

4-1 Benchmark Study: 3M

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MBA-580-Q2734 Innovation and Strategy in High-Perform Organizations 23TW2

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January 20, 2024

Analyze 3M's Experience For a Process-Based Approach Towards Innovation

How Does 3M Manage Innovation?

Innovation is the key to any company's success in the modern world. Companies like 3M have shown time and time again that they can achieve exponential growth and profitability only through innovation. At the heart of 3M's innovation management strategy lies a culture of continuous innovation, which they have carefully cultivated over the years (Tidd et al., 2013). But what exactly does this culture of innovation entail, and how does 3M manage innovation?

Encouraging Entrepreneurial Spirit is one of the core principles of 3M's innovation management (Tidd et al., 2013). The company believes strongly that innovation cannot be created by just a few employees in R&D, and that innovation is a company-wide effort. 3M encourages employees to think like entrepreneurs and take ownership of their projects. They provide excellent resources for their employees to develop their ideas, including training and education programs, and internal venture capital funds for research projects. This approach ensures that innovation permeates every aspect of the company and leads to growth and success.

Allowing Room for Failure Innovation can only take place when people feel confident enough to take risks. 3M understands this well, and therefore welcomes and even celebrates failures, as long as people learn from them. To encourage risk-taking, 3M also has a unique '15% rule,' where employees are allowed to spend 15% of their work time on developing their ideas. This approach provides an environment where innovation can thrive even if an idea initially fails.

Open Communication Open communication is essential for any company to succeed, and 3M understands this well. At 3M, everyone is encouraged to share their ideas through formal and informal communication platforms. These channels provide employees with a platform to share their thoughts on improving products or processes. The company also has a 'Technical Council,' where researchers from different departments can come together to discuss and collaborate on their innovative ideas.

Customer-Focused Innovation To ensure that 3M provides unique and competitive products to customers worldwide, the company has a customer-focused innovation approach. Instead of just focusing on their products, 3M puts the customer's needs at the forefront of their innovative efforts. This approach includes working directly with customers to understand their needs, developing solutions that exceed customer expectations and partnering with customers to deliver innovative solutions.

Diverse and Inclusive Workplace Innovation is all about diversity of thought. 3M understands this and fosters a diverse and inclusive workplace where employees feel confident and comfortable sharing their thoughts and ideas. This includes cultivating a culture of inclusion where people from different backgrounds, nationalities, ages and genders can collaborate. The incoming CEO, Mike Roman said about this, "We recognize that we want our company to be inclusive and welcoming to everyone."

3M's continuous innovation strategy has led to a reputation as one of the world's most innovative companies. The company's success lies in its culture of encouraging risk-taking, open communication, a customer-focused approach and providing a diverse, inclusive work environment. Through these strategies, 3M continues to grow and disrupt markets, creating

products that are essential for everyday life. As a CEO, adopting 3M's innovation management strategies could lead to your company's success, like that of this industry leader.

The Innovation Strategy and Leadership Style within 3M

In today's ever-changing markets, innovation is crucial to stay competitive and maintain growth. 3M is a company that has mastered the art of innovation and leadership. 3M has been able to stay at the forefront of technological advancements by adopting an innovation strategy that is driven by a unique leadership style (Tidd et al., 2013).

Innovation Strategy: 3M's innovation strategy is based on encouraging creativity and autonomy amongst its employees. They provide them with resources and tools to innovate and develop new products, and their employees have the freedom to work on projects they are passionate about. Moreover, 3M has a cross-functional approach, where teamwork is highly encouraged, and employees from different departments work together. The culture of innovation at 3M is fostered through a structured program called "15% time." Here employees can use up to 15% of their working hours on a project of their choice. This initiative is responsible for some of 3M's most successful products, including Post-it Notes and Scotch Tape.

