Study Of Application Of Design Thinking In Entrepreneurial Skill Development For Start Ups

Dr. Jayasree Nambiar*[1]

[1]*Assistant Professor, Balaji College of Arts Commerce and Science, Pune-33.Email: jayapradeepnambiar@gmail.com*

***Correspondence Author:** Dr. Jayasree Nambiar*
Assistant Professor, Balaji College of Arts Commerce and Science, Pune-33.Email: jayapradeepnambiar@gmail.com

Abstract

I Design thinking is a human-caused approach to sort out problems and prepare the mindset to deal with the challenges in business. This is a step-by-step method to deal with the entire aspects of production right from product decision to launch of the product. The proper method to know the consumer's need and formulation of suitable action plan to devise solutions is required before product decision. The constructive interaction between design thinking and entrepreneurship development is well-known. Reliable solutions can be derived through design thinking in developing ideas for start-up ventures. The upcoming entrepreneurs can explore many open-ended options and design the options to capture the market share.

***Keywords:** Design Thinking, Mindset, Explore, Reliable Solution, Start-Up*

Introduction

Design thinking is a better tool to create solutions to problems in the process of business. In start-up ventures, design thinking can be supported by giving solutions from multiple perspectives in product development, customer acquisition and governance. By using the mode of design, startups can better understand and empathize with their future customers and potential investors in a better way. Inventors who use design thinking often cite improved communication and collaboration within their teams to derive ideas. By working together to solve problems, team members can develop better ideas and more robust solutions. This can result in developing higher quality products and effective competitive advantage for the inexperienced players. While design thinking is a valuable tool for startups, it is not the only approach that is necessary for success. In the future by understanding the consumer's experience and issue-solving from a design thinking perspective, the managers can ensure the success of their organizations. With increasing competition and an ever-changing market, startups need all the help they can get. Design thinking is a powerful tool that can help investors and founders to share their views on the practice to help further growth in the startup ecosystem. As startups continue to grow and become more complex these days, it is imperative for investors to use Design Thinking as a tool to create roadmap for their businesses. Founders who employ Design Thinking argue that the process helps companies become more customer-centric and eliminates the need to work based on assumptions. Good Design Thinking can help foster a collaborative idea sharing environment that leads to success. The researcher

examines the origins, practices, and practical value of the design thinking process, and links these to the existing practice and its application in start-ups.

Objectives of the Study

1. To understand the concept of design thinking
2. To analyze the applicability of design thinking in development of start-up ideas
3. To discuss problem solving through design thinking

Research Methodology

The research paper is prepared based on secondary data sources published in various journals and websites. This is descriptive research to understand the application of design thinking in startups.

Need of the Study

Design thinking is the future of any innovation that allows us to design solutions for the end users with a single problem statement in mind. It not only imparts valuable skills but helps to advance one's career prospects. It is collaborative process mastered through continuous practice with peers. There is a need to start polls, debates with peers and problem-solving exercises, to get a taste of the process. It is also important to seek diverse viewpoints to prepare the investor to enter the business world. In addition, one can consider design thinking as the main skill set available and think about the goals for the future growth of the firm. The study can better understand the importance of developing communication among peers, initiative to undertake innovation and research. This also gives insights into leadership and how to develop management skills, the basic requirements in startups.

Literature Review

Design Thinking is an efficient method to find solutions to difficult problems in a human-centered way; it consists of collaborative, team-based and interdisciplinary processes (Curedale 2013).
Beckman and Barry (2007) define design thinking as a learning process that involves observesion, framing, ideation solution and development. It is a process of matching the observation and assumptions with the ultimate demand from the people and materializing them with the help of various technology and strategies.
Müller and Thoring (2012) opined that design thinking is a process of problem solving that starts with a problem converts into an idea. Different kinds of problems are discussed, and innovative ideas are generated and materialized. As far as startup echo systems are concerned, design thinking is the most reliable process leading them to success.

Analysis

Meaning of Design Thinking
Design thinking is a process for creative problem solving that begins with understanding the needs of people, proceeds to ideation to generate potential solutions, then involves testing and refinement of those solutions. Design thinking has been applied in a wide range of fields including product design, architecture, urban planning, engineering, and education. The key to successful design thinking is to focus on the user or customer experience throughout the entire process. This means that designers must constantly be asking themselves, "What does the user need?" and "What will make the user's experience better?" (Schiele, 2019) At its heart, design thinking is about putting the user first. It's a human-centered approach to problem solving that begins with understanding the needs of people. Designers then generate potential solutions and test them with users to see what works best. This iterative process ensures that the final solution meets the users' needs in the most effective way possible. Design thinking has been shown to be an effective approach for tackling complex problems and producing innovative solutions.

The Benefits of Design Thinking for Startups
Design thinking begins with a deep understanding of the user, their needs, and their pain points. This is followed by the generation of creative solutions that are then prototyped and tested with the user. The key to

Design Thinking is that it is an iterative process, which means that solutions are constantly being refined based on feedback from users. There are many benefits of using design Thinking for startups. The most important benefit is that it helps to ensure that products and services are designed with the user in mind. This user-centric approach can help increase customer satisfaction and loyalty and reduce customer attrition. In addition, design thinking can help startups to save time and money by avoiding costly design mistakes. Another benefit of using Design Thinking is that it encourages collaboration between different team members. This is because the process relies heavily on input from all members of the team, including developers, marketers, and designers. This collaboration can help create a more cohesive team that can solve complex problems. Finally, Design Thinking can help startups to stand out from the competition. In today's highly competitive marketplace, it is essential for startups to find ways to differentiate themselves from their rivals. By using Design Thinking to design unique and innovative products and services, startups can make themselves more attractive to potential customers and investors.

Use of Design Thinking in Startup
Design thinking is a method for problem solving that is used in many different industries. The basic premise of design thinking is to think about the user primarily when designing products or services. This means putting self in the shoes of the customers and understanding their needs and wants. Design thinking can be used in any industry, but it is especially useful for startups because they often solve problems that are new and unique.
There are five steps to design thinking: empathize, define, ideate, prototype, and test.
Empathize: The first step is to understand the user. This means trying to understand their needs and wants. This can be done through research, surveys, interviews, and observation.
Define: Once understanding the user is done, next is the need to define the problem trying to solve. This step is more important because it will help to focus on finding a solution that meets the user's needs.
Ideate: This is the brainstorming phase where the investor produces potential solutions to the problem. The important thing to remember during this phase is to not judge any ideas. All ideas should be welcomed because any idea can turn into the best solution.
Prototype: The next step is to take one of the ideas and turn it into a prototype. This can be a physical prototype or a digital prototype. The important thing is to create something that can be tested with the end users.
Test: The last step is to test the prototype with users. This will help to see if the solution solves the problem and if users like it or not. Testing is a crucial step because it allows the investor to make changes to the prototype before it goes to market. The design thinking process is flexible and can be adapted to fit the needs of any problem. It is important to remember that the process is not linear. The phases may be repeated as needed and they can be done in any order.

Methods for Implementing Design Thinking in Start Ups
For any startup to implement design thinking, it must create a work culture. Below are some areas that would help implement design thinking for startups.
Educating the team: Educating the team about the importance of design thinking is the first step towards establishing a design thinking culture.
Encourage everyone: Ensure that everyone follows design thinking. If not, explore ways to encourage them to adapt to the change.
Seek help from design advisors: The support of design advisors also helps to reach design goals. These advisors help the companies to balance their efforts to reach the customer's expectations.
Once all the above tasks are completed, an ecosystem of design thinkers can be constructed. Going forward, these design thinkers will help to maintain the culture and inspire the team with innovative ideas at each stage. Airbnb, a startup that was launched in 2009, was about to close as no one noticed its existence. That was the time when Airbnb was a part of the Y Combinator. The team brainstormed the reason for its failure and produced a pattern of 40 listings. They sought the problem to be the pictures that did not convey the reason to pay for the services or rooms. The entire process was a big turning point for the company, the case study explains in detail about their adaptation of design thinking and making the startup a million-dollar business things, take risks, and learn from their actions when seeking creative solutions to problems and navigating challenges.
In fostering an entrepreneurial mindset, the design thinking process sets wicked problems requiring unique definitions and innovative solutions. Working through its steps promotes divergent thinking and enhances understanding of entrepreneurship processes, emphasizing the need for a technology-equipped learning environment for optimal clarity. An increasing number of organizations are starting to value Design Thinking

