

DESIGN THINKING IN CORPORATE HOUSES-EXPLORING THE IMPACT ON INNOVATION AND CUSTOMER SATISFACTION

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Abstract

In a world where innovation is the key to success, corporate houses seek new approaches to enhance customer satisfaction and drive growth. Could design thinking be the answer they are looking for? This research delves into the fascinating world of design thinking and how it can transform how companies approach problem-solving. By putting the customer at the centre of the process and focusing on experimentation and collaboration, design thinking can help organizations create products and services that genuinely meet the needs of their customers. But how exactly does design thinking work in practice? And what impact does it have on innovation and customer satisfaction? This study aims to answer these questions, exploring how design thinking can drive business success and help companies stay ahead of the curve.

Keywords: Innovation, Corporate Houses, Design Thinking, Customer Satisfaction, Problem-Solving, Experimentation, Collaboration, Business Success.

INTRODUCTION

Design thinking originated in the early 20th century when designers began considering user needs and preferences. However, it wasn't until the 1990s that the term "design thinking" was coined by David Kelley, founder of IDEO, who developed a problem-solving methodology to understand users' needs and desires to create effective and satisfying products and services. Design thinking gained traction in the design community. By the early 2000s, it began to gain recognition in the business world, with companies like Procter & Gamble and IBM adopting it to drive innovation and improve their offerings. Design thinking increased customer satisfaction and improved business outcomes by taking a user-centred product and service development approach. Today, it is widely recognized as a valuable approach to problem-solving used by companies across various industries, with its impact expected to continue for many years.

Design thinking is a user-centred approach to problem-solving that has gained increasing attention in recent years. It involves a series of iterative cycles of empathizing, defining, ideating, prototyping, and testing. The first stage is empathy, where designers seek to understand the user's perspective and gather insights about their needs and behaviours. The next stage is definition, where designers use the insights gathered to create a clear problem statement that defines the challenge or opportunity they are addressing. The ideation stage involves generating a wide range of ideas and solutions, while the prototyping stage turns these

ideas into tangible representations that can be tested and refined. Finally, the testing stage involves gathering user feedback and using it to refine the design.

Using design thinking allows organizations to develop innovative and effective solutions that meet the needs of their users. It emphasizes a user-centred perspective, which can lead to higher customer satisfaction and loyalty. It also emphasizes creativity, collaboration, and experimentation, which can help organizations stay ahead of the curve and adapt to changing market conditions.

Design thinking in Corporate Houses

Design thinking has become popular in the corporate world as companies look for new and creative ways to improve their products, services, and customer experiences. It's all about understanding the needs and experiences of the people who use these products and services, which helps companies create more intuitive, user-friendly, and practical things. This approach also encourages teams to work together and share ideas, which leads to better outcomes and a more engaged workforce.

One of the great things about design thinking is that it helps companies identify and fix things that cause their customers pain. By mapping out a customer's journey, companies can identify areas where people may be struggling or feeling frustrated. They can then create better services that make more sense to customers. Design thinking is also helpful for creating marketing campaigns that resonate with people. By understanding what the target audience wants and needs, companies can create more memorable and engaging campaigns.

Another benefit of design thinking is that it encourages innovation and creativity within a company. Employees who feel motivated and inspired to try new things can develop great ideas that help the company. For example, a retail company might use design thinking to create new training programs that empower employees to take more ownership of their work and contribute to its overall success.

Research Gap

In today's fast-paced and ever-evolving world, businesses face complex and multifaceted problems requiring innovative solutions. Traditional problem-solving approaches may not suffice, leaving many organizations needing help finding practical solutions. This is where design thinking is a powerful problem-solving approach that has recently gained popularity. However, despite its potential benefits, many corporate leaders and managers must familiarize themselves with design thinking and its applications, which can hinder its adoption and implementation in their organizations. Furthermore, implementing design thinking in a corporate environment can be challenging and requires a significant shift in organizational culture. This cultural shift can take time to achieve, particularly in organizations resistant to change.

Consequently, conducting empirical research to measure the effectiveness of design thinking in corporate settings has proven to be a challenge. Measuring the impact of design thinking on business outcomes can also be challenging due to the complexity of the process and the diverse

range of products that can result. Additionally, design thinking is not a stand-alone methodology but needs to be integrated with other business methods to achieve desired outcomes. Integrating design thinking with different procedures can present a challenge, particularly if existing processes are entrenched. Additionally, there is often a misconception that design thinking focuses solely on aesthetics and surface-level design. However, design thinking is a problem-solving approach that goes beyond the visual aspects of design. It emphasizes understanding the needs and experiences of users and using this information to create innovative and effective solutions. This approach can be applied to various challenges, from developing new products to improving organizational processes. Companies may need to invest in training and education for their employees to embrace design thinking fully. This can be a significant investment, both in terms of time and resources. However, the benefits of adopting design thinking can be substantial, including increased innovation, better customer experiences, and a more engaged and collaborative workforce. Ultimately, the success of design thinking in corporate settings will depend on the willingness of organizations to embrace change and take a more human-centered approach to problem-solving. As more companies recognize the value of design thinking, we may shift towards more innovative and practical solutions to today's complex challenges. However, bridging the research gap and establishing consumer perception as an integral part of design thinking in corporate houses can provide valuable insights into the effectiveness of this problem-solving approach. By gaining a better understanding of how design thinking can be applied to improve customer experience, service design, marketing, and product design, businesses can create innovative solutions that better meet the needs of their users.

LITERATURE REVIEW

One of the key benefits of design thinking in corporate houses is its ability to foster innovation. In their article "Design Thinking in Business and Management: Innovation, Research and Practice," researchers Kimbell and Seidel (2011) note that design thinking can help organizations identify growth opportunities and develop new products and services. Design thinking can be particularly effective in industries experiencing disruption, such as the technology and healthcare sectors. In these industries, there is a need to quickly adapt to changing market conditions and new technologies. By using design thinking, organizations can better understand the needs of their customers and develop products and services that meet those needs.

Another area where design thinking can be valuable in corporate houses is improving customer experience. In his article "Design Thinking: A Useful Myth," researcher Beyer (2017) notes that design thinking can help organizations better understand the needs and desires of their customers. Organizations can create solutions more likely to meet customer needs and preferences by taking a user-centric approach to product and service design. This approach can be precious in industries where customer experience is critical, such as hospitality, healthcare, and retail.

Design thinking can also help corporate houses improve collaboration and communication among team members. In their article "Design Thinking and Organizational Culture," researchers Kolko and Dailey (2012) argue that design thinking can help break down silos and encourage cross-functional collaboration. In today's complex business environment, where organizations increasingly operate across different departments and geographies, effective collaboration is more critical than ever. By involving team members from other departments in the design process, organizations can create solutions more likely to be adopted and implemented. This approach helps to ensure that solