Innovation and design thinking - The order of the day for Start Ups.

M.N. PrabaDevi^{1*}

¹Department of Management Studies,

SRM University, Chennai, Tamilnadu, India

Corresponding author: M.N. PrabaDevi

Email Id: supratam@gmail.com

Abstract

"ALL INVENTORS CAN BE INNOVATORS BUT NOT ALL INNOVATORS CAN BE **INVENTORS**"

At a time when policy makers are pooling efforts to restore growth and overcome the global economic and financial crisis, specific attention has been focused on innovative entrepreneurship, as it can play an important role in contributing to economic growth, job creation and poverty reduction, and can help address key social challenges. This paper deals about invention, innovation, renovation and design thinking and how it is related to new start ups. As many companies have lost confidence in the traditional ways of running a business, design thinking has entered the mix. Design Thinking for Strategic Innovation presents a framework for design thinking that is relevant to business management, marketing, and design strategies and also provides a toolkit to apply concepts for immediate use in everyday work. An essential guide for any business seeking to use design thinking as a problem-solving tool as well as a business method to transform companies and cultures

1.1 WHAT IS INVENTION

To have a clear idea of what is innovation we need to know what is meant by invention. Invention happens when someone tries to explore something. Inventions are always unique because something unknown is made known to the world for the very first time. In the same way entrepreneurs also should be unique in their own way. Entrepreneurs are said to be innovators, but they should be both inventors and also innovators.

1.1.1 DIFFERENCE BETWEEN INVENTION AND INNOVATION

The first basic difference between the two is is that invention is the creation of something new whereas innovation is an add on to invention. Invention focuses on need innovation focuses on want. Invention need not be always planned, it can be a random exploration of things. But innovation is planned, generated and executed. Invention's main aim is to make aware that a product is existing. Innovation's main aim is quality improvement over the invention.

1.1.2 WHAT IS MEANT BY DESIGN THINKING

Basically design thinking is done to create solution for complex problems when invention or innovation doesn't work properly. It is a term which is closely associated with both invention and innovation. It helps to sort problems in a more simplified way.

"Design is the action of bringing something new and desired into existence—a proactive stance that resolves or dissolves problematic situations by design. It is a compound of routine, adaptive and design expertise brought to bear on complex dynamic situations." — Harold Nelson

1.1.3 CHARACTERSTICS OF DESIGN THINKING

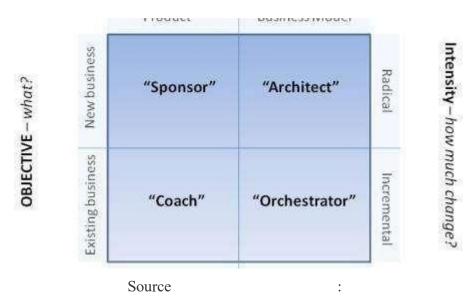
- Finding simplicity in complexity
- Beauty as well as functionality
- Improving quality of experience
- Creating elegant solutions
- Serving the needs of people

1.1.4 WHAT IS RENOVATION

In simple words renovation can be understood as an add-on to innovation. When an innovation is worked upon to make it much more attractive and creative it is called as renovation. **Renovation** is the process of improving a broken, damaged, or outdated structure. Renovations are typically either commercial or residential. Additionally, renovation can refer to making something new, or bringing something back to life and can apply in social contexts. For example, a community can be renovated if it is strengthened and revived.

1.2 INNOVATION

1.2.1 INNOVATION STRATEGY



Do you innovate or renovate?

Not everything new is an innovation, some is more renovation than in innovation. Here is a framework that helps to distinguish an innovator from a renovator and works for entrepreneurs and intrapreneurs alike. It is important to understand which role to play and when; it all depends on what you need to achieve and critical to reach your goal.

1.2.2 INNOVATION STRATEGY

As an Executive Champion, you take active part in the process – but even as the champion, there are different roles needed for different scenarios. The four dimensions (Objective, Scope, Intensity, and Boundaries) open up a matrix that points to four different roles, one of each suited for a specific scenario:

• "Sponsor" – You are a sponsor, when you create a totally new <u>category of products</u> or services. This role focuses on the bigger picture, the vision, and sees it through within the organization (which includes tactical out-sourcing). A sponsor guides this endeavor while nurturing and empowering the staff. For example, broad usage of the MP3 format revolutionized

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the music industry in unforeseen ways. MP3 players where a disruptive technology that made your CD collection obsolete, which has had replaced your cassette tapes and vinyl records markets some time ago.

- Architect" It takes an architect to build a new and never-before <u>business model</u> or system. The architect forms coalitions, alliances, and strategic partnerships with the big picture in mind and providing win-win incentives for all players in the business model. While entrepreneurial examples come to mind easily, less obvious is an architect who operates within an organization as an intrapreneur. For example, the NxGen business model (as outlined in "Build ERGs as an innovative business resource!" and disrupted the common paradigm and mental model of "how-business-is-done" within a company by engaging and leveraging employees in new ways.
- "Coach" You need a coach to get a new-and-<u>improved product</u> or service on the way within an organization just like this tough but supportive sports coach you remember from school or try to forget...

A new car model, for example, has more bells and whistles than its predecessor and may outrun the competitor's model by a tad. In the end, however, it remains being a car. It offers the same common way of transportation we are already used to, i.e. it is an evolutionary, an incremental improvement.

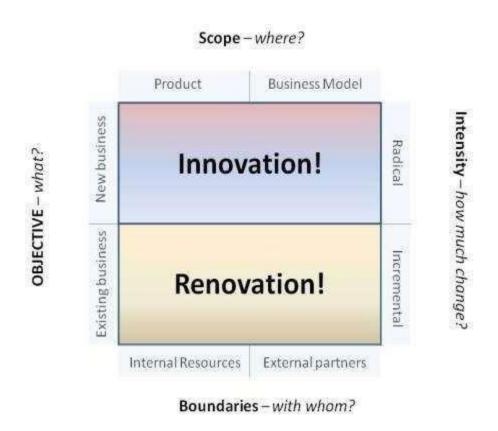
• "Orchestrator" – Imagine a conductor directing an orchestra: The orchestrator brings to life a new-and-improved business model or system in concert with strategic partners outside the organization. It takes skill to interpret and continuously integrate the moving parts. Ducati it an Italian high-end motorcycle manufacturer known internationally for its performance bikes that consistently win races. Very early on, Ducati outsourced nearly all company functions to focus on their core competency: design and engineering. Even manufacturing is outsourced! Ducati became the first company to offer a new motorcycle model exclusively on the internet – and sold its entire production before the first bike was even built! This does not

only prove enormous brand power and marketing skill, Ducati also proved they can be a leading and very successful motorcycle company by engineering and outsourcing.

1.2.3. SO, DO YOU RENOVATE OR INNOVATE?

The core of **innovation** and entrepreneurship is around creating new businesses around completely new products or services, or even entire business models that are disruptive to the status quo. So, this points directly to the roles of the **Sponsor** and the **Architect** as strategic innovators and gamechangers.

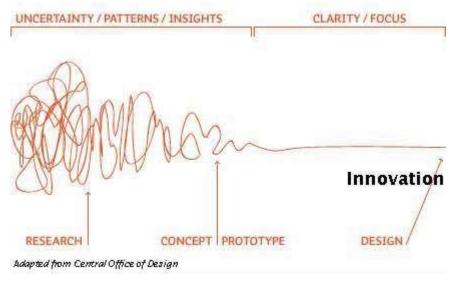
In contrast, reinforcing or enhancing an existing product, system, or business model with incremental steps is **renovation**, just as you would renovate an older house to bring it up to modern standards. It is the **Coach** and the **Orchestrator** role, who fix to improve or come up with the next new-or-improved product or way of doing things.



Source: Internet

1.3 DESIGN THINKING

1.3.1 DESIGN THINKING AS A STRATEGY



Source: Internet

When design principles are applied to strategy and innovation the success rate for innovation dramatically improves. Design thinking is at the core of effective strategy development and organizational change. Design can be applied to products, services, processes, physical location, anything that needs to be optimized for human interaction. Design thinkers can be of various types viz they can be entrepreneurs themselves or the intrapreneurs who want to develop the organization through R&D. You can design the way you lead, manage, create and innovate.

1.3.2 HOW DESIGN THINKING & INNOVATION ARE IMPORTANT TO ENTREPRENEURIAL PROCESS, ENTREPRENEURSHIP

The below process will define how innovation and design thinking are important in ENTREPRENEURSHIP.

STEP 1:

The first step being **defining the opportunity**. An entrepreneur should first of all know what is the prospect for the business in that area. For example if he is setting up a departmental store, he should first understand the location, what kind of people live there, is the area a residential one etc. This is the first step in design thinking process.