Leadership Style: Innovation and leadership are entwined at 3M. Their leadership style is based on the principle of "Lead without a Title." This means that everybody in 3M has the potential to be a leader and contribute to the company's success, regardless of their position or title. 3M's leadership philosophy puts trust and autonomy in its employees. This builds a culture of innovation that attracts top talent, fosters creativity, and encourages experimentation. The

company prefers its leaders to take more of a supportive approach instead of the traditional autocratic approach, leading the people and not just the project.

Customer Focus: At the heart of 3M's innovation strategy is its ability to work closely with its customers. 3M believes that by listening and understanding their customer's needs and desires, they can develop products that ultimately meet those desires and are more likely to succeed. 3M's strategy is based on prioritizing products that will make a difference to its customers, and they have created a simple, easy-to-follow process to prioritize customer needs.

Sustainability: 3M has made sustainability one of its top priorities, which is reflected in its innovation strategy. Their focus is on creating sustainable solutions that minimize their environmental footprint. This is accomplished through a scientific approach that emphasizes Life Cycle Assessments, which help in understanding the true environmental impact of their products. Based on this assessment, they work to improve their current products' lifecycle and develop new sustainable products that help solve some of the world's most pressing environmental challenges.

3M's innovation strategy and leadership style are exemplary for CEOs looking to find ways to foster innovation in their organizations. The company is at the forefront of innovation, winning accolades for its ability to create new products that solve customers' problems. By following 3M's example, CEOs can create a culture of innovation that fosters creativity, encourages experimentation, and ultimately results in success. The importance of customer focus and sustainability is emphasized at 3M, and it is essential to follow these aspects while developing an innovation strategy. Therefore, CEOs must learn from 3M and apply its principles to stay ahead in an ever-changing environment.

How Does 3M Enable The Innovation Process?

Innovation is the key to staying competitive and remaining relevant in a constantly evolving marketplace. This is where 3M comes in – a multinational corporation that is dedicated to producing groundbreaking products that transform the world we live in.

Firstly, 3M emphasizes the importance of research and development. In fact, a significant part of their annual budget is allocated to R&D, with the company investing over \$1.8 billion annually in this area. 3M's innovation process is grounded in science, technology, and collaboration to deliver solutions that solve customer needs. They have a thriving innovation centre that explores key trends and challenges in various industries, uncovering insights to address customer needs. This approach has enabled 3M to invent a variety of products, such as Post-it Notes, which have had a widespread impact on people's lives (Tidd et al., 2013).

Secondly, 3M value diversity of perspectives, skills, and ideas. They recognize that innovation is not a one-person job, but rather a group effort, and they strive to foster a culture of collaboration. For example, they have an Open Innovation Program that encourages external creatives to bring innovative new concepts that address customer needs. 3M also brings together its vast pool of technical experts to form Cross Enterprise Teams to solve the toughest challenges for their customers. This holistic approach has allowed 3M to develop a significant patent portfolio of over 100,000 patents and remain ahead in the game of developing game-changing products (Tidd et al., 2013).

Third, 3M empowers their employees to be innovative by fostering a creative culture and providing professional development opportunities. 3M encourages risk-taking and recognizes that not all initiatives will succeed, but the key is to learn from each experience and use that

knowledge for future endeavors. 3M also encourages team members to attend industry conferences and talks to gain new knowledge, cross-pollination of ideas, and stay on top of the latest trends (Tidd et al., 2013).

Fourth, 3M's business model supports innovation by using a 15% rule, where employees are allowed to trade their time in carrying out their current work duties, dedicating it to the project of their choice. This approach channels employee ideas and creativity to new areas, resulting in solutions that can drive growth. 3M has also introduced the 'New Ventures' fund to support innovative employee ideas that address customer needs. This initiative has significantly impacted the company's growth, with more than \$100 million set aside for the same in 2020 (Tidd et al., 2013).

Fifth, 3M facilitates an effective and streamlined commercialization process, aimed at hitting the markets and generating economic value quickly (Tidd et al., 2013). This framework not only lowers the time to market but also lowers the cost of commercializing new products. This mindset provides much-needed flexibility and speed to 3M, enabling them to focus on the business needs of their customers and stay ahead of the competition.

3M's innovation blueprint is one that can be emulated to streamline our businesses' inputs and outputs. They consistently put a premium on investing in R&D, foster a culture that encourages diversity and collaborative teamwork, offer professional development opportunities to their employees, while providing flexibility. Their commercialization process is smooth, leading to increased profit margins. These set of factors, when implemented, can lead to groundbreaking products that solve customer needs and add value to our businesses. Let's take a

cue from 3M, focus on innovation, and embrace the changes that can create disruptive solutions that solve our customers' needs (Tidd et al., 2013).

Identify Significant Features or Processes That Promote Innovation From The Case Study

How does the management team within 3M recognize and reward employees?

3M management team recognizes and rewards their employees in numerous ways, from employee development and recognition programs to competitive compensation and benefits packages. They prioritize employee satisfaction, engagement, and growth, as they understand that happy and motivated employees lead to a successful, innovative, and competitive company (Tidd et al., 2013).

Flexible Work Arrangements: 3M management team understands that work-life balance is crucial to employee morale and well-being. Thus, they offer flexible work arrangements, such as telecommuting, flexible scheduling, compressed workweek, and job sharing. As long as the employees meet their work obligations, they can structure their work arrangements to suit their lifestyle, family commitments, and personal needs.

Employee Recognition Program: 3M management team acknowledges and rewards employees who demonstrate exceptional performance and contributions to the company. They have a formal recognition program that includes awards, bonuses, thank-you notes, personal visits from higher management, and more. The employee recognition program encourages a culture of appreciation, recognition, and continuous improvement.

Learning and Development Opportunities: 3M management team values employee development, growth, and potential. They offer various learning and development programs, including training, coaching, mentoring, and tuition reimbursement. They also prioritize internal

promotions and career advancement opportunities, as it promotes employee engagement and retention.

Competitive Total Rewards Package: 3M management team understands that employee compensation and benefits play a significant role in employee satisfaction and retention. Thus, they offer a competitive total rewards package that includes competitive salary, health insurance, retirement plans, vacation and sick time, disability insurance, and more. They regularly review, benchmark, and adjust the total rewards package according to industry standards and employee feedback.

Community Involvement and Volunteerism: 3M management team encourages employee involvement and community outreach. They have a robust volunteer program that allows employees to participate in various charitable organizations, events, and programs that align with 3M's purpose and values. By supporting employee volunteerism and philanthropy, 3M management team fosters a culture of social responsibility, civic engagement, and employee morale.

What is the importance of permission to play within 3M?

It is clear from 3M's success that building a culture of trust, accountability, compliance, and strong reputation is a vital ingredient in ensuring long-term success for any company. By giving importance to ethical and legal standards, companies can foster a culture of success and create better outcomes for all stakeholders.

Building Trust - At 3M, permission to play is about building trust with customers and stakeholders. Trust is essential in today's competitive market, as a tarnished reputation can have a significant impact on the bottom line. By adhering to ethical and legal standards, 3M builds a

culture of trust that fosters strong relationships with customers, investors, employees and partners.

Accountability - Permission to play also fosters accountability within a company. It encourages employees to take responsibility for their actions and ensures that everyone works towards common goals. By following ethical and legal standards, 3M establishes strong accountability mechanisms. As a result, the company can hold employees accountable and ensure that they work towards the same objectives.

Compliance - The importance of permission to play extends beyond trust and accountability. It also ensures compliance with local and international regulations. Given the complexity of the regulatory landscape, 3M places a high priority on compliance and works closely with governing bodies to ensure it remains compliant with all applicable laws. This approach ensures that the company can continue operating in various jurisdictions and meet its commitments to all stakeholders while remaining compliant.

Reputation - As mentioned earlier, Trust is an essential foundation of permission to play. By fostering a culture of trust and accountability within the company, 3M ensures its reputation remains unblemished. This approach gives the company an upper hand over its competitors, providing it with a significant, long-term competitive advantage.

