Hype Cycle for Innovation Practices, 2023

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Innovation is critical to navigating volatility and uncertainty. Executive leaders should study this Hype Cycle to understand the trends in practices that can help organize and execute innovation to maximize the value and impact of their innovation programs across the organization.

More on This Topic

This is part of an in-depth collection of research. See the collection:

2023 Hype Cycles: Deglobalization, Al at the Cusp and Operational Sustainability

Analysis

What You Need to Know

Innovation is a discipline that enables organizations to generate and execute 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 differ for each organization. Those that succeed in designing innovation programs that best serve their business and innovation goals will find it relatively easier to tackle the new opportunities and challenges that arise in the next few years by leveraging these techniques to test out new solutions to these new problems.

Executive leaders can use this Hype Cycle to identify the innovation practices 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 illustrated by the number of practices spread across the Hype Cycle. Even some practices at the left-hand side of the curve, such as business model innovation frameworks and innovation ecosystems, are not new techniques, but rather underused approaches that can help organizations that haven't taken advantage of them in the past.

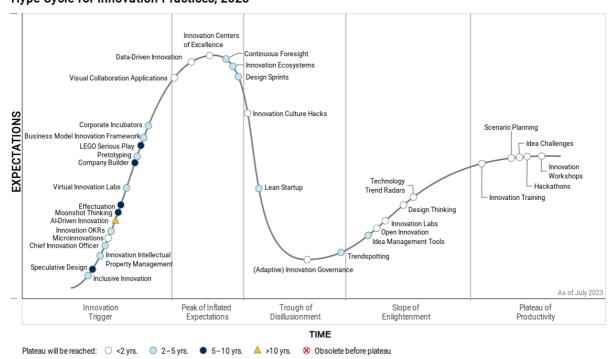
Many of the techniques included in this Hype Cycle generate recurring interest from clients to Gartner's expert inquiry service. We have also included some that are just emerging, but offer the potential for significant improvements to the innovation process (i.e., artificial intelligence [AI] and data-driven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

- Organizing for Innovation: Chief innovation officer, corporate incubators, company builder, innovation centers of excellence, innovation ecosystems, (virtual) innovation labs, open innovation, (adaptive) innovation governance, innovation IP management
- Improving the Innovation Process and Culture: Al-driven innovation, effectuation, innovation culture hacks, innovation training, inclusive innovation
- Strategy and Opportunity Identification: Data-driven innovation, continuous foresight, trendspotting, technology trend radars, business model frameworks, scenario planning, speculative design, moonshot thinking, microinnovations
- Idea Generation: Idea management tools, hackathons, idea challenges, innovation workshops, LEGO Serious Play
- Evaluation and Experimentation: Lean startup, design thinking, design sprints, pretotyping, visual collaboration applications

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.

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Figure 1: Hype Cycle for Innovation Practices, 2023



Hype Cycle for Innovation Practices, 2023

Gartner.

The Priority Matrix

Although many of the innovation techniques in this Hype Cycle are well-established, they are not necessarily considered to be "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. By clearly demonstrating the value of innovation techniques, executive leaders can embed them better into broader management practices and tools. Most of the techniques have a lag time in terms of years to mainstream adoption of less than five years to reflect their full potential. Some, including Al-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. Al-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. Business Model Innovation Frameworks and Moonshot Thinking are transformational in their approaches to opportunity identification.

Table 1: Priority Matrix for Innovation Management Techniques, 2023

(Enlarged table in Appendix)

Benefit ↓	Years to Mainstream Adoption			
	Less Than 2 Years ↓	2 - 5 Years $_{\downarrow}$	5 - 10 Years $_{\downarrow}$	More Than 10 Years
Transformational		Business Model Innovation Framework	Moon shot Thinking	Al-Driven Innovation
High	Data-Driven Innovation Design Thinking Innovation Centers of Excellence Innovation Labs Open Innovation Scenario Planning Visual Collaboration Applications	Chief Innovation Officer Continuous Foresight Corporate Incubators Innovation Ecosystems Lean Startup Pretotyping Trendspotting	Company Builder	
Moderate	(Adaptive) Innovation Governance Hackathons Idea Challenges Innovation Culture Hacks Innovation Training Innovation Workshops Microinnovations Technology Trend Radars	Design Sprints Idea Management Tools Inclusive Innovation Innovation Intellectual Property Management Innovation OKRs Virtual Innovation Labs	Effectuation LEGO Serious Play Speculative Design	
Low				

Source: Gartner (July 2023)

Off the Hype Cycle

The following innovation practices were on the previous version of this Hype Cycle but have been removed this year:

- Innovation Storytelling: Although storytelling may still be used in innovation, we see it being used in a number of other areas including futurism, strategy formulation and product visioning. As a result, we no longer wish to position this as an innovation practice.
- Digital Safaris: Has been sliding into the trough for the past years, and we no longer see much interest in this approach.

- ISO 56000: Has been removed since we are not experiencing recurring interest from clients in this.
- Expert Networks for Innovation: Has been removed since we are not experiencing recurring interest from clients in this.
- Innovation Hubs: Has been removed because the practices of an innovation hub are largely covered by innovation centers of excellence and innovation labs.
- Internal pitch events: Removed as it is now deemed fully mature.

On the Rise

Inclusive Innovation

Analysis By: Mordecai.

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Inclusive innovation is the deliberate practice of creating spaces, engagements and results that foster inclusion across innovation's practice. By front-door tactics for inclusion through innovation work, and the technologies adopted through it, an inclusive environment (i.e., culture change) becomes active in organizations countering issues of marginalization, dormant potential and one solution innovation.

Why This Is Important

Inclusivity is fundamental for the success of all employees and organizations as a whole. As inclusive innovation is a practice that offers new thinking, new strategies of working are easily adopted along with it. By addressing marginalization that can occur in traditional approaches to brainstorming, development and delivery, inclusive innovation actualizes tactics that offer multiple ways to participate, engage and collaborate.

Business Impact

Aligning innovation work to the broader inclusive innovation from genesis is a beginning to create an antifragile organization. By teaming inclusion tactics in innovation's practice, employees, leaders, partners and the technology being engaged can become more inclusive. Creating an environment proactive in inclusion efforts can deliver better employee retention, diversify perspectives and create a better work product.

Drivers

Inclusive innovation establishes itself off the call for cultural change made to leaders, by employees, and demanded of the technologies engaged via:

 "Opensource" methodology — An open collaboration model, fostering peer-to-peer analysis by offering blueprints and early product testing to the public.

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- Procedural accountability Transparent engagement to how decisions are made, ideas validated and setting clear KPIs across innovation. By employees knowing how a process may work initially, it can be adapted to best fit the way they participate.
- Diverse perspectives The need for multiple POVs and experiences to truly communicate an idea's validity.
- Learning and development Educational resources provided to employees at employer's cost. Innovation and HR (diversity, equity and inclusion [DEI]) are hubs of (no-outside cost) employee-led learning and development to foster new skills and understandings.
- **DEI mandates** Corporate governance dictating an organization wide commitment to DEI. Further, regulations from governments create incentives for DEI initiatives and cultural accountability making DEI work a high priority.
- Inclusion toolkits Inclusion tools are available, with training often required, for leaders and employees. Example inclusion tools are not making assumptions, understanding unconscious bias and self-reflecting on one's own privilege. Though these trainings provide practical application tools, implementation is low.

Obstacles

- Product roadmaps and innovation workshops can become rigid, ineffective processes, with little flexibility. Engaging outdated frameworks can lead to likeability bias in practice, lending themselves to systemic issues adversely targeting marginalized employees.
- Siloed innovation work hinders the power of collective ideation and creates an echo chamber for ideas. Siloes often bring team dynamics into innovation work, which can silence team members or create a room catering to only management ideas.
- Volunteer teams, those with extra time in their schedule, can be the only way innovation is explored in an organization. "Extra time" is a privilege for employees that often leaves those unable to spend extra hours at work or with roles that require constant presence at their workspace, out of opportunities.
- Fear of being wrong can lead people to wanting spaces that "feel" right, activating affinity bias. Inclusion requires self-reflection and vocalized accountability which may feel uncomfortable.

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User Recommendations

- Enact "open source" idea generation earlier in innovation's process to welcome a range of ideas, strategies, and solutions.
- Train innovation team on multiple methods for innovation activities. From ways of learning and participating to different life experiences and ablement, having multiple ways to brainstorm, sprint, etc., allows for fresh thinking and more inclusive experiences.
- Focus on employee diversity. Assemble new collections of innovation squads, particularly in early ideation. By having employees from multiple business units and backgrounds, inclusive innovation's inclusion tools can be repurposed to their teams.
- Demonstrate effective inclusionary hiring tools when exploring and vetting innovation ecosystem partners. Avoid exclusionary practices, e.g., Al tools which may expedite vetting but instill bias and affinity partnering (e.g., working with friends of friends).
- Host inclusion training for team leads focused on acknowledging biases, and easily enacted tools to counter them.

Sample Vendors

Hustle Crew

Gartner Recommended Reading

Confront Behaviors That Marginalize Employees

Speculative Design

Analysis By: Christian Stephan, Brian Prentice

Benefit Rating: Moderate

Market Penetration: Less than 1% of target audience

Maturity: Emerging

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Definition:

Speculative design is an ideation approach that uses design to explore possible future scenarios, provoke discussions and challenge conventional wisdom. It encourages critical thinking and the examination of potential implications and ethical considerations of new technologies, policies, or social trends. Speculative design projects, conceptual in nature, serve as conversation starters to inspire reflection on the future we want to create.

Why This Is Important

Speculative design (SD) enables the type of critical thinking necessary to foster a culture of innovation. It is designed to anticipate trends by envisioning future scenarios in a nonlinear fashion. SD encourages the questioning of assumptions and explores ethics, which can lead to more responsible decision making and a better understanding of the social impact of technology. Seasoned designers can build on known techniques applied like scenario planning and backcasting.

Business Impact

Innovation plays a central role in determining how an enterprise responds to an uncertain world. SD is ideally suited to this objective because it encourages the questioning of the status quo. It also allows practitioners to consider an enterprise's potential actions through an ethical lens. It is through this combination that SD provides enterprises with the opportunity to create radical new products, services and processes while building a reputation for responsible decision making.

Drivers

- Complex societal changes: Challenges such as climate change, inequality, and resource scarcity, geopolitical upheaval are shifting customer/citizen preferences and demand future-oriented solutions. SD allows organizations to envision alternative futures and respond to them.
- Inherent storytelling: While for many methods building narratives to innovation is part of marketing, SD is based on narratives and the projects speak for themself.

Obstacles

- Resistance to unconventional thinking: provoking methods often get stuck in the daily operation of middle management and immediate problem solving. Not every organization embraces SD's unconventional approach.
- Short-term focus: without optionality-based finance mechanisms and the ability to quarantine new ventures from established business operations, SD is unlikely to move beyond an ideation methodology.
- Misunderstanding the approach: Stakeholders may misinterpret SD as impractical or frivolous, rather than recognizing its value in critical thinking and innovation.
- Balancing speculation and practicality: SD is a cognitively intensive process that requires substantial data to produce reasonably likely scenarios. Cutting corners in practitioner skill sets, time spent in analysis, or with information sources can lead to unrealistic scenarios prone to individual bias.

User Recommendations

- Comfort your organization with this method, by exhibiting design artefacts and stimulating the discussion, while taking feedback.
- Prime SD activities by having executive leadership define the key challenges, trends and areas of concern for the organization.
- Develop comprehensive and creative future scenarios by assembling a multidisciplinary core team and partnering with an external agency or university to facilitate the process. Over time the team can become self-sufficient.
- Focus on user insights by combining desk research, expert interviews and market analysis to prepare for the SD process.
- Envision future scenarios by creating a range of possible futures, considering factors like social, technological, environmental, economic and political developments that might shape the landscape.
- Develop speculative concepts that address the challenges or opportunities. Create a visual representation of prototypes to facilitate discussion and evaluation.

Innovation Intellectual Property Management

Analysis By: Darren Topham, Tsuneo Fujiwara, Brian Prentice

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Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Definition:

Innovation intellectual property (IP) management is the formal process of protecting the outcomes of innovation activities to guide future investment decisions and maintain competitive advantage for the organization.

Why This Is Important

The innovation process can create assets that provide competitive advantage to the business, and these discoveries and outcomes must be adequately protected. Innovation IP management provides the framework and process to protect the innovation assets of an organization and ensure appropriate treatment during development.

Business Impact

The value of innovation, irrespective of outcome, is often undermined because inventions are not adequately protected early enough. If the IP of innovation is not properly protected, it could risk being easily duplicated by competitors, which may result in the enterprise being unable to fully achieve the business value of the innovation. On the other hand, protection of IP costs money, time and effort to the enterprise.

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Drivers

- Intellectual property is one of the most important assets of innovation. Currently, executive leaders are often unaware of the need for or options (trade secret, patent application, publication, doing nothing) to protect it. However, Gartner is seeing an increase in inquiries on the subject as innovation practices mature.
- Not every innovation is worthy of IP protection. Knowing which ones should be considered for protection and which ones should not is an important innovation step.
- Organizations are driven to take early action on IP protection consideration to ensure that ideas and lessons derived from innovation are properly protected from the outset and appropriate preparations made.
- The IP owner retains freedom to use the assets themselves, and can control which external entities can and cannot use it.
- Technological inventions that create competitive advantages can be patented to secure a 20-year monopoly. In a small number of jurisdictions (the U.S. being the most notable), business methods can also be patented.

