercial products to market faster. Organizations that create innovation hubs can mobilize innovation initiatives quickly and optimize the time taken to create new value for their end users and themselves.
- **Act as a catalyst for driving organizational change:** Innovation hubs can make organizations more entrepreneurial and open to change; they can adopt a growth mindset around experimentation and fail fast.
- **Create the basis for a multiplication factor for growth:** The right ecosystem, often combined with the appropriate geographical location (such as an existing technology hot spot or a well-trafficked location near the corporate headquarters), can enable an innovation and growth multiplication factor, due to the tight affinity between different ecosystem participants.

Obstacles

- Lack of enthusiasm, support and sponsorship from senior management. Innovation hubs need significant financial commitment and continued support from senior leadership.
- Innovation hubs are prone to failure if they lack a clear mission, inspiring leadership and effective ways to measure success.
- The innovation hub is far removed from the vision and goals of the mother organization — this lack of synergy can be highly detrimental.
- Lack of talent that embodies the innovation mindset and risk taking.
- Cultural incompatibility and lack of trust with ecosystem participants, such as startups and research universities.
- Concerns around privacy and ownership of intellectual property (IP).

User Recommendations

- Determine whether you need an innovation hub by identifying business drivers and success metrics.
- Establish a clear mission, ownership, funding and access to resources for an innovation hub to thrive and succeed.
- Build expertise by building strong research capabilities and attracting the right talent in strategic areas.
- Make it a true “hub” by facilitating collaboration with other ecosystem participants, such as startups, universities and others, cultivating strong networks, shared research facilities and business use case maps.
- Create startup exchanges that allow business units to work directly with startups to solve complex business problems.
- Push the application of technology and commercialization of research by experimenting with university-industry partnerships, pioneering open IP policies and keeping industry participants engaged.

Gartner Recommended Reading

Reimagine Innovation With an Adaptive Innovation Ecosystem Framework

Rules of Engagement for Establishing Innovation Ecosystems

Innovation Case Study Spotlight Series: BBVA's Go-To Innovation Techniques

Expert Networks for Innovation

Analysis By: Jackie Fenn

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Definition

Expert networks offer access to prescreened experts on specific topics who may assist an organization in problem solving or opportunity generation as part of the organization's open innovation activities.

Why This Is Important

Expert networks for innovation are a type of crowdsourcing that provides access to a broader and more diverse set of contributors than an organization can achieve through hiring. For example, experts from different industries, geographies and disciplines may offer original solutions to a challenging problem. Experts are typically prescreened, and their participation is curated by the company providing the service, potentially leading to better-targeted and higher-quality ideas.

Business Impact

Expert networks for innovation can form part of an open innovation ecosystem, complementing other external sources, such as customers, vendors, startups and universities. In addition to broadening access to ideas, they can reduce the cost and risk of pursuing multiple approaches, by offering a prize or "bounty" that is paid out only if an acceptable solution is created. They can be used as needed and often simplify intellectual property (IP) issues through predefined agreements.

Drivers

- Expert networks have passed through a period of hype (as part of broader enthusiasm for crowdsourcing) and disillusionment, and most of the original networks have been acquired by other companies. They are currently not widely used as part of innovation portfolios, but still have potential, given the right opportunity.

- Expert networks can expand innovation potential in understanding trends and advances in specific industries or topics and crowdsourcing ideas for new products or services, and in solving challenging problems in areas such as engineering, design, chemicals or materials science. They can also expand this potential in developing new algorithms that improve performance in a specified task.

- Networks work best for well-defined problem or opportunity statements, where it is easy to determine whether the desired outcome has been achieved.

Obstacles

Barriers include:

- Identifying opportunities that can be defined with specific success criteria that would lead to a payout to the expert contributors
- Potential exposure of the organization's goals and approaches through posting the problem description on an open platform
- Ensuring that the network's IP agreements match an organization's needs and preferences

User Recommendations

Executive leaders designing and supporting innovation management programs:

- Identify challenging topics, as part of open innovation initiatives, that might benefit from exposure to a diverse network of experts.
- Explore prescreened and curated expert networks, such as those run by IdeaScale, yet2, Wazoku's InnoCentive, Anaqua's ideaPoint, HeroX or Advarra's YourEncore (life science industry) for relevant topics.
- Involve legal and commercial experts from your organization to ensure that the terms and conditions of the network work for your innovation goals.

Gartner Recommended Reading

Reimagine Innovation With an Adaptive Innovation Ecosystem Framework

Deciding When to Innovate With Ecosystem Partners

Market Guide for Innovation Management Tools

Idea Management Tools

Analysis By: Nikos Drakos

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition

Idea management tools help organizations manage the flow of ideas from initial concept generation to their final realization or commercial exploitation. They support different ways to generate ideas internally or externally. This includes challenges, brainstorming or hackathons; stage-gate automation for idea evaluation and selection; and ways to manage a portfolio of active ideas (including idea execution to take ideas to realization via project or product management).

Why This Is Important

The ability to innovate is a fundamental characteristic of any successful organization in a competitive market. Whether focused on internal efficiency, partner effectiveness, product differentiation or customer intimacy, every win depends on having ideas recognized, selected and executed effectively. While it is not necessary to use technology to generate/execute ideas, idea management tools help scale and focus idea generation, selection, management and execution.

Business Impact

Idea management tools automate, facilitate and support:

- Idea generation through events, campaigns and hackathons
- Collaboration to collect, refine and filter ideas

- Stage-gate workflow automation to support structured decision making based on cost, risk and business impact
- Idea execution to take ideas to realization via project or product management capabilities
- Analysis and reporting via status updates and aggregated project/portfolio views for different stakeholders

Drivers

- Idea generation tools are becoming easier to deploy and use. Idea management tools make it easy to target internal employee constituencies (large, small or external ones) including customer communities, or external open innovation and crowdsourcing. They include the facilitation of small specialist workgroups and brainstorming workshops, or broader-scope activities involving “idea jams,” events, challenges and continuous engagement. Deployments are now almost exclusively cloud-based, which makes idea management systems easier to deploy and use; only 6% of vendors tracked by Gartner are reporting on-premises deployments.
- Idea management tools are offering deeper support for end-to-end innovation activities. Apart from idea generation capabilities which are most common, they also include self-service mechanisms for sifting, filtering, organizing and systematically assessing the risks and rewards of different options, and maintaining a comparative portfolio of active options.
- Some vendors are broadening support for use cases such as roadmapping, IP commercialization and agile experimentation. Idea management tools also often come with advice and support for effective use and, in some cases, with access to external ecosystems, including specialists in different areas (sometimes described as “software that comes with people”).
- There is increased interoperability with other strategic platforms including cloud office or project management tools. Some idea management tools are offered as add-ons to cloud office suites such as Microsoft 365.

Obstacles

- **Lack of preparedness:** Some organizations are not ready to use the idea management technology effectively, and success of the technology depends on organizations' readiness to move ideas into execution and value realization.
- **Lack of participation:** Idea generation relies on discretionary participation, which requires attention to participant motivation. Ideation initiatives can fail in ways similar to other collaborative initiatives that rely on voluntary participation (e.g., knowledge management or social networking). Success depends on the ability to motivate participation.
- **Technology overlap:** The technology foundations of idea management tools overlap substantially with what may already be in place. The collaboration, stage-gate automation, reporting and execution components of idea management tools overlap with cloud office suites and other applications. Despite increasingly sophisticated integration options, this introduces extra complexity both in terms of user experience as well as managing IT architecture and infrastructure.

User Recommendations

- Engage with business stakeholders and establish an innovation framework as well as executive commitment before deploying idea management tools. Ensure commitment, including leadership buy-in, budgets and decision responsibilities.
- Focus ideation on desired outcomes. Choose relevant idea generation scenarios (e.g., events, challenges, campaigns) to identify participants, decision makers, engagement mechanisms, evaluation criteria and execution methods. Clearly communicate the value of participation to your target audience.
- Test usability as part of vendor selection. Select idea management tools based on vendor and product capabilities as well as subjective qualities such as usability and user experience.
- Deploy innovation tools alongside the applications that people already use (e.g., collaboration or business applications) to ensure participants are immersed in the business context that can spark new ideas.

Sample Vendors

Brightidea; edison365; HYPE; Planview; Qmarkets; Wazoku

Gartner Recommended Reading

Market Guide for Innovation Management Tools

Toolkit: Innovation Management Tools Vendor and Product Data

Jump-Start Your Innovation Journey With a Customizable Innovation Framework

Successful Innovation Begins With the Business Strategy: Use Business Objectives and Goals to Start Your Innovation Journey

Key Roles and Job Descriptions for Staffing Innovation

Climbing the Slope

Innovation Labs

Analysis By: Tsuneo Fujiwara, David Cearley, Samantha Searle

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition

An innovation lab is a unit within the organization whose mission is to devise novel ideas that can either disrupt or complement the rest of the organization, and to deliver business-relevant outcomes. While the execution may involve creativity, exploration and incubation, the viability of the lab hinges on its contribution to the strategic objectives and goals of the organization. A lab is typically run out of a distinct physical space to emphasize the separation from business as usual.

Why This Is Important

Innovation labs can accelerate innovation by incubating promising ideas away from the pressures of short-term operational goals. Innovation labs identify ideas and opportunities, experiment on emerging technologies, and demonstrate proofs of concept to various audiences in the organization. They may also be a focal point for developing external partnerships, training employees on innovation topics, hosting startups or incubators, and providing a showcase of innovative solutions to visitors.

Business Impact

- An innovation lab can boost digital transformation initiatives by streamlining the process from idea generation to value creation.
- A lab can target anything, from creating new products, to entering into a new market, to improving culture and employee engagement.
- Labs are a mechanism to reduce the risk of trying new things, by experimenting in an environment that is tolerant of “good” failure and by managing risk across a portfolio of opportunities.

Drivers

Companies often establish innovation labs as means to explore innovation initiatives and take risks that require some degree of separation from the established organizational structures. This may include business model innovation or pursuit of new “game changer” products or services that can be disruptive to existing business and may, therefore, trigger resistance. It can also be innovation aimed at radical change to existing ways of working, where the pressure and habits of day-to-day operations can inhibit innovation and where the lab can provide the needed free space and time.

Pursuit of such goals often conflict with the inherent risk-aversion found in large enterprises. An innovation lab provides a space where several elements of the operating model can be tailored to innovation. Examples:

- The lab can be allowed to experiment with emerging technologies that do not fit the security policies of the rest of the organization.
- The size and profile of an innovation lab will often be perceived as a better match for partnerships with nontraditional partners and talent compared with a large enterprise.
- The small organization size and close physical proximity in the lab reduce the need for formal organizational structures.

The common driver for innovation labs is the exploration and pursuit of strategic goals. This, in combination with the need to accept radically different ways of working, means that strong executive sponsorship is critical to the success of an innovation lab.

Obstacles

Potential obstacles that may cause innovation labs to close or fail include:

- The lab is not focused on strategic business outcomes, so it struggles to move beyond pilot projects to find practical use cases for the technologies.
- The lab does not recruit the right people, with the right mix of skills and experience to succeed.
- The organizational culture does not support innovation, so the lab is not seen as integral to the business.
- Innovators fail to transfer deliverables from the lab to operations due to lack of involvement of business and IT stakeholders responsible for implementations.

- Innovation labs that don't evolve over time may end up as irrelevant and "ivory tower."

User Recommendations

Executive leaders evaluating the establishment of innovation labs should:

- Determine a clear strategy and mission for the lab.
- Secure executive sponsorship. Sponsors should help develop business-focused metrics to track innovation success.
- Determine key business outcomes, opportunities or challenges specific innovation ideas can address.
- Leverage data generated from customer interactions to shape innovation strategies. Successful innovation labs use customer insight to guide product innovation and capability development.
- Focus their innovation programs on digital optimization and modernization as a precursor to preparing for digital transformation, if their organizations have low digital business maturity. Ensure alignment with business needs to deliver value.
- Avoid the trap of pursuing technology innovation without measuring the business impact. Although innovation labs require the freedom to fail fast, they will be closed down eventually, if no positive business impact can be found.

Gartner Recommended Reading

Survey Analysis Report: Determine Your Innovation Lab Scenario to Optimize Success and Avoid Failure

Survey Analysis: Innovation Lab Scenarios — How Collaborators Enable Disruptive Innovation

How to Build an Innovation Lab

Survey Analysis: Innovation Lab Scenarios — How Productizers Accelerate Time to Market

Seven Best Practices to Create an Innovation Center

Open Innovation

Analysis By: Peter Skyttegaard

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

Definition

Open innovation is an approach that sources ideas from outside the organization and also shares unused or underutilized ideas in the opposite direction with customers and partners. Over the last two decades, it has become an essential component of many corporate innovation programs. It was first proposed by Professor Henry Chesbrough of UC Berkeley in his book, “Open Innovation: The New Imperative for Creating and Profiting from Technology” in 2003.

Why This Is Important

In a world of abundant knowledge and instant information mobility, companies cannot rely on the notion that enough smart people work for them and that good ideas only come from within. Nor can they assume that they have the resources to exploit all their ideas internally. Innovation today must go beyond the boundaries of the individual organization so that talent and inspiration can be leveraged more widely.

Business Impact

Open innovation is sharing inventions and ideas across partnerships. It allows organizations to bring underutilized ideas to value elsewhere and to solicit ideas from external sources, such as suppliers, customers, universities, startups and even competitors. Ideas can not only be exchanged in monetary transactions through selling, buying and licensing technology and patents, but can also involve “free” transactions where the value comes from peer recognition or brand publicity.

Drivers

A number of drivers are currently creating momentum in the use of open innovation:

- Companies are faced with increasing complexity and size of challenges that they are seeking to solve through innovation. Contributing significantly to solutions for environmental or societal issues is beyond reach of (most) individual enterprises, so companies come together to address these issues. Combining capabilities can add mutual benefits to all parties involved and allow better sharing of risk.
- There is a growth of business ecosystems as a dominant model within many industries. As these ecosystems bring diverse participants together, including startups, academia and technology providers, it enables open exchange of innovative ideas.
- Technology platforms can provide more visibility in nonmonetary recognition similar to getting "likes" on social media. An example is the LEGO Ideas platform, where fan designers can submit ideas for new designs and can get their ideas promoted and eventually turned into real products if they win support from other community members.
- There is an increasing mobility of knowledge. Technology provides inexpensive and instant sharing of information globally. It also allows greater mobility of individual workers. The recent surge in acceptance of working from home makes it easier for workers to work remotely for companies at greater distance. And it makes it easier for companies to source knowledge from workers far away.
- Sharing is caring. There is a general societal shift toward seeing sharing as a positive trait. The behavior shift is heavily influenced by consumers moving to sharing economies. Tesla's decision to open-source its patent portfolio is a good business example.

Obstacles

Common obstacles to open innovation are:

- Concern over losing competitive advantage when revealing intellectual property to potential competitors
- Risk of infringement of intellectual property rights when sourcing ideas from external sources
- Difficulties with incentivizing participants in nonmonetary innovation exchanges
- "Not Invented Here Syndrome" — the tendency to resist ideas or knowledge stemming from outside sources often found in established corporate cultures

User Recommendations

To leverage open innovation, leaders must:

- Expand their source of innovative ideas by inviting a range of external stakeholders to contribute with ideas to solve current business challenges.
- Promote a shift leadership mindset toward sharing by actively promoting good examples of mutual benefits from shared capabilities or knowledge.
- Liberate internal expertise by identifying innovative ideas that you are currently not utilizing. Decide which ideas that you are willing to share freely and which you will seek to monetize.
- Pursue multiple options by selecting from a range of approaches from free exchange to monetary transaction in both inbound and outbound knowledge exchange.
- Make open innovation part of your culture by identifying macrolevel challenges that your employees are encouraged to contribute to solving.

Gartner Recommended Reading

Deciding When to Innovate With Ecosystem Partners

Reimagine Innovation With an Adaptive Innovation Ecosystem Framework

Tech and Trend Radars

Analysis By: David Cearley, Marty Resnick

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition

A technology and trend radar is a customizable visualization tool that shows the current and future trends that your organization has identified as being impactful. It can also be used to track and prioritize discrete technologies and broader trends composed of multiple technologies moving in the same direction. Such radars help an organization prioritize investments by showing which technologies and trends are important and when they should be acted on.

Why This Is Important

An emerging technology radar is a visualization tool to support a benefit-driven, defensible approach to prioritize technology adoption. Technologies can cause significant disruption or create new opportunities for the organization. Trends can drive shifts in a company's strategy or form the basis for entirely new strategies or business models. Radars can save organizations' time and reduce risks of misunderstood technologies to ultimately support business transformation efforts.

Business Impact

Technology and trend radars can be used to visualize, assess and share the relative impact of technologies in order to prioritize focus and investments. The radar can be used as a first pass to list technologies and trends to be aware of that will have an impact on the business. Radars encourage leaders to focus on items that will have a high impact on your industry and company, and that are mature enough to align with your risk tolerance.

Drivers

- Radars are an easily digestible visualization tool for planning and decision making to help leaders make decisions about how and when to act for technology adoption.
- They also provide a visual representation that explains a complex analysis of technology and trend opportunities, risks, and impact across multiple business units.
- Radars provide a useful model to visualize the timing of opportunities, challenges and disruptions of future trends in the business as well as the level of uncertainty with each trend.
- Established trends are current and clear while evolving and emerging trends have increasing levels of uncertainty.
- A collection of trend radars focused on individual business units or different categories of trends (e.g., technology trends vs. economic trends) can be used to drive specific discussions with business executives.

Obstacles

- Lack of a fact-based analysis method can lead to biased decision making.
- The expectation that the radar is some kind of provably correct document when it's really just a reasoned opinion on the state of technology. This misalignment of expectations paralyses efforts and prevents them from moving forward.
- The proliferation of radars for multiple technology and nontechnology trends can itself become complex. Understanding how to properly bound the project and organize the radars is important.
- Radars are a visual view of technologies and trends, and the use of various symbols, symbol size and alphanumeric indicators can provide a useful reference. However, if left unchecked, complexity can actually obscure the message you are trying to deliver.

User Recommendations

- Use trend radars as a critical step in the trendspotting process to identify how digital disruptions introduce risk and opportunity in the organization. Treat radars as living documents that should be continuously updated with the latest trendspotting information.
- Scan the market for candidate technologies, and provide a process to vet and eliminate technologies that don't have beneficial returns for the company.
- Focus on those trends and technologies that are most relevant to your business strategy. Thus, every company will have its own version of the radar screen.
- Use different radars to drive different conversations with business leaders and guide those conversations to focus on how disruptive trends will impact the organization. Showcase radars in meetings with your business stakeholders to align your organization and drive actions that deliver positive business outcomes.

Gartner Recommended Reading

Tool: Template for Developing Impactful Trend Cards

Toolkit: How to Build an Emerging Technology Radar

Getting Started With Trendspotting

Expand Trend Radars and Stress-Test Innovation for Gray Rhinos Such as Coronavirus

Quick Answer: Technology Radar

Innovation Training

Analysis By: Arun Chandrasekaran, Tsuneo Fujiwara, Nick Jones

Benefit Rating: Moderate

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition

Innovation training is a program that equips learners to understand and leverage innovation theories, frameworks and techniques. It teaches how to align resources and processes to develop an innovative culture, harness new opportunities rapidly, and pursue creative disruption to ignite growth. It broadly includes internally developed training programs and courses, massive open online courses (MOOCs), third-party training institutes and structured innovation programs from research universities.

Why This Is Important

Innovation training is important because it allows organizations to pursue emerging market opportunities faster and reach their full potential. With a continued focus on innovation, organizations can better compete by harnessing the value of emerging disruptive technologies. Organizations that have innovation training programs tend to have more engaged employees, who can think critically, share their ideas with the rest of the company and are highly motivated at work.

Business Impact

Innovation training can have a profound impact by fostering a commitment to innovation throughout the organization and increasing the engagement level of employees. Innovation training programs help with formulating, evaluating and ultimately bringing new ideas to market. For example, in the article, Fostering Employee Innovation at a 150-Year-Old Company, executives from pharmaceutical and life science company Bayer describe how innovation training enabled their organization to transform.

Drivers

- Organizations need innovation to achieve digital business success but most report that they are not as effective at innovation as they would wish. Training can improve individual and team innovation performance.
- Innovation training can increase the effectiveness of tools and processes that support innovation, such as innovation management products.
- Innovation training helps organizations make their employees understand the strategy better, feel more connected to leaders, and contribute to an environment that supports ideation and inventiveness.
- Training programs can promote collaboration, trust and diversity within organizations, which is vital for success in innovation.
- The common aspects of most innovation training programs include collaborative innovation techniques (such as hackathons), design thinking (customer-focused innovation), adopting the innovation mindset (fail fast and lean principles) and agile innovation (Scrum and other agile techniques).

Obstacles

- Failure to make wider changes in the way the organization innovates so that the training can be exploited. Training may be ineffective without addressing issues such as incentives, metrics, process and culture.
- Convincing management about the value of investing in innovation training and addressing common barriers such as the belief that innovation is a creative skill that cannot be taught.
- Convincing employees that the training is worthwhile because they'll have opportunities to use it.
- Lack of inputs from employees and middle managers on what would be most useful to them could derail innovation training programs.
- Treating innovation training initiatives as a one-off ephemeral program rather than as a new mindset for every employee. This is problematic because it creates a disconnect between various groups of employees, and makes these programs political, ineffective and parochial.

User Recommendations

- Adapt the content of the innovation training for the audience in question. The innovation training should be relevant, useful and interesting for the participants. As you scale the innovation efforts, make the training mandatory for new employees.
- Make it easier for attendees to get access to training programs through a self-service portal or via interactive workshops.
- Set goals on the outcomes that you want to see as a result of the innovation training program and ensure that it is a part of an employee's annual assessment.
- Create a platform to experiment — solicit ideas, conduct hackathons, crowdsource success stories, and encourage other social learning sessions through which actionable prototypes and ideas emerge based on the training program.
- Ensure that teamwork is central to training programs. While nurturing individual creativity and freedom is important, promoting collaboration, diversity and trust is important to building an innovation culture.

Gartner Recommended Reading

Leverage a Customizable Innovation Framework to Design Effective Innovation Roadmaps

Infographic: Use Case Prism to Learn Go-To Techniques From the Innovation Heavyweights

Entering the Plateau

Business Model Frameworks

Analysis By: Daniel Sun, Marcus Blosch

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Mature mainstream

Definition

Business model frameworks are strategic innovation management and entrepreneurial tools that allow the organization to describe, design, adapt, invent and pivot their business models. Mainstream business model frameworks include Gartner's Business Model Framework and Strategyzer's Business Model Canvas.

Why This Is Important

Business model frameworks break the business model down into easily understood segments, providing visual representation of the current or new business models. Leveraging business model frameworks in the process of innovations (for example, postideation and business case evaluation during the innovation workshop) enhances the effectiveness and outcomes of business innovations.

Business Impact

Leveraging business model frameworks in the process of innovation enables your organization to design and improve your business model. A well-designed business model is the basis of sustainable competitive advantage. Business model frameworks also reveal clear paths on which to build your organizational innovation strategy. More importantly, business model frameworks enable you to move innovation out of the "in-theory" stage into the planning stage.

Drivers

There are two primary drivers for organizations to leverage business model frameworks:

- **Innovating the current business model:** When the organization is facing challenges/opportunities like changing market dynamics, new competitions, or industry and social disruptions, they must find a way to adapt their current business model. Take the traditional retailers during the COVID-19 pandemic as an example. Traditional retailers who used to heavily rely on offline channels must innovate their current business model by adding new online channels to drive sales revenue and to ensure the continuity of their operations. However, it is not a simple and straightforward task. They must take various factors into consideration, including partnerships, availability of resources, suitability of product offerings for online distribution and profitability. Business model frameworks provide a powerful tool for the organization, under this or similar situations, to systematically take all relevant factors into consideration, designing and developing their plan of innovating current business models.

- **Creating a new business model:** The alternative for the company to respond to challenges/opportunities like changing market dynamics, new competitions, or industry and social disruptions is to create a new business model. For example, the majority of the small to midsize banks in China lack the capability of undertaking digitization and digital transformation. Large and leading banks recognize and exploit this potential business opportunity by establishing their fintech subsidiary business. The fintech subsidiary business provides a range of technology services, including software solutions, system integration, open platform and IT consulting. This is an example of creating a new business model to disrupt the industry. Business model frameworks provide a powerful tool for the company, under this or similar situations, to ensure the creation of a feasible and sustainable new business model.

Obstacles

There are two main obstacles:

- **Some mainstream business model frameworks do not take strategy into consideration:** Take the Business Model Canvas (BMC) as an example. What the BMC is missing is a section at the top that defines the mission statement to give an idea of the priorities and objectives the company has set for itself. This could lead to disconnections with the organization's overall strategy and objective, which set the direction for business model innovation and creation.

- **Business model frameworks are more user-friendly to business executives than to IT leaders:** Business model frameworks are generally designed for the executive leadership team to have a holistic view of the business. What it does not provide are the detailed action items of business model innovation and creation. So, it is hard for IT leaders to apply business model frameworks to plan IT/digital initiatives that support or respond to the execution of business model innovation/creation actions.

User Recommendations

- Use the company strategy as the guiding principle to identify the areas that can be improved and to design, invent and pivot the components and segments of business model frameworks. But before applying the business model frameworks to innovate current or create new business models, ensure you fully understand the overall strategy and objective of the company.
- Learn about the Gartner Business Model Innovation (BMI) framework, which is largely designed and modified based on those mainstream business model frameworks. The BMI framework encompasses 10 aspects and provides 30 action items. Using this framework, the business can identify the most relevant action items for innovating current or creating new business models, while IT can plan digital initiatives supporting the execution of those identified business model innovation actions.

Gartner Recommended Reading

The Gartner Business Model Innovation Framework: A Tool for Deciphering High-Impact Digital Initiatives

How Leading Organizations Create Innovative Business Models

Why Business Models Matter for CIOs

How CIOs Can Foster Business Model Innovation Through Workshops

Launching a Tech Business Within Traditional Companies: Examples and Implications for CIOs

Hackathons

Analysis By: David Pidsley, Peter Krensky, David Cearley

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Mature mainstream

Definition

Hackathons are a competitive design activity involving development of a prototype or app, usually in one to two days. Assigned or self-selected teams work in parallel on a goal or challenge, and come together at a fun final event to pitch and compete for prizes. These sometimes involve outside participants (universities, startups or citizens). Outside IT, these are sometimes called innovation days, and are used to rapidly prototype plans, products/services, and customer or employee experiences.

Why This Is Important

Hackathons are important to shift toward customer-centric innovation. With the explosion of mobile apps and AI-powered customer experiences, these provide an alternative approach. They support collaborative development that can be more inclusive, diverse and representative of customers, employees and communities. Hackathons showcase lean and agile methods that reduce time to market in an uncertain business environment, encouraging new ways of working and the most innovative solutions.

Business Impact

Most sizes, industries and functions recognize hackathons (hack day, hackfest, datathon or codefest) and innovation days.

Functions:

- IT (Apps, data and analytics, security)
- R&D
- Marketing and sales
- Customer service

Industries:

- Public sector and NGOs
- Healthcare and life sciences

- Education
- Banking and insurance
- Energy and utilities
- Media, gaming and sports

Organizations with assets:

- Remote collaboration
- Conference halls
- Open-source, standard platforms (APIs, frameworks, data, compute)
- Public affairs and comms teams

Drivers

- Hackathons are moving up the Slope of Enlightenment and are symbolic of innovation driven by wider community collaboration.
- Identifying new revenue opportunities or proposals, product or service ideas or "what-ifs" and business models to generate or retain clients or support other existing key performance indicators.
- Changing corporate culture, particularly to encourage innovation in ways of thinking and doing things that solves a well-known problem and speeds up a slow business process, while helping users learn about the constraints of existing systems.
- Improving customer experience and employee experience especially via the development of applications and multiexperience interfaces, where participants are dissatisfied with the existing experience.
- Attracting, identifying, evaluating and retaining talent especially scarce and highly skilled developers/engineers, data scientists, creatives, entrepreneurs, industry vertical experts and business domain experts.
- Engaging new partners and building communities and vendor ecosystems with innovative startups.
- Recent developments in low-code/no-code tools for rapid prototyping, and the rise of "citizen" skills decentralized to lines of business, e.g., citizen developers, citizen data scientists and citizen integrators.
- Trend toward hackathons for a cause or purpose, such as COVID-19 pandemic response, social impact and environmental, e.g., "Data for Good."
- Pandemic stimulated innumerable hackathons making dashboards from open data and APIs.

Obstacles

- COVID-19 made large-scale physical interaction with strangers a higher risk. It increased the cost for venues hosting hackathons. Travel restrictions and the shift to remote working have reduced attendance. Virtual collaboration and communication tools for hackathons constrain the experience and outcomes, especially networking and unstructured interaction which epitomize hackathons.
- Hackathons may be perceived as IT events, less appealing to noncoders who cannot directly make software or data prototypes. Lack of coding abilities, poor data literacy and low digital literacy create a digital divide between participants who can and cannot contribute to the outputs. Noncoders can best contribute via ideation, mockups, testing interfaces, creating documentation and telling the story.
- Hackathon deliverables are not operationalized or are quickly abandoned.
- Compliance issues related to security, confidentiality and intellectual property rights.

User Recommendations

- Scope hackathons to gain strategic alignment to specific goals and a strong theme (mission, challenge or experience).
- Identify logistical requirements and address the hybrid (virtual-physical) challenges early on. Plan to document and learn lessons.
- Build momentum with a campaign to get the word out to the target audience. Highlight experts and judges attending.
- Kick off with the theme, goals and judging criteria. Equip and energize the participants. Provide ample unstructured time to “let them hack.” Judge solutions and award prizes fairly and transparently.
- Transition prototypes into pilots via a relationship or product manager — ensuring reuse is legal, ethical, reliable, secure and compliant. Continue the journey by measuring success and incorporating lessons learned into future hackathons.

Sample Vendors

Alcrowd; Campus Party; DataDriven; HackMIT; Junction; Kaggle; Major League Hacking; MHacks; NASA International Space Apps Challenge; Zindi

Gartner Recommended Reading

Pursue Citizen Data Science to Expand Analytics Use Cases

Maximize the Value of Your Data Science Efforts by Empowering Citizen Data Scientists

How Executives Can Design an Innovation Process That Brings Ideas to Value

Internal Pitch Events

Analysis By: Darren Topham, Michelle Bazargan

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

An internal innovation pitch event — also sometimes called a "Shark Tank" or "Dragon's Den" — is a venture-capital-style competition in which individuals or teams present ideas to a panel of judges (which could be an innovation committee or a group of executives). Judges ask penetrating questions about the idea, and ultimately accept or reject each idea for backing or onward investment.

Why This Is Important

Innovation pitch events provide opportunity for wider idea assessment to take place in a more open, formal and standardized way. They not only allow for more diverse assessment of an idea's potential, but are also a critical step in ensuring that innovation has the appropriate resources required for effective development. They allow an organization to capture and advance ideas from employees who may not normally be able to advocate an idea by creating a specific place where they can take ideas.

Business Impact

Formalized internal pitch events provide an opportunity for exposure of ideas to the wider business for more critical assessment and to encourage sponsorship and the allocation of (usually phased) funding and resources for development.

The business leadership — acting as judges — probe the ideas presented for opportunity and business impact in areas such as:

- **Value proposition:** The implied promise an innovation makes regarding the value potential
- **Attributes:** The high-level capabilities and resources needed to deliver the value
- **Customers:** Which individuals and customer segments that will consume the innovation
- **Finance:** How the pricing model, revenue model and metrics will generate the value

Drivers

An innovation internal pitch event should always look to answer the following 10 questions:

1. What is the problem the idea is trying to solve?
2. Who does the idea aim to help?
3. Why should the target audience care about this idea?
4. How will this idea meet the challenge posed?
5. Are there any (external) examples of success that can be shared?
6. What are the proposed next steps to confirm the hypothesis?
7. Assuming a successful exploration, who would own this idea at scale?
8. What is the “ask”? What resources are required for the next steps?
9. Who should be accountable for the next (prototyping/MVP) steps?
10. Who will sponsor the initiative at scale?

These key questions will allow for repeatable idea comparison, as well as helping innovation proposers to strengthen their ideas ahead of the formal assessment event.

Obstacles

- Innovation ideas need comparative assessment as well as the assessment of an idea's individual merit. Internal pitch events help organize and align the enterprise's wider innovation portfolio, as well as looking at the merits of specific ideas. Without this activity, there are two risks: Duplication — Where an organization pursues similar ideas independently in different parts of the organization. Disruption — Where too many "big ideas" are adopted simultaneously, causing unforeseen disruption across the enterprise.
- It's also important to follow a set process. Don't equate the merit of an idea with the proposer's presentation ability. Formalizing the process and mandating the info required will help with this.

User Recommendations

- Consider internal innovation pitch events when a wider objective and comparative assessment of an organization's innovation portfolio needs to take place. CIOs, CTOs and enterprise innovation leaders should also provide an opportunity to look objectively at the merits of a particular idea outside of localized enthusiasm.
- Identify and confirm ownership during development and ownership when it comes to scaling the innovation across the enterprise — something that innovation teams often struggle with directly.
- Demonstrate that innovation is being taken seriously by the organization and in a coordinated way, not just being allowed to happen "accidentally." This helps to drive team creativity, organizational collaboration and executive engagement.

Scenario Planning

Analysis By: David Furlonger, Frank Buytendijk

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

Scenario planning is a management methodology that helps organizations prepare for uncertainty by envisaging and analyzing plausible future outcomes. The methodology assesses critical uncertainties and macroforces influencing or impacting the market and enterprises, stimulating executive thinking. Executives can “future test” their strategies and promote innovation by ideating opportunities, risks and actions to capture stakeholder returns.

Why This Is Important

Scenario planning methodology is a foundational mechanism for understanding disruption and honing management strategy, challenging how leaders prepare to make key decisions. It can be used in anticipation of and/or during periods of significant external change to plan for potential problems or exploit opportunities. COVID-19 has highlighted the importance of analyzing uncertainty and evaluating the multiple disruptive events impacting industry and business trajectories.

Business Impact

Scenario planning offers a:

- Structured methodology and dynamic tools to address critical uncertainties. Core business initiatives can be prioritized based on clear descriptions of plausible market futures not previously considered.
- Strategic canvas to evaluate innovations and break fixed mindsets. Scenarios question market norms based on future sensing, as opposed to projecting outcomes from present conditions.

Drivers

- Business in the 21st century is extremely volatile, uncertain, complex and ambiguous. There is competition from within and outside industry segments, and a constant stream of innovations, floods of information, dramatic social shifts and a digitally accelerating business landscape for executive leaders to contend with.
- Growth (or survival) trajectories due to COVID-19 mean leaders are challenged by prioritizing the best pathways to accelerate out of the crisis.
- Macroforces influencing our future are collated using methods such as technological, political, economical, social/cultural, trust/ethics, regulatory, environmental analysis into synergistic categories from which axes of critical uncertainty are developed. 2X2 matrices and trilemma models are then created as scenario outputs that structure plausible future scenarios for better analysis.
- In the face of considerable business uncertainty and complexity, scenario planning can help drive executive decision making by uncovering the risks and opportunities enterprises will face in the future. Scenario thinking uncovers risks and opportunities for innovation resulting from changes or disruptions in the business environment. These risks and opportunities should act as catalysts that leaders can use to innovate today to get ahead of the competition in the future.
- Scenarios, therefore, offer a canvas for ideation. Innovation initiatives then become directly tied to the strategic requirements that could address future business scenarios.
- Embarking on innovation initiatives without a clear understanding of potential future business states risks losing money, wasting time and, through innovation failure, reinforcing the status quo.

Obstacles

- Preoccupation with today's uncertainties, thinking that the future is "too far away" and/or irrelevant
- Using assumptions that the future is like the past — that is, a singular prediction of likely outcomes with probability assessments, as opposed to a variety of thinking about the plausibility of a particular outcome being realized
- Lack of understanding/knowledge of scenario planning methodology, which results in resorting to standard trend analysis and rigid management processes for strategic planning
- Lack of a common departmental language, standards and framework for assessing uncertainty
- Lack of diversity and collaboration in innovation and scenario teams fostering status quo bias, reinforcing enterprise silos inhibiting change
- Immature innovation management capabilities
- Lack of resource commitment to innovation and/or execution of ideas
- Lack of follow-up from a scenario planning exercise — failure to revisit the waypoints indicating which (if any) of the scenarios are unfolding

User Recommendations

Executives leaders involved in innovation management should use scenario planning to:

- Assess volatile market dynamics, anticipate future business capability needs and customer requirements, and create and adapt innovation initiatives to avoid performance stalls.
- Encourage, facilitate and participate in conversations with the board and executive team about the future and its impact on business operations and market behaviors.
- Clarify assumptions about possible futures and identify signposts/measures to monitor outcomes and indicate the validity of assumptions over time.
- Evaluate current and proposed business and technology innovation initiatives and investments against potential future scenarios.

Gartner Recommended Reading

Expert Insight Video: Gartner Global Scenarios 2021 — The Role of Business In Society

Toolkit: Gartner Global Scenarios 2020: How to Accelerate Business Success in a Time of Worldwide Disruption

Don’t Make Predictions and Choices, Instead Create Options by Using Scenario Planning for Pandemic Recovery

Scenario Planning Playbook

Introduction to Scenario Planning

Idea Challenges

Analysis By: Jackie Fenn

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

An idea challenge is a time-bounded request for ideas to solve a particular business problem or address an opportunity. A challenge usually lasts from a few days to a few weeks, and targets a diverse population of participants. To reach the broad population and to manage the ideas collected, a challenge is typically run through an online innovation portal, often using an ideation tool.

Why This Is Important

The value of an idea challenge lies in surfacing ideas from employees (or outside stakeholders) who would not otherwise be able to contribute to innovation initiatives, in particular frontline or customer-facing employees.This thas two benefits: Firstly, it draws on the knowledge, experience and creativity of a diverse set of participants to generate a broader range of ideas and insights, and secondly, it increases employee or stakeholder engagement by showing people that their input is valued.

Business Impact

Compared with other innovation techniques, idea challenges tend to generate opportunities at the incremental end of the scale. They are often a first step in generating ideas for a new innovation initiative targeting customer experience, process improvements or new technologies. A challenge may expand to include customers or suppliers in generating ideas, which creates a larger and more-diverse pool of informed ideas, and can attract stakeholders to feel more involved with the organization.

Drivers

An idea challenge is often the first innovation activity for an organization aiming to improve its level of innovation. Challenges can be a good option when organizations want to:

- Launch a simple call for ideas as a community innovation exercise or to jump-start a focus on innovation.
- Gather multiple viewpoints from a broad range of participants (such as, from diverse roles, backgrounds, cultures, or with different expertise or capabilities), and allow ideas to be refined with comments from all participants.
- Engage geographically distributed employees in innovation, as challenges enable asynchronous and remote collaboration.
- Solicit ideas from a broad range of stakeholders, including external participants, such as customers, citizens or suppliers.

Obstacles

Potential challenges and obstacles include:

- Disappointment in the quality of the ideas, particularly if the organizers are seeking highly original, disruptive ideas.
- Lack of follow-through on ideas. In particular, if the organizers hand off ideas to relevant managers who haven't been involved in the challenge, those managers may not have the commitment to take on the additional work to implement the idea.
- Low participation resulting from a lack of preparation or communication, or from a lack of incentives.

User Recommendations

When organizing and running innovation challenges, executives, CIOs and innovation leaders should:

- Invite participants beyond those who usually work on the problem. Adjacent roles may provide a particularly valuable perspective.
- Enable different levels of involvement, including submitting ideas, building on other people's ideas, commenting or rating submitted ideas.
- Set clear constraints for the challenge in terms of the target and the level of risk (such as new product ideas or improved processes, short-term wins or visionary ideas). Clarity of scope steers the creative efforts and provides evaluation criteria that are known upfront (which promotes a sense of fairness in the evaluation process).
- Ensure that relevant business leaders and executives are committed to sponsoring winning ideas.
- Appoint someone to be responsible for organizing and running the challenge for its duration and for managing follow-up activities.

Gartner Recommended Reading

Executing on Innovation: Design the Process From Idea to Value

Drive a Creative Culture Through Activities, Education and Attitude

Innovation Governance Committees

Analysis By: Owen Chen

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

An innovation governance committee is a group of people who are chosen to supervise, lead and govern innovation-related matters for their organization. It is the highest level of authority of the innovation governance structure in an organization.

Why This Is Important

An innovation governance committee is important within an organization, because it provides a focus and level of authority for innovation. It ensures:

- All innovation activities focus on the business objectives and innovation goals.
- All innovation-related decision rights are clearly defined or delegated.
- Innovation activities are communicated to all stakeholders.
- Innovation resources and funding are allocated.
- Metrics to measure success are established.
- Innovation-related policies and processes are defined.

Business Impact

As part of an organization's innovation program or initiative, an innovation governance committee provides value by setting the direction of the innovation in the organization. A well-established innovation committee clearly defines the purpose of innovation, and makes sure all innovation activities are aligned with the innovation purpose.

Drivers

- In the digital era, changes are happening rapidly. In order to keep the business competitive, innovation is becoming essential.
- The scope of innovation is expanded from business process innovation, product/service innovation to business model innovation. While the investment of innovation is growing fast, an innovation governance structure is required, and an innovation committee is the highest level of the structure to accelerate governance and multidisciplinary leadership focus.
- The direct driver of an innovation governance committee is to balance the innovation requirement and resources. While there are many innovation ideas that can be pursued, the innovation resources within an organization are limited. An innovation governance committee makes sure the innovation activities are focused on business objectives.

Obstacles

- One-size-fit-all governance — Traditional governance model with a desire for control and predictability in mind is in conflict with the exploratory nature of innovation. The committee needs to implement an adaptive model with a broad palette of governance styles that can be selected throughout the innovation journey.
- Either too tight or too relaxed governance — If governance is too tight, it stifles innovation efforts and jeopardizes the opportunities for innovation. If governance is too relaxed, it leads to wasted resources or unacceptable risk. The committee needs to find a balance between tight and relaxed.
- Ineffective governance — If a committee does not have the authority to assign funding and resources, its recommendations and decisions will have no impact.
- Over-reliance on the committee — A committee is not generally effective at doing actual innovation, so it needs to be part of a broader program of innovation structure focused on all stages of the innovation process.

User Recommendations

- Create an innovation governance committee as part of an adaptive governance model by leveraging a broad palette of governance styles and mechanisms for your innovation initiative.
- Improve the governance process continually by practicing the basics, communicating the decisions and measuring the results.

Gartner Recommended Reading

Adapting Governance to Your Innovation Journey

Jump-Start Your Innovation Journey With a Customizable Innovation Framework

Innovation Workshops

Analysis By: Jackie Fenn

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition

Innovation workshops are event-based, highly collaborative sessions that last from a couple of hours to a couple of days in duration. These workshops typically include one or more process steps, ranging from idea capture (like ideation), to idea categorization and discussion (such as, elevator pitches), to idea prioritization (such as voting) and then to high-level business cases and roadmaps. They complement longer-duration innovation campaigns and may be run internally or externally.

Why This Is Important

Innovation workshops provide a rapid way to capture and prioritize a set of ideas and opportunities at the front end of the innovation pipeline for subsequent evaluation and business case development. These event-based sessions are an important complement to longer-duration innovation campaigns and challenges, because they can be used more readily and strategically for top-down ideation with a targeted audience, such as the senior leadership team or a select group of subject matter experts.

Business Impact

Innovation workshops can provide rapid results with low overhead. They are highly flexible in supporting ideation related to both incremental and disruptive innovation and business, technology, and process innovation. They are a “go-to technique” for organizations to rapidly populate their innovation pipelines and roadmaps with actionable ideas. In addition to live meetings, online collaboration and conferencing tools enable workshops to be conducted in virtual or hybrid work environments.