Better Outcomes - Companies that adhere to ethical and legal standards have an increased chance of success. As part of its permission to play policy, 3M works towards creating innovative products that are environmentally sustainable, increasing the company's positive impact on society. These measures enable the company to align its business purpose beyond just

profits. By integrating a sustainability lens into the company's culture, it creates better outcomes for all stakeholders in the long-term.

How do the 3M attributes of patience and acceptance of mistakes enhance an innovative culture?

An innovative culture is not built by simply pushing employees to come up with ideas faster or work longer hours. Instead, it is built by creating an environment that values patient experimentation and the acceptance of mistakes. At 3M, these qualities have been instrumental in building an innovative culture that has lasted over a century. By embracing patience, accepting mistakes, fostering collaboration, encouraging risk-taking, and promoting adaptability, 3M has built a culture that allows employees to think creatively and continue to innovate.

3M Helps Foster a Creative Environment: Patience is one of the most important qualities required for innovation. Having a culture that values patience means allowing employees to think creatively without the pressure of having to come up with something right away. Patience allows for experimentation and exploration, which are crucial for coming up with new ideas. At 3M, employees are given the time to think outside the box and the company helps foster an environment that encourages creativity and exploration.

3M's Acceptance of Mistakes Drives Learning and Growth: Mistakes are bound to happen when a company is pushing boundaries and trying new things. But an innovative culture is one that embraces these mistakes and uses them as an opportunity for growth and learning. At 3M, employees are not punished for their mistakes, but are instead encouraged to learn from them. This creates an environment where employees are not afraid to take risks, knowing that the company values learning and growth over perfection.

3M's Patience and Acceptance of Mistakes Fosters Collaboration: A patient environment is one that is conducive to collaboration. When employees are not rushing to come up with ideas, they have the time to bounce ideas off each other, finding inspiration in unexpected places. Similarly, when the company values the acceptance of mistakes, employees are more likely to work together to learn from those mistakes, instead of blaming each other. This fosters a collaborative environment where employees feel free to share their ideas and work together to come up with solutions.

A Culture of Patience and Acceptance of Mistakes Encourages Risk-Taking: Innovation requires risk-taking, and risk-taking can mean making mistakes. That's why 3M has built a culture that values taking risks, knowing that it is a necessary part of innovation. When employees are allowed to take risks and make mistakes, they are more likely to innovate and find new solutions to problems. This encourages creative thinking and allows for breakthrough ideas to emerge.

Compare the organization from the course scenario with 3M

What are the differences between the two organizational structures?

3M's flat organizational structure promotes the quick flow of ideas to decision-makers, prioritizing innovation over excessive rules and hierarchy. They value "creative association," integrating input from both technical and marketing sides (Tidd et al., 2013).

In contrast, our company operates with a taller structure using a matrix design. While this allows for efficiency through "Centers of Excellence," it also creates silos and rigid processes that can restrict creativity and hinder innovation (*MBA 580 Organization Overview (Processes, Structure, Culture)* n.d.).

As we enter the 21st century, where prompt problem-solving and rapid time-to-market is becoming increasingly more important, our communication struggles and departmental barriers impede our ability to innovate effectively. Our structure may have been suitable for the 20th century, but it is time to adapt to meet the demands of today's consumers (*MBA 580 Organization Overview (Processes, Structure, Culture)* n.d.).

What is the difference between formal and informal innovation management?

For long-term projects to reach their full potential, they require ample time to grow and develop. 3M understands the significance of this process and believes that projects should have a period of 2-3 years to "cook" before being integrated into the formal system. This patience is necessary to produce a minimum viable product for long-term innovation (Tidd et al., 2013).

Once a product is ready for the market, it is crucial to give consumers the time to familiarize themselves with it. This is why our project team carefully analyzes the market data from the beta launch during review meetings. By doing so, we can determine how our new product compares to existing offerings. Are we leading the market or still lagging the competition? Answering these questions helps us assess whether the product is viable or if it requires additional time to "cook" further, as 3M aptly describes it.

How does the organizational structure in each company affect communication? Why is this important to innovation?

