Industrial Innovation Culture

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***Abstract*—** **Current rapid market and technology changes require companies to become more adaptive and assertive in their pursuit of Innovation. Companies must ensure that the changes they make are extensive to cover not only processes and technologies but also employee mindsets and behaviors. To realize this cultural transformation, leaders must be the first to model the change. Growth is fueled by Innovation. It's also a mentality impacted by one's ideas, values, and actions. As a result, company culture has a significant impact on Innovation, with the ability to either stimulate or constrain it. As a result, many businesses have sought to implement systems and procedures that promote a creative culture. While such steps are frequently seen as panaceas, they are only the beginning. To create a genuinely creative culture, a company's top executives must adopt a thoughtful approach. Every action and word shows a genuine desire to foster and promote new ideas. Developing an innovation culture necessitates new leadership, people, process capabilities, and a focus on opportunity. A culture of Innovation necessitates improvements in procedures for discovery, experimentation, and the development of portfolios of choices. Because options and solutions are better defined, these new processes will assist in minimizing risk exposure. Uncertainty and ambiguity will be reduced by better definitions [1].**

> **Keywords—*Culture, Innovation, Management.***

I. WHAT IS INNOVATION MANAGEMENT?

For the majority of company executives, Innovation is now a top priority. However, determining which strategy would provide the highest return on investment is not always straightforward. This procedure is simplified because of innovation management. The method allows you to tap into the wisdom of the crowds to find, develop, and execute the most valuable ideas for your company [2].

II. THE CONCEPT OF INNOVATION MANAGEMENT

The systematic process of coordinating creative activities throughout your company is known as innovation management. When used correctly, innovation management may foster an innovative culture in which new ideas are created regularly. It may also guarantee that large-scale, complicated innovation objectives are broken down into smaller, more achievable goals that different participant groups can work on [3].

III. METHODOLOGIES & APPROACHES

Companies may manage and scale up Innovation in several ways across the board. The most common innovation management techniques, on the other hand, maybe divided into two categories:
- Incremental
- Disruptive

A. Incremental Innovation

This strategy entails making gradual enhancements to a current product or service. It may entail lowering prices, introducing new features, or applying methods to make the product or service more customer-friendly. As a result of customer demand, incremental Innovation is most easily visible in software upgrades, where new versions offer capabilities that build upon the old.

B. Disruptive Innovation

Disruptive innovations require making bigger changes that come with a higher risk and a higher potential reward. Larger companies typically overlook disruptive Innovation due to the higher risks involved, leaving them open to smaller businesses specializing in disruptive features. Despite the increased level of risk involved with disruptive Innovation, it is often required to ensure its long-term sustainability. Philip Morris International, one of the world's largest cigarette manufacturers, is a beautiful example of self-disrupting Innovation in action. Philip Morris International is investing substantially in Innovation to achieve a smoke-free future. Depending on the nature of your industry, one of these categories will likely take precedence over the other. However, it's critical to give each its proper consideration to maximize your company's innovation management efforts at all levels. The following are the most common ways to innovate: Integrative Approach, Emergent Approach, Customer-Centric Approach, The Active Approach, The Self-Disrupting Approach.

IV. TYPES OF INNOVATION

New opportunities emerge throughout the whole growth cycle, whether a company is just beginning to explore Innovation or has already earned some expertise with it. Companies may analyze the opportunities that exist and how different techniques might help them generate and capture value by categorizing Innovation into four main areas. There are four types of product innovation (incremental, modular,

architectural, and radical). These categories would significantly affect how businesses structure their innovation management [4].

Incremental Innovation: It is the process of continuously improving current products or services to add value to a market that already exists. With characteristics including product line extensions, cost reductions, and next-generation goods, it eliminates faults and progressively increases performance. This sort of invention is short-term in nature, with little technological development and little commercial influence.

Architectural Innovation: The adaptation of current systems for a completely new market is referred to as architectural Innovation. Architectural Innovation is the process of altering a product's overall design by combining existing components in novel ways. This is short-term to medium-term invention.

Disruptive Innovation: When new technology and products are developed to service an existing market, this is known as Disruptive Innovation. New technology enables this sort of Innovation by providing a more efficient and accessible alternative to what is already available on the market. Businesses use disruptive Innovation to meet the changing demands of their customers, resulting in the creation of totally new value streams and service offerings that did not exist previously. Disruptive Innovation typically begins at the low end of the market sector, but as the technology matures, it eventually supplants existing industry leaders. This type of invention occurs over a medium to a lengthy period.

