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To What Extent Does The Creative And Human-Centric Approach Allow Design Thinking To Lead To Efficient Innovations Across Industries?

Kaashvi Gupta
Student
Pathways School Noida, Noida, India

Abstract

Innovation in business is a complex but crucial aspect to grow and ensure long term sustainability of a company. Since its origin, there have been many theories and perspectives on innovation. This research paper specifically aimed to explore the theory of design thinking - a human centric approach to innovation and its role in revolutionizing businesses by prioritizing the needs of customers. In doing so, the paper critically analyzes the 5 stages of the theory - emphasize, define, ideate, prototype and test - and further uses the case study of AirBnb to understand the real life application of these stages. The latter end of this paper evaluates the concept of design thinking as an approach to innovation. All of the aforementioned is facilitated by the application of appropriate economics and business theories, particularly in the realm of innovation.

Introduction

They say that the customer is god then why not start innovating accordingly?

Innovation in business is complex yet vital. There are many interpretations and definitions of the term but essentially "business innovation is a practice of developing and marketing breakthrough products and services for the adoption of customers" (McKinsey & Company, 2022). In fact, innovation in business extends beyond just the products and includes breakthroughs in even processes, business models adopted, and management procedures. As the literature has developed, many different approaches to innovation have been observed. However, the majority of the traditional approaches tend to be developed on the foundation of enabling profitability for the companies as opposed to actually considering and innovating in light of the needs of the customers.

Design thinking presents an approach to innovation that is revolutionary in the sense that it is deemed human-centric. Design thinking is a fairly new concept that was founded and mainstreamed only in the 1990s when the company IDEO - a design and consulting firm - popularized it (Dam and Siang, 2022). By prioritizing the customer's needs and requirements above all else, this approach allows companies to innovate in accordance with the interests of the most important stakeholders i.e. the customers.

Given the importance of innovation for the growth and long-term sustainability of a business, the need to adopt revolutionary approaches such as design thinking is heightened. However, the approach has also received some critique with regard to its applicability across industries. In line with the aforementioned, this research paper aims to answer the question, **"To what extent does the creative and human-centric approach allow design thinking to lead to efficient innovations across industries?"**

This paper argues that design thinking is vital in enabling creative and efficient innovations in certain industries with a closer look at the case study of Airbnb.

Literature review

Innovation is repeatedly quoted to be a vital part of businesses. Innovation becomes a part of businesses when it introduces something new. Innovation is believed to be the starting point of entrepreneurship and involves the person thinking creatively and bringing their ideas to life (F.Dieffenbacher, 2023). One of the key benefits of innovation that is overlooked is growth. Innovation, while it helps in developing an initial idea, also allows growth. Innovation also plays a key role when the matter of the sustainability of a business comes up - the sustainability of a business is completely dependent on innovation, where without innovation, the business will go into loss and eventually would have to shut down.

Over the years, there have been many different interpretations and definitions of innovations. As time progresses, the definitions keep on changing and people's viewpoints and interpretations keep on evolving. Joseph Schumpeter was a scholar who very early on defined innovation in his own manner. Shumpeter's theory is one of the oldest theories on innovation in the year 1934. Schumpeter coined the term *'creative destruction'*. Creative destruction essentially highlights the process that sees new innovations replacing existing ones that are rendered obsolete over time. This theory links to economic dynamism as the theory challenges the perspectives of economists who look at the world in a static sense, rather than thinking about the future (Adler, 2019). There are many unforeseen changes that keep on occurring due to innovations, and Schumpeter's theory challenges exactly that.

The disruptive innovation theory is another theory by a famous Harvard professor, Clayton Christensen. This theory essentially describes when a small company is able to challenge an established business, by entering at the bottom of the market and then gradually moving up (Larson, 2016). The theory was created in 1997 and helps the market open up for new products. The theory highlights fundamental innovations that help to change the economies and markets, often by simply offering a cheaper solution.