Drivers

Since innovation campaigns, challenges and hackathons require considerable planning, as well as broad employee communication, innovation workshops are an attractive complement, because they can be used to deliver rapid results from a more-targeted audience with low overhead, while providing the flexibility for all types of innovation intent:

- **Rapid results** — Unlike weeks-long innovation challenges and campaigns, innovation workshops can be used to surface topics, source ideas, hear elevator pitches and prioritize these ideas within sessions lasting from as little as two hours to two days in duration.
- **Low overhead** — Innovation workshops require minimal planning overhead and can often be conducted with a few hours of planning and with an agenda and participant guide distributed ahead of the session.

- **Flexibility** — Well-designed and well-executed workshops can provide flexibility (that is, intrinsic agility) for a variety of workshop objectives, as well as for a variety of ideas flowing through these sessions.
- **Quality** — They can also simultaneously maintain a high bar on quality and consistency in terms of overall workshop efficiency and effectiveness.Creativity prompts can be used to trigger out-of-the-box approaches and solutions.

Obstacles

- **Process gaps** — Innovation workshops can be victim to process gaps or "drop points" if ideas are not followed up postworkshop to keep promising ideas moving toward implementation and deployment.
- **Specialized software** — Traditional innovation management platforms and software are often overkill for these event-based sessions with too many features and functions. Facilitators, therefore, need to look for more agile, easy-to-use alternatives, such as found within group decision support software.
- **Lack of standards** — Like other ideation techniques, there is a lack of common approaches and best practices in the industry for how these workshops are to be conducted. While this allows great flexibility, it also creates confusion among participants and requires careful planning.

User Recommendations

Innovation workshops can be a powerful tool in the toolkit in terms of activities for sourcing and prioritizing ideas. However, they need to be carefully designed and executed to ensure success (see The Art of the Innovation Workshop):

- Maximize outcomes by complementing ongoing, macrolevel enterprise innovation processes with innovation workshops. Use these workshops to enable microbursts of event-based ideation focused on specific challenges and opportunities.
- Run productive sessions with a high degree of participant involvement, interaction and satisfaction by engaging best practices across preworkshop planning, workshop execution and postworkshop follow-up.
- Design formal, structured workshops to support a variety of objectives by engaging agile innovation workshop processes while retaining a high bar on quality, consistency and repeatability.

Gartner Recommended Reading

The Art of the Innovation Workshop

Video: How to Run a Virtual Innovation Workshop

Appendixes

Hype Cycle Phases, Benefit Ratings and Maturity Levels

Table 2: Hype Cycle Phases

(Enlarged table in Appendix)

Phase	Definition
Innovation Trigger	A breakthrough, public demonstration, product launch or other event generates significant media and industry interest.
Peak of Inflated Expectations	During this phase of overenthusiasm and unrealistic projections, a flurry of well-publicized activity by technology leaders results in some successes, but more failures, as the innovation is pushed to its limits. The only enterprises making money are conference organizers and content publishers.
Trough of Disillusionment	Because the innovation does not live up to its overinflated expectations, it rapidly becomes unfashionable. Media interest wanes, except for a few cautionary tales.
Slope of Enlightenment	Focused experimentation and solid hard work by an increasingly diverse range of organizations lead to a true understanding of the innovation's applicability, risks and benefits. Commercial off-the-shelf methodologies and tools ease the development process.
Plateau of Productivity	The real-world benefits of the innovation are demonstrated and accepted. Tools and methodologies are increasingly stable as they enter their second and third generations. Growing numbers of organizations feel comfortable with the reduced level of risk; the rapid growth phase of adoption begins. Approximately 20% of the technology's target audience has adopted or is adopting the technology as it enters this phase.
Years to Mainstream Adoption	The time required for the innovation to reach the Plateau of Productivity.

Source: Gartner (July 2021)

Table 3: Benefit Ratings

Benefit Rating ↓	*Definition* ↓
Transformational	Enables new ways of doing business across industries that will result in major shifts in industry dynamics
High	Enables new ways of performing horizontal or vertical processes that will result in significantly increased revenue or cost savings for an enterprise
Moderate	Provides incremental improvements to established processes that will result in increased revenue or cost savings for an enterprise
Low	Slightly improves processes (for example, improved user experience) that will be difficult to translate into increased revenue or cost savings

Source: Gartner (July 2021)

Table 4: Maturity Levels

(Enlarged table in Appendix)

Maturity Levels	Status	Products/Vendors
Embryonic	In labs	None
Emerging	Commercialization by vendors Pilots and deployments by industry leaders	First generation High price Much customization
Adolescent	Maturing technology capabilities and process understanding Uptake beyond early adopters	Second generation Less customization
Early mainstream	Proven technology Vendors, technology and adoption rapidly evolving	Third generation More out-of-box methodologies
Mature mainstream	Robust technology Not much evolution in vendors or technology	Several dominant vendors
Legacy	Not appropriate for new developments Cost of migration constrains replacement	Maintenance revenue focus
Obsolete	Rarely used	Used/resale market only

Source: Gartner (July 2021)

Recommended by the Authors

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Understanding Gartner's Hype Cycles

Create Your Own Hype Cycle With Gartner's Hype Cycle Builder

Create a Research Engagement Plan to Advance Your Innovation Programs, Processes and Culture

Jump-Start Your Innovation Journey With a Customizable Innovation Framework

Organizing for Innovation: Maturing From Accidental to Intentional Innovation

Executing on Innovation: Design the Process From Idea to Value

Infographic: Use Case Prism to Learn Go-To Techniques From the Innovation Heavyweights

Table 1: Priority Matrix for Innovation Management Techniques, 2021

Benefit	Years to Mainstream Adoption			
	Less Than 2 Years	2 - 5 Years	5 - 10 Years	More Than 10 Years
Transformational				AI-Driven Innovation
High	Design Thinking Innovation Governance Committees Internal Pitch Events Open Innovation Scenario Planning	Corporate Incubators Innovation Centers of Excellence Innovation Ecosystems Innovation Hubs Innovation Labs Lean Startup Trendspotting	Continuous Foresight Data-Driven Innovation	
Moderate	Business Model Frameworks Hackathons Idea Challenges Innovation Culture Hacks Innovation Training Innovation Workshops Tech and Trend Radars	Digital Safaris Expert Networks for Innovation Idea Management Tools Innovation Storytelling ISO 56000		
Low				

Source: Gartner (July 2021)

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Phase ↓	Definition ↓

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