

نوآوری، خلاقیت نیست و بسیار فراتر از آن است. نوآوری، یکی از حیاتیترین قابلیتهایی است که سازمانها و کسبوکارها برای بقـا و رشد کسبوکار نیاز دارند و خصوصا در عصر دیجیتال، بیش از پیش به توانمندی نوآوری نیاز است.

این قابلیت، یک موضوع لوکس نیست که تنها برای شرکتهای پیشرو و بینالمللی کاربرد داشته باشد. نـوآوری بـه معنـای پیادهسـازی ایدههای ارزشآفرین جدید است. چنانچه نوآوری به درستی معطوف به مسائل اولویتدار و فرصتهای جذاب کسبوکار بـه کـار گرفتـه شود در هر شرایطی میتواند موثر و ارزشآفرین باشد. از نوآوری میتوان برای حل انواع مختلفی از مسائل، از چالشهایی خاص شرایط ایران همچون چالش مدیریت جریان نقدی در اقتصاد تورمی تا بهرهگیری از فرصـتهای رشـد در اقتصاد دیجیتـال بهـره گرفـت. حتـی ایران همچون چالش مدیریت جریان نقدی در اقتصاد تورمی از نوآوریها، حل مسایل متنوع و ناهمگن را به شکل همزمان دنبال کرد.

با آرزوی سربلندی ایران و ایرانیان





سازوکارها و روشهای مختلفی برای نوآوری استفاده میشوند. در این مستند که بـر اسـاس گزارش معتبر و جذاب «هایپ سایکل گارتنر درباره روشهای نوآوری، ۲۰۲۳» تهیه شده است جهت سادگی بیشتر، روشهای نـوآوری از رایجتـرین تـا جدیـدترین مـوارد در پـنج بخش معرفی شدهاند. مدیران کسبوکارها باید بـر اسـاس اسـتراتژی نـوآوری و رشـد کسـبوکار، مواردی که با شرایطشان هماهنگ است را برگزیده و بهکار بگیرند.

به عنوان یک راهنمای کلی، روشهای نوآوری را بر این اساس انتخاب کنید:

- رو<mark>شهای رایج و مطمئن</mark>: بخش **اول** و **دوم**
- روشهای **نوین در حال استفاده** ولی دارای **ابهامهای اجرایی**: بخش **سوم** و **چهارم**
- روشهای **جدیدی** که صرفا برخی **سازمانهای نوآور** در حال ارزیابی کارایی آنها هستند: بخش **پنجم**

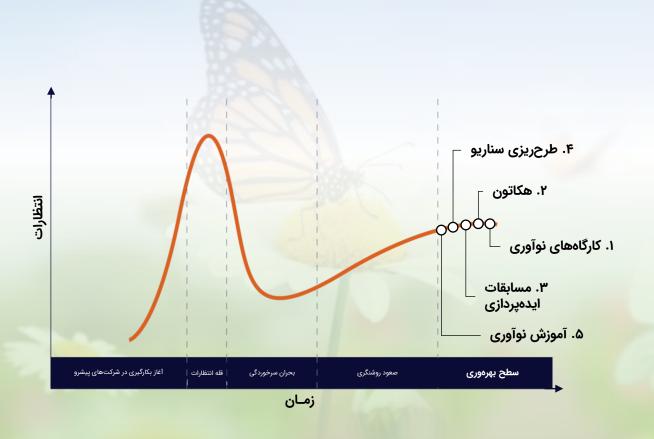
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بخش اول



۱. کارگاههای نوآوری



کارگاههای نوآوری، **جلسات و رویدادهایی کوتاهمـدت، بسیار تعـاملی و مشـارکتی** هستند.

اغلب برای تولید ایده استفاده می شوند اما ممکن است در مراحل ارزیابی، اولویت بندی، تحلیل یا سنجش میزان تحقق ارزش ایده نیز مورد استفاده قرار گیرند. این کارگاهها در نقاطی مشخصی از فرآیند نـوآوری و خصوصـا بـرای نتیجـهگیری و تعریف اقدامات اجرایی مورد استفاده قرار می گیرند.

- √ **محدوده کارگاه نوآوری را با اهداف استراتژیک بهروز شده هماهنگ کنید** تا اطمینان حاصل شود که طراحی و اجرا به یک نتیجه برنامهریزی <mark>شده دست می</mark>یابد.
- √ با **تکمیل فرآیندهای نوآوری شرکتی** در سطح کلان با کارگاههای نوآوری، نتایج را به حداکثر بر<mark>سا</mark>نید. از این کارگاهها با **تمرکز بر چالشها و فرصتهای مشخص** استفاده کنید.
 - √ کارگاههایی برای حمایت از **نوآوری در مدل کسبوکار**، و با هدف ایجاد یک کسبوکار جدید ی<mark>ا مسلط</mark> شدن به بازار نیز برگزار کنید.
 - √ جلسات کارگاهها را با **افزایش مشارکت، تعامل و رضایت شرکتکنندگان** و با برنامهریزی **قبل، حین** و **پس** از کارگاه، به بهترین شکل ممکن برگزار کنید.

1. Innovation Workshops

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.

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.

۲. هکاتون



هکاتون یک طراحی رقابتی است که شامل توسعه یک نمونه یا برنامه اولیه است و معمولاً در یک تا دو روز انجام میشود. تیمها به صورت موازی روی یک هدف یا چالش کار میکنند و در یک رویداد پایانی گرد هم میآیند تا با یک دیگر مسابقه دهند. هکاتونها میتوانند شامل شرکتکنندگان داخلی (کارمندان) یا شرکتکنندگان خارجی (دانشجویان، استارتاپها، شهروندان) باشند.

در خارج از حوزه فناوری اطلاعات، از هکاتونها بـرای نمونهسـازی سـریع طرحهـا، محصولات، خدمات، و یا تجربیات مشتری/کارمند استفاده میشود.

- √ هکاتونها را حول یک موضوع واضح و با اهداف خاص برای اطمینان از همسویی با اهداف استراتژیک بکار ببرید. با بیان واضح موضوع، اهداف و معیارهای قضاوت، انتظارات را در شروع کار روشن کنید.
- √ برای فراهمسازی امکانات اولیه برنامهریزی کنید. با ایجاد کمپین بازاریابی و برجسته کردن کارشناسان و داوران حاضر، **شرکتکنندگان هدف را جذب کنید.** بـا قضــاوت عینــی راهحلهــا بــر اســاس معیارهــای مشخص، **عدالت را تضمین کنید.**
 - √ در صورت لزوم از هکاتونهای داخلی برای رعایت سیاستهای امنیتی، حریم خصوصی و محرمانگی استفاده کنید. برای اطمینان از استفاده مجدد، نمونههای اولیه را پایلوت کنید.
 - √ موفقیت را با ارزیابی تأثیر نمونههای اولیه بر اهداف اندازهگیری کنید و **درسهای آموختهشده را در هکاتونهای آینده برای بهبود مستمر بگنجانید.**

2. Hackathons

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.

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 **AI-powered** 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.

Drivers

- Hackathons enable organizations to identify **new revenue** opportunities 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.
- By encouraging innovative thinking to solve well-known problems or speed up slow business processes, hackathons change **corporate culture**.
- 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.

- 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.

۳. مسابقات ایدهپردازی



مسابقات ایدهپردازی، فراخوانی است محدود با زمان مشخص برای ایدهپردازی در خصوص حل یک مشکل کسبوکاریِ خاص یا بهرهبرداری از فرصتی رو به رشد. یک مسابقه معمولاً از چند روز تا چند هفته طول میکشد و جمعیت متنوعی از ذینفعان را هدف قرار میدهد.

برای دستیابی به جمعیت گسترده و مدیریت مـؤثر ایـدههای جمعآوریشـده، ایـن مسابقات معمولاً از طریق یک پورتال نوآوری آنلاین اجرا میشود کـه اغلـب از یـک ابزار ایدهپردازی نیز استفاده میکند.

- √ شرکتکنندگانی جدا از کسانی که معمولاً روی مشکل مورد نظر کار میکنند دعوت کنید. بعلاوه برای اطمینان از تنوع دیدگاه، افراد را از سراسر زنجیره ارزش درگیر کنید.
 - √ سطوح مختلف مشارکت را تعریف کنید: از جمله **ارائه** ایدهها، **اصلاح** ایدههای دیگران و **ارزیابی** ایدههای ارسال شده.
 - √ محدوده و محدودیتهای سطح ریسک و بازده (مانند ایدههای محصول جدید یا فرآیندها<mark>ی بهبودیا</mark>فته، موفقیتهای زودبازده یا ایدههای <mark>رویا</mark>یی) را روشن کنید.
 - √ اطمینان حاصل کنید که رهبران و مدیران، **متعهد به حمایت از ایدههای برنده** هستند.

3. Idea Challenges

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.

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.

۴. طرحریزی سناریو



طرحریزی سناریو، روشی مدیریتی است که به سازمانها کمک میکند تا با پیشبینی و تجزیه و تحلیل احتمالات آینده، برای عدماطمینان آتی آماده شوند. این روش، عدمقطعیتهای حیاتی و نیروهای کلان را که بر بازار و شرکتها تأثیر میگذارند، ارزیابی میکند. مدیران اجرایی می توانند استراتژیهای خود در خصوص آینده را ارزیابی کنند و نوآوری را با ایدهپردازی در خصوص فرصتها و مدیریت ریسکها در راستای بدست آوردن بازده سهامداران ارتقا دهند.

- √ پویایی نوسان بازار را ارزیابی کنید، **قابلیتهای مورد نیاز آینده** و نیازهای مشتری را پیشبینی کنید، و برای جلوگیری از توقف عملکرد، **ابتکارات نوآوری** را ایجاد و توسعه دهید.
 - √ گفتگو هیئت مدیره و تیم اجرایی در مورد آینده را تشویق و تسهیل کنید و تأثیر سناریوهای آینده بر عملیات کسبوکار و رفتارهای بازار را بررسی کنید.
 - √ **مفروضات مربوط به آیندههای احتمالی** را روشن کنید و علائم/اقدامات را برای نظارت بر نت<mark>ایج شناسایی</mark> کنید و **اعتبار مفروضات** را در طول زمان بسنجید.
 - √ ابتکارات و سرمایهگذاریهای نوآوری در کسبوکار و فناوری فعلی و آتی را متناسب با سناریوهای بالقوه آینده ارزیابی کنید.

4. Scenario Planning

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.
- Strategic canvases evaluate innovations and break fixedmindsets. Scenarios question market norms based on future-sensing.

Drivers

- Business today is **volatile**, **uncertain**, **complex** and **ambiguous** (**VOCA**). 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, 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.
- Scenarios offer an input for ideation. Innovation initiatives then become directly tied to the strategic requirements that could address future business scenarios.

- 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.

۵. آموزش نوآوری



آموزش نوآوری، برنامـهای اسـت کـه طـی آن بـه فراگیـران مبـاحثی جهـت درک و استفاده از نظریهها، چارچوبها و تکنیکهای نوآوری ارائه میشود. هـدف آمـوزش نوآوری این است که چگونه منابع و فرآیندها بـرای توسـعه یـک فرهنـگ نوآورانـه، دستیابی به فرصتهای جدید و پیگیری تخریب خلاق در راسـتای رشـد کسـبوکار همراستا شوند. روشهای مختلفی برای آموزش نوآوری شامل برنامهها و **دورههای** آموزشی داخلی، دورههای آنلاین انبوه باز (MOOCs)، استفاده از موسسات آموزشی ثالث و **برنامههای نوآوری دانشگاهی** وجود دارد.

- √ محتوای آموزش نوآوری را **با مخاطب مورد نظر تطبیق دهید**. آموزش نوآوری باید برای شرکتکنندگان مرتبط، مفید و جالب باشد.
- √ با افزایش تلاشهای نوآوری، آموزش را برای کارکنان جدید اجباری کنید. استفاده از گیمیفیکیشن و تجربیات فراگیر را برای آموزش در نظر بگیرید و راههایی برای استفاده عملی و فوری از آموزش بیابید.
- √ دسترسی شرکتکنندگان به برنامههای آموزشی را از طریق پورتالهای سلف سرویس یا کارگاههای تعاملی آسان کنید. اهدافی را برای نتایجی که میخواهید از برنامه آمـوزش نـوآوری ببینیـد تعـیین کنیـد و مطمئن شوید که بخشی از ارزیابی سالانه یک کارمند است. بعلاوه **سازوکاری برای جمعسپاری داستانهای موفقیت** و جلسات یادگیری ا<mark>جتماعی</mark> فراهم سازید.
 - √ اطمینان حاصل کنید که **کار تیمی محور برنامههای آموزشی است.** پرورش خلاقیت و آزادی فردی مهم است اما ایجاد **فرهنگ نوآوری نیازمند همکاری، تنوع و اعتماد است.**

5. Innovation Training

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

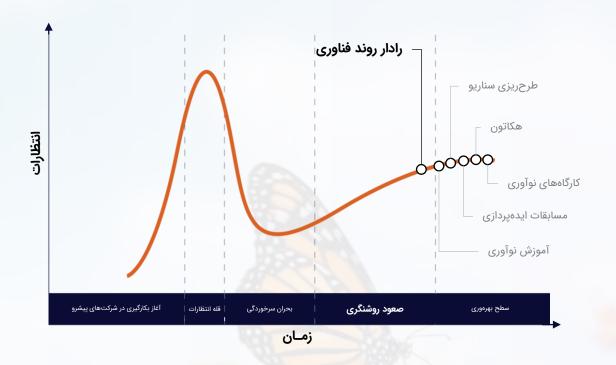
- Organizations need innovation to achieve **digital business success**, but most report that **they are not as effective** at innovation as they would like to be. Training can improve individual and team innovation performance.
- Innovation training can increase the **effectiveness of tools and processes** 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).

- 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.





۶. رادار روند فناوری



رادار روند فناوری، یک تصویرپردازی متناسبسازی شده است که نشان میدهـد انتظار میرود چه زمانی روندهای فناوری بر سازمان تـأثیر بگذارنـد. رادارهـا اغلـب اطلاعاتی اضافی مانند میزان اثر یا سطح ریسک را نیز نشان میدهند.

میتوان از آن برای ردیابی و **اولویتبندی فناوریهای خاص** علاوه بر روند ف**ناوریهای گسترده** نیز استفاده کرد. رادار روند را میتوان به روشهای مختلفی از جمله موضوع، حوزه فناوری، واحد کسبوکار یا بخش سازمانی دستهبندی کرد.

- √ از رادارهای روند فناوری به عنوان یک گام مهم در **فرآیند تشخیص روند** استفاده کنید تا **ریسک و فرصت تحولات دیجیتال** را در سازم<mark>ان رصد کنید.</mark>
- √ رادارها را به عنوان اسناد زندهای در نظر بگیرید که باید به طور مداوم با آخرین اطلاعات مربوطه به روز شوند. بازار را برای روندهای فناوری محتمل اسکن کنید و مواردی که سودی برای شرکت ندارنـد حــذف کنید. روی روندهایی تمرکز کنید که بیشترین ارتباط را با استراتژی کسبوکار شما دارند. بنابراین، هر شرکت صفحه رادار مخصوص به خود را خواهد داشت.
- √ از رادارهای مختلف برای **هدایت مباحث مختلف با رهبران کسبوکار** استفاده کنید. رادارها را **در جلسات با ذینفعان کسبوکار خود به نمایش بگذارید** تا سازمان خود را همسـو کنیـد و اقـداماتی را انجـام دهید که نتایج مثبت کسبوکار را به همراه دارد.

6. Technology Trend Radar

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.

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.

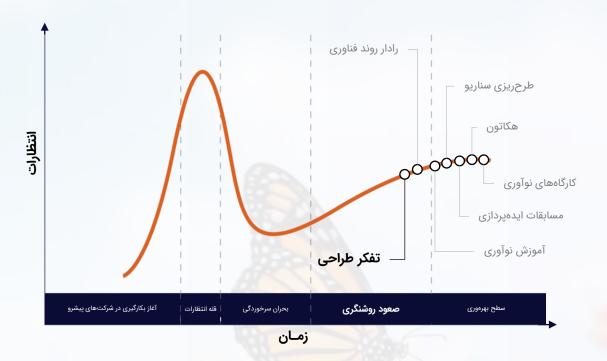
Radars encourage leaders to focus on items that will have a high impact on your industry and company, and that are mature enough to align with your risk tolerance for adoption.

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.

- 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.

۷. تفکر طراحی



تفکر طراحی یک روش ایدهپردازی است که از فرآیند طراحی با رویکرد چند رشتهای استخراج شده که در ایجاد محصولات فیزیکی و دیجیتالی کاربرد دارد.

تفکر طراحی را باید مستقیماً در راستای مشکلاتی از کسبوکار بکار گرفت که در آنها میتوان **ذینفعان مرتبط** را شناسایی کرد و **ارزش کسبوکاری را اندازهگیری** نمود. گرچه مشکلات پیچیده برای ورودی تفکر طراحی خوب هستند اما بدون زمینهسازی مناسب، تفکر طراحی میتواند به بینشهای ایدهآلگرایانهای منجر شود که غیرقابلاجرا هستند.

- √ از **تحقیقات مشاهدهای و «همدلانه**» غافل نشوید. مطمئن شوید که کار تحقیقاتی مقدم بر هر ابتکار تفکر طراحی است.
 - √ برای دستیابی به بینشهای قوی، در شرکت کنندگانِ تیم تفکر طراحی، **تنوع** ایجاد کنید.
- √ در استعدادهای داخلی برای ایجاد یک **برنامه مداوم از تفکر طراحی کاربردی** سرمایه گذاری <mark>کنید</mark> و اطمینان حاصل کنید که **افراد واجد شرایط،** کارگاههای تفکر طراحی را به پیش میبرند.
 - ✓ در صورت امکان، کارگاههای تفکر طراحی را به ابتکارات طراحی گستردهتر پیوند دهید تا شانس انتقال ایدهها به یک فرآیند تولید واقعی را افزایش دهید.

7. Design Thinking

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 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.
- 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.

- 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.

۸. آزمایشگاه نوآوری



آزمایشگاه نوآوری، واحدی است که مأموریت آن ابداع ایدههای جدید برای تحـول یا تکامل کسبوکار اصلی سازمان و ارائه خروجیهایی مرتبط با کسبوکار است. آزمایشگاه نوآوری، محیطی مستقل و مناسب برای تحمل ریسک نوآوری را فراهم میسازد که تحت فشارها و معیارهای کسبوکار متعارف نیست و در عین حـال بـا استراتژی سازمان همسو است.

- √ **اهداف نوآوری** خود را از استراتژی شرکت استخراج کنید و **ساختاری** را تعریف کنید که قابل دفاع باشد و **سرمایهگذاری در آزمایشگاه نوآوری** را توجیه کند.
- √ با تعیین **اهداف دقیق، کمی و محدود به زمان** که منجر به نتایج مطلوب کسبوکاری می شود**، چشم اندازی شفاف** برای آزمایشگاه نوآوری تعیین کنید.
- √ برای موفقیت آزمایشگاه نوآوری، یک **مدل عملیاتی نوآوری ساختاریافته** برای هدایت فعالیتهای **تصمیمگیری برای سرمایهگذاریهای نوآوری** طراحی کنید.
 - √ اگر آزمایشگاه نوآوری فعالیتهای متنوعی را در بر میگیرد، **رویکرد ماژولار** میتواند برای اسپینآفهای بعدی مفید باشد.

8. Innovation Labs

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.

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.

- 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**."

۹. نوآوری بــاز



رویکردی است که بـر تـامین ایـدههای نوآورانـه از خـارج از سـازمان و همچنـین اشتراکگذاری ایدههای استفاده نشده یا کمتر استفاده از درون سازمان به مشـتریان و شرکای خارجی تاکید دارد.

این رویکرد در طول دو دهه گذشته، به یکی از اجزای اساسی بسیاری از برنامههای نوآوری شرکتها تبدیل شده است. برای اولین بار در سال ۲۰۰۳ توسط پروفسور هنری چسبرو از دانشگاه برکلی در کتابی با عنوان "نوآوری باز: الزامی جدید بای ایجاد و کسب سود از فناوری" ارائه شد.

- √ با شناسایی ایدههای نوآورانهای که در حال حاضر از آنها استفاده نمیکنید، دانش ارزشمند داخلی را آزاد سازید. تصمیم بگیرید که چه ایدههایی را میخواهید آزادانه به اشتراک بگذارید و از کدامیک به دنبال کسب درآمد هستید. چندین گزینه را با انتخاب طیف وسیعی از رویکردها، از مبادله آزاد تا معاملات پولی، در تبادل دانش ورودی و خروجی دنبال کنید.
 - √ با شناسایی چالشهای کلان که کارکنان شما تشویق میشوند در حل آنها مشارکت کنند، **نوآوری باز را بخشی از فرهنگ خود کنید**.
 - √ منبع ایدههای نوآورانه خود را با دعوت از طی<mark>فی از ذ</mark>ینفعان بیرونی برای کمک حل چالشهای ف<mark>علی</mark> گسترش دهید.
 - √ با **ترویج فعالانه نمونههای خوب و موفق** از منافع متقابل اشتراکگذاریها، در **طرز فکر** رهبری و مدیران تغییر ایجاد کنید.

9. Open Innovation

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.

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 not controlled environment.
- Technology platforms can provide **more visibility** in nonmonetary recognition, similar to getting "likes" on social media.
- 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.
- There is a general societal shift toward seeing sharing as a positive trait.

- 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.

۱۰. ابزارهای مدیریت ایده



ابزارهای مدیریت ایده به سازمانها کمک میکنند تا جریان ایدهها را، از تولید مفهوم اولیه تا تحقق ارزش نهایی یا بهرهبرداری تجاری مدیریت کنند. این ابزارها از روشهای متنوعی برای تولید ایدهها - چه در داخل و چه در خارج - برای اولویت بندی و انتخاب ایدهها، اقدام بر روی ایدههای منتخب، مشاهده و اندازهگیری فعالیت و تأثیر، و اجرای برنامههای نوآوری در مقیاس پشتیبانی میکنند.

- √ با تعامل با ذینفعان کسبوکار و ایجاد یک چارچوب نوآوری، صرف نظر از اینکه ابزاری به کار گرفته شده باشد یا نباشد، اطمینان حاصل کنید که تعهد، بودجه و مسئولیتپذیری در تصمیمگیری وجـود دارد. ابزارها میتوانند به مقیاسبندی و بهینهسازی تلاشها کمک کنند اما بدون داشتن اصول اولیه بیاثر خواهند بود.
 - √ ابزارهای مدیریت ایده را بر اساس تواناییهای فروشنده و محصول انتخاب کنید. بر کاربردی بودن و تعامل مناسب با کاربر از طریق گیمیفیکیشن و امکان تعریف معیارهای انتخاب تمرکز کنید.
- √ ایده پردازی را روی نتایج دلخواه متمرکز کنید. سناریوهای تولید ایده مرتبط (مانند رویدادها، چالش ها و کمپین ها) را برای شناسایی شرکت کنندگان، تصمیم گیرندگان، مکانیسم های مشـارکت، معیارهـای ارزیابی و روش های اجرا انتخاب کنید. ارزش مشارکت را به وضوح به مخاطبان هدف خود منتقل کنید. بعلاوه ابزارهای مدیریت نوآوری را در کنار برنامههایی که قبلاً استفاده میشدهاند به کار ببرید.

10. Idea Management Tools

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 events 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.
- **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 **road mapping**, 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.

- 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.





۱۱. روندیـابی (ترندسپاتینگ)



روندیابی یک **رویکرد هدفمند** برای شناسایی و ارزیابی **روندها** است.

روند، یک مشاهده یا پیشبینی در مورد تغییرات و تحولات فعلی و آینده است که میتوانند منجر به تهدید یا فراهم شدن فرصت برای کسبوکار شوند.

روندیابی، تغییرات در حوزههای مختلف فناورانه، سیاسی، اقتصادی، اجتماعی/فرهنگی، اعتماد/اخلاق، نظارتی/قانونی و محیطزیستی را بررسی میکند و برای آگاهیبخشی و ارتقای برنامهریزی استراتژیک، کارایی عملیاتی و مدیریت نوآوری استفاده میشود.

توصیههای اجرایی

√ ر**وشهایی را برای شناسایی روندها** ایجاد کنید که عوامل فنی، سیاسی، اقتصادی، اجتماعی/فرهنگی، اعتماد/اخلاق، نظارتی/قانونی و محیطی را در نظر میگیرد.

TPESTRE: Technological, Political, Economic, Social/cultural, Trust/ethics, Regulatory/legal and Environmental factors

✓ هدف (به عنوان مثال، اطلاع رسانی، کاوشگری، فراهمسازی پیشنهادهای کسبوکاری) و دامنه مورد نظر از فعالیت روندیابی را تعیین کنید تا منابع کافی برای آن فراهم سازید. از مطالعات شرکت گـارتنر، از جمله هایپ سایکلها، فهرستهای روند و رادارهای روند به عنوان نقطه شروع روندیابی بهرهبرداری کنید. برای کمک به رهبران جهت برنامهریزی با استفاده از آیندهنگری استراتژیک، تأثیر روندها را از دیدگاه افراد (مشتریان، کارکنان، شرکا)، کسبوکار (محصولات، خدمات، فرآیندها) و فنـاوری (بخشهـای فنـاوری (بخشهـای فنـاوری اطلاعات، سیستمها) نیز در نظر گرفتهاید. همچنین از کارتهای روند، رادارها، ابزارهای ایدهپردازی، تفکر طراحی و سایر روشها برای جمعآوری، ارزیابی و انتقال اطلاعات در مورد روندها استفاده کنید.

11. Trendspotting

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.

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.**

- 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.

۱۲. حکمرانی نوآوری



حکمرانی نوآوری در سازمان، مجموعهای از سازوکارهایی است که اهداف را همسو می کند، اختیارات تصمیمگیری را مشخص میکند و منابع را به فعالیتهای نوآوری با هدف ایجاد حداکثر ارزش ممکن با در نظر گرفتن ریسک قابل قبول تخصیص میدهد. حکمرانی سازمانی، نقشی کلیدی در تصمیمگیری در مورد آغاز کردن یا پایان دادن به یک طرح نوآوری ایفا میکند و همچنین در خصوص مسیر آینده توسعه نوآوری تصمیم میگیرد. به دلیل ماهیت آزمایشگرایانه نوآوری، حکمرانی آن باید تطبیقپذیر باشد.

- √ هم سازمان و هم تیم نوآوری، برای موفقیت در نوآوری نیازهای حکمرانی متفاوتی دارند. بر اساس دامنه فعالیت نوآوری و همچنین سطح بلوغ نوآوری در سازمان، سازوکار مناسبی طراحی کنید کـه بـه حـد مطلوب، نیازهای حکمرانی سازمان (معمولاً کنترلشدهتر) و تیم نوآوری (معمولاً مستقلتر) را فراهم سازد. سازوکارهای حکمرانی مناسب (شامل قواعد کسبوکاری، نقشها، فرآیندها، ساختارها و رفتارها) را که به این نیازها پاسخ می دهند تعریف کنید.
- √ دریابید هر سازوکار حکمرانی **در چه زمان و موقعیتی** باید اعمال شود و شرایط لازم برای فعال شدن سازوکارهای حکمرانی مختلف را به طور شفاف تعریف کنید. به طـور مـداوم، تغییراتـی کـه ممکـن اسـت الزامات سازمان و نوآوری در حکمرانی موفق نوآوری را در نظر داشته باشید و چنانچه سازوکارهای حکمرانی نیاز به اصلاح داشت تغییرات را در زمان مناسب اعمال کنید. به یاد داشته باشید که هر گونه تغییر در سازوکارهای حکمرانی سازمان باید **به شکل مطلوب اطلاعرسانی شود**.

Innovation governance

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

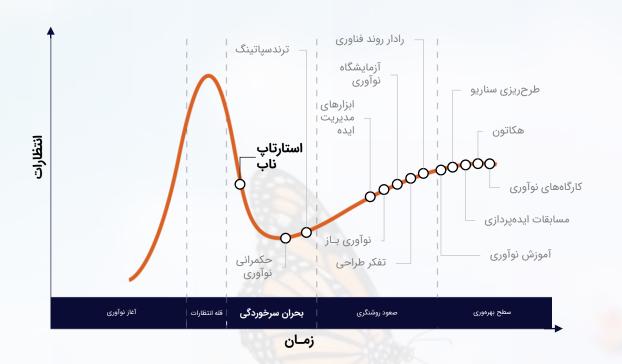
- Innovation governance starts with a **set of boundaries** and parameters that allow for adaptation based on objectives and context.
- Adaptation of innovation governance occurs in response to **demands for agility and flexibility**, and as the **innovation maturity** level of the enterprise increases.
- 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.

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.

۱۳. استارتاپ نـاب



استارتآپ ناب، **یک تکنیک نوآوری** است که سـرعت توسـعه محصـول را افـزایش میدهد و امکان **تست سریع** و **تناسب مدل کسبوکار** را فراهم میکند.

این روش توسط **اریک ریس** در کتاب «استارتآپ ناب» محبوبیت یافت و اکنون با موفقیت در واحدهای فناوری اطلاعات شرکتهای بزرگ و بالغ که به دنبـال ارتقـای کارآفرینی داخلی، یادگیری معتبر، حسابداری نوآوری و ذهنیت ساخت-انـدازهگیری- یادگیری هستند به کار گرفته میشود.

- √ با تجزیه و تحلیل توانایی خود در تجاریسازی ایدهها و ایجاد تمایز رقابتی، تعیین کنید که آیا روش استارتاپ ناب برای شما مناسب است یا خیر. کوچک و در قالب یک تیم مبتکر در یک پروژه آزمایشی کـه پیچیدگی محدودی دارد، شروع کنید. تیمهای کسب وکاری شرکت را درگیر روش استارتاپ ناب کنید. این امر از تلقی پروژه به عنوان **یک تلاش صرفا فناورانه** جلوگیری میکند.
 - √ از طریق **جلسات توجیهی آموزشی**، حمایت اجرایی را به دست آورید. متخصصان برونسازما<mark>نی را برا</mark>ی ارائه آموزش و درک نحوه استفاده <mark>از روش</mark>های استارتآپ ناب بکار بگیرید.
- √ تیم پروژه را از کسبوکار اصلی شرکت **جدا** کنید تا بتوانند واقعاً اصول ناب را بدون تحت فشار قرار گرفتن یا متاثر شدن از طرز فکر رایج سازمان دنبال کنند. یک **جدول زمانی و معیارهای واضح** برای موفقیت (مانند سرعت پذیرش، نرخ تبدیل، نرخ تکرار، نرخ ریزش) مشخص کنید و تلاش نمایید مسیر را بر اساس بازخورد مشتری و بازار اصلاح کنید.

Lean startup

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

- 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.

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.

- 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.

۱۴. هک فرهنگ نوآوری



هک فرهنگ نوآوری یک تعدیل کوچک در رفتار یک فرد است که تغییر بزرگتر و گستردهتری در فرهنگ سازمان ایجاد میکند. نوآوری، فرهنگی میطلبد که نـوآوران را برای خلاقیت و کنجکاوی توانمند میکند.

- √ رفتارهایی را که مانع نوآوری و اعتماد به نفس آزمونگری و کشف راههای جدید هستند شناسایی کنید (مانند ریسک گریزی). محیطی امن برای شکست خوردن و **درس گرفتن از شکستها** ایجاد کنید.
- √ اعتبار نوآوری را با هدف توسعه نوآوری مداوم ایجاد کنید. بررسی کنید که آیا سازمان به جایی میرود که قرار بود برود. این بدان معناست که نه تنها بهترین نتایج را شناسایی کنید، بلکه از قبل تعیین کنید که پیشرفت و موفقیت چگونه است و سازمان انتظار دارد چه نقاط عطفی را در رفتارهای روزمره از طریق تنظیم و ردیابی معیارهای فرهنگ ببیند.
- √ رویکردهای متعددی را برای فعال کردن تغییر رفتار، از جمله تغییر طرز فکر و معیارها، آموزش تکنیکها و رویکردهای نوآوری، و سازماندهی فعالیتهای ایدهپردازی بپذیرید. آنها را از طریق طراحی و اجرای هکهای فرهنگ نوآوری فعال کنید.

Innovation Culture Hack

Definition

An innovation culture hack is a **small adjustment** to an individual's behavior that will create a larger, more wideranging 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**.

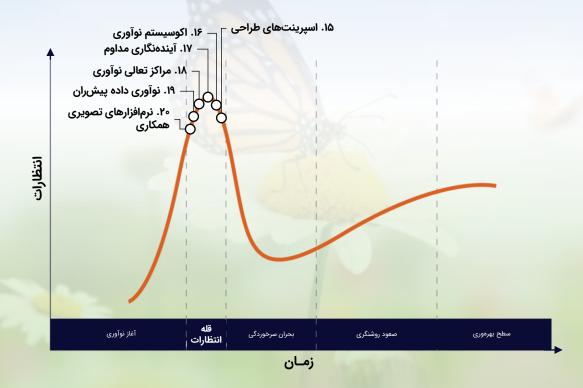
Innovation culture hacks should result in moving toward a culture where innovation is part of the **organizational DNA** or "**business as usual**." Innovation culture hacks could be a **quick win** to ensure innovators remain motivated and continue to perform at their very best.

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.
- 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?
- 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).

- 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 dayto-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**.





۱۵. اسپرینتهای طراحی



اسپرینت (دور سریع، تاخت یا برهه کوتاه) طراحی، یک فرآیند چند روزه به سبک کارگاهی است که برای حل مشکلات کسبوکار از طریق کاوش در طراحی استراتژیک، نمونه سازی اولیه و آزمایش سریع طراحی شده است. یک اسپرینت طراحی معمولی پنج روز طول می کشد و شامل مراحلی برای تعریف مشکل، تولید ایده، نمونهسازی و آزمایش نمونه اولیه با کاربران واقعی است. اسپرینتهای طراحی به توسعهدهندگان و طراحان کمک میکنند تا با ارائه یک فرآیند ساختاریافته برای همکاری بهتر با هم کار کنند.

- √ رهبران نرمافزار و تیمهای آنها را در زمینه طراحی اسپرینتها آموزش دهید و بهطور دورهای از آنها برای ابتکارات استراتژیک در مقیاس بزرگتر، مفاهیم محصول جدید و بهبود ویژگیهای متحول کننـده استفاده کنید.
 - √ تیمهای محصول با تجربه کارگاهی مشترک میتوانند با کمک مقالهها، کتابها و قالبهای <mark>مشترک،</mark> فرآیند اسپرینتهای طراحی را به را<mark>حتی بی</mark>اموزند.
 - √ از فرآیند، فعالیت، و الگوهای آماده ابزارهای همکاری بصری برای بهبود کیفیت جلسات سرعت طراحی استفاده کنید.

15. Design Sprints

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**.

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.

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.
- Collaboration and decision making: Design sprints have a significant **cultural impact** on an organization. During a design sprint, ideas rule the day, not people.
- Foster better relationships: The experience of collaborative creativity **builds bridges between people, teams and across disciplines**.
- 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.

- 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.

۱۶. اکوسیستم نوآوری



اکوسیستم نوآوری، شبکهای پیوسته از موجودیتها (مثلا استارتاپها، دانشگاهها، تامین کنندگان، رقبا و ...) است که قابلیتها را (به شکل همتکاملی) حول مجموعهای مشترک از فناوریها، دانش یا مهارتها توسعه میدهند. این شبکه بهصورت مشارکتی و رقابتی کار میکنند تا محصولات، خدمات و تجربه مشتری یکپارچه فراهم سازند. اکوسیستم نوآوری، روشی جدید نیست اما با توجه به پیچیدگیها، هنوز در عمل با سطح بهرهوری فاصله دارد. بسیاری از مدلهای کسبوکار دیجیتال (شهر هوشمند، سلامت دیجیتال و ...) اکوسیستمگرا هستند.

- √ اکوسیستم نوآوری را به عنوان بخشی از استراتژی نوآوری در نظر بگیرید و زمانی از آن استفاده کنید که (۱) برای توسعه ایدههای جدید، دچار فقدان تخصص، اطلاعات بازار یا سرمایه هستید و یا قصد دارید ریسک را مدیریت کنید؛ (۲) مدل کسبوکار یا مدل عملیاتی مورد نیاز، مدل اکوسیستمی است؛ و (۳) برای عملکرد بهتر در مراحل مختلف نوآوری (مثلا شناسایی یا ارزیابی طرحها) به دیـدگاههای بیـرون از سازمان نیاز باشد؛ و (۴) خصوصا برای تحول دیجیتال به توسعه اکوسیستم نوآوری برای شرکتتان یا مشارکت در اکوسیستمهای دیگر توجه داشته باشید.
 - √ **دیانای اکوسیستم نوآوری** شامل **تبادل ارزش، شرکای متنوع، قابلیتهای مشترک** و **قوانین مناسب تعامل** است.
 - \checkmark اکوسیستم نوآوری نظارت و بهبود عملکرد بلکه باید با مدیریت مستمر، اندازه گیری، نظارت و بهبود عملکرد تکامل یابد.

16. Innovation Ecosystems

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.
- 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.

۱۷. آیندهنگاری مداوم

آیندهنگاری مداوم از بهروشهای مختلف آیندهنگاری استراتژیک و آیندهنگاری شرکتی برای ارزیابی مستمر مدلها و استراتژیهای کسبوکار استفاده میکند و تعیین میکند هر یک چگونه بر شکلگیری آینده اثر خواهند داشت.

آیندهنگاری مداوم، روش و رشتهای برای شناسایی و ارزیابی روندها و پیشبینیها و همچنین پسنگری از آیندههای مطلوب است. آیندهنگری مداوم به درک دنیایی از تغییرات مستمر و چگونگی اثرگذاری بر شکلگیری یک آینده مطلوب موثر است.



- √ از مجموعه چهار اقدام استفاده کنید. یعنی مدل (ASAP) شامل کسب (Acquire)، ترکیب (Synthesize)، حمایت (Advocate) و آمادهسازی (Prepare) را بکار بگیرید تا یک متدولوژی مشـترک در شـرکت برای ردیابی و پاسخدهی به تحولات شکل گیرد. مجموعه ابزاری از تکنیکهای تحلیل روند برای برنامهریزی برای یک پاسخ عملی به تحولات ایجاد کنید.
 - √ **روندیابی** را برای جمعآوری اطلاعات روندهایی که بر تصمیمات استراتژی فناوری شما تأثیر م<mark>یگذارد، ا</mark>حیا کنید تا سازمان را برای آینده <mark>آماده کند</mark>.
 - √ **تجزیه و تحلیل (TPESTRE)** را برای شناسایی پیشرانها و موانع را بکار بندید و روندهای فنی، سیاسی، اقتصادی، اجتماعی/فرهنگی، اعتماد/اخلاقی، نظارتی/قانونی و محیطزیستی را در نظر بگیرید.
 - √ از تکنیکهای **داستانگویی** (مانند داستانهای علمی-تخیلی) برای کمک به ذینفعان جهت تصور بهتر آینده بهره ببرید.

17. Continuous Foresight

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.
- An increasing demand for tools that facilitate trendspotting and innovation management.
- 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.

- 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.

۱۸. مراکز تعالی نوآوری



توصیههای اجرایی

- √ مرکز تعالی نوآوری را به عنوان **نقطهای کانونی برای ترویج نوآوری** به طور گسترده در سراسر یک سازمان و همچنین **اشتراکگذاری تخصص** نوآوری ایجاد کنید.
- √ تیم مرکز تعالی نوآوری را با رهبران و کارشناسان متخصص شکل دهید. اعضای تیم میتوانند به تصدی پستهای دیگر یا کار در نقشهای خود به صورت پارهوقت یا تمام وقت ادامه دهند.
 - ✔ حوزه تمرکز یا قابلیت مرکز تعالی نوآوری را مشخص کنید که باید با اهداف کسبوکار همسو باشد.
- 🗸 هدف مرکز تعالی نوآوری را به روشنی تعریف کنید. این هدف میتواند شامل ارائه تحقیق، آموزش و نظارت بر کارکنان، ارائه راهنمایی، حمایت از سازمان از طریق بهترین شـیوهها و اداره تخصـیص مناسـب منابع باشد.

زمان

18. Innovation Centers of Excellence

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 individuals, making their expertise available more broadly.

Business Impact

An innovation COE brings benefits to 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.

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.
- 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**.
- An innovation COE can be used to research innovative products, services and business models that are **aligned** with the company's business strategies.
- An innovation COE promotes a culture of innovation in the organization.

Obstacles

Some 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**.

۱۹. نوآوری داده پیشران

نوآوری داده پیشران یا مبتنی بر داده (Data Driven Innovation – DDI)، استفاده از تجزیه و تحلیل دادهها برای توسعه یا تقویت محصولات، فرآیندها، روشهای سازمانی و بازارهای جدید است. نوآوری داده پیشران از تجزیه و تحلیل دادهها برای تقویت انسان به عنوان ملاحظات اولیه در این مراحل استفاده می کند. تجزیه و تحلیل دادهها میتواند هم کشف و هم اجرای نوآوری را هدایت کند و به سازمانها کمک کند تا مدلهای کسبوکار، محصولات و خدمات جدیدی با ارزش کسبوکاری تأیید شده ایجاد کنند.



- √ هنگام ایجاد یک محصول یا یک سرویس جدید برای نوآوری دیجیتال (خصوصا نوآوری در مدل کسبوکار)، از نوآوری دا**ده پیشران استفاده کنید.** با توجه بـه حجـم و فراگیــر بــودن دادهها، نــوآوری داده پیشران راه عملیتری برای نوآوری است. بعلاوه دادهها میتوانند به یک محصول دیجیتال تبدیل شوند که به خودی خود دارای ارزش باشند.
- √ از قابلیت تجزیه و تحلیل پیش بینی فعال شده توسط تکنیک های هوش مصنوعی برای انجام یک سری آزمایش در برابر یک مدل تحلیلی و ارزیابی یک ایده نوآوری بـرای سـناریوها یـا انـواع رویـدادهای مختلف استفاده کنید. ارزیابی یک نوآوری با استفاده از داده ها و تجزیه و تحلیل، خطر شکست را کاهش می دهد. به عنوان مثال، قابلیتهای هوش مصنوعی مولد که از الگوریتمهای یادگیری بدون نظارت برای ایجاد تصاویر دیجیتال، ویدیو، صدا، متن یا کد جدید استفاده میکنند نیز میتوانند سناریوهای جدیدی تولید کنند.

19. Data-Driven Innovation

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.

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.

- 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.
- 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.

۲۰. نرمافزارهای بصری همکاری

برنامههای بصری همکاری، **ابزارهای مبتنی بر ابر** هستند که تیمها را قادر میسازد تا در حین کار (چه به صورت همزمان یا ناهمزمان) با یک دیگر **ارتباط** برقرار کنند و خلاقانه با یکدیگر همکاری کنند.

این برنامهها، بوم دیجیتال مشترکی در دسترس قرار میدهند که قالبهای همکاری فراهم کرده و چارچوبها، جریانها، فعالیتها و طرحهایی بـرای همکاری ارائه میدهد.



- √ هنگام انتخاب یک برنامه بصری همکاری، از اینکه همه نیازهای ذینفعان محصول در نظر گرفته شده است اطمینان حاصل کنید.
- √ از یک برنامه بصری همکاری به عنوان ابزاری واقعی برای به اشتراکگذاری دانش محصول و طراحی استفاده کنید. کارگاه و اسپرینت طراحی بر روی پلت فرم انتخاب شـده، چـه از راه دور و چـه بـه صـورت حضوری را برنامهریزی و اجرا کنید.
 - √ از یک برنامه بصری همکاری برای برنامهریزی و اجرای فعالیتهای مطالعه کاربر که نیاز به تسهیل لحظهای و یک به یک دارند، استفاده <mark>کنید.</mark>

20. Visual Collaboration Applications

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 collocated, 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".
- 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, the role of the human will shift strongly towards research and strategy activities.

- 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 codesign features (such as a digital whiteboard) in design platforms (e.g., Figma) and business communication platforms (e.g., Microsoft Teams, Zoom Video Communications, etc.) are close to purpose-built visual collaboration tools.





۲۱. مراکز رشد شرکتی

مرکز رشد شرکتی، **موجودیتی در داخل یک شرکت** است که از سـرمایهگذاریهای جدید از ایدهپردازی و توسعه مفهوم در مراحل اولیه تا مدلهای کسـبوکار جدیـد معرفی شده در بازار پشتیبانی میکند.

مرکز رشد شرکتی به عنوان یک کاتالیزور بارای شارکت جهات تحریک نوآوری و توسعه سرمایهگذاریهای جدید عمل میکناد. ایان مراکاز فاراهم کنناده مشاوره، آموزش، تامین مالی، بازار و مقیاسدهی هستند.



- √ یک چشمانداز و استراتژی روشن برای ارائه **نوآوری رادیکال** ایجاد کنید تا با استفاده از چارچوب نوآوری، **رشد تحولآفرین** را هدایت کند.
- √ اطمینان حاصل کنید که رهبران و هیئت مدیره **متعهد به سرمایه گذاری** در **یک واحد کسبوکار مجزا** هستند که متعهد به رشد از طری<mark>ق نوآوری ا</mark>ست.
 - √ زمانی که شرکت در یک صنعت یا بخش به شدت در حال تحول و رقابتی است، برنامه را هدای<mark>ت کنید تا **پایداری کسبوکار درازمدت** ایجاد شود.</mark>

21. Corporate Incubators

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.

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 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.

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.

- 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.

۲۲. چارچوب نوآوری مدل کسبوکار



توصیههای اجرایی

- √ چارچوب نوآوری مدل کسب و کار را به عنوان **جزئی از استراتژی کلی نوآوری** بپذیرید.
- √ اطمینان حاصل کنید که مدیران و شرکتکنندگان قبل از اعمال چارچوبها برای نوآوری یا ایجاد مدلهای کسبوکار جدید، استراتژی و هدف کلی شرکت را کاملاً درک کردهاند.
- √ از چارچوب برای شناسایی مرتبط ترین موارد اقدام برای نوآوری فعلی یا ایجاد مدل های کسبوکار جدید استفاده کنید. سپس فناوری اطلاعات میتواند ابتکارات دیجیتالی را برنامهریزی کند که از اجرای آن اقدامات نوآوری مدل کسبوکار شناساییشده پشتیبانی کند.

زمان

22. Business Model Innovation Framework

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 doit-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.
- 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.

۲۳. بازی جدی لگو

بازی جدی لگو، یک روش کارگاهی منبع باز است که توسط شـرکت LEGO ابـداع شده است. این بازی مبتنی بر تحقیقات روانشناسـی شـناختی، یـادگیری عملـی و ذهنی را از طریق ایجاد، به اشتراک گذاری و تأمل تشویق می کند.

شرکتکنندگان مدلهای فیزیکی میسازند تا ایدهها یا راهحلها را نشان دهند، به طوریکه گفتگو و همکاری تقویت شود. این بازی دو فرمت را بـرای نـوآوری ارائـه میدهد، "استراتژیهای بلادرنگ " و "جانور"، که دومی مشکلات مهم را تجزیـه و تحلیل و حل می کند.



- √ با تعیین اهداف خاص و نتایج دلخواه برای جلسات بازی جدی لگو در فعالیت گم نشوید. بازی جدی لگو را می توان برای فعالیت هایی مانند توسعه استراتژی، بهینه سازی فرآیند و نوآوری استفاده کرد.
 - 🗸 بازی نکنید، نوآوری کنید. با استخدام یا یافتن یک تسهیل کننده معتبر برای اجرای جلسه، مطمئن می شوید که روندی ساختاریافته، جذاب و موثر را دنبال می کنید.
 - √ با تنظیم جلسه در **محیطی راحت** با نور کافی، فضای کار و آجر برای ساخت، همه را از روال کاری خود خارج کنید.
- √ زمان کافی برای جلسات اختصاص دهید که بسته به پیچیدگی اهداف می تواند بین ساعت ها و روزها اجرا شود. نتایج خود را اصلاح کنید و شواهد و روش های پیشنهادی را ارائه دهید. نتایج، بینش ها و آموخته های جلسات از طریق عکس ها، یادداشت ها و ضبط های دقیق، در جریان نتایج قرار دهید.

23. LEGO Serious Play

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.

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.

- 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, hands-on 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.

۲۴. وانمود به نمونهسازی

«وانمود بـه نمونهسازی»، یـک روش نوآورانـه بـرای آزمـایش نفـوذ بـازار قبـل از نمونهسازی برای اندازه گیری پذیرش بازار و به دسـت آوردن پیامـدهای توسـعه در عرض چند ساعت یا چند روز است. «وانمـود بـه نمونهسـازی» ترکیبـی از "وانمـود کردن" و "نمونهسازی" است. تکنیکها شامل وانمود کردن یک انسان به جای یـک ماشین (ترک مکانیکی)، فراهم کردن امکان دسترسـی بـه یـک محصـول وانمـودی (تسـت درهـای جعلـی)، ارائـه محصـولات مشـابه موجـود (برچسـب مجـدد) و نسخههای غیر کاربردی و کم عمق محصولات است.



- √ با ایجاد محیطی که در آن کارکنان برای آزمایش ایدههای جدید و توسعه آنها در تکرارهای سریع احساس توامندی کنند. **فرهنگ شکست سریع را تشویق کنید.**
 - √ با گردآوری تیمهایی با مهارتها و تخصصهای مختلف برای کار بر روی پروژههای نمونههای و<mark>انمود شده، **از یک رویکرد جامع اطمینان حاصل کنید.**</mark>
- √ با اولویت دادن به **بازخورد و تکرار ایدههای اولیه**، نیازهای مشتری را برطرف کنید. تلاش های خود را با توسعه حداقل نمایش ها در ساده سازی کم هزینه محصول یـا خـدمات بـرای جمـع آوری بـازخورد و انجام آزمایشهای سریع برای آزمایش با مشتریان واقعی و جمعآوری واکنشها و ترجیحات آنها بر روی دادهها تمرکز کنید.
 - 🗸 با تعیین اهداف روشن و معیارهای موفقیت علیرغم تکرارهای سریع، تمرکز خود را حفظ کنید. معیارها را تعریف کنید و از همسویی با استراتژی شرکت یا استراتژی محصول اطمینان حاصل کنید.

24. Pretotyping

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.

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 early in the development process, before investing in deeper product development.
- Fail-fast mentality: Pretotyping not only supports this mindset by allowing organizations to quickly test, learn and pivot, it also reduces 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.

- 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.

۲۵. سازنده شرکت



سازنده شرکت، ارائه دهنده خدمات است که مقدمات تأسیس شرکت و واحد کسبوکار جدید را فراهم میکند. مدل کسبوکار آنها این است که شرکتها را قادر میسازند تا بازارهای همیشه در حال تغییر را پشت سر بگذارند و از فرصتهای جدید با کارآفرینان سریالی بهره ببرند. طیف آنها از فعالیت مرکز رشدی تا مقیاسدهی به کسبوکار را در بر می گیرد. آنها اما بر خلاف برنامههای شتابدهی، یا به عنوان استودیوهای استارتاپ یا سازندگان طرحهای نوآورانه عمل میکنند و تیم پس از نهایی شدن کار به پروژه بعدی می رود.

- √ با تشریح واضح اهداف و نتایج مورد نظر، برای همکاری با «سازنده شرکت» آماده شوید. همچنین مطمئن شوید که **ریسکپذیری و <mark>سناریوی موفقیت مطلوب</mark> ت**عریف شده اس<mark>ت.</mark>
 - √ با تحقیق و ارزیابی شرکتها بر اساس سابقه، تخصص، تمرکز صنعت و همسویی با اهداف سازمان، **با سازنده شرکت مناسب شریک شوید.**
 - √ با تعیین **یک محدوده شفاف از همکاری**، تعهدات مالی، حقوق مالکیت معنوی و الزامات خا<mark>ص صنعت</mark> در قراردادهای رسمی، از اختلافا<mark>ت بعدی ا</mark>جتناب کنید.
 - \checkmark با یادگیری روشها، فرآیندها و شبکههای سازنده شرکت، از همکاری برای بهبود قابلیتها استفاده کنید.
- √ با تنظیم به موقع منابع مورد نیاز، برای واگذار<mark>ی آما</mark>ده شوید و زیرساخت های لازم و پشتیبانی مدیریتی را برای کمک به مقیاس و یکپارچه سازی سرمایه گذاری های موفق فراهم کنید.

25. Company Builder

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.

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.

- **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.

۲۶. آزمایشگاه نوآوری مجازی

آزمایشگاه نوآوری مجازی یک محیط دیجیتالی برای همکاری، ایدهپردازی، آزمایش و اجرای ایدههای جدید است. این روش، فرصتی به نـوآوران ارائـه میدهـد تـا بـا استعدادهای جهانی همکاری کرده و در عین حال به طور مستقل دورکاری کنند. این امر به دنبال کردن ابتکارات نوآوری تحول آفرین یا توسعه مشترک فراتر از مرزهـا در محیطهای توزیع شده و همکاری با غیرهمکاران با استفاده از پلتفرمهـا و ابزارهـای دیجیتال کمک میکند و دسترسـی، انعطـاف پـذیری و مقـرون بـه صـرفه بـودن را افزایش میدهد.



- √ آزمایشگاههای مجازی را با بیانیه ماموریت و چشم انداز کسب و کار، اهداف راهبردی همراستا کنید. **دلیل سرمایه گذاری در آزمایشگاه نوآوری مجازی** را به وضوح توجیه کنید.
 - √ زمینه کسب و کار فعلی را تجزیه و تحلیل کنید و **معیارهای متمرکز بر کسب و کار** را برای پیگیری پیشرفت تنظیم کنید.
 - √ یک **برنامه فناوری** روشن تدوین کنید که شامل سخت افزار، نرم افزار و قابلیت های شبکه اس<mark>ت</mark> و برای حمایت از همکاری و کار آزمایشگاه نوآوری مجازی مورد نیاز است.
 - √ اطمینان حاصل کنید که **خطمشیها و دستورالعملهای امنیت داده** برای جلوگیری از نقض امنیت دادهها در آینده به خوبی کار میکنند.
 - ✓ فرآیند نوآوری را برای کار پایدار آزمایشگاه تنظیم کنید.

26. Virtual Innovation Labs

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.

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.

- 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.

۲۷. اثرسازی



اثربخشی یک رویکرد و یک سری اصول نوآوری است که در آن بر بهترین استفاده ممکن از منابع تاکید میشود. با استفاده از منابع دردسترس، اهداف به شکل تطبیقیابنده شکل میگیرند چراکه دنبال کردن مسیرهای توسعه بلندمدت در مراحل اولیه توسعه دشوار است. لذا بر اثربخشی منبعمحور و بهرهبرداری از فرصتهای در دسترس تاکید میشود.

- √ با شناسایی و **توانمندسازی کارکنان** دارای **طرز فکر کارآفرینی** یا با **به کارگیری استعدادهای خارج از سازمان،** اصول اثرگذاری را فعال کنید.
- √ فرصتهای جدیدی را با **فهرستبندی منابع، مهارتها، مشارکتها و شبکههای موجود** ایجاد <mark>کنید که</mark> میتوان از آنها در فرآیند نوآوری استفاده کرد.
- √ با تعیین معیارها و **زیان مقرون به صرفه**، ذهنیتی را اتخاذ کنید که ریسک ها را بپذیرد و شکست را تحمل کند. بعلاوه با بهرهبرداری از روابط قوی با شرکا برای ا**ستفاده مشترک از فرصتها**، از خلق مشــترک حمایت کنید. تکرار با **بازخورد بلادرنگ** را جایگزین برنامه ریزی سفت و سخت کنید.
 - √ **موفقیت را جشن بگیرید**، زیرا عدم اطمینان احساس شده توسط نیروی کار را کاهش می دهد و ذهنیت چابک و کارآفرینی را پرورش می دهد.

27. Effectuation

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.

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.
- 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.

- Road mapping 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.

۲۸. تفکر سفر به ماه



«تفکر سفر به ماه» یک رویکرد بزرگ و جسورانه برای نـوآوری اسـت کـه هـدف آن مقابله با چالشهای مقیاس بزرگ با دنبال کردن راهحلهای متحولکننـده، بـهجای بهبودهای تدریجی است. این روش با الهام از ماموریت آپولـو ۱۱ بـر جهشهای ۱۰ برابری، همکاری بین رشتهای و بهره برداری از فناوری های نوظهور تاکید دارد. «تفکر سفر به ماه» ریسک و احتمال شکست را میپذیرد و بـا هـدف نهـایی ایجـاد تـأثیر مثبت و قابل توجه بر جهان از طریق نوآوری های موفقیت آمیز پیش میرود.

- 🗸 با برنامهریزی **فراتر از پیشرفتهای تدریجی،** یک **ذهنیت رهبری رویایی** ایجاد کنید. با نشان دادن **مزایای مالی و غیرمالی نوآوری های «تفکر سفر به ماه»،** ایجاد ارزش پایدار را هدف قرار دهید.
 - √ یک تیم یا آزمایشگاه اختصاصی بسازید که مسئول شناسایی، توسعه و پیگیری «تفکر سفر به ماه» باشند. با تشویق همکاری های متقابل، **سیلوهای دانش را بشکنید.**
 - √ برای تشویق به آزمایش و یادگیری از شکست با تقاضای شفافیت و ارتباطات فعال در سازما<mark>ن، **ذهنیت شکست سریع را اتخاذ کنید.**</mark>
 - √ با تخصیص منابع و بودجه برای حمایت از پروژ<mark>هها، ماهیت پرخطر و پر پاداش «تف</mark>کر سفر به ما<mark>ه» را بپ</mark>ذیرید.
 - √ با تعیین نقاط عطف واضح و تعریف انتظارات مشترک موفقیت، اطمینان حاصل کنید که پروژه ها روی ریل باقی می مانند.

28. Moonshot Thinking

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.

Drivers

- Rapid technological advancements: The pace of progress in **emergent technologies** encourages organizations to think beyond incremental improvements.
- 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.

- Risk aversion: Organizations may be hesitant to embrace risks associated with bold, transformative projects.
- Organizational culture: A culture resistant to **change** 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.
- 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.

۲۹. نوآوری ۸۱ پیشران

نوآوری الهپیشران فرآیندی است که از قدرت فناوریهای هـوش مصـنوعی بـرای تسریع نوآوری استفاده میکند. این به سـازمان هـا کمـک مـی کنـد تـا اختراعـات پیشگامانه در حوزه های تخصصی، مانند داروهای جدید و علم مواد را کشف کننـد. علاوه بر این، نوآوری مبتنی بـر هـوش مصـنوعی میتوانـد چـابکی و کـارایی را در صنایع مختلف افزایش دهد و در نتیجه نوآوریهای سرتاسری را بهینه کند.



- √ مناطق خاصی را فهرست کنید که در آن هوش مصنوعی روند نوآوری شما را تقویت می کند و به شما امکان می دهد محصولات را به رو<mark>ش های سریع تــ</mark>ر و کــم هزینــه تــر بــه بــازار بیاوریــد. بــا حوزههــای اثباتشدهتر، مانند شناسایی روند، جستجوی فناوری و تولید ایده شروع کنید. این مناطق دارای ارتباط تجاری بالاتر و عملیاتی شدن آسان تر هستند.
- √ تمرکز بر مدیریت هوش مصنوعی و آموزش کارکنان از طریق برنامه های هوش مصنوعی و سواد داده. افزایش دسترسی به داده های با کیفیت و قابلیت توضیح مدل برای رفع ابهام از فرآیند تصـمیم گیـری هوش مصنوعی.
 - √ تمرکز بر هوش مصنوعی به عنوان ابزاری برای تقویت انسان در فرآیند نوآوری. انتظار می رود در کوتاه مدت، هوش مصنوعی مولد تنها توسط تهاجمی ترین پذیرندگان فناوری استفاده شود.
 - √ تشویق به آزمایش در میان تیم ها برای جمع آوری تجربیات عملی در مورد موارد استفاده مختلف ارائه شده توسط نوآوری مبتنی بر هوش مصنوعی.



29. Al-Driven Innovation

Definition

AI-driven innovation is a **process** that harnesses the **power** of AI technologies to accelerate innovation.

It helps organizations unlock **groundbreaking inventions** in specialized domains, such as new drugs and material science. Moreover, AI-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.

Business Impact

In the short term, AI-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. AI 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. AI can catalyze a wide range of innovations, removing the constraints of data and information processing during the ideation process. Recent advances in generative AI, foundation models and synthetic data have made it possible to apply AI 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, AI 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.

- Creating a decision framework on **where to use AI** 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, AI-generated artifacts do not count on any **copyright protection**. This may decrease their value to enterprises.
- AI 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.

۰۳. OKRهای نوآوری

اتخاذ چارچوب اهداف و نتایج کلیدی (OKR) برای تعیین و پیگیری نوآوری است. OKRهای نوآوری، هدف گذاری انعطاف پذیری را برای تبدیل اهداف و اولویتهای نوآوری سازمان ها به نتایج عملیاتی ملموس و قابل اندازه گیری به ارمغان میآورد. رهبران شرکت با هماهنگ کردن نـوآوری بـا OKRهـای یـک سـازمان، مشـارکت و مسئولیت لازم برای رشد را در سراسر کسب وکار توزیع می کنند.



- در جلسات توسعه OKR بر نوآوری نیز تاکید کنید. اطمینان از OKRهای نوآوری از طریق موارد زیر را دنبال کنید:
 - √ شناسایی و هماهنگی با اهداف مشترک در کسب و کار.
 - √ با اندازه گیری های حساب شده، اهداف روشنی را تعیین کنید.
 - √ اهداف نوآوری را برای چندین ذینفع تعریف کنید.
- √ نسبت به نتایج پاسخگو باشید. پیشرفت را پیگیری کنید. انعطاف پذیر بمانید، به مشکلات رسیدگی کنید و مطابق با آن سازگار شوید.

30. Innovation OKRs

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 highpriority 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.
- 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.

- 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.

۳۱. مدیر ارشد نوآوری

مدیر ارشد نوآوری، در ارتباط با مدیران ارشد شرکت و گزارشدهی به آنها فعالیت میکند و مسئولیتپذیری و فرصت بیشتری برای نوآوری در سطح سازمان را فراهم میسازد.

با وجود مدیر ارشد نوآوری که زیر نظـر هیـات مـدیره فعالیـت میکنـد نـوآوری در شرکت و سازمان بهتر برنامهریزی و پیگیـری میشـود. بعـلاوه بـا ایـن کـار، امکـان همکاریهای بین واحدی در حوزه نوآوری افـزایش مییابـد و بـازدهی بـالاتر بـرای نوآوری محقق میشود.



- √ یک **مدیر ارشد نوآوری را برای رهبری ابتکارات نوآوری تحت نظارت هیئت مدیره** با اهداف کسب وکاری واضح منصوب کنید.
- √ تخصیص بودجه برای نوآوری در سراسر سازمان را زیر نظر یک مدیر ارشد نوآوری دنبال کنید. برای تسریع زمان پاسخگویی به چالشها، **پروتکل های امضای سریع** را تعیین کنید.
 - √ با به نمایش گذاشتن آن به عنوان یک ارزش اصلی، ارتباط با حمایت رهبری و **پرورش فرهنگ نوآوری** از بالا، نوآوری را توانمند کنید.
 - √ چارچوب بهترین عملکرد را برای نوآوری های <mark>مخرب، چ</mark>رخش <mark>فرهنگ و تحولات فناوری مستحکم کنید.</mark>

31. Chief Innovation Officer

Definition

A chief innovation officer, on or **reporting to the board**, provides **accountability** and greater opportunity for **enterprise wide 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.

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.

- 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.

۳۲. نوآوری فراگیر

نوآوری فراگیر، اقدامی هدفمند برای ایجاد فضا، تعاملات و نتایجی است که شمولیت و همراهی همه کارکنان در نوآوری را تقویت میکند.

با سازوکارهای مختلفِ گنجاندن نوآوری در سرتاسر سازمان، محیطی فراگیر از طریق تغییر فرهنگی ایجاد میشود که با مسائل حاشیهنشینی سازمانی (برخی کارکنان در حاشیه هستند و نقشی در تصمیمسازی و تصمیمگیری ندارند)، پتانسیلهای خفت و نوآوری مبتنی بر تنها یک راهحل مقابله میکنند.



- √ برای استقبال از طیف وسیعی از ایدهها، استراتژیها و راهحلها، **تولید ایدهپردازی «متن باز»** (open source idea generation) را ز<mark>ودتر در فرآیند نوآوری</mark> اجرا کنید.
- √ تیم نوآوری را از روشهای متعدد برای فعالیتهای نوآورانه **آموزش** دهید. از روشهای یادگیری و مشارکت تا تجربیات مختلف زندگی را بکار گیرید و راههای متعدد برای طوفان فکری، اسـپرینت نـوآوری و غیره، را استفاده کنید تا **امکان تفکر تازه و تجربیات فراگیرتر** فراهم شود.
- √ بر **تنوع کارکنان** تمرکز کنید. مجموعههای جدیدی از جوخههای نوآوری را به ویژه در ایدهپردازی اولیه شکل دهید. با داشتن کارمندانی از چ<mark>ندین</mark> واحد کسبوکار، میتوان ابزارهای گنجاندن نوآوری فراگیـر را برای تیمها به طور موثرتر استفاده کرد. هنگام کاوش و بررسی شرکای **اکوسیستم نوآوری**، ابزارهای همکاری فراگیر را بکار گیرید.

32. Inclusive innovation

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.
- **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.
- (diversity, equity and inclusion [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.

- 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.