Obstacles

- The cost of some approaches, such as filing patent applications, can be overwhelming, especially when leaders are not selective enough about what to protect.
- While a range of options exist (trade secret, patent application, publication, doing nothing), each comes with its own considerations, risks and levels of protection that must be balanced with the innovation's potential rewards.
- Variations in intellectual property law across different jurisdictions increase the cost and complexity of managing intellectual property.

User Recommendations

Innovation leaders should:

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- Partner with corporate legal counsel to design, own and run an IP consideration process as an early step in their innovation cycle. Together, evaluate the range of options available for IP protection to help ensure that the right approach is taken early enough so that the most appropriate protection approach is maintained throughout the innovation development process.
- Train the innovation team on IP awareness and culture so that emergent and secondary discoveries are captured and considered in a timely way.
- Run intangible asset-mining sessions to identify and review potential IP. Work with legal counsel to determine which identified assets, if any, are worthy of patent protection.

Gartner Recommended Reading

How to Protect Your Innovation's Intellectual Property

Chief Innovation Officer

Analysis By: Mordecai.

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

A chief innovation officer, on or reporting to the board, provides accountability and greater opportunity for enterprisewide innovation. With board signoff on a set practice or product of innovation, an organization's innovation work is positioned for greater planning, utilized in multifunction engagement, and responsible for broader returns on investments.

Why This Is Important

Having a chief innovation officer creates executive accountability and enables effectiveness for executive leaders to implement the protocols, strategies, and support for an impactful innovation practice. Focused on business goals such as revenue, opportunities and reputation, a chief innovation officer or executive leader of innovation is best implemented on the board or reporting to the board, for seeking funding approvals directly in line with board priorities.

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Business Impact

A chief innovation officer, along with the board's participation, aligns executive leadership to a practice of innovation that services the needs of the organization as a whole. Focused on board expectations, specifically the organizational and commercial goals that innovation can address, the officer implements and creates growth from empowered leaders to lead innovation effectively. The sponsorship and authority provided from the board are important for this type of innovation.

Drivers

A chief innovation officer reporting to the board empowers innovation across the organization and answers to the board with:

- Accountability: Defining companywide innovation goals, best practices, and a regular rate of review encourages not only accountability to budget and resources, but provides transparency to business goals that employees across the organization can support.
- Block funding: IT and business leaders responsible for innovation in high-maturity organizations are more likely to use block funding for innovation.
- Global disruption strategies: Political, environmental, economic, technological and social disruptions are consistently increasing. Board-led innovation offers leadership to uncertain times and proactive innovative solutions to global disruptions.
 Disruptions are mitigated through an executive-led innovation practice that engages relevant stakeholders across the business.

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Obstacles

- Innovation is managed midlevel, not at the executive level: Siloed teams, and project and event management minimize innovations' impact to the business by rarely aligning to its goals.
- Ad hoc spending: Individual business units allocate project-based budgets for innovation.
- Fear of the unknown: Organizations remain reactive when implementing innovation, fostering an environment of becoming a victim to disruption, rather than seeing it as an opportunity.
- Transformation lag: Issues ranging from the length of the procurement process to too many stakeholders seeking ownership of innovative technologies can stall transformation, and hinder the flexibility needed to adapt and grow the business.

User Recommendations

- Appoint a chief innovation officer to lead board-mandated innovation initiatives with clear business objectives and accountability to results across a full measurement spectrum, including failure rate, employee engagement percentage, and actionable insights.
- Allocate block funding for innovation across the organization under a chief innovation officer. Determine swift signoff protocols to expedite response time to disruptions.
- Empower innovation by exhibiting it as a core value, communicating leadership support and fostering a culture of innovation from the top.
- Stress-test scenarios and solidify a best-practice framework for disruptive innovations, culture turns, and technology transformations.

Gartner Recommended Reading

A Chief Innovation Officer Is Needed to Lead Innovation Effectively

Innovation OKRs

Analysis By: Mordecai.

Benefit Rating: Moderate

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Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Adopting the objectives and key results (OKRs) framework for innovation priorities, innovation OKRs, bring flexible goal-setting to convert innovation objectives and priorities of the organizations into concrete and measurable operational results. By aligning innovation with an organization's OKRs, executive leaders distribute the engagement and responsibility necessary for growth across the business.

Why This Is Important

Innovation OKRs drive stakeholder engagement in innovation practices and are key to aligning innovation with the overall business goals of the organization. By definition, OKRs set an unapologetic standard for measuring key results for organizations. setting and managing strategic goals, accountability via clear measurements and failures demonstrates how a clear purpose-built practice of innovation benefits the business.

Business Impact

Establishing innovation OKRs sets an executive-level mandate for innovation in the organization, pushing performance and promoting innovation while delivering focus, building cross-functional alignment, and tracking progress/success. Engaging innovation OKRs sets innovation as a high-priority objective in line with business growth opportunities.

Drivers

Innovation OKRs prioritize innovation across executive leadership and the organization through:

- Accountability: Having clear and explicit responsibilities in the process and outcome of innovation work allows for ownership, leadership, creativity, and a streamlined path forward toward the business objectives and priorities.
- Measurement: Setting goals that are clearly defined for leadership and teams allows for a transparent understanding of innovation's intention. New routes to success can be decided with a clear objective in sight. OKRs are meant to be flexible and adaptable during the innovation process.

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- Executive Buy-In: In the 2022 Gartner Justifying and Funding Innovation Survey, organizations report being most effective in the design and management innovation stages by obtaining executive buy-in.
- Key Stakeholder Engagement: Innovation OKRs set prioritized objectives across the organization, allowing for innovation to thread throughout and serve multiple teams in the process.

Obstacles

- Innovation can often be perceived as an ancillary activity, siloed and project-based, not seeded into the overall business strategy, with difficulty in measuring 'outcome success' when value realization is not considered.
- Simplistic measurements, i.e., it works or it doesn't, can commonly be the only measurement for innovation exploration. This fails to maximize the lessons from the process, and failures or secondary outcomes may not be seen as successful.
- A lack of executive buy-in diminishes the power of a company's innovation work as it
 is not perceived with the level of importance necessary to actualize its possibilities.
- Being siloed is frequently cited as a hindrance by those with innovation responsibilities in organizations. Reducing the ability to impact or serve the objectives businesses have, losing opportunities at large.

User Recommendations

Establish executive leadership in OKR development sessions to include innovation goals, and innovation leadership, if applicable. Ensure innovation OKRs:

- Identify and align with shared objectives in the business.
- Set clear objectives with accountable measurements (don't be number shy!)
- Define contributions to innovation objectives for multiple stakeholders.
- Be accountable for results.
- Track progress.
- Remain Flexible Address disruptions and adapt accordingly.

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Gartner Recommended Reading

Everything CIO's Need to Know About OKRs

How CIOs Can Implement OKRs That Align and Focus Their Teams

Microinnovations

Analysis By: Tsuneo Fujiwara, Darren Topham, Daniel Sun

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition:

Microinnovation is the advancement of products, services, processes, etc., in small but important increments that bring tremendous business value to an enterprise. They do so by enhancing efficiency or by bringing new or enhanced functionality to existing products and services quickly which may potentially result in a new revenue stream, by one or a few people. Business leaders own these microinnovations when an IT organization does not have the line of sight to take full ownership.

Why This Is Important

Technologists within business units (business technologists) will generate the most microinnovations because they have more domain knowledge than peers within the IT organization. Whereas CIOs are likely to know about their organizations' large, strategic innovation projects, smaller microinnovations often fall under their radar and are easily missed. Unfortunately, microinnovations can become macrodisruptions for the IT organization and the whole enterprise if they're mishandled.

Business Impact

Microinnovations are small changes, quickly created by one or a few people, that have a big impact on the business. For an innovation to work well, its creators must consider security, interoperability and other factors (i.e., nonfunctional requirements) that business technologists know less about in addition to functional requirements, where they excel. Moreover, business units will likely end up asking the IT organization to operate many of their microinnovations, unexpectedly adding to IT's burden.

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Drivers

- To obtain payback quickly from all the investments in the digital foundations CIOs and IT organizations have made, the enterprise needs to microinnovate, by having business and IT organizations partner.
- Sixty-three percent of the workforce are business technologists that do not report to the IT organization. This is a huge potential of innovation that CIOs and organizations can leverage.
- The shared digital foundation requires a shift in leadership where executives become partners. This is an opportunity rather than an obligation, but those that operate in partnerships will most likely be more successful and the power of many is stronger than the power of one.
- There will be pent-up demand for quick, small, incremental innovations once the digital platforms are available from the IT organization.
- The number of small, incremental innovations will continue to increase in scope and scale across the enterprise as the number of business technologists grows. Business leaders feel business technologists are capable of executing these innovations and will encourage and sponsor them to generate microinnovations.
- The urgency for payback from digital platforms necessitates microinnovations.

Obstacles

- Business technologists use their superior knowledge of the business to generate microinnovations quickly, which IT organizations cannot mimic as they tend to be more careful about nonlinear requirements, governance, business case, etc.
- The IT organization does not have the capacity to take full ownership of all microinnovations on demand, or may not even be aware of them when the business grows tired of supporting them.
- Business technologists are not capable of supporting their own microinnovations.
- Business technologists are often unaware of nonfunctional requirements that play a critical role in any solution deployment, and they need to be educated by the IT organization.

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User Recommendations

- Close the digital competency gap between IT and business technologists by helping the latter to understand the nonfunctional requirements of microinnovations they create.
- Reduce digital friction for business technologists by making IT expertise available through catalogs of services.
- Apply adaptive governance to microinnovations by creating a framework that shows where business technologists can play freely and where more oversight is needed.
- Engage with business leaders so they can act as partners in co-funding or investing in the innovations that matter to their businesses, for those organizations not centrally funding innovations.

AI-Driven Innovation

Analysis By: Arun Chandrasekaran, Brian Burke, Ankita Khilare

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition:

Al-driven innovation is a process that harnesses the power of Al technologies to accelerate innovation. It helps organizations unlock groundbreaking inventions in specialized domains, such as new drugs and material science. Moreover, Al-driven innovation could boost agility and efficiency across various industries, thus optimizing end-to-end innovations.

Why This Is Important

Advancements in AI and growing access to AI technologies are fueling innovations across various industries. AI is streamlined, data-driven and responsive to market disruptions. When AI technologies drive innovation, they can optimize products and services, enhance organizations' productivity and agility, and boost efficiency. With the advent of generative AI, breakthroughs are expected in R&D, such as helping researchers process vast amounts of data inside and outside their organizations.

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Business Impact

In the short term, Al-driven innovation will impact many business areas, such as trend identification, pattern matching and technology scouting. Also, it will help generate, test and prototype ideas using agile, lean methodologies. Al can iterate generative designs for new ideas against user preferences and target customers, considering their demographics, gender and race. In the long term, it will help in the area of generative products and services development.

Drivers

- Faster and improved ideation and prototyping: Innovation is about generating ideas. Al can catalyze a wide range of innovations, removing the constraints of data and information processing during the ideation process. Recent advances in generative Al, foundation models and synthetic data have made it possible to apply Al to the ideation process, thus increasing its overall robustness and augmenting human decisions. By adding massive quantities of data and using pattern recognition and other techniques, Al systems can generate more ideas and a vast pool of hypotheses that can be tested before moving to the prototyping phase.
- Competitive differentiation when creating innovative products: Recent advancements in reinforcement learning have given rise to exciting new use cases. For example, robotics (contextual awareness), chemistry (optimizing molecular reactions) and autonomous vehicles.
- Augmented ideation processes with generative AI: Generative AI provides gamechanging opportunities across various industries, such as drug discovery and material science. Also, recent use cases include optimizing prototype engineering and improving light and space efficiency in building design.

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Obstacles

- Creating a decision framework on where to use Al during the innovation process, what techniques to employ and ensuring adequate availability of data and other resources.
- Trend identification and pattern matching tools are based on natural language processing (NLP). Gartner classifies NLP as an emerging technology. Although some commercial NLP products are available, many are not yet fully proven.
- While some high-value opportunities, like drug and material design, are at the early stages of development, solutions supporting generated content and synthetic data are becoming commercialized.
- In certain domains, such as image generation, Al-generated artifacts do not count on any copyright protection. This may decrease their value to enterprises.
- Al tools designed to test feasibility are domain-specific and at varying maturity levels.
- Using generative AI for prototyping is viable, and the technology is relatively stable.
 However, critics argue that, among other design issues, too many options may overwhelm decision makers and result in slower decision-making processes.

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User Recommendations

- Shortlist specific areas where AI will augment your innovation process and allow you to bring products to the market in faster and less expensive ways. Start with more proven areas, such as trend identification, technology scouting and idea generation. These areas have higher business relevance and easier operationalization.
- Focus on Al management and employee training through Al and data literacy programs. Increase access to quality data and model explainability to demystify the Al decision process.
- Focus on Al as a tool for human augmentation in the innovation process. In the short term, generative Al is expected to be used only by the most aggressive technology adopters.
- Encourage experimentation among teams to gather hands-on experience on the various use cases provided by Al-driven innovation.
- Work with startups and vendors that can offer commercial solutions to address specific innovation process challenges rather than building your own Al tool from scratch.

Gartner Recommended Reading

Innovation Insight for Generative Al

Building a Digital Future: Emergent Al Trends

Effectuation

Analysis By: Christian Stephan, Darren Topham

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Effectuation is an innovation principle of the best possible utilization of resources with adaptive objectives. Long-term development paths are not vehemently pursued in the early phase of development but are determined by opportunities.