Radical Innovation: When a company applies new technology to a new market, this is known as radical Innovation. When a new product, method, or service with significant technical improvement has an enormous market impact and entirely replaces an old offering, this is called Disruptive Innovation. This is a long-term process of invention.

V.   THE CULTURE OF INNOVATION

A culture of Innovation stimulates creative thinking and advances efforts to extract economic and social value from information, resulting in the development of new or improved products, services, or processes [3].

A healthy innovation culture is defined by a standard set of values and mutually reinforcing views about the importance of Innovation and an integrated pattern of behavior that encourages research and development. A thriving innovation culture can take advantage of a research and innovation ecosystem's current assets.

The first thing to realize is that Innovation isn't a one-time activity; it's a continual effort comprised of eight components, known as the Eight Pillars of Innovation Culture [3].

Processes. Designing, implementing and adjusting innovation strategy, governance, performance measurement, innovation technology, and team structure.

People. Finding the right talent and training them to work as a team.

Projects. Taking the lean approach (short sprints, starting small, growing when needed).

Problems. True Innovation solves real-life difficulties; it's not a C-suite's pet project.

Priorities. A long-term business innovation strategy, but one that can be adjusted based on the changing business needs and preferences.

Progress. Measurable results and progress towards the goals set.

Partnerships. External expertise and trends can help allocate internal effort with the topmost efficiency.

Places. Creating a workspace that stimulates creativity, mentally and physically.

VI.   CHARACTERISTICS OF INNOVATION CULTURE

It's easy to say, 'I want my business to be more innovative,' but what does that look like in reality. I've noticed the same set of characteristics appear time and time again. And although these characteristics do vary by company, industry, and geography, they're more consistent than you might think.

Active Opportunity Management - Opportunity management happens (a) on an ongoing basis as part of leadership meetings/conversations and (b) during business/strategic planning. New opportunities are actively identified, prioritized/deprioritized, and appropriately resourced on an ongoing basis. It's always clear what is being pursued and why.

Adequate Funding of Ideas - New ideas cost money. Therefore, funding is set aside in advance to allow for new ideas to be piloted and scaled if successful. If this doesn't happen, ideas will die in PowerPoint. This funding needs to be sufficient, protected, and allocated at the beginning of the year, which means you often won't know exactly what it will be used for and therefore need to leap of innovation faith.

Leadership Role Modeling - Leaders do more than just nod along to Innovation. They turn up to meetings on time and stay to the end. They are active and contribute their ideas and perspectives. They inspire possibility and visibly show energy. And they pay attention to how they behave around fresh thinking, avoiding the default behaviors of judging and decision-making.

Stretch Goals and a Higher Purpose - Individuals and teams have goals that cannot be achieved without pushing beyond what has always been done - so by definition; they are forced to think differently and innovate. These stretch goals should be attainable but not without challenging current thinking. And if they can also be connected to a higher emotional purpose or cause, this adds extra motivation and ultimate satisfaction when they are reached.

External Stimulus - The outside can be found on the inside. External provocation, insight and foresight are systematically brought in through a rich and

diverse network of partnerships. This knowledge is captured, shared, and used continuously to inspire and fuel new ideas.

Controlled Madness - Deliberate use of unbridled expansive thinking, where the world is your oyster, and anything is possible, combined with intelligent analysis and rigor, can generate sniper-like creativity. People should be apparent how and when to give themselves license to push the boundaries and go a bit renegade in their thinking and attitude - and when not to.

Up-Down-Left-Right Collaboration - Working in small groups with different people is the norm and is how things get done. Levels and silos are put aside in favor of shared ownership of a common issue and solution. This type of collaboration unlocks superior thinking and unlocks energy and creativity in everyone involved. Diversity becomes a genuine advantage versus just a tick in the box.

Stories Everywhere - If you ask someone what they've done recently, that's innovative, and they will bore you with example after example. It's not hard to find evidence, and it goes beyond just product. Anecdotes are told and retold until they become a legend, and people strive to do something worthy of becoming part of the narrative. Stories become recognition in themselves.