Tidd and Bessant's *Innovation Funnel model* is a newer approach to innovations. This model was launched in 2011. The innovations funnel is fundamentally a tool that helps companies decide what ideas and innovations are sustainable and realistic. The innovation funnel is like a physical funnel in which there are many ideas, some fancy, some simple, some logical, and some illogical. Then, the best ideas are retained while others get filtered out (Dowsett, 2022). The innovation funnel has 4 different stages. The first stage is to search for different opportunities for innovation. The second stage is concerned with selection - essentially finding an ideal product or service to create. The third stage signifies implementation which refers to coming up with strategies to apply the idea and bring the idea to life. The fourth and final stage of the funnel is to capture i.e. consider the different ways in which the business would be able to benefit from the innovation. The funnel also includes 2 questions which are vital in inferring if the ideas will lead to feasible innovations or not (as can be seen in the image below).

(Maldonado, Vaz and Dias, 2014)

Whilst the definitions, theories and approaches surrounding innovation are plenty, there are four main types of innovations that have been identified in the literature. Namely, these are; product innovation, business model innovation, process innovation, and management innovation. *Product innovation* is the most common type and primarily refers to the innovation of different products and services. This type of innovation is commonly recognized as a facilitator of business sustainability as well as growth since introducing new products and services into the market can keep a business relevant even in the context of regularly changing preferences and trends. With regard to *business model Innovation*, this is a newer type of innovation that focuses on creating strategies and changing how the organization creates value. The main aim of this type of innovation is to focus on gaining more profitability and look for new strategies to do so. *Process innovation* is concerned with day to day work of the business and is focused on building efficiency and creating quality-driven work. Finally, *management innovation* helps to lead an organization by innovating strategies to manage its employees, coming up with unique structures, and helping an organization run.
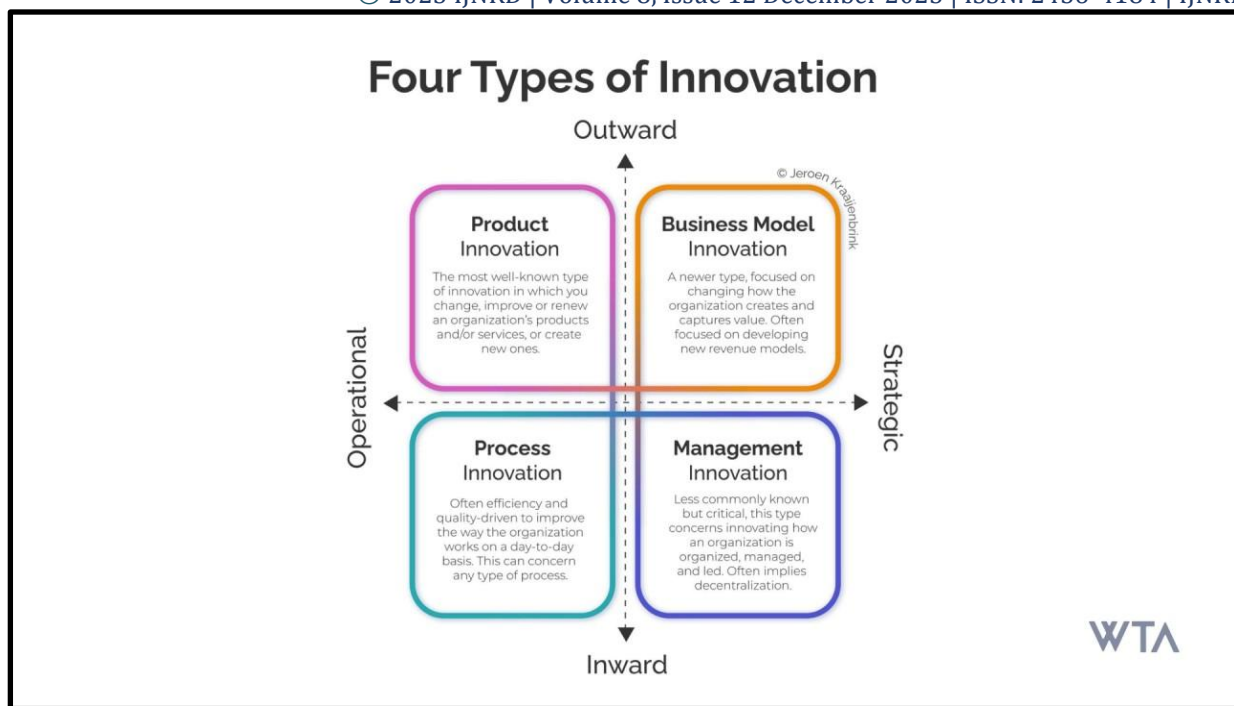
(We Think App, 2023)