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Why This Is Important

Effectuation principles are the natural behavior of successful entrepreneurs and intrapreneurs who maximize the effectiveness of their resources by looking for the next best option and taking a vague direction. Especially when innovation goals are unclear, this is a powerful way to develop unique business propositions. Effectuation principles orient on the means and not on the goal, therefore it is not necessary to prepare long-term plans or forecasts.

Business Impact

Startups and organizations in rapidly changing environments benefit from effectuation principles. They can harness existing resources, skills and networks to identify and seize opportunities. Its agility encourages experimentation, learning from failures, and adaptability, and enables leaders to navigate uncertain markets. Effectuation principles foster collaboration and co-creation and empower strong leaders to drive innovation, resulting in a responsive and partly resilient organization.

Drivers

- Uncertainty and ambiguity: In dynamic and uncertain environments, effectuation offers a more adaptable and flexible approach to decision making.
- Resource constraints: Effectuation emphasizes working with available resources, making it particularly suitable for startups or organizations with either limited funding, resources or a rich pool of assets.
- Emphasis on experimentation: Lean methods and the value of experimentation in innovation have driven interest in effectuation, which encourages learning in iterations.
- Focus on the individual: The innovator is at the center of the process, emphasizing personal skills, experience and networks, which resonates well with the trend of individual empowerment.
- Scalability: Effectuation is adaptable in context and scale, making it attractive to businesses of different sizes and industries seeking lean and agile approaches to innovation with extremely fast decision making.
- Emphasis on action: Corporates in fast-paced industries, where long-term strategies or not stable, take advantage of effectuation principles action orientation, leveraging the system's responsiveness.

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Obstacles

- Roadmapping mindset: Organizations with a traditional, top-down approach to decision making and a desire for lasting plans resist the flexible and adaptive mindset required for effectuation principles.
- Resource constraints: Despite the method encouraged to leverage available resources, it may still be challenging for organizations to even free up those resources and execute projects effectively.
- Risk aversion: Effectuation principles demand risk acceptance and failure tolerance, which can be challenging for organizations that prefer stability and minimal risks.
- Insufficient skills and experience: The strength to rely on individuals can turn out as weakness if the expertise is not matching with intended development.
- Resistance to collaboration: Working in partnerships for co-creation can lead to resistance in siloed and competitive corporate cultures.
- Difficulty scaling: Effectuation principles work well for small projects, but it is not suitable to drive a huge corporate transformation.

User Recommendations

- Enable effectuation principles by identifying and empowering employees with an outstanding entrepreneurial mindset or by recruiting an external talent with these qualities.
- Create new opportunities by inventorying existing resources, skills, partnerships and networks that can be leveraged in the innovation process.
- Adopt a mindset that accepts risks and tolerates failures by turning the metrics from estimated revenue toward affordable loss.
- Support co-creation by exploiting strong relationships with partners to seize opportunities collaboratively. Relationships are also valuable resources for effectuation principles.
- Reset organizational planning by implementing an iterative process with real-time feedback and market dynamics replacing rigid planning.
- Communicate and celebrate success with the organization, for it will ease the uncertainty felt by the workforce and fosters an agile, entrepreneurial mindset.

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Moonshot Thinking

Analysis By: Christian Stephan, Peter Skyttegaard

Benefit Rating: Transformational

Market Penetration: Less than 1% of target audience

Maturity: Embryonic

Definition:

Moonshot thinking is a big and bold approach to innovation that aims to tackle large-scale challenges by pursuing transformative solutions, rather than incremental improvements. Inspired by the Apollo 11 mission, it encourages 10x leaps, interdisciplinary collaboration, and emerging technologies exploitation. Moonshot thinking embraces risk and the possibility of failure, with the ultimate goal of creating significant, positive impact on the world through breakthrough innovations.

Why This Is Important

Moonshot thinking (MT) fosters transformative innovation that can create significant competitive advantages. By targeting large-scale challenges and pursuing ambitious goals, enterprises can unlock new markets, drive sustainable growth, and stay ahead of industry disruptions. MT encourages interdisciplinary collaboration, enhances problem-solving, and cultivates a culture of risk-taking and resilience, all of which are crucial for long-term success in today's rapidly evolving business landscape.

Business Impact

MT's impact is significant for industries such as technology, healthcare or energy that face rapid disruption or complex challenges, or that focus on long-term impact. It is especially appealing to visionary leaders who aim to create a lasting and meaningful impact. It is also more radical than other transformative methods (e.g., Blue Ocean). Differentiating from competitors through ambitious goals can be a key driver for long-term growth, inspire talent and meet evolving consumer demands.

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Drivers

- Rapid technological advancements: The pace of progress in emergent technologies encourages organizations to think beyond incremental improvements and fosters the desire to explore transformative innovations.
- Market disruption: MT always comes with a flavor of industry disruption and establishes new and unconventional solutions that organizations adopt to stay competitive.
- Global awareness: Pressing issues such as wars, climate change, resource scarcity and pandemics demand bold and innovative solutions that can be inspired by MT.
- Ambitious corporate visions: Visionary leadership pays off in shareholder interests.
 MT enables long-term strategic thinking to create a lasting impact.
- Public-private interest: Because of these innovations' impact, they are often in the public interest, making them eligible for additional funding and support from governments that benefit from them.
- Consumer demand: Moonshots often get public attention, creating their own demand. Highly informed consumers also push corporations toward more radical solutions.
- Radical differentiation: Companies adopting moonshots can differentiate themselves from competitors, creating a unique identity.

Obstacles

- Risk aversion: Organizations may be hesitant to embrace risks associated with bold, transformative projects.
- Organizational culture: A culture resistant to change, experimentation, or failure may impede MT.
- Lack of interdisciplinary collaboration: Siloed departments or teams can hinder the exchange of diverse perspectives and ideas.
- Short-term focus: An emphasis on short-term goals and immediate returns may overshadow long-term projects.
- Lack of transparency: Organizations struggle to quantify returns on MT and forecast potential revenue.

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Inadequate leadership support: Without coverage from top management, securing

resources and driving organizational commitment may be challenging.

■ Failure to adapt: Difficulties adjusting strategies or learning from setbacks stall the

progress toward ambitious goals.

Implementation challenges: Scaling and deploying transformative solutions can be

complex, requiring careful planning and execution.

User Recommendations

Develop a visionary leadership mindset by planning beyond incremental

improvements and aim for long-term goals by advocating them and aligning them

with corporate goals.

Aim for sustainable value creation by showing the financial and nonfinancial

benefits of moonshot innovations.

Build a dedicated team or lab responsible for identifying, developing and pursuing

moonshots to account for the unique nature of MT.

Break knowledge silos by encouraging cross-functional collaborations, balancing

knowledge drains and buffering targets for involved teams.

Adopt a fail-fast mentality to encourage experimentation and learning from failure

by demanding transparency and active communication within the organization.

Accept the high-risk, high-reward nature of moonshots by allocating and buffering

resources and funding to support the projects.

Ensure projects stay on rails by setting clear milestones and defining shared success

expectations.

Gartner Recommended Reading

5 Success Habits of the Digital Dragons and Giants

A New Value Equation for Sustainability

Virtual Innovation Labs

Analysis By: Gunjita Mundeja, Tsuneo Fujiwara, Peter Skyttegaard

Benefit Rating: Moderate

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Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

Virtual innovation lab is a digital environment for collaboration, ideation, experimentation and execution of new ideas that generate business value. It offers Innovators an opportunity to collaborate with global talent yet work independently in their remote locations. It helps in pursuing transformational innovation initiatives or co-developing beyond borders, distributed, noncollocated environments using digital platforms and tools, offering accessibility, flexibility, and cost-effectiveness.

Why This Is Important

Virtual innovation lab is a digital environment space where innovators get independent space to work and digital tools and technologies for collaboration, ideation to prototyping and are untethered by the pressures of short-term operational challenges which further diminish under a virtual lab. It offers a virtual innovation space that can be accessed through a web browser or specialized software and within that users can navigate and interact.

Business Impact

In a globally interconnected world, virtual labs help organizations harness the borderless talent, creativity and perspectives of employees and other stakeholders. A virtual lab provides major benefits of an innovation lab with the flexibility to innovators that may enhance the reachability and productivity of innovators by providing a conducive work environment. The virtual lab enables an agile and innovative culture that is better positioned to succeed in a rapidly evolving market.

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Drivers

- The increased adoption of a virtual-first digital workplace, where employees work remotely and are fully equipped with the required tools and technologies to work and collaborate, organically create the adoption of virtual innovation labs.
- The talent shortage requires reachability to globalized talent, i.e., getting the right expertise, skills, diverse perspective and ideas without any geographical barriers.
- Virtual innovation lab offers an independent work environment without being impacted by the existing culture of radical experimentation for new developments.
- Virtual innovation lab can be cost-effective, as it requires less expenditure on real estate and travel. This can help organizations save on operational costs while still maintaining a high level of innovation and productivity.
- Virtual innovation lab increases the reachability of the lab ecosystem by collaborating with customers and partners across the globe.
- The increasing accessibility of technologies that enable work from anywhere in the world, access computing resources on demand, and leverage digital tools to enhance the innovation process. It not only facilitates collaboration across organizational boundaries but also enables open innovation and knowledge sharing.

Obstacles

- The success of a virtual innovation lab depends on a reliable and robust technology infrastructure that sometimes becomes challenging.
- Setting up a secure virtual environment that prevents data breaches and unauthorized access as protecting intellectual property and sensitive information is critical for any innovation lab.
- Virtual innovation lab requires strong leadership to guide the team so that all are working toward common innovation goals, especially in the remote workplace and providing clear direction and fostering a culture of innovation.
- Some innovation processes, particularly those involving physical R&D and specialized tools, may require a physical presence and access to specific equipment that cannot be easily transmitted remotely. One must find a balance between virtual and physical components, based on the nature of the innovation project, available resources, and team demands.

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User Recommendations

- Establish clear strategic or recognized business goals and outcomes for their innovation lab, by aligning them to the business mission and vision statement. And clearly justify the reason for investing in a virtual innovation lab.
- Analyze the current business context and set up business-focused metrics to track progress.
- Build a clear technology plan that includes hardware, software and network capabilities that are required to support collaboration and working of the virtual innovation lab.
- Ensure data security policies and guidelines are well worked upon to avoid future data security breaches.
- Set up the innovation process for the sustainable working of the lab by chartering the different components of the innovation process.

Company Builder

Analysis By: Christian Stephan, Apoorva Chhabra

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Adolescent

Definition:

Company builders are service providers who do the groundwork for founding new companies and business units. Their business model is to enable corporate development to catch up on ever-changing markets and tap into new opportunities with experienced entrepreneurs. Their spectrum ranges from incubation to the scaling of business, but unlike an accelerator program, they act either as startup studios or venture builders for corporations and the team moves on to the next project after finalization.

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Why This Is Important

Company builders deliver the core resources for the fast development of ideas to an actual product, service or organization. They are packed with serial entrepreneurs with experience in fields with scarce talent availability like AI, e-mobility, fintech, robotics or medtech. Corporate company builders are aiming to build new models with a target business unit in mind. Their work can be financed via one-off payments, equity or revenue shares and therefore fit different budgets and models.

Business Impact

Company builder enables organizations to overcome their own innovation limitations and their corporate heritage and to rapidly innovate, develop, and scale new ventures in a highly efficient and targeted manner. Shared resources, expertise and proven methods increase the likelihood of success and minimize organizational risks. Company builder promotes focused innovation efforts in specific industries or markets, allowing organizations to establish a strong competitive advantage.

Drivers

- Speed and efficiency: Company builders leverage shared resources, expertise and infrastructure to launch new ventures. Proven methods and a focused innovation effort result in rapid iterations of development close to the corporate innovation goal.
- Risk mitigation: Sorting many issues before the project starts, company builders are
 effectively reducing the risk for corporations and increasing the likelihood of success
 in innovation and disruption on new and established businesses.
- Access to talent and expertise: Company builders attract and retain experienced entrepreneurs, designers, engineers and other highly specialized professionals. This provides organizations access to scarce talents with specialized skills and knowledge.
- Scalability and growth: Independent ventures with dedicated teams can quickly scale successful projects. By designing directly for the market or a later integration as a function the projects are already set up for rapid growth and adoption.
- Democratized innovation: Resources for innovation with expertise and capacity are limited in many organizations. Company builders come for a prize, but they can grant access to innovation capabilities and experience.

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Obstacles

- Alignment of interests: Aligning the goals and objectives of the corporation and the company builder can be challenging, as both parties may have different strategic priorities.
- **Financial interests**: Both parties need to agree on funding and sharing in equity or revenue.
- Cultural differences: Company builders typically established a different working culture, agile, entrepreneurial and risk-tolerant. Bridging between the two cultures can be difficult.
- Intellectual property: Issues related to ownership, licensing and revenue-sharing can be complex, depending on the preset alignment of interests between the corporate and the company builder.
- Bureaucracy: In large organizations long and complex decision-making processes can slow down innovation, frustrating the company builder and its partners.
- Internal resistance: The value of a company builder is often underestimated by internal resources, for individual fragments seem solvable for them, ignoring capacity and complexity.

User Recommendations

- Prepare for collaboration with a company builder by clearly outlining the goals and desired outcomes. Also, make sure the appetite for risk and desired success scenario are defined.
- Partner with the right company builder by researching and evaluating companies based on their track record, expertise, industry focus and alignment with the organization's objectives.
- Avoid later disagreements by setting a clear scope of collaboration, financial commitments, intellectual property rights and industry-specific requirements in formal agreements.
- Use the collaboration to improve capabilities by learning the company builder's methods, processes and networks.
- Prepare for the handover by setting up required resources in time, and provide necessary infrastructure and management support to help scale and integrate successful ventures.

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Sample Vendors

Bridgemaker; Excubate; finleap connect; Founders Factory; JUSTROCKET; WhatAVenture

Pretotyping

Analysis By: Christian Stephan, Tsuneo Fujiwara

Benefit Rating: High

Market Penetration: 1% to 5% of target audience

Maturity: Emerging

Definition:

Pretotyping is an innovation method of market penetration testing before prototyping to measure market acceptance and obtain development consequences within a few hours or days. Pretotyping is a portmanteau of "pretend" and "prototyping." Techniques include humans imitating a machine's work (mechanical Turk), enabling access to a pretend product (fake-door tests), presenting similar existing products (relabel) and nonfunctional, shallow versions of products (Pinocchio).

Why This Is Important

Pretotyping decreases the resources spent, before the actual development even starts. It does not focus on elaborating an idea, but to quickly ensure you're working on the right thing, before building it right. Pretotyping is based on a few principles (e.g., "now beats later," "commitment beats committees," "data beats opinion") and enables fast decision making in an early design stage. By simplicity, it is fast to learn, problem-adaptive and delivers meaningful insights to improve development.

Business Impact

Pretotyping is most beneficial for organizations that need to innovate quickly and bring new products and services to market efficiently. Pretotyping ensures resources are allocated effectively, saving time and money, while increasing the likelihood of success. Pretotyping promotes a customer-centric solution, helping businesses large and small understand and address their target audience's preferences. It empowers organizations to stay competitive in rapidly evolving markets.

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Drivers

- Rapid innovation: In heavily competitive environments, organizations are under pressure to innovate quicker and bring new products and services to market faster than their rivals. The rise and the emphasis on minimum viable products (MVPs) have contributed to the popularity of pretotyping as a way to test and validate ideas, moving MVPs to minimum marketable products (MMPs).
- Cost and resource efficiency: Pretotyping saves time and money by identifying product-market fit and potential issues early in the development process, before investing in deeper product development.
- Fail-fast mentality: Embracing failure as an opportunity for iteration has become common in modern business environments. Pretotyping not only supports this mindset by allowing organizations to quickly test, learn and pivot, it also reduces developers' emotional attachment to the tested objects.
- Customer centricity: Pretotyping is at the heart of understanding customers' needs and preferences; it both shows ideas and requests action from possible users. This approach ensures new products and services are more likely to succeed in the market.
- Data-driven decision making: Pretotyping eliminates gut feeling in decision making by providing valuable data on customer behavior, reactions and potential demands.
- Scalability: Pretotyping can be applied to projects of varying size and complexity, making it attractive for all sizes of organizations and industries.

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Obstacles

- Fear of failure: Traditional organizations may be reluctant to adopt the fail-fast mentality and fear a negative brand perception or even reputational damage.
- Overemphasis on speed: The focus on rapid experimentation may lead to insufficient depth in analysis or the exploration of alternative solutions, resulting in suboptimal development.
- Intellectual property concerns: Sharing early-stage ideas and prototypes with potential customers or partners could expose the corporation to a fast-following competitor. It can also affect a patenting process.
- Short-term focus: A strong pretotyping culture may lead to prioritizing short-term wins over long-term strategic goals, exposing the organization to developmental risks.

User Recommendations

- Encourage a fast-failure culture by creating an environment where employees feel empowered to test new ideas and develop them in rapid iterations.
- Ensure a comprehensive approach by assembling cross-functional teams with different skills and expertise to work on pretotyping projects.
- Address customer needs by prioritizing feedback and iterating on initial ideas.
- Keep your efforts low by developing minimal representations in a low-cost simplification of the product or service to gather feedback and validate market abilities.
- Focus on data by designing and conducting quick experiments to test with real customers and gather their reaction and preferences.
- Maintain focus by setting clear objectives and success criteria despite the fast iterations. Define metrics and benchmarks, ensuring an alignment with corporate strategy or product strategy.

Business Model Innovation Framework

Analysis By: Daniel Sun, Marcus Blosch

Benefit Rating: Transformational

Market Penetration: 5% to 20% of target audience

Maturity: Emerging

Definition:

The business model innovation framework is a scenario planning foundation that allows organizations to foster technology-enabled innovations in the areas of customer experience, value propositions, capabilities and financial models. It is often used in ideation and innovation workshops to create a new business model as a goal of digital business transformation.

Why This Is Important

Leveraging the business model innovation framework in the process of digital business transformation enables the organization to design and improve business models. A well-designed business model is the basis of sustainable competitive advantage. The business model innovation framework reveals clear paths on which to build the organizational innovation strategy. More importantly, a business model innovation framework enables to move innovation out of the "in theory" stage into the planning stage.

Business Impact

Business model innovation framework offers a checklist of 30 strategic business initiatives/scenarios. Organizations can leverage Gartner's Toolkit: A Guide for Business Model Ideation and Innovation Workshops in Times of Disruption built on this framework to run their do-it-yourself (DIY) digital business model ideation and innovation workshops. Such DIY capacity is important as organizations must enhance their capabilities of independent planning to accelerate their speed of business transformation.

Drivers

Drivers for adopting a business model innovation framework to innovation include:

- A need to accelerate digital innovations and achieve more dividends from digital business transformations to cope with economic headwinds, talent shortages and other disruptions.
- An urgency to fill the constant gaps between IT's deliverables and business imperatives.

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Increasing competition from new entrants or new business models that disrupt the industries.

Obstacles

Obstacles to adopting the business model innovation framework include:

- Poor business and IT alignment, resulting in a lack of collaboration. Then it is impossible to leverage the framework to run business model innovation and ideation workshops successfully.
- Lack of strong executive commitment. Executives must commit their time, ideally twice a year with a couple of days of on-site meetings, to orchestrate business model innovation and ideation workshops.
- Lack of strong business knowledge from IT. It is essential for IT to collaborate with the business to leverage the framework to either run or participate in the workshops, especially for digital business innovation.
- Getting business executives to focus on longer-term vision and scenarios, especially if the current business model is delivering satisfactory financial results.

User Recommendations

- Adopt the business model innovation framework as a component of the overall innovation strategy.
- Ensure executives and participants fully understand the overall strategy and objective of the company before applying the frameworks to innovate current or create new business models.
- Use the framework to identify the most relevant action items for innovating current or creating new business models. Then IT can plan digital initiatives supporting the execution of those identified business model innovation actions.

Gartner Recommended Reading

Toolkit: A Guide for Business Model Ideation and Innovation Workshops in Times of Disruption

How CIOs Can Foster Business Model Innovation Through Workshops

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LEGO Serious Play

Analysis By: Christian Stephan, Peter Skyttegaard

Benefit Rating: Moderate

Market Penetration: 1% to 5% of target audience

Maturity: Early mainstream

Definition:

LEGO Serious Play (LSP) is an open-sourced workshop methodology invented by LEGO. Grounded in research from cognitive psychology and learning, LSP encourages hands-on, minds-on learning through building, sharing and reflecting. Participants construct physical models to represent ideas or solutions, fostering dialogue and collaboration. LSP offers two formats for innovation, "real-time strategies for the enterprise" and "the beast," with the latter analyzing and solving critical problems.

Why This Is Important

The complexity of business is increasing, and entanglements require interdisciplinary work across different domains, hierarchies and backgrounds. LSP helps break down barriers and promotes open dialogue and deeper understanding of different perspectives. LSP can improve team cohesion, drive innovation and support strategic decision making. It reenergizes the creativity of innovation teams fatigued with ideas on a particular problem and unlocks hidden insights to explore complex challenges.

Business Impact

LSP leverages organizational knowledge and can be applied without innovation experience among participants. The method enables all team members to visualize and communicate about complex challenges, maximizing resource efficiency. The process leads to a better understanding of the problem by promoting active participation from all team members, ensuring diverse inputs and breaking down hierarchical barriers.

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Drivers

- Increased complexity: Businesses face increasingly complex challenges. LSP offers a tangible, hands-on approach to problem solving, enabling participants to visualize, communicate and explore ideas in a simple way.
- Inclusivity and collaboration: LSP is an easy-to-adapt process that focuses on participation among team members. It is hard to break multiple barriers in innovation, such as language, hierarchy, communication styles or cultural backgrounds, to search for the best ideas. LEGO Serious Play enables all participants to contribute equally, promoting diversity in the ideation process. LSP unlocks innovation potential, also within the individuals, by stimulating different brain areas that are untapped during many other thinking-only activities.
- Need for alignment: In complex environments, teams need to align on common goals, shared understanding and decision making to implement new strategies. LSP supports these critical transformational communication processes.
- Emphasis on creativity: Many corporate teams struggle with creativity and innovation. The playful, creative character of LSP enables those teams to overcome their resistance and encourages them to practice innovative thinking and idea generation.

Obstacles

- Skepticism: Participants connect LEGO bricks with play and, usually, not with a professional context.
- Confusion: It is not immediately clear how arranging physical LEGO bricks relates to innovation in complex challenges.
- Resistance to play: Some participants may struggle to embrace the playful, handson nature of LSP.
- Organizational resistance: Corporate cultures resistant to unconventional methods or open dialogue can hinder LSP adoption.
- Limited scalability: LSP may be less effective for large groups, or when addressing organizationwide or unspecific challenges.

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User Recommendations

- Don't get lost in activity by setting specific goals and desired outcomes for the LSP sessions. LSP can be used for a variety of activities, like strategy development, process optimization and innovation.
- Don't play, innovate. By hiring or finding a certified LSP facilitator to run the session, you make sure it follows a structured, engaging and effective process.
- Get everyone out of their work routine by setting the session up in a comfortable environment with enough lighting, workspace and bricks to build.
- Take it seriously. Despite its playful character, allocate sufficient time for the LSP sessions, which could run between hours and days, depending on the complexity of the objectives. Refine your outcomes and deliver evidence and suggested procedures.
- Make sure LSP leaves the ideation stage, by capturing outcomes, insights and learnings from the sessions through detailed photographs, notes and recordings.
 Provide information, strategy, results and decisions for the management.

Gartner Recommended Reading

Enterprise Architects Combine Design Thinking, Lean Startup and Agile to Drive Digital Innovation

Corporate Incubators

Analysis By: Peter Skyttegaard

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

A corporate incubator is an entity within an enterprise that supports new ventures from early-stage ideation and concept development to new business models 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 scaling handoff.

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Why This Is Important

The pace of business and technology disruption has accelerated, and enterprises often struggle with operating models purely focused on running the day-to-day operations that deliver immediate results. Creating a separate and dedicated corporate incubator can help create focus by nurturing disruptive ideas that can launch new products, services and business models, creating long-term sustainability for enterprises.

Business Impact

Corporate incubators can help to:

- 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

- Provides strategic focus and direction by discovering new markets that could turn into a new revenue stream
- Delivers on goals to drive radical or adjacent innovation in a slow-paced enterprise
- Creates focus for highly disrupted industries that need to accelerate the innovation and time to market
- Motivates businesses needing innovation assets such as patents, technology, inventions or other intellectual property

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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, funding and investment to scale innovative solutions
- Not clear on how far the enterprise wants to branch out from its 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

- Create a clear vision and strategy for delivering radical and disruptive innovation to drive transformational growth by leveraging our innovation framework.
- Ensure executive leaders and the board are committed to investing in a separate business unit that is committed to growth through innovation by evangelizing the strategy and benefits.
- Drive a plan aggressively when the enterprise is in a highly disruptive and competitive industry or sector to drive long-term business sustainability.

Gartner Recommended Reading

Justify Investment in Innovation by Addressing the Inherent Uncertainty

Fuel Growth During Economic Headwinds by Innovating Disruptively

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

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At the Peak

Visual Collaboration Applications

Analysis By: Brent Stewart

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Visual collaboration applications are cloud-based tools that enable teams to communicate and creatively collaborate during both asynchronous and real-time work. They provide a shared digital canvas offering collaboration features and templates for common frameworks, flows, activities and designs.

Why This Is Important

During the pandemic, visual collaboration applications became an essential part of the digital product team's toolset, and have only grown in popularity and impact as organizations return to the office or engage in hybrid work models. The most significant insights, ideas, strategies and designs for leading digital products emerge on the whiteboard of a visual collaboration app. As such, they are seen by many as the place where "the magic happens" for design, product and engineering teams.

Business Impact

Visual collaboration applications make remote and hybrid creative work possible. Without them, the only other viable approach is colocated, workshop-style collaboration that used to be standard practice for digital product teams. In fact, Gartner hypothesizes visual collaboration apps elevate creativity and productivity, regardless of whether they are used remotely or in person, due to the templates they provide, team participation they promote and traceability they enable.

Drivers

Permanence of remote and hybrid work: The global shift to remote and hybrid work makes visual collaboration applications the "new whiteboard" and a required platform for any digital product or business strategy team, whether used in person or remotely.

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- Product team collaboration: Coordinating handovers between product management, design and development can take significant effort, and a misaligned product team results in misaligned products. Visual collaboration apps reduce, and even eliminate, handovers between stakeholders and contribute to the delivery of more cohesive products.
- Design thinking and collaborative creativity: The rise of design thinking and collaborative creativity, in the form of workshops, design sprints, strategy sessions and more, requires a workspace that enables shared ideation, evaluation and decision making.
- Templates: Visual collaboration tools include templates for brand, business, marketing and product strategy methods and techniques that accelerate discovery, exploration and validation of insights, ideas, strategies and designs.
- Integrations: Recent feature enhancements from vendors include integrations with popular product management, user experience (UX) design and software engineering tools.
- Generative AI: With AI completing increasingly more production work, such as screen designs, user flows, and code, the role of the human will shift strongly towards research and strategy activities. Visual collaboration tools will become the singlemost important "home" for human creativity in the enterprise.

Obstacles

- Customer perception as a remote-only tool: Many view visual collaboration applications as a solution for remote or hybrid teams only. As organizations transition from fully remote work to in-office or hybrid arrangements, it is possible purpose-built visual collaboration applications (e.g., Miro, Mural, Klaxoon, etc.) will be viewed as expendable by some teams.
- Competition from design and business communication platforms: Collaboration and co-design features (such as a digital whiteboard) in design platforms (e.g., Figma [FigJam]) and business communication platforms (e.g., Microsoft Teams, Zoom Video Communications, etc.) are close to or on par with purpose-built visual collaboration tools.

User Recommendations

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- Build a platform evaluation and selection process, by ensuring that the needs of all product stakeholders are considered when choosing a visual collaboration application.
- Employ a visual collaboration application as the de facto means for sharing product and design knowledge with development. Plan and execute workshops and design sprints on the selected platform, whether working remotely or in person.
- Use a visual collaboration application to plan and execute user research activities that require real-time, one-on-one facilitation.

Sample Vendors

Bluescape; Figma; InVision; Klaxoon; Lucid; Miro; Mural

Data-Driven Innovation

Analysis By: Tsuneo Fujiwara, David Pidsley

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Mature mainstream

Definition:

Data-driven innovation (DDI) is the use of data and analytics (D&A) to develop or foster new products, processes, organizational methods and markets. A human-centric innovation process starts with idea generation followed by idea evaluation. DDI uses D&A to augment the human being as a primary consideration in these steps. D&A can drive both the discovery and the execution of innovation, helping organizations create new business models, products and services with a confirmed business value.

Why This Is Important

Given the volume and ubiquity of data organizations have, DDI may be a more pragmatic way to innovate in some situations compared to conventional idea-based innovation, which starts with design thinking or human-centered design. Data itself can also bring value to organizations that sell or license it. Generative AI, which could be considered a contributor or driver of DDI, has gained popularity this year, bringing DDI into sharper focus.

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Business Impact

DDI can have a high impact on all industries, as well as on the digital innovation process itself. DDI improves the speed and success rate of digital innovations through the study of data and data correlations and insights gained from analyzing data. This means organizations can gain more efficiency, effectiveness and impact from innovating new digital products and services.

Drivers

- Digital business acceleration is increasing the migration of socioeconomic activities to the internet; lowering the costs of data collection, storage and processing; and resulting in the generation and use of vast amounts of data. Rich, immediate and reliable data provides a mechanism for innovation ideas generation and evaluation, thus driving DDI.
- Recent acceleration in digital innovations is enabled by the adoption of data such as facial recognition at airports, improved weather forecasting for farmers and the monetization of sensor data in various industries. This acceleration is driving organizations to leverage DDI processes so they don't leave innovation ideation and evaluation to chance.

Obstacles

- Some organizations embrace DDI without ensuring the goals of DDI align with their business goals. This alignment is essential for the DDI to create business value, and business goals should drive DDI.
- Without first establishing a culture of innovation, organizations will be unable to plan and execute DDI.
- The D&A team and the innovation team usually work in silos with limited or no collaboration. But collaboration must be established before any DDI can be done (see Quick Answer: How Do I Get Started With Data Monetization?).
- DDI requires the innovation team to possess analytical modeling capabilities.
 Without these capabilities, it will be unable to model a complex situation, which is usually quicker in data than constructing mock-ups would be.
- In order to productize the innovation to create business value, the innovation should be transferred to the appropriate business units, which are ideally involved from early on. Unfortunately, most innovation dies before being transferred to the business units.

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User Recommendations

- Leverage DDI processes when creating a new product or a new service for digital innovation, including business model innovation. 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.
- Separately, data itself could become a digital product when it has value in itself.
- Use the predictive analysis capability enabled by Al techniques to conduct a series of experiments against an analytical model and evaluate an innovation idea for different scenarios or event types. Assessing an innovation using data and analytics reduces the risk of failure. For instance, generative Al capabilities that use unsupervised learning algorithms to create new digital images, video, audio, text or code can also produce novel scenarios.

Sample Vendors

Accenture; Capgemini; Deloitte; KPMG; Tata Consultancy Services; Wipro

Gartner Recommended Reading

Use Data-Driven Innovation to Achieve Digital Business Growth

Accelerate Digital Business Through Data-Enhanced Innovation Process

Quick Answer: How Do I Get Started With Data Monetization?

Case Study: Data Product Development to Prioritize Data Monetization (ZF Group)

Magic Quadrant for Data and Analytics Service Providers

Innovation Centers of Excellence

Analysis By: Tsuneo Fujiwara, David Cearley

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Early mainstream

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Definition:

The innovation centers of excellence (COEs) is one approach to provide structure, centralized knowledge and dedicated resources to innovation management. It is a capability center run by a group of experts establishing best practices, training and leadership around critical processes, technologies or applications supporting the innovation process. The innovation COEs can be centralized or decentralized and include dedicated and virtual experts.

Why This Is Important

An innovation COE is important/valuable because it:

- Enables a hub for expertise from a wide variety of inputs across organizational boundaries.
- Provides a focus for collecting best practices and proliferating a common approach to innovation when activities are highly distributed.
- Provides a pathway to communicate and collaborate outside of hierarchical organizational structures.
- Harvests the expertise of highly skilled and knowledgeable individuals, making their expertise available more broadly.

Business Impact

An innovation COE brings benefits to an organization such as:

- Ensures efficient use of resources to facilitate innovation projects via standard approaches.
- Reduces operation costs by eliminating inefficiencies.
- Upskills innovation talent and supports individual/team learning on the latest viable innovation techniques.
- Provides a focal point for innovation and information repository for innovations across the organization.
- Leverages expertise in innovation models, methods and methodologies from across the organization.

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Drivers

An innovation COE is usually a lightweight approach that does not mandate its use but rather highlights its capabilities to support independent innovation efforts. When acting as a hub for innovation, it can gather information about otherwise disconnected efforts across an organization.

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

The drivers for an innovation COE are as follows:

- A COE supports knowledge sharing for innovation projects by having experts residing in the COE train team members on viable innovation techniques and approaches.
- 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 across the organization.
- 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.

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Obstacles

Some 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 status quo.
- Complexity: Some companies say they don't have the time, expertise or even the experience to 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 mitigating their risks.
- Isolationism: "We are the experts bring your issues to us and we'll take over" mentality when the COE is insulated. This exclusive mentality will create resentment.
- Bureaucracy: COEs that focus only on the tactical mechanics of the process, academics such as frameworks and methodologies, become bureaucratic and 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 and sharing expertise in select innovation areas as needed.
- 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 parttime 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.

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Gartner Recommended Reading

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

Build Your Innovation Roadmaps Using a Customizable Framework

How to Build an Impactful Innovation Lab

Continuous Foresight

Analysis By: Marty Resnick, Frank Buytendijk

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Emerging

Definition:

Continuous foresight leverages the best practices of strategic/corporate foresight and futurism to continuously assess and evaluate business models and strategies, and determine how to adjust either or both to create future success. Continuous foresight is a methodology and discipline for identifying and assessing trends and projections, as well as backcasting from desirable futures. Continuous foresight will help support the process of anticipating and influencing 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 to connect the dots between acquiring trends through to turning those findings into action.

Business Impact

Taking a disciplined approach to continuous foresight will aid in introducing new strategies, business and operating models, and responses to disruption. This leads to:

 Hiring leaders that focus on, or encouraging existing leaders to use continuous foresight.

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- An increasing demand for tools that facilitate trendspotting, innovation management and continuous foresight.
- IT leaders highlighting accelerators and inhibitors across technological, political, economical, social, trust, regulatory and environmental trends (TPESTRE).

Drivers

IT leaders must make decisions, and increasingly these decisions have to be made in complex environments. 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 possible disruptions, and the drive for resilience and future fitness.

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Obstacles

- IT leaders tend to have a narrow focus on technology. Ignoring the combinatorial impact of trends in addition to technology (political, economic, social, trust, regulatory and environment) could limit innovation initiatives and create a lack of preparation for future 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

- Use four action sets part of what we call the acquire, synthesize, advocate and prepare (ASAP) model — 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.
- Revive trendspotting efforts to assemble trends that will impact your technology strategy decisions to prepare your organization to become future fit.
- Adopt Tapestry (TPESTRE) analysis to identify relevant accelerators and inhibitors, including technological, political, economical, social/cultural, trust/ethics, regulatory/legal and environmental factor trends.
- Begin using storytelling techniques (like sci-fi) to help stakeholders envisage the future.

Sample Vendors

FIBRES; Futures Platform; ITONICS

Gartner Recommended Reading

Inventing the Future With Continuous Foresight

Complexity, Chaos and Confidence: A Tapestry of Trends Across Brave New Worlds

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The Gartner Trendspotting Framework: Driving Operations, Innovation and Strategy

Gartner Futures Lab Podcast: Thriving in the Age of Disruption

Maverick Stories: Brave New Worlds

Innovation Ecosystems

Analysis By: Daniel Sun, Tsuneo Fujiwara, Nick Jones

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

An innovation ecosystem is an interconnected network of entities that co-evolve capabilities around a shared set of technologies, knowledge or skills, and work cooperatively and competitively to develop new products, services and seamless customer experience to create value.

Why This Is Important

Many digital business models are ecosystem-oriented, such as smart cities, healthcare, smart homes and agriculture. Innovations in such areas often use 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, healthcare ecosystems could involve parties as diverse as academics, insurance companies, physicians and pharmaceutical manufacturers.

Business Impact

Facing economic headwinds, companies must be smarter with their innovation efforts. They must spend less and act faster than competitors. Innovation ecosystems are a good option since they:

- Accelerate ideation, experimentation and collaboration.
- Reduce time to market.
- Share investment costs and the risk of innovation bets.

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- Provide broader evidence of customer pain points and opportunities.
- Enable innovations that could not be achieved by an organization acting on its own.

Drivers

- Lack of a portfolio of capabilities and expertise often required for combinatorial innovations involving multiple technologies.
- 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.
- A need to access a larger pool of information and insights than from within one enterprise.

Obstacles

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

- Management and ownership of co-created intellectual property.
- Allocation and distribution of funding and benefits.
- Culture clashes among the participants.
- Internally focused mindset at some organizations that prefer to go alone.
- The challenge of defining a clear operating model and legal basis for collaboration.
- Shift in mindset to reflect the fact that profits are shared across multiple participants.

User Recommendations

Consider innovation ecosystems as a component of their overall innovation strategy to be used when:

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

Leverage innovation ecosystems fully for digital success by:

- Constructing the "DNA" of innovation ecosystems, which includes the value exchange, diverse partners, shared capabilities and rules of engagement.
- Evolving their innovation ecosystems by continuously managing, measuring, monitoring and improving their performance.

Gartner Recommended Reading

Innovation Ecosystems Are the Right Way to Innovate in a Downturn

A Visual Guide to Digital Ecosystems

Design Sprints

Analysis By: Will Grant, Brent Stewart

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

A design sprint is a multiday, workshop-style process designed to solve business problems through strategic design exploration, prototyping and rapid user testing. A typical design sprint lasts five days and includes steps to define the business problem, generate ideas, prototype the solution and test the prototype with real users. Design sprints help developers and designers to work better together by providing a structured process for collaboration.

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Why This Is Important

Design sprints enable the rapid generation and evaluation of big ideas. Using quick prototyping and fast feedback helps maintain focus on delivering customer value. Teams work together to generate new ideas, revolutionary features and products, or to identify new ways to solve old problems. By employing design sprints, an organization taps its collective knowledge from across the business to gain deeper insight from cross-disciplinary subject matter experts.

Business Impact

Many popular and impactful products — both digital and physical — were born during a design sprint, or a similar process. Design sprints give businesses a fast, proven and human-centered means to generate and/or evaluate new ideas, experiences, designs and products. Very few methodologies in business move at the speed of technology. Design sprints are an exception and have become a popular way to infuse experience research and experience strategy into rapid design-development cycles.

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Drivers

- Innovation: The first and most important business impact of design sprints is innovation. True and meaningful innovation requires deep expertise, diversity of thought, empathy for users and validation of requirements. Design sprints empower organizations to innovate quickly and cheaply, while still maintaining their ability to incrementally evolve and maintain core products and services.
- Accelerate product delivery: At the core, a design sprint is simply a shortened version of the human-centered design process. While deeper human-centered design (HCD) is often required, design sprints provide a "quick and dirty" evidence-based approach to design. As a result, teams that use design sprints drive deeper consensus and move faster than the average product team.
- Collaboration and decision making: Design sprints have a significant cultural impact on an organization. During a design sprint, ideas rule the day, not people. This democratization of influence is empowering to individuals who may not always have a voice at the table of product strategy and innovation.
- Foster better relationships: The experience of collaborative creativity builds bridges between people, teams and across disciplines. Most critically, design sprints open channels of communication and build relationships that close the gap between design and development, leading to better ideas, easier execution, superior design and higher-quality releases.
- User centricity: By bringing the whole team not just designers along for the journey, design sprints have the effect of instilling a user-centric mindset in nondesign staff. Developers, salespeople, customer support and business leaders are operating in a "user first" mode for the whole design sprint, with lasting impact on how they see the process of ideation.

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Obstacles

- Workshop skills: In order to succeed, a design sprint must be planned meticulously and run with precision and finesse. Only experienced workshop planners and facilitators can do the low-level planning, preparation and ongoing production work.
- Availability: A sprint is worthless unless you have the right attendees both from the user experience (UX) team and the business. For the average product team, it is difficult to lose key team members from product delivery tracks of work for an entire week or more.
- Echo chambers: The best feedback comes from users of the product. If it's not possible to present to users during (or at the end of) a design sprint, be cautious about feedback from the same set of internal stakeholders. Managers are a poor proxy for users.
- Not a panacea: Design sprints are great to initiate action on a new initiative, but don't expect definitive answers or deep solutions. It's about getting started, and where to go next, rather than finished products.

User Recommendations

- Educate software engineering leaders and their teams in the practice of design sprints and periodically employ them for larger-scale strategic initiatives, new product concepts and transformative feature enhancements.
- Recognize that design sprints are overkill for smaller, incremental improvements. Product teams with collaborative workshop experience can learn the design-sprint process easily with the help of articles, books and shared templates.
- Employ process, activity, and deliverable templates from visual collaboration tools (e.g., Miro, Mural, Figjam) to improve the quality of design sprint sessions.

Gartner Recommended Reading

Quick Answer: How Can We Incorporate User-Centric Design Into the Features We Build for Our Product?

How Design, Development and Product Management Can Work Together Successfully

The 4 Secrets of Design-Led Companies

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Sliding into the Trough

Innovation Culture Hacks

Analysis By: Tsuneo Fujiwara, Darren Topham, Gunjita Mundeja

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

Definition:

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

Why This Is Important

An innovative culture is a must-have for digital business success. Culture hacks are quick ways to impact the behaviors we do repeatedly in some specific, but positive, 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 habitually.

Business Impact

Culture hacks make small behavioral adjustments that deliver big innovation benefits, which are actionable, low effort (but not low courage), immediate, visible and emotional. Innovation culture hacks should result in moving toward a culture where innovation is part of the organizational DNA or "business as usual." Innovation culture hacks could be a quick win to ensure innovators remain motivated and continue to perform at their very best.

Drivers

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

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- Innovation culture hacks focus on a specific behavior that needs to change and alter it. 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?
- As an example of culture hacking in innovation, if innovation failure is seen as undesirable, embrace failure as a behavior to drive by displaying failed prototypes in the enterprise stories with key learning that came from it on the company newsletter. This sends a signal that failure in the pursuit of innovation is allowed, and what is learned matters regardless of the outcome.
- 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. Directly associate culture hacks to some metrics to measure the impact. These include the amount of creative space given to individuals (time), individuals' innovation inclination (interest), and team incentives and empowerment. They also include 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 (experimentation, exploration, and/or learning).

Obstacles

- Culture is perceived as abstract 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.
- But if culture is translated as "the way we work," it becomes more tangible. The obstacle then is to find small alterations to how work is done.
- Changing the culture involves recognizing that innovation is not always separate from day-to-day operations. The leaders need to identify specific behavioral goals of a cultural change effort, in the current organizational context that shapes the choices.
- Since it tends to be a localized, grassroots initiative, culture hacking can lose momentum and impact if executives and managers do not initiate and encourage an ongoing commitment.

User Recommendations

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Identify behaviors that limit innovation and the confidence to experiment or explore

new ways, such as risk aversion. Create a safe environment for people to fail and

learn from failures.

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 them via designing and executing

innovation culture hacks.

Gartner Recommended Reading

Foster a Culture of Innovation Using a Two-Layered Roadmap

The Culture Hacking Roadmap

The Art of Culture Hacking

Innovation Is Not Just About Process, but Enabling Right Behaviors to Drive Ideas Into

Action

Lean Startup

Analysis By: Arun Chandrasekaran, Ankita Khilare

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Adolescent

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Definition:

Lean startup is an innovation technique that accelerates the speed of product development and enables rapid testing and aligning business model fit. Popularized by Eric Ries in the book "The Lean Startup," 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 the build-measure-learn mindset.

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 faster and to compete better against startups in their core product categories. The foundation of lean startup is a scientific and agile way of decision making.

Business Impact

The business impacts of lean startup include:

- Enhances the probability of successful innovation through an iterative and feedback-centric approach to product development.
- Can have a dramatic impact on an organization's culture and ability to innovate.
 Having successfully implemented a lean startup mindset once, enterprises are likely to adopt it more broadly across several business areas.
- Can reduce uncertainty in a volatile environment, enabling large enterprises to respond to changing circumstances faster.

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Drivers

- The build-measure-learn mindset, where product building is geared toward a minimum viable product with immediate feedback from customers and iterative design, enables organizations to constantly evolve 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.
- Rapid prototyping and product build are critical to enable large enterprises to compete with nimble startups.
- Digital leaders want to experiment with new business models with lower risk, and in tune with customer expectations and changing market dynamics.
- To ensure the success of their digital business, IT leaders need to use data-driven decision making and AI as core parts of the innovation value chain.
- Enterprises are striving to validate the direction of their product at every step, as startups do. This enables early "pivoting," rather than requiring the organization to wait until the end when change is too hard or too late.

Obstacles

- Lack of managers and employees who embody the lean startup mindset.
- Large enterprises often experience organizational inertia due to a strong culture favoring a hierarchical organizational structure, sequential processes and preplanning of the entire product development process. This goes against the core ethos of lean startup.
- Heavy, rigid project governance can result in failure for lean startups.
- Inflexibility and disagreement on business models can lead to lean startups being viewed as cannibalistic to the enterprise's core business. Lean startup success is not just about fast, iterative product development, but is also predicated on pursuing creative business models. 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.

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User Recommendations

Determine if the lean startup methodology is appropriate for you by analyzing your

ability to commercialize ideas and build competitive differentiation with the

methodology.

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. This will

help prevent the project from being perceived as an IT-only endeavor.

Gain executive support and endorsement through practical demonstrations and

educational briefings.

Engage external experts to provide training and understanding of how lean startup

methodologies can be applied across the organization.

Separate the project team from the core business so that it can truly pursue lean

principles without being encumbered by the business model or mindset of the wider

organization.

Establish a clear timeline and metrics for success (such as adoption velocity, paid

conversion rate, repeat rate and value, churn rate), but be willing to pivot or correct

course based on customer and market feedback.

Gartner Recommended Reading

Using an Idea Evaluation Canvas for Innovation Experimentation

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

(Adaptive) Innovation Governance

Analysis By: Tsuneo Fujiwara, Gunjita Mundeja, Darren Topham

Benefit Rating: Moderate

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Innovation governance is a set of mechanisms that aligns goals, assigns decision authority and allocates resources to innovation activities with the aim of creating maximum value potential at acceptable risk. Governance plays a key role in the decision making of the start-stop innovation idea, which would also decide the future journey of the innovation initiative. For innovation, governance needs to be adaptive due to the experimental nature of innovation.

Why This Is Important

Organizations that are unable to establish the appropriate innovation governance mechanisms early are more at risk of their innovation efforts floundering due to a lack of agility, ability to explore and to achieve a timely and successful outcome.

Business Impact

Innovation needs governance by exception; allow the innovators to accomplish what they need to do, but there must be restrictions in place to catch any derailments and preserve the enterprise's larger needs and red lines. Innovation governance should enable faster decision making, learning from failure and culture change to a culture of experimentation, based on the innovation life cycle stage. Therefore, innovation requires a system for adaptive governance.

Drivers

- Innovation governance starts with a set of boundaries and parameters that allow for adaptation based on objectives and context.
- Adaptation of innovation governance occurs in response to demands for agility and flexibility, and as the innovation maturity level of the enterprise increases.
- Adaptive innovation governance helps innovators do what they need to do while ensuring derailments are caught in sufficient time to take corrective actions.
- Adaptive innovation governance is an agile approach that considers the needs of the organization and the innovators.
- Adaptive governance offers flexibility throughout the innovation life cycle between the strategic, highly controlled governance needs and the tactical, autonomous and agile requirements so that the innovation team can function effectively.

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Obstacles

- Innovation governance can be a tricky balance. Inappropriate, weak or uncoordinated governance usually leads to highly variable levels of outcomes and risks.
- Leaders often find it challenging to apply governance frameworks that properly balance risk and reward in innovation. Governance that is too relaxed — or no governance at all — can lead to wasted resources or unacceptable risk, whereas governance that is too tight can slow down and stifle innovation efforts, and lead to forfeiting business opportunities.

User Recommendations

- Assess the governance needs over the innovation life cycle for both the enterprise (usually more controlled) and the innovation team (usually more autonomous), based on the scope of work and the innovation maturity level of the organization.
- Identify the appropriate governance mechanisms (rules, roles, processes, structures and behaviors) that will address these needs.
- Understand when and where these mechanisms should apply and define the explicit trigger conditions.
- Monitor and look for shifts in both enterprise and innovation requirements that could trigger the need to review and adjust, or adapt, the mix and nature of governance mechanisms used. Communicate these adjustments effectively when they occur.

Gartner Recommended Reading

The CIO's Guide to Innovation Governance

Trendspotting

Analysis By: David Cearley, Samantha Searle, Marty Resnick

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

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Definition:

Trendspotting is a purposeful and targeted approach for acquiring and evaluating trends. A trend is an observation or prediction about current and future changes and disruptions that create threats and opportunities. Trendspotting explores changes in technological, political, economic, social/cultural, trust/ethics, regulatory/legal, and environmental areas and is used to inform and enhance strategic planning, operational efficiency and innovation management.

Why This Is Important

Enterprises must continuously scan and respond to changes and disruptions that impact their business. Trendspotting filters, analyzes, contextualizes and brings order to the cacophony of observations and predictions about these changes, and is a critical technique for navigating uncertainty and guiding scenario planning. Trendspotting establishes governance and communication mechanisms for collaborating with constituencies inside and outside the organization regarding trends.

Business Impact

Trendspotting helps organizational leaders:

- Identify which trends and disruptions may have an impact on the business and how to respond with changes to operations or strategy.
- Evaluate trends' strategic relevance to drive more purposeful, outcome-driven innovation.
- Anticipate the future and explore likely outcomes to provide decision makers with actionable information for more prudent investments.

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Drivers

- Trendspotting is gaining greater use as a broader, structured and purposeful process as part of strategic business, scenario and innovation planning.
- Gartner has seen an increase in the number of CTOs looking to establish a trendspotting capability as part of the CTO organization.
- Coordinated trendspotting is a more efficient and effective use of time and resources and allows trends to be leveraged in many different organizational contexts.
- The need to navigate uncertainty and guide scenario planning creates greater need for trendspotting.
- Companies need to gather and qualify more information from more sources, and get it in the hands of decision makers more quickly to support digital transformation.
- Companies with a trendspotting capability are less likely to be blindsided by unexpected events.
- Analyzing and contextualizing trend impact is an important part of risk analysis and mitigation.

Obstacles

- Trendspotting is often an informal, ad hoc and niche activity, with little information sharing between groups and no coordinated response.
- Technology tracking can be mistaken for trendspotting. Technology tracking looks at the state of a discrete technology, while a technology trend looks at a broader set of technologies evolving over time.
- Lack of detailed analysis of the factors driving and influencing a trend to determine when and how to respond can lead to reactive decisions that do not drive long-term value.
- Trendspotting that is not closely aligned with business impacts becomes academic and undermines the effective allocation of resources.

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User Recommendations

- Develop methods to identify and contextualize trends using the "tapestry" that considers technological, political, economic, social/cultural, trust/ethics, regulatory/legal and environmental (TPESTRE) factors.
- Determine the desired outcome (e.g., inform, explore, advise) and scope of the effort to allocate adequate resources.
- Exploit Gartner research, including Hype Cycles, Trend Lists and Trend Radars as the starting point for trendspotting.
- Evaluate the impact of trends and how to deal with them, delivering forecasts, perspectives, and insights to help leaders plan using strategic foresight and other methodologies.
- Assess trends' impact from the perspectives of people (customers, employees, partners), the business (products, services, processes) and technology (IT departments, systems).
- Utilize trend cards, radars, ideation tools, design thinking and other methods to collect, evaluate and communicate information about trends.

Sample Vendors

Brightidea; EY; Futures Platform; HYPE; ITONICS; Planbox

Gartner Recommended Reading

The Gartner Trendspotting Framework: Driving Operations, Innovation and Strategy

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

Hype Cycle for Emerging Technologies, 2022

Tool: Template for Developing Impactful Trend Cards

Getting Started With Trendspotting

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Climbing the Slope

Idea Management Tools

Analysis By: Nikos Drakos

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Idea management tools help organizations manage the flow of ideas from initial concept generation to final value realization or commercial exploitation. They support diverse methods to generate ideas — both internally or externally — to prioritize and select ideas, to act on selected ideas, to observe and measure activity and impact, and to operate innovation programs at scale.

Why This Is Important

The ability to innovate is a fundamental characteristic of any successful organization in a competitive market. Whether an innovation initiative is 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 or execute ideas, idea management tools help scale and focus idea generation, selection and execution.

Business Impact

Idea management tools support many aspects of the innovation process:

- Idea generation through trendspotting, events, campaigns and hackathons.
- Consolidation, connection and integration of ideas from different groups and jurisdictions.
- 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 via project or product management capabilities.

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 Analysis and reporting via status updates and aggregated project or portfolio views for different stakeholders.