STEP 2:

The next step being **gathering information** or data about the competitors, customers and suppliers. The cost of living in that area should also be known.

STEP 3:

The next step is all about **rethinking the idea** that you have generated at step 1 so that it will not be a flop. If it is set up it must go on. It must be designed in such a way that it must self construct itself if something happens i.e there must be a back up plan for the business idea you are coming up with.

STEP 4:

The next step is **risk management**. Every entrepreneur should be a risk taker. Here comes the matter of what type of risk to take. He should be a calculated risk taker i.e, if he is taking a risk he should know up to what level he can manage the risk all alone.

STEP 5:

The last step comes the **innovation** part. To attract customers one has to think out of box. Every entrepreneur is an innovator. A person who always innovates his own idea into a best thing can only be called an entrepreneur.

1.3.3 DEVELOPING DESIGN THINKING CAPABILITIES

While learning to be a good designer takes years, non-designers can learn to think like a designer and apply these skills to leadership and innovation. Innovation challenges will guide you through a design thinking process from start to finish.

- Develop the 5 discovery skills that make up the Innovator's DNA and optimize yo ur ability to innovate.
- Examine the four primary forces that shape innovation and 10 types of innovation you can leverage
- How to connect more deeply with customers to uncover opportunities for innovation
- Transform insights and data into actionable ideas
- Explore the tool-sets and skill-sets used by designers: empathy for your customers, idea generation, critical thinking, aesthetic ways of knowing, problem-solving, rapid- prototyping and collaboration.
- Develop a wide variety of concepts for products, services, experiences, messages, channels, business models, or strategies.

 Create and implement elegant and feasible solutions that create value for the customers, faster and more effectively.

1.3.4 BECOMING A SUCCESSFUL DESIGN THINKER

Today we have an increasingly competitive and ever-changing business environment, putting huge pressure on businesses and entrepreneurs to identify new opportunities for the expansion while simultaneously focusing on the reduction of operational errors and systemic efficiency, all of which are directed towards attaining a competitive edge and sustainability.

Design thinking is a problem-solving mindset. Entrepreneurs should possess the ability to carefully examine a given situation which may have both defined and hidden parameters and exploit opposing ideas and opposing constraints to create new solutions. In the case of a business that means balancing human requirements, technological feasibility and economic viability.

For an entrepreneur, design thinking can prove to be a very useful and powerful tool along their journey. By attaining mastery over it, an entrepreneur can have an open-minded problem solving approach to challenges which can be faced in any business venture. In order to be a successful design thinker, one can follow the described set of processes:- Information, Innovate, Implementation.

Information:-

This is the first step to begin designing the line of thoughts. Ideas can be generated through various external and internal stimuli, however to create a business would require the thinker to go a step ahead and immerse themselves deeply in the various aspects of their desired project, gathering every bit of information for e.g. Demographics, target audiences, preferences, economic situation of specific markets etc. Collection of this information is vital for enabling the entrepreneur to create strong, sustainable business designs.

Innovate:-

In this phase, the gathered information must be analyzed, and we identify the problem

statement after understanding the ecosystem that influences the challenge and the target audience from the methods and information gathered.

Patterns are identified and a map for the consumer requirements is created to understand the pinch points. Understanding the user, followed by drawing Insights will influence the innovation process. The goal of this step is to come up with any and all possible solutions to the challenge. One can use various methods like brainstorming, cross pollination, sampling to design a feasible innovative design. This can be followed by converging into few ideas which can be conceptualized keeping the functional and human factor requirements that influence the soluti

Implementation:-

This brings us to the final stage of implementation. Just like the process of designing any product, the finalized ideas must be formulated and put to the test out in the field to identify flaws, challenges and better ideas too. The prototype can be a flowchart, a rough map, a business model or a miniature form of the final solution. Prototypes lead the way to the User Test. It helps us fail early and learn faster from our users and various other stakeholders who will be interacting with the solution. It's one of the most critical steps in the design process in order to get valuable feedback. Entrepreneurs need a way to define the problem statement because most of the times they have a solution in mind but have not studied the ecosystem of the user, environment and various other stakeholders who are a part of it along with the overarching perspective of desirability, feasibility and viability.

1.3.5 CONCLUSION

QUALITY, LOYALTY AND INTEGRITY are the 3 T's which an entrepreneur should always have within himself. This is possible only if the entrepreneurs knows how to attract customers through designing his own business idea and also innovating it successfully.

Innovation and design thinking used to be frowned on; today it is the most important thing a business can do to stay ahead.

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