Overall, it may be observed that the majority of approaches to innovation, as cited in the literature, tend to have a keen focus on businesses innovating for their own benefits i.e., growth, profitability, survival etc. That being said, not many of the approaches highlight the importance of focusing on the customer in order to innovate more effectively.

Overview of Design Thinking

As mentioned in the introduction, design thinking was a theory founded and mainstreamed in the 1990's by the company IDEO - a design and consulting firm (Dam and Siang, 2022). By definition, "design thinking is a systemic, intuitive, customer-focused problem-solving approach that organizations can use to respond to rapidly changing environments and to create maximum impact" (McKinsey, 2023). In its very essence, design thinking is a multidisciplinary approach whereby aspects of subject fields such as psychology, sociology, and anthropology are incorporated to enable a human-centric approach to problem-solving, which prioritizes the consumers' needs above anything else (Tuttle, 2021). The multidisciplinary approach allows companies to innovate in accordance with the most important part of their business i.e., their customers.

The theory of design thinking has been broken down into 5 stages - empathize, define, ideate, prototype, and test. In the first stage i.e. *empathize* - the designer observes the consumers to gain a deeper understanding of how they interact or are affected by a product or issue (Tuttle, 2021). Companies use various market research techniques to help to empathize with consumers. One of the popular direct methods of market research used is surveying wherein businesses are able to gather the personal preferences straight from their consumers. Another direct way that firms use to connect with their consumers is through feedback which serves to be crucial for firms in the process of rectifying problems and gathering inputs from various consumers to help and better their service/product. Furthermore, focus groups may also be used whereby consumers are categorized based on specific criteria and encouraged to provide feedback and their inputs regarding a particular product, service, or strategy that the company employs (Shopify, 2022). That being said, another method becoming increasingly popular to satisfy the requirements of the empathizing stage is ethnographic research derived from anthropology - a field that studies human societies and cultures (Mind Tools, 2023). This form of research requires companies or market researchers to observe consumers in natural environments which can help generate insights that may otherwise not be found through traditional methods of surveying or focus groups.

The second stage of the design thinking process is *define* (Tuttle, 2021). In this stage, the company synthesizes the information gathered from the first stage, like the different problems that the customers are facing, to identify the core problem. Essentially, at this point, the company focuses on defining the main problem that they are solving through the products and presents it in a human-centric approach (Dam, 2023).

The third stage of design thinking is *ideate*. During this stage, the company starts to brainstorm their ideas to find a solution to the problem presented (Tuttle, 2021). The company views different perspectives, ideas, and innovative solutions to come up with human-centric solutions. The ideation usually happens between team members where they showcase their creativity and critical thinking skills to accommodate the consumer's needs to come up with an innovative solution. There are many strategies and techniques that firms use to ideate ranging from general and simple techniques such as brainstorming and mind mapping to more creative approaches like the Worst Possible Idea technique - a creative way to help and identify some problem areas which may occur by getting the team to list down their worst possible ideas and then later identifying problems and coming up with substitutes to help and resolve them. All the ideas derived from the methods practiced at this stage are then mixed and matched to come up with feasible solutions (Dam, 2023) followed by the company choosing the best possible solution to move forward with.