Drivers

- Idea management tools make it easier to crowdsource ideas from internal employees as well as from customers and other external stakeholders. They also support trendspotting, brainstorming or broader-scope activities involving "idea jams," events, challenges and continuous engagement.
- Idea management tools offer support for end-to-end innovation activities. Their main strength is idea generation capabilities. However, they also include self-service mechanisms for filtering, organizing and systematically assessing the risks and rewards of different options; and maintaining an active 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 on and support for effective use. In some cases, they also come with access to external ecosystems, including specialists in different areas. This phenomenon is 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. However, the success of the technology depends on organizations' readiness to move ideas into execution and value realization. Readiness requires having budgets and decision-making authority in place when needed.
- Lack of participation: Idea generation relies on discretionary participation, which
 requires participant motivation. Ideation initiatives can fail if not enough attention is
 paid to motivating participation and more generally driving a culture of innovation.
- Technology overlap: The collaboration, stage-gate automation, reporting and execution components of idea management tools overlap with cloud office suites and other applications that may already be in place. Despite increasingly sophisticated integration options, this introduces extra complexity both in terms of user experience and IT infrastructure management.

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User Recommendations

- Ensure commitment including leadership buy-in budgets and decision responsibilities are in place by engaging with business stakeholders and establishing an innovation framework, whether or not a tool is deployed. Tools can help with scaling and optimizing the effort but will be ineffective without having the fundamentals in place.
- Select idea management tools based on vendor and product capabilities. Focus on usability and user engagement through gamification and on supporting decision makers in defining selection criteria and the process for moving ideas through to value realization.
- Focus ideation on desired outcomes. Choose relevant idea generation scenarios (e.g., events, challenges and campaigns) to identify participants, decision makers, engagement mechanisms, evaluation criteria and execution methods. Clearly communicate the value of participation to your target audience.
- Deploy innovation management tools alongside the applications that people already use (e.g., collaboration or business applications such as Microsoft Teams, Slack Technologies or Workplace by Meta) to ensure participants are immersed in the business context that can spark new ideas.

Sample Vendors

Brightidea; edison365; HYPE Innovation; Planbox; Planview; Qmarkets; Wazoku

Gartner Recommended Reading

Market Guide for Innovation Management Tools

Jump-Start Your Innovation Journey With a Customizable Innovation Framework

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

Achieve the Desired Maturity Level Using the Innovation Management Maturity Model and Assessment

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

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Open Innovation

Analysis By: Peter Skyttegaard, Gunjita Mundeja

Benefit Rating: High

Market Penetration: 20% to 50% of target audience

Maturity: Mature mainstream

Definition:

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

Why This Is Important

In a world of abundant knowledge and instant information mobility, companies cannot rely on the notion that enough innovative people work for them, and that good ideas and perspectives only come from within. Nor should they assume that they possess 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 be exchanged through selling, buying and licensing technology and patents, but open innovation can also involve "like for like" exchanges or "free" transactions, where the value comes from peer recognition or brand publicity.

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Drivers

- Companies are facing an increase in the complexity and size of challenges that they seek to solve through innovation. Contributing significantly to solutions for environmental or societal issues is beyond the reach of (most) individual enterprises, so companies come together to address these issues. Combining capabilities can provide 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 — they enable open exchange of innovative ideas.
- Open innovation is a great early litmus test for ideas in an open, not controlled environment.
- 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 increase in remote work or hybrid work in recent years has made it easier for workers to work remotely for companies at greater distance. It also 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. This 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.

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Obstacles

Concerns 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

Liberate internal expertise by identifying innovative ideas that you are currently not

utilizing. Decide which ideas 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 transactions, in both inbound and outbound knowledge

exchange.

Make open innovation a part of your culture by identifying macrolevel challenges

that your employees are encouraged to contribute to solving.

Expand your source of innovative ideas by inviting a range of external stakeholders

to contribute ideas to solve current business challenges.

Promote a shift in leadership mindset toward sharing by actively promoting good

examples of mutual benefits from shared capabilities or knowledge.

Gartner Recommended Reading

Reimagine Innovation With an Adaptive Innovation Ecosystem Framework

Innovation Labs

Analysis By: Gunjita Mundeja, David Cearley, Samantha Searle, Tsuneo Fujiwara, Peter

Skyttegaard

Benefit Rating: High

Market Penetration: 5% to 20% of target audience

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Maturity: Mature mainstream

Definition:

An innovation lab is a unit whose mission is to devise novel ideas for disrupting or complementing the rest of the organization and delivering business-relevant outcomes. It offers an independent risk-tolerant environment that is not subject to the typical business pressures and metrics, and is aligned to business strategy.

Why This Is Important

Innovation labs can accelerate innovation by incubating promising ideas and freeing them from the pressure of meeting 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 to develop external partnerships, train employees on innovation topics, collaborate with startups or incubators, and showcase innovative solutions to visitors.

Business Impact

Innovation labs can boost digital transformation initiatives by streamlining the process from idea generation to value creation. A lab can target anything, ranging from radically enhancing existing products, creating new products and entering a new market, to improving culture and employee engagement. Labs provide a risk-tolerant environment to try new things by exploring or experimenting in an environment that is tolerant of "good failures" and by managing risk across a portfolio of opportunities.

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Drivers

- Innovation labs provide a space and time to explore initiatives independently from existing ways of working or the dominant organizational culture. They help organizations take risks that require some degree of separation from established organizational structures, such as innovating business models or pursuing radically innovative products and services.
- Innovation labs provide a safe and secure environment that allows exploration and experimentation with emerging technologies that do not fit the security policies of the rest of the organization.
- Innovation labs enable experimenting with unconventional ideas by collaborating with startups, universities, venture capitalists, incubators and talent and creating a startup culture that is agile and focused on open communication, experimenting and problem solving.
- Innovation labs play a pivotal role in discovering new opportunities and ways to generate business success and strategizing for the future to survive and thrive through disruptions.

Obstacles

- Innovation labs may not be focused on strategic business outcomes. So they struggle to obtain executive buy-in due to unclear justification for the investment, eventually failing because they are unable to prove business value.
- Organizations may be resistant to change and innovation and thus will make a challenging environment to implement an innovation lab.
- Innovators may fail to advance deliverables from the lab to operations due to not informing and involving the business and IT stakeholders who are responsible for implementations.
- Innovation labs may not evolve over time and lag changes in business and industry, ending up irrelevant and "ivory tower."

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User Recommendations

- Derive your innovation goals from the corporate strategy, and specify a structure that is defensible and justifies the investment in an innovation lab.
- Secure executive sponsorship that should help in developing business-focused metrics to track innovation success.
- Set a crystal clear vision for the innovation lab by defining detailed, quantified, timebound goals that lead to the desired business outcomes.
- Design an impactful innovation lab by creating a structured innovation operating model to guide decision-making activities for innovation investments.
- Create an operating model for the innovation lab, based on the innovation goals and planned innovation activities. If the innovation lab spans a variety of activities, a modular approach can serve a subsequent spinoff unit.

Gartner Recommended Reading

How to Build an Impactful Innovation Lab

You Need a Frictionless Operating Model to Run Your Innovation Lab Effectively

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

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

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

Design Thinking

Analysis By: Brian Prentice

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Early mainstream

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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 is generally delivered through a workshop format. It promotes investment in empathetic learning about the organization's customers/stakeholders as the key step to ensure the right problems are defined before innovative actions are taken to deliver solutions. It 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. It helps business innovators explore multiple solutions and 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 add 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. It helps organizations see how they fit within the broader context of their customers' goals or see the organization's operations through the eyes of people at the front line.

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- Integration with design practices Design thinking isn't contingent on making a new product or service. However, when it is used for that, there is seamless integration into a broader design process.
- Most design thinking occurs through workshops run by design team members 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.
- Often, workshops proceed without any research and quickly devolve into empathy sessions, resulting personas and journey maps are more likely to echo existing biases than 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 to build internal design capability or to retain design agencies. The end result is design thinking workshops that have neither any follow-through activity nor any hope for design capability.

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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 precedes 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.

Technology Trend Radars

Analysis By: David Cearley, Marty Resnick

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Adolescent

Definition:

A technology trend radar is a customizable visualization that shows when technology trends are expected to impact and potentially disrupt the enterprise. Radars often show additional information, such as the degree of impact, level of disruption or risks. It can be used to track and prioritize discrete technologies in addition to broad technology trends. Trend radars can be organized in a number of ways, including theme, technology domain, business unit or department.

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Why This Is Important

Trends can drive shifts in a company's strategy or form the basis for entirely new strategies or business models. Technology trend radars help an organization prioritize investments by showing which technologies and trends are important and when they should be acted on. It is a benefit-driven approach to technology adoption. Radars can save organizations time and reduce risks of misunderstood technologies to ultimately support business transformation efforts.

Business Impact

Technology trends can cause disruption and/or create opportunities for the organization. Technology trend radars can be used to be aware of what technologies and trends will have an impact on the business. They can be used to visualize, assess, share and discuss the relative impact of trends and technologies. 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 for adoption.

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 can be used to simplify, inform and explain an otherwise complex analysis of technology and trend opportunities, risks and impact across multiple business units.
- Radars provide a useful model to consider the timing of opportunities, challenges and disruptions of future trends in the business, as well as the level of uncertainty with each trend.
- Technology trend radars can be used to provide unbiased recommendations based on a fact-based analysis method.
- A collection of trend radars focused on individual business units or different categories of trends (e.g., technology trends versus economic trends) can be used to drive specific discussions with business executives.

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Obstacles

- Lack of a fact-based analysis method can lead to inappropriate and uninformed decision making.
- A belief that the radar is a final and definitive conclusion about a trend, when it's actually a reasoned opinion used to discuss options, leads to misaligned expectations.
- 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 obscure the message you are trying to deliver.

User Recommendations

- Use technology trend radars as a critical step in the trendspotting process to communicate 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 technology trends, and provide a process to vet and eliminate those that don't have beneficial returns for the company, while tracking those technologies that do.
- Focus on trends 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.

Sample Vendors

FIBRES Online; Futures Platform; ITONICS; TRENDONE

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Gartner Recommended Reading

Tool: Developing Impactful Trend Cards

Toolkit: How to Build an Emerging Technology Radar

Getting Started With Trendspotting

The Gartner Trendspotting Framework: Driving Operations, Innovation and Strategy

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Entering the Plateau

Innovation Training

Analysis By: Arun Chandrasekaran, Tsuneo Fujiwara, Ankita Khilare, 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 enables organizations to pursue emerging opportunities faster and reach their full potential. With a continued focus on innovation, organizations can gain a competitive advantage by harnessing the value of emerging disruptive technologies. Organizations that have innovation training programs tend to have more engaged employees who can think critically and creatively, share their ideas with their colleagues and be highly motivated at work.

Business Impact

Innovation training programs result in more engaged and satisfied employees, which boosts employee retention. Innovation training can help businesses to identify and meet intrapreneurial needs by teaching employees how to think creatively and solve problems. Overall, innovation training is an important investment for businesses that want to stay ahead of the competition, improve customer satisfaction and increase employee engagement.

Drivers

 Organizations need innovation to achieve digital business success, but most report that they are not as effective at innovation as they would like to be. Training can improve individual and team innovation performance.

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- Innovation training can increase the effectiveness of tools and processes that support innovation, such as innovation management products.
- Innovation training helps employees to understand the organization's strategy better, feel more connected to leaders and contribute to an environment that supports innovation culture.
- 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 to the way the organization innovates can prevent the training from being used to full effect. Training may be ineffective without addressing issues in areas such as incentives, metrics, process and culture.
- Innovation is inhibited in risk-averse environments. Organizations must make a safe space for innovation and encourage fast failures as a form of success.
- It can be difficult to convince management of the value of investing in innovation training. Common barriers include the belief that innovation is a creative skill that cannot be taught.
- Employees must be convinced that the training is worthwhile and that they will have opportunities to use it.
- Lack of input from employees and middle managers on what would be most useful to them could derail innovation training programs.
- Treating innovation training initiatives as one-off ephemeral exercises rather than as an ongoing culture development program for every employee can create a disconnect between various groups of employees. This can render these programs political, ineffective and parochial.

User Recommendations

Adapt the content of the innovation training to the audience in question. Innovation training should be relevant, useful and interesting for the participants.

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- Make the training mandatory for new employees as you scale the innovation efforts. Consider using gamification and immersive experiences for training, and find ways to put training to immediate practical use.
- Make it easier for attendees to access training programs through a self-service portal or interactive workshops.
- Set goals for the outcomes that you want to see from 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, building an innovation culture also requires collaboration, diversity and trust.

Gartner Recommended Reading

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

Hackathons

Analysis By: David Pidsley, Gunjita Mundeja

Benefit Rating: Moderate

Market Penetration: 5% to 20% of target audience

Maturity: Legacy

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 against each other. Hackathons can involve internal participants (employees) or external participants (universities, startups, citizens). Outside IT, these are used to rapidly prototype plans, products/services and customer/employee experiences.

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Why This Is Important

Hackathons allow a shift toward more customer-centric innovation through collaborative development that can be more inclusive, diverse and representative of customers, employees and other stakeholder communities. With the explosion of mobile apps and Alpowered customer experiences, these provide co-production opportunities. Hackathons showcase lean and agile methods that reduce time to market in an uncertain business environment, encouraging new ways of working on the most innovative solutions.

Business Impact

Hackathons (aka hack days, hackfests, datathons or codefests) benefit organizations by generating ideas, prototypes and user feedback in a single event. They're popular in the public sector, healthcare, education, banking, energy, media, gaming and sports. With the help of public relations teams, most organizations can orchestrate a hackathon by leveraging conference halls, platforms with APIs, SDKs, frameworks, data and compute. IT, R&D, marketing, sales and customer service can participate.