as a tool for creative problem solving. For some time now, the investors have recognized that ideas often do not come from the top – Ideas originate from across the organization. That is why many companies now train their employees in Design Thinking to encourage the pursuit of innovative ideas. Once the fun and the ingenuity of Design Thinking workshops are experienced, they will always try to be a part of it. Design thinking is contagious. It boosts team morale, creates enthusiasm, and gets everyone working toward a common goal. The comfortable participants of design thinking can become a valued team member. One can use one's own skills to solve problems within the team. They can also teach others the skills and help them solve problems in other areas of the organization.

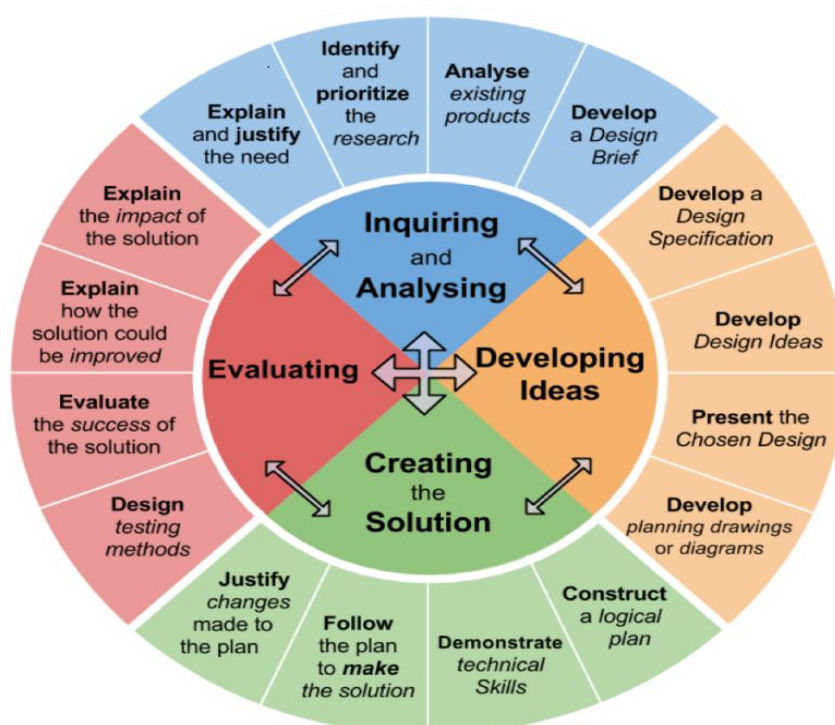**Problem Solving through Design Thinking**
Creative Ideation
Techniques for Generating Innovative Ideas
It is a highly collaborative method that relies on moving forward, identifying problems, exploring them, and having fun developing solutions. That is why it is best to start no matter where you are in the other areas of the journey. The more practice the design thinking framework, the more familiar it will become. Starting a design thinking project can be daunting, especially when all eyes are on the result. But you can take comfort in the fact that the process is about learning, and to learn, you need to make mistakes. Start small, look for ways to solve problems, and begin practicing design thinking as soon as possible.

The problem range Design Thinking can solve
Design Thinking is versatile and can be applied to various problems in various fields. It has proven effective for solving tasks requiring a deep understanding of human needs and complex systems. It is known to be effective in solving problems that are poorly defined or complex, i.e. 'A Wicked Problem.' (Dorst, 2011) Its collaborative and iterative nature allows us to use different skills to cycle through the framework to expand our knowledge and increase our chances of success with each iteration. Design Thinking acknowledges that it is not necessary to know all the answers and values inquiry and the pursuit of understanding. It is teamwork. Although some of the most inspiring examples come from healthcare, education and environmental sustainability. In the private sector, it is effective in developing products, its functions and services. Simultaneously exploring problems and solutions makes it an effective outcome that is not very well defined or complex and difficult to solve.

Design Cycle

Steps in problem solving with design thinking ideas

Identifying the problem areas

Finding suitable human-centered solutions to business problems.

Developing new products by defining features and their services.

Applicable processes, ways of working and areas of operations.

Preparation of proper business design strategies and policies.

Find out all ways of efficient functioning and organizational and community initiatives.

Effective design thinking supports society with a design that resonates with a group of people's needs, behaviors, and attitudes.

Large Projects vs Small Projects

Design thinking is applicable to projects of all shapes and sizes.

Sometimes it is enough to start with a specific problem or outcome one wants to achieve and go through the framework once to get the desired results. For larger projects, divide the project into manageable sections and progressively go through the framework multiple times for various parts before bringing everything together at the end. For example, suppose the project is to improve employee engagement or collaboration around a particular idea. In that case, developing an innovative solution and testing it for a few weeks may be better before revisiting the project, reviewing the data, and moving on. When redesigning an extensive application, website, or platform that includes multiple sections or functional categories, it would be best to break it into smaller parts and work on each individually.

Design thinking works because it is highly collaborative. It emphasizes on-the-go learning through direct observation. It values making decisions based on evidence, and this can bring more confidence in the decisions we make. Design thinking works because it attracts people and encourages engagement because of its interactivity and fast-paced nature. It also acknowledges that one might not get it right the first time and that it is okay to try again, incorporating new evidence until get it right. Because it is an iterative model, the chances of success increase with each iteration.

Process of Design Thinking

Design thinking can accelerate time to market, stimulate creative thinking across the organization, and train the team with new skills. The best way to solve the problem is to experience the problem and find out the ways to approach it. It is a result of commitment, energy, and creativity. More experience will be gained with the practical implementation and experiment with activities.

Startup Idea- Choose a Project, Problem, Need or Goal

The first step is to select a project with an idea of an outcome to be achieved, a problem to be solved, or a change that wants to be incorporated. The available broad set of starting points demonstrating the goals and outcomes should be specific and well defined:

Redesign the mobile experience.

Reduce the environmental footprint.

Understand customers and solve their problems.

Encourage colleagues to celebrate each other's successes.

Getting clarity and focus on goals and outcomes can be part of the discovery process

Involve the stakeholders in the opportunity identification process.

With the support of the stakeholders, one should use more time, space, and people needed for the project. They will all be excited to see the outcome when it is done. Choose a Team of People they can work on. The more diverse the team is, the more diverse the outcome will be. If the team is new, it is a promising idea to have a strong facilitator, teach some skills beforehand, or choose a project that allows them to experiment without fear of failure. After the selection of the team members, arrange a session to brief them on the project. Go through each phase of the framework and try to understand the audience, choose a focus, develop ideas, prototype, get customer feedback, rinse and repeat as many times as necessary. Towards the end of the project, summarize the process and approach and document your findings so that it can be shared with them with the business and make plans to develop and deploy the solution. This can be done using a series of decision-making frameworks, or discuss and prioritize ideas based on the criteria identified during the project. For example, in the initial phase, the idea must be sustainable, cost-effective, and accessible. Once the review is done at the end, map them to these criteria to see if they meet the requirements or if gaps need to be filled.