The fourth stage of the design thinking process is *prototype*. At this stage, ideas finally start to turn into real solutions. The firm produces scaled-down versions of the product creating multiple prototypes for each of the selected ideas in the ideation process (Tuttle, 2021). These versions of the final solution are tested within small markets, user groups, and team members to judge which idea is vastly accepted by the consumers and what improvements could be made (Dam, 2023). This stage is an experimental stage but is extremely crucial through the process as it helps identify the best possible solution to the problem which was defined through complete evaluation. This stage also helps the firm get a better idea of some improvements they could make, what problems they might face while launching and creating the product, and how their audiences would interact with the product.

The last and final stage in the process is the *test*. During the test stage, the company and its designers take feedback from their users on the prototyped solution (Tuttle, 2021). The company is then able to launch the products for its users. This stage of the process helps to synthesize all understandings and observations while helping to design a feasible and consumer-centric product for the users (Dam, 2023). As design thinking is an iterative process, many times, companies have to go back a few stages to reevaluate and then ultimately get a deep understanding of the product and its users.

Design thinking is a cohesive approach to innovation, where the consumer needs matter. Many perspectives, ideas, and solutions come together to create a comprehensive approach to a particular problem. As design thinking follows a human-centric approach, it helps to create personalized items for its users. These items and products also help the company create a bigger impact on its customers by catering to their specific needs. Overall, this approach helps the company form an emotional connection with its customers and benefits as a whole.

Business Innovation and Success Due to Design Thinking - A Case Study of Airbnb

(Forrest, 2014)

Airbnb is an American San Francisco-based company. It operates in an online marketplace and is a hub for homestays and experiences. The company acts as a broker and charges a commission for each booking. Airbnb was founded in 2008 by Brian Chesky, Nathan Blecharczyk, and Joe Gebbia. The original name of the company was AirBedandBreakfast.com which was later shortened into Airbnb. The company's aim was to revolutionize the tourism industry (Cadwalladr, 2013). Airbnb has proven its success as it focuses on design and user experience. This is primarily due to the founders' design background. From the beginning, the founders focused heavily on creating a user-centric and approachable profile hence the company is an exemplary example of the real life application of key design thinking principles (Badhan, 2022).

The company started when roommate and former schoolmates Brian Chesky and Joe Gebbia came up with the idea of turning their living room into a bed and breakfast. Afterward, Nathan Blecharczyk joined the venture and became the third co-founder of the company. They all established a website and offered short-term living quarters for people who were unable to book hotels (Carson, 2016). In 2009 a crisis arose for Airbnb. Like new startups, nobody noticed that they had launched a company. The company started to go into losses and their revenue flatlined by 200 dollars per week. This led to indefinite losses and zero growth. The team was forced to max out their credit cards (First Round Review, 2019).

Airbnb soon realized that people were becoming skeptical about bookings and listings. The team then decided to visit all the listings in the city of New York. They spoke to the different hosts and then came to a realization - something as simple as low-quality pictures and the bookings had decreased the bookings. This showcases the first step of the design thinking approach whereby the company was able to *empathize* with their users by going out to them to try and find the problem as opposed to sitting on a conference table and brainstorming what the root of the problem may be.

After identifying the problem, the solution was rather simple - taking high-quality professional photographs. They were able to *ideate, prototype, and test* the solution which are the next steps of design thinking. They started by uploading professional photographs of the listings on their website and waited to see feedback, later, they met with a highly positive response. In just a week's time, the revenue doubled and the company started to earn 400 dollars per week (First Round Review, 2019). Now the company has an annual turnover of 8.4 billion dollars and is present in 192 countries (First Round Review, 2019). To analyze this innovation further, we can categorize it as a process innovation whereby there is a focus on achieving efficiency and producing quality-driven work to improve the way that an organization runs on a daily basis (We Think App, 2023). This also explains why and how the company has enabled their success by providing stricter rules and regulations on photo quality for anyone who is a host, changing its day-to-day processes and continuously producing quality-driven work

The company has also used the principles of design thinking and innovation in other aspects. A major innovation that Airbnb launched was <u>Airbnb Experiences</u>. Through Airbnb Experiences, hosts were able to conduct events and plan activities for their guests (ABIT, 2021). Using the method of product innovation, which is when there is a change, improvement, or renewal of an organization's product or service to create new ones (We Think App, 2023) - the company was able to successfully launch Airbnb Experiences. Airbnb strived to become something greater than just an ordinary bed and breakfast. They wanted to build experiences, lifelong memories, and a community for the users. The company successfully empathizes with its customers creating a strong connection and bond with them. Another example would be a simple one wherein Airbnb had an option of clicking on a star to highlight a listing that they would eventually want to pursue, but changing a simple icon into a heart helped a lot. The company was able to tap into the user sentiment and provide which led them to incline on using the heart to like a particular listing (ABIT, 2021).

Overall Airbnb has proven to be a great example of incorporating design thinking, innovation, and business. More specifically the company stands out in being able to consider the perspectives of both their hosts as well as guests and innovating in accordance. Through the various principles of design thinking and innovation, Airbnb was able to save itself from failure and become one of the top businesses in the tourism industry, generating an annual revenue of over 8.4 billion dollars.

Evaluation of the Impact of Design Thinking on Business Innovation

There are many positive aspects of design thinking. As explored above, design thinking is a user-centric theory that focuses on innovating and creating for the consumers which can benefit a company greatly. Moreover, design thinking helps to foster a culture of creativity and experimentation as it requires various perspectives to be considered, wherein everyone gets to pitch in their ideas and solutions and come together to release a product. The team as a whole helps to ideate, one of the crucial steps of the process, to help create a user-centric product.

Design thinking also allows businesses to overcome traditional barriers to innovation by enabling those involved to think beyond and use unconventional ways to innovate for its consumers. As explored above, in the case of Airbnb, meeting directly with the consumers of the product to be able to understand and interpret the reason the platform was failing was an unconventional way to empathize with its consumers.

Although design thinking is beneficial in many aspects of innovation and business industries, it can have its challenges. Design thinking can be an extremely time-consuming process (Tsoi, 2021) as the theory and method have 5 stages and completing each stage to innovate successfully can require a lot of time and capital investment.

As the theory of design thinking is user-centric, it also requires heavy user participation (Tsoi, 2021). As explored above, Airbnb used an unconventional way to help find the problem or areas of improvement for the company. The theory of design thinking requires companies to empathize with their customers, gather their opinions, and get feedback to successfully create a user-centric solution. Many a time, it is difficult to obtain this kind of research and connect with the consumers properly. It can also be difficult to facilitate in certain industries.

Furthermore, it may be argued that by conducting this kind of research, there are many other aspects which are neglected. One certain stakeholder, i.e., the customer is focused on but the needs of the others may get neglected. This could include the employees and their productivity as well as the impact on the work environment or then even some macro-elements such as the actions of the competitors.

Overall there are many benefits and some drawbacks of the design thinking theory, but it helps to foster innovation and help to facilitate innovation in business.

Conclusion

As explored above, the idea and the theory of innovation is not a new one but it is one which keeps on continuously evolving - for instance, one of the earliest theories was that of creative destruction presented by Joseph Schumpeter in the year 1934, then followed by the theory of disruptive innovation introduced by Clayton Christensen in 1997 and then a newer theory being represented by Tidd and Bessant in the form of the Innovation Funnel introduced in 2011. Whilst this paper discusses only a few of the many theories of innovation, one thing that is agreed upon is that innovation takes place in one of the 4 categories i.e., product innovation, business model innovation, process innovation and management innovation.

That being said, one of the newer approaches to innovation which has gained a great amount of traction in recent years is design thinking - the core focus of this paper. Since being mainstreamed by IDEO in the 1990's, this theory has become popular for its multidisciplinary approach whereby the users are at the center of innovation - unlike most traditional models that were introduced before. The five steps of design thinking - empathize, define, ideate, prototype and test - were explored in the paper and analyzed in regard to their application by Airbnb wherein it was proven that design thinkinking helped the company innovate and save itself from what may once have been deemed inevitable failure.

Overall, it can be said that design thinking helps to foster innovation to a great extent. There are, however, limitations to it which must be acknowledged particularly with regard to its applicability in certain industries that have creative restraints.

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