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Drivers

- Hackathons enable organizations to identify new revenue opportunities or proposals, product or service ideas, or "what-ifs" and business models to generate/retain clients or support other existing KPIs.
- The speed and agility of hackathons provide a strongly time-constrained environment that not only fosters rapid ideation, but also minimizes the resources needed to do so.
- Corporatewide hackathons foster collaboration and cross-functional thinking. They
 also improve results by adding diverse viewpoints. In short, they break down silos for
 long-lasting effect.
- By encouraging innovative thinking to solve well-known problems or speed up slow business processes, hackathons change corporate culture. At the same time, they help users learn about the constraints of existing systems.
- Hackathons can not only identify suboptimal customer/employee experiences, but also improve them, especially via the development of applications and multiexperience interfaces.
- Hackathons can help attract, identify, evaluate and retain talent, especially scarce and highly skilled developers/engineers, data scientists, creatives, entrepreneurs, industry vertical experts and business domain experts.
- Enterprises can use hackathons to engage new partners and build communities and vendor ecosystems with innovative startups.
- Recent developments in low-code/no-code tools for rapid prototyping are fueling hackathons. The rise of "citizen" skills decentralized to lines of business (e.g., citizen developers, citizen data scientists and citizen integrators) is also having an impact.
- Hackathons that target a cause or purpose, such as the COVID-19 pandemic response, social impact or environmental protection, are trending. "Data for good" hackathons are an example.

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Obstacles

- Poor planning and stakeholder engagement lead to low hackathon participation.
- Ambiguity in event purpose, due to nonalignment with business problems, can hinder participation.
- Virtual collaboration and communication tools constrain hackathon experiences and outcomes, especially networking and unstructured interaction.
- Innovation days are broader alternatives to hackathons, used to manifest ideas without data and technology resources.
- Lack of coding abilities, poor data literacy and low digital literacy create a digital divide, hindering noncoders' contribution to hackathons. However, noncoders can contribute through ideation, mockups, testing, documentation and storytelling.
- Most hackathon deliverables require further development or get abandoned, creating a lack of transparency in idea implementation or progress.
- Compliance issues related to security, confidentiality and intellectual property rights must be considered, adding complexity.

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User Recommendations

- Scope hackathons around a clear theme and specific objectives to ensure alignment with strategic goals.
- Plan logistics early and document lessons learned to address hybrid (virtualphysical) challenges.
- Generate interest and attract target participants by creating a marketing campaign and highlighting attending experts and judges.
- Set expectations at the kickoff by clearly communicating the theme, goals and judging criteria.
- Ensure fairness by judging solutions objectively based on established criteria.
- Use internal hackathons to comply with security, privacy and confidentiality policies when necessary.
- Transition prototypes into pilots through a product or relationship manager to ensure legal, ethical, reliable, secure and compliant reuse.
- Measure success by evaluating prototypes' impact on goals, and incorporate lessons learned into future hackathons for continuous improvement.

Sample Vendors

HackerEarth; Junction; Kaggle; Mercer Mettl; Slack; TechGig

Gartner Recommended Reading

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

Innovation Idea Selection — Choosing for Success

Generate Innovation Ideas Through Activities, Education and Attitude

Case Study: Forming a Developer Community to Advance Product- and Community-Led Growth (Twilio)

Case Study: Enterprise Chatbot Strategy (FiveTrain*)

Idea Challenges

Analysis By: Apoorva Chhabra, David Cearley

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Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

An idea challenge is like a competition — a time-bound call for ideas to solve a particular business problem or act on a growing opportunity. A challenge usually lasts from a few days to a few weeks, and targets a diverse population of stakeholders. To reach the broad population and to effectively manage the ideas collected, a challenge is typically run through an online innovation portal, often using an ideation tool.

Why This Is Important

A formalized approach to innovation, idea challenges help build a pipeline of ideas. The value of an idea challenge lies in sourcing ideas from employees (or other stakeholders) who are not a part of the innovation team directly. It enables organizations to draw on the diverse knowledge, experience and creativity of a varied set of participants and to generate a broader range of ideas. Additionally, 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, rather than a more transformative approach. They are often the first step in generating ideas for an innovation initiative targeting customer or employee 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, leading to stakeholders feeling more involved with the organization.

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Drivers

- Launch a call for ideas as a community innovation exercise or jump-start a focus on innovation.
- Gather multiple insights from a broad range of participants (such as those from diverse roles, backgrounds, cultures, or with different expertise or capabilities), and allow ideas to be evaluated for value generation.
- Enable asynchronous and remote collaboration by engaging geographically distributed employees in innovation challenges.
- Solicit ideas from a broad range of stakeholders, including external participants such as customers, citizens or suppliers.

Obstacles

- Quality of ideas Organizations struggle to get high-quality ideas, particularly if the organizers are seeking highly original, disruptive ideas.
- Lack of follow-through Absence of commitment to translate ideas into value leads to an inventory of abandoned ideas. Failure to align expectations around the speed and impact of innovation initiatives delivers innovation-in-name-only.
- Low participation Lack of interest due to inadequate preparation or communication, or from a lack of incentives. Also, there is a lack of opportunities and dedicated time for employees to contribute to innovation.

User Recommendations

- Invite participants apart from those who usually work on the problem. Involve people from across the value chain to ensure diversity of perspective.
- Enable different levels of involvement, including submitting ideas, refining other people's ideas and evaluating submitted ideas.
- Clarify the scope of and constraints on the level of risk and return (such as new product ideas or improved processes, short-term wins or visionary ideas). It provides upfront and transparent evaluation criteria.
- Ensure that relevant business leaders and executives are committed to sponsoring winning ideas.

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Gartner Recommended Reading

Select Best-in-Class Innovation Ideas

Innovation Idea Selection — Choosing for Success

Scenario Planning

Analysis By: David Furlonger, Frank Buytendijk, David Pidsley

Benefit Rating: High

Market Penetration: More than 50% of target audience

Maturity: Mature mainstream

Definition:

Scenario planning is a management methodology that helps organizations prepare for uncertainty by envisioning 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 make key decisions. It is used in anticipation of or during significant external change to plan for problems or exploit opportunities. It should be used more extensively as a way of looking at the future. COVID-19 and the Russian invasion of Ukraine highlighted the importance of analyzing uncertainty and evaluating events disrupting business trajectories.

Business Impact

This foresight and anticipatory approach considers alternative future scenarios, plans to react and identifies signals that indicate movement along each path:

 Structured methodology and dynamic tools acknowledge and address critical uncertainties. Business initiatives can be prioritized based on descriptions of market futures not previously considered.

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Strategic canvases evaluate innovations and break fixed-mindsets. Scenarios question market norms based on future-sensing, as opposed to projecting outcomes from present conditions.

Drivers

- Business today is 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.
- Due to growth (or survival) trajectories caused by inflation, social shifts and the Russian invasion of Ukraine, leaders are challenged to prioritize effective capital allocation strategies.
- Trendspotting processes explore how leaders identify, filter, contextualize, analyze, and relate trends and feed this into scenario planning and backcasting techniques to explore their future interplay. Scenario planning exercises can be used to communicate the result of the trendspotting process.
- Macroforces influencing our future are collated using categories such as technological, political, economical, social/cultural, trust/ethics, regulatory/legal and environmental (TPESTRE) into categories from which axes of critical uncertainty are developed. Two-by-two matrices and trilemma models are created as scenario outputs that structure plausible future scenarios for analysis.
- Executive decision making is driven by uncovering the risks and opportunities enterprises will face in the future. Scenario thinking uncovers risks and opportunities for innovation that result 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 an input 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.

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Obstacles

- Preoccupation with today's uncertainties and 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 thinking about the plausibility of a particular outcome being realized
- The propensity to fixate on one predicted or expected future path rather than numerous potential alternatives
- Little understanding of scenario planning methodology and resorting to trend analysis and rigid management processes in strategic planning
- No common business language, standards and framework for assessing uncertainty
- Lack of diversity and collaboration in scenario teams fostering status quo bias, reinforcing enterprise silos and inhibiting change
- Immature innovation management and trendspotting capabilities
- Low resource commitment to innovation and/or execution of ideas
- Weak follow-up from a scenario planning exercise failure to revisit waypoints indicating which (if any) of the scenarios are unfolding

User Recommendations

Executive leaders 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 scenario planning's 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.

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Gartner Recommended Reading

Gartner Global Scenarios: Scenario Planning Resource Center

The Gartner Trendspotting Framework: Driving Operations, Innovation and Strategy

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

TechWave Podcast: 'Tapestry' for Strategic Planning

Innovation Workshops

Analysis By: Apoorva Chhabra, David Cearley

Benefit Rating: Moderate

Market Penetration: 20% to 50% of target audience

Maturity: Early mainstream

Definition:

Innovation workshops are event-based, highly interactive and collaborative short-duration sessions. They are most often used for idea generation, discussion, evaluation and prioritization, but may also be used during idea analysis and value realization stages. These workshops are go-to techniques, such as idea challenges, used at targeted points in the innovation process to reach conclusions and recommend actions.

Why This Is Important

Innovation workshops provide a structured way to capture and prioritize a set of ideas and opportunities to feed the innovation pipeline for subsequent evaluation and business case development. These sessions complement longer-duration innovation campaigns and challenges. They can be used for highly targeted ideation on a specific topic with a targeted audience, such as the senior leadership team or a select group of subject matter experts.

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Business Impact

Innovation workshops can provide rapid results with low overhead and uncover hidden opportunities that were not apparent before participants interacted. They support both incremental and disruptive change, targeting business, technology and process innovation. They are a valuable tool to rapidly populate innovation pipelines and roadmaps with actionable ideas. Online tools enable workshops to be conducted in virtual as well as hybrid work environments.

Drivers

- More targeted interactions Innovation workshops can be organized with a smaller group around a simple problem or question. They can be used to deliver rapid results from a more targeted audience.
- Low overhead Innovation workshops require minimal planning overhead and can often be conducted with a few hours of planning, using an agenda and participant guide distributed ahead of the session.
- Flexibility Well-designed and well-executed workshops can provide flexibility (intrinsic agility) for a variety of workshop objectives, as well as for a variety of ideas flowing through these sessions.
- Quality The workshops can 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

- Lack of follow-up Innovation workshops can be victim to lack of business sponsorship or "drop points" if ideas are not followed up postworkshop and pushed toward implementation and deployment.
- Overreliance on specialized software Often, innovation management platforms and software drive the workshop. The goals of the workshop, including the facilitators, participant experience and engagement level, should drive the tools that are used, not the other way around.
- Lack of clear output Best practices on how these workshops should be conducted are lacking, often leading to an inability to reach clear conclusions.

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User Recommendations

- Align the scope of the innovation workshop with updated strategic goals to ensure design and execution achieve a planned outcome.
- 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 structured workshops to support business model innovation, with the objective of creating a new industry or becoming dominant in a market.

Gartner Recommended Reading

The Art of the Innovation Workshop

Toolkit: A Guide for Business Model Ideation and Innovation Workshops in Times of Disruption

Appendixes

See the previous Hype Cycle: Hype Cycle for Innovation Management Techniques, 2022

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Hype Cycle Phases, Benefit Ratings and Maturity Levels

Table 2: Hype Cycle Phases

(Enlarged table in Appendix)

Phase ↓	Definition ψ
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 technolog 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.
Slop e of En lightenment	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 tool 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 o Productivity.

Source: Gartner (July 2023)

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 2023)

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 main stream	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 2023)

Document Revision History

Hype Cycle for Innovation Management Techniques, 2022 - 26 July 2022

Hype Cycle for Innovation Management Techniques, 2021 - 12 July 2021

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

Understanding Gartner's Hype Cycles

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

Lead Innovation Management Maturity to the Next Level

Tool: Innovation Maturity Self-Assessment

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

Jump-Start Your Innovation Journey With a Customizable Innovation Framework

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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

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Table 1: Priority Matrix for Innovation Management Techniques, 2023

Benefit	Years to Mainstream Adoption			
\	Less Than 2 Years $_{\downarrow}$	2 - 5 Years 🔱	5 - 10 Years \downarrow	More Than 10 Years $_{\downarrow}$
Transformational		Business Model Innovation Framework	Moonshot Thinking	Al-Driven Innovation
High	Data-Driven Innovation Design Thinking Innovation Centers of Excellence Innovation Labs Open Innovation Scenario Planning Visual Collaboration Applications	Chief Innovation Officer Continuous Foresight Corporate Incubators Innovation Ecosystems Lean Startup Pretotyping Trendspotting	Company Builder	
Moderate	(Adaptive) Innovation Governance Hackathons Idea Challenges Innovation Culture Hacks Innovation Training Innovation Workshops Microinnovations Technology Trend Radars	Design Sprints Idea Management Tools Inclusive Innovation Innovation Intellectual Property Management Innovation OKRs Virtual Innovation Labs	Effectuation LEGO Serious Play Speculative Design	

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Benefit	Years to Mainstream Adoption			
\	Less Than 2 Years $_{\downarrow}$	2 - 5 Years \downarrow	5 - 10 Years ↓	More Than 10 Years $_{\downarrow}$
Low				

Source: Gartner (July 2023)

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Table 2: Hype Cycle Phases

Phase \downarrow	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.
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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.

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1	Phase ↓	Definition ↓

Source: Gartner (July 2023)

Table 3: Benefit Ratings

rys of doing business across industries that will result in industry dynamics	
lys of performing horizontal or vertical processes that will antly increased revenue or cost savings for an enterprise	
Provides incremental improvements to established processes that will result in increased revenue or cost savings for an enterprise	
es processes (for example, improved user experience) that will anslate into increased revenue or cost savings	
) (e	

Source: Gartner (July 2023)

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Table 4: Maturity Levels

Maturity Levels ↓	Status ↓	Products/Vendors ↓
Embryonic	In labs	None
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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 2023)

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