Humility - People can see the cracks and acknowledge what needs to be made better. It's seen as OK to showcase failure. Wins are shared, not grabbed, and triumphs feel balanced. Without humility, collaboration and togetherness are challenging. With humility comes a sense of togetherness, and that makes Innovation and stretch much easier to do.

Room for Craziness - It's OK to stand out from the crowd. It's OK, to be honest about what you did at the weekend. It's OK to share scary ideas. It's OK to wear your heart on your sleeve. It's not OK to judge. If you want to stretch the boundaries with ideas, you have to push the boundaries with talent. Tolerance and empathy become essential competencies in this environment.

VII. How Various Organizations have Adopted an Innovation Culture

We frequently associate Innovation with brainstorming sessions about tempting new items, followed by intelligent marketing strategies to launch and sell them. But, for a moment, forget about the product and contemplate a holistic approach to Innovation across your entire company. Starting with the "4 P's: profit models, processes, products, and policies," according to Forbes, can help you to move faster and more operationally agilely by breaking Innovation down into four factions and treating them as independent tasks [5].

Empower Your Employees, and They'll Provide Value in New Ways - As a business value, Innovation entails cultivating a culture in which every person believes they have some autonomy with expectations, of course, to think independently and develop innovative solutions to issues. Great leaders make wise judgments, but they also recognize that they can't and shouldn't do everything themselves. Listening, guiding, trusting, and motivating your team are all crucial aspects of leadership.

Understand That Failing Is OK - When it comes to cultivating an innovation culture, failure is unavoidable, and that is part of the issue, the fact that there is nearly always a degree of uncertainty. If you never fail, you're probably not innovating very much. In comparison, no one sets out trying to fall, realizing that it will happen and that you'll be fine when it does, a sign of a strong leader.

Choose Your Approach to Innovation Metrics Wisely - We're all aware that data is essential, but can you quantify something as intangible as an idea? Even more difficult an idea culture? You can, as long as you take your time and think about what you're going to measure. You'll need numbers on client activity about your product or service, regardless of your business - that's a given — but look elsewhere as well. What's the return on your strategic alliances? How about obtaining information on how much time your team is needed to devote to discovery? How many of them have received training on how to innovate? Isolate what can make a difference for your company and base your approach to innovation metrics on it.

Don't Be Afraid to Take action — and Quickly - You must be willing to support creative ideas, not merely produce continual conceptual discourse, to develop an innovation culture. This isn't to argue that every concept is brilliant or that every new product proposal should be prototyped immediately. Allow enough time to acquire information and make an informed decision, but not too much. Be agile enough to make those decisions confidently and systematically, with no more downtime than is necessary, whether you invest more resources or choose an alternative course.

Learn from the Past and Look to the Future - According to Accenture's 2015 US Innovation Survey [6], 60% of organizations confessed that they had not learned from previous mistakes through corporate Innovation. That's a lot of information! In addition, 72 percent of the businesses polled stated they frequently overlook possibilities to capitalize on underdeveloped locations or markets. Surprisingly, several of the same companies expressed strong confidence in their ability to innovate. This disparity in perceptions of what it takes to be a successful business innovator demonstrates that many executives do not take the time to learn from their errors. While moving forward, it's critical to improve what isn't working. I know I said failing is fine, and it is, but failure complacency is not.

The Burning House - Consider the "Burning house" scenario as a bonus tip. Now put it to use in your company: What would you want to take with you if everything fell apart? What would you grab as you hurried out the door if your house was on fire? I'd choose the capacity to innovate and inspire creativity in my team because it's the foundation for growth, uniqueness, and the secret sauce.

VIII. How Innovation Culture Leads to Organizational Success

Innovation is a notion that is often considered extremely necessary for business without any comprehension of what it is or why it is so crucial. Innovation is much more than coming up with new ideas. Although Innovation is an essential aspect of it, Innovation also refers to the process of discovering new ways to do things, changing business models, and adjusting to changes to provide better products and services. Successful Innovation allows businesses to create new ideas, solve issues, penetrate and develop markets more quickly, and achieve a competitive advantage. However, identifying Innovation as a worthy activity within your firm isn't necessarily enough to reap the rewards [7].

Raise the Stakes - Innovation is encouraged as a regular aspect of how a company does business in innovative work environments. Rather than recognizing and correcting problems as they arise, the most successful companies strive to raise the standard. Innovation is incorporated into the activity rather than being a chore, resulting in constant progress regardless of orders. Maintaining a steady flow of innovations to products, processes, and services allows you to stay ahead of difficulties and competitors. Attempting to address Innovation as needed or as complications develop might cause disruptions in the normal flow of operations. By expecting improvements to come as a natural part of the work process, cultivating an innovation culture raises the bar. Anyone can learn to innovate and put it to use systematically. Employees will be motivated to learn and improve this talent if their workplace fosters a safe and open environment.

Strategies That Work - Leaders must lead the formation of an innovative culture and serve as role models for other employees. Fostering Innovation in a way that benefits the entire company necessitates a strategy and a plan. The appropriate method has a significant impact on how your innovation culture affects your business. There are a few tactics that can be combined to create a powerful effect.

Focus on results - It is critical for the workplace culture to clearly state the end objective and desired outcomes without micromanaging the process. Allowing teams to be responsible for attaining the intended results allows for more creativity and dynamic Innovation. This component of the culture is significant because it will enable people from all backgrounds to freely develop in new ways without being hampered by rigid structures.

Challenge the current condition - effective cultures encourage employees of all levels and roles to share their thoughts and opinions. There is a courteous method to challenge the company status quo that will foster greater collaboration and Innovation among colleagues. Higher employee involvement leads to increased productivity in environments that encourage open communication.

Do not take the easy way out - simple aims do not demand inventive solutions. Setting difficult-to-

obtain organizational goals and motivating team members to develop innovative ways to attain them is critical. Cultures that foster this type of creative change get the best results from solutions that were previously unimagined.

Creating a Culture of Innovation is critical for discovering new methods to innovate, raise profitability, increase employee engagement, and improve your company's overall health. There are techniques to determine exactly where your firm is on its innovation path, whether it is new to making Innovation a priority, has had innovative efforts in place for years, or is in the midst of a change. This knowledge may help you identify your strengths and limitations and continue developing an innovative culture.

IX. Effects of an Innovation Culture

Growth necessitates structure and discipline, and organizational changes can strain the creative culture that is important for future success. Companies must institutionalize the innovation process to maintain a competitive edge; they must develop an organizational climate in which creative thinking is essential to their beliefs, assumptions, and actions. Innovation is one of an organization's most vital talents, and it plays a crucial role in its culture. For an organization or example, a corporation with many customers with varying wants and demands, the impact of Innovation may be both beneficial and harmful. Innovative culture faces both expected and unanticipated difficulties. Forecasting talents can solve known obstacles, while unforeseen challenges might lead to devastating outcomes. Innovation is an organization's most important capability, and it plays a crucial role in its culture. For example, for an organization with a large number of customers with varying requirements and demands, the impact of Innovation can be both positive and negative [8], [9].

A. Positive Effects of Innovative Culture on Organizations

- Promotes Individual Growth

Individual growth is one of the essential benefits of creative culture. The desire of the company to invest in the employee's progress encourages employees to invest in creative energy at work.

- Build Confidence

Fear of making a mistake is replaced with confidence resulting from experience, encouragement, and freedom. Confident workers are aware of their strengths, do not fear failure, and are more likely to try new ideas.

- Optimizes the work environment

Implementing an innovative culture in the workplace leads to the enhancement of workforce capability and high-quality goods, all of which contribute to the organization's overall success. In terms of product quality and output, the work environment is critical.

- Adapting to Rapidly Changing Environment

The organizational environment has been rapidly evolving. It is a set of forces and conditions outside of the organization's limits and can influence how it runs.

B. Adverse Effects of Innovation Culture on Organizations

- Unpredictable Challenges

An innovative culture cannot handle the unforeseen challenges that can lead to a significant organizational collapse.

- Communication Gap

The increase of the communication gap between employees and employers is one of the most important effects that organizations experience when implementing innovative changes. When the communication gap between coworkers in an organization widens, it leads to conflicts and various disagreements between management and employees.

X. CONCLUSION

To summarize, Innovation is an undeniable fuel for business growth, yet many executives in a variety of industries fail to foster an environment that stimulates and rewards creativity. An innovative culture is challenging to establish, and even once established; it is difficult for employees or members of a commercial organization to accept. Managing Creativity and Innovation looks into the manager's role in stimulating organizational creativity and guides what managers and leaders can do to boost practical Innovation.

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