This summary phase is essential to put into a concise case study that can be used to tell the story of the complex problems you want to solve and the potential solution to be developed. Different perspectives benefit the Design Thinking approach and are excellent for creative thinking. If some parts of the idea need improvement or the idea could have been more successful, one can use the data collected to choose another focus and repeat the process. This iterative approach helps us identify innovation opportunities and develop breakthrough products and services.

Measure the Success of Design Thinking
Periodically review the project's progress and evaluate the data to decide what tweaks and adjustments are needed or if the project is successful enough to continue. Organizations are used to measure the success of their work to determine if they are using their time efficiently and adding value in the right areas. The answer to this question depends on the nature of the project and what impact is expected. It is like how one would measure another type of activity. The number of workshops conducted, prototypes created, features on the roadmap that emerged from Design Thinking workshops and the number of ideas produced.

Steps
Measure the Impact of the solution on Customers using customer feedback, survey responses, retention and adoption rates, task completion and time on task.
Measure the Impact of Design Thinking on the Organization.
The number of employees trained in Design Thinking, or the number of projects completed.
Measure the Traditional Key Performing Indicators (KPIs) to know the impact.
The profit generation, welcomed by the customers.
Compare solutions created through Design Thinking activities with solutions created through other methods by looking at the roadmap and highlighting the projects that came about through Design Thinking and those that did not. See how many of them there are and how they perform relative to each other.

Conclusion

Design thinking is a powerful tool that can help you achieve the desired outcome no matter what the intensity of the problem is. The more practice of design thinking, the more familiar it will become. Design Thinking is versatile and can be applied to various problems in various fields. The Design Thinking methodology has become popular in recent years; it has experienced a resurgence. As markets and industries become more competitive and innovating has become necessary, companies are looking for new ways to innovate. Since Design thinking is the name given to the process of thinking like a designer. Note that these frameworks are based on the design process, so they all have similar phases, values, and outcomes. The start ups can incorporate design thinking in their functioning to avoid failure.

References

1. (n.d.). https://makeiterate.com/how-to-use-design-thinking-to-solve-problems/
2. Schiele, K. (2019). Design Thinking and Digital Marketing Skills in Marketing Education : A Module on Building Mobile Applications DESIGN THINKING AND DIGITAL MARKETING SKILLS IN MARKETING EDUCATION : A MODULE ON BUILDING MOBILE APPLICATIONS. March 2018. https://doi.org/10.1080/10528008.2018.1448283
3. (n.d.). https://fastercapital.com/content/Design-Thinking-for-Startups--An-Introduction.html#The-Benefits-of-Design-Thinking-for-Startups
4. (n.d.). https://www.interaction-design.or/literature/topics/design-thinking
5. Cross, N. (2011). Design Thinking: Understanding how Designers Think and Work. United Kingdom: Berg.
6. Meinel, C., & Leifer, L. (2021). Design Thinking Research: Translation, Prototyping, and Measurement. In Google Books. Springer Nature. https://www.google.co.in/books/edition/Design_Thinking_Research/jyc9EAAAQBAJ?hl=en&gbpv=1&dq=Beckman+and+Barry&pg=PA266&printsec=frontcover
7. (n.d.). https://www.google.co.in/books/edition/Design_Thinking_Research/-9hwDwAAQBAJ?hl=en&gbpv=1&dq=M%C3%BCller+and+Thoring+(2012)&pg=PA202&printsec=frontcover

8. (n.d.). https://www.researchgate.net/publication/234066097_DESIGN_THINKING_VS_LEAN_STARTUP_A_COMPARISON_OF_TWO_USER-DRIVEN_INNOVATION_STRATEGIES

9. Dorst, K. (2011). The core of `design thinking' and its application. Design Studies, 32(6), 521–532. https://doi.org/10.1016/j.destud.2011.07.006

10. Liedtka, J. (2018). Why design thinking works. Harvard Business Review, 96(5), 72-79.

11. Cross, N. (1992). Research in design thinking (pp. 3-10). Delft University Press.