First, let's understand the differences between a flat and tall, matrix organizational structure. A tall, matrix organizational structure such as ours has multiple layers of hierarchy, which means that communication is more likely to be constrained. In contrast, a flat organizational structure has fewer layers of hierarchy, meaning that communication is more

direct and open. 3M's flat organizational structure means that employees can speak up and share their ideas with ease, without worrying about how they'll get attention or be heard (Tidd et al., 2013). This streamlined communication process means that innovative ideas can be floated more easily, and creativity among employees can be harnessed to a greater extent.

Second, a flat structure can promote an environment of collaboration and independent thinking. When communication is direct, employees feel more empowered, leading to fewer dependency issues and micromanagement. 3M provides a platform for its employees to work collaboratively and share ideas freely without parameters, which fosters innovation and creativity in a natural manner (Tidd et al., 2013). One example of this can be seen in 3M's Post-it® Notes. Post-it® Notes were invented by 3M scientist Spencer Silver, who came up with the idea while working on a project that needed a strong adhesive that would peel off easily from the paper. When Silver shared his idea with fellow colleague Art Fry during a seminar, Fry realized its potential and developed the now-iconic sticky notes. This is an excellent example of how effective communication and collaboration lead to innovation, even beyond their primary purpose.

Thirdly, a flat organizational structure allows employees to develop their expertise and become versatile. In a tall, matrix organizational structure, employees are often pigeonholed in their roles, which can lead to a lack of cross-functional skills and knowledge. In comparison, a flat organizational structure ensures that employees engage in a variety of roles and work closely with colleagues from different departments. This enables growth and learning, which can lead to more significant opportunities for innovation where people are more inclined to ask questions, experiment with new ideas, and bring those ideas to life.

Lastly, 3M's flat organizational structure significantly helps avoid delays and improves the speed of information transfer (Tidd et al., 2013). In a tall, matrix organizational structure, companies may encounter bureaucracy or face difficulty in relaying information from one department or team to another (*MBA 580 Organization Overview (Processes, Structure, Culture)* n.d.). This can lead to delays and stifle innovation. In contrast, a flat organizational structure simplifies the communication process and allows for faster decision-making. This helps 3M to respond to market demands quickly and stay ahead of the competition.

Innovation can only thrive in an environment that fosters creativity and encourages the flow of ideas amongst team members. 3M's flat organizational structure is a perfect example of how communication can be an enabler for innovation.

Identify The Process Gaps of The Organization

What needs to be done to make the organizational structure support innovation?

Since our company is still using what is an outdated form of organization, we need to think about radically changing our organizational structure (*MBA 580 Organization Overview (Processes, Structure, Culture)* n.d.). One thing that we can do is think of our organization as a spider plant. The spider plant is a form of organization that has a structure which closely resembles the plant after which it is named. It has a central core, from which other branches emerge. Each branch, such as our newly formed electric car division, has its own set of responsibilities, but they are all interdependent. This form of organization enhances cross-functional collaboration, allowing employees to work together on various projects. Additionally, this structure allows information to be easily shared among employees, which helps to promote faster decision-making (Hughes, 2023).

What rewards could our organization best utilize to motivate innovative behavior?

Recognition and Praise: According to studies, employees who feel recognized and appreciated for their efforts are more likely to continue to strive for success than those who are under-appreciated. Therefore, recognition and praise are essential to motivate innovative behavior. Praising an employee's efforts or achievements in front of their peers, or rewarding them with public acknowledgment, recognition awards, or naming new projects after them, is a simple way to motivate them to stay committed to the company and continue to come up with new ideas (Warden, 2016).

Financial Rewards: Monetary rewards are a motivational approach that has been used for centuries, and they work! Offering monetary rewards such as bonuses, commissions, and profit

sharing not only encourages employees to innovate but also communicates to them that their innovation is valuable to your company. Therefore, if you want to motivate innovative behavior in your employees, then financial incentives are one of the most powerful methods (Warden, 2016).

Personal Development Opportunities: Personal growth and learning are essential for every employee, and it's an excellent way to foster innovation in the workplace. Therefore, offering training sessions, conferences, seminars, or courses can be a reward that encourages staff to attain new skills, learn new techniques, and apply them towards solving complex business challenges. Not only does this reward develop employee skills, but it also expands the company's knowledge, which can lead to new innovative ideas (Warden, 2016).

Perks and Benefits: Apart from financial and personal development rewards, offering perks such as flexible work hours, remote work options, vacation time, and health benefits is a great way to motivate innovative behavior. These rewards can help employees feel valued and appreciated, which can boost employee morale and encourage innovative thinking. Offer a choice of rewards or give a select few options that employees can choose from. This way, you give them the power to pick a reward that matters the most to them, and it can motivate them to continue innovating (Warden, 2016).

Intrinsic Motivators: Intrinsic motivators are different from the traditional rewards that we listed above. These rewards are not based on external factors such as financial incentives, instead, they are internal motivators that come from within the employee. They include things like freedom, autonomy, creativity, and empowerment. Therefore, offering employees perspective and the chance to take calculated risks, suggest ideas without fear of rejection, or the

opportunity to work on projects alone, can be powerful motivators for fostering innovative behavior (Warden, 2016).

How should our organization examine its timeline to identify ways for longer-term projects to be more successful?

In today's fast-paced environment, organizations are under pressure to deliver results quickly. Failing to do so will lead to companies falling behind the competition and becoming irrelevant. This often leads to short-term thinking and projects that aim to achieve immediate goals. However, it is important to not forget the value of long-term projects that can greatly benefit the organization in the future (AdaptiveWork, 2021).

1. Evaluate our organization's goals and strategies during a kick-off meeting. Using the Cooper Stage Gage Process can help make sure that our innovation projects are aligned with our vision and values.

2. Break our larger innovation projects into smaller manageable parts that can make it easier to track progress and provide a sense of accomplishment along the way. Where the completion of each part is considered a milestone to be presented at review meetings.

3. Invest in our team's by continually developing their skills and talents, hiring staff or outsourcing tasks to an outside third party that has the necessary skills. Investing in the development of our team can create a high-performance culture that will foster collaboration and innovation.

4. Review and adjust timelines regularly by having ongoing review meetings after the completion of each milestone. This will not only give a sense of accomplishment, but also keep the team motivated with the next phase of the project.

5. Celebrate successes and learn from failures. Long-term innovation projects will always be surrounded by uncertainty because of the high failure rate. It is important that we celebrate our successes and learn from our failures and adjust our plans accordingly instead of dwelling on them.

References

- AdaptiveWork, T. (2021, May 24). *Tips for planning for long-term projects*. Tips for Planning for Long-Term Projects. <https://blog.planview.com/tips-for-planning-for-long-term-projects/>
- Hughes, L. (2023, June 24). From hierarchy to spider plants: Your organization is changing and so should your design. <https://www.leadingtoday.org/from-hierarchy-to-spider-plants-your-organization-is-changing-and-so-should-your-design/>
- Southern New Hampshire University. (n.d.). MBA 580 Organization Overview (Processes, Structure, Culture) . <https://learn.snhu.edu/content/enforced/1445105-MBA-580-Q2734-OL-TRAD-GR.23TW2/Course%20Documents/MBA%20580%20Organization%20Overview.pdf?ou=1445105>
- Tidd, J., Bessant, J., & Pavitt, K. (2013, January 1). *Cases*. 3M: Rethinking Innovation. https://www.johnbessant.org/files/ugd/6ba33a_0d844b920e654d70b9350893dc4b7aa5.pdf
- Tidd, J., & Bessant, J. R. (2020). *Managing innovation: Integrating technological, market and organizational change* (7th ed.). Wiley.
- Warden, T. (2016, January 7). The role of rewards in creating a culture of innovation. <https://focus.kornferry.com/the-role-of-rewards-in-creating-a-culture-of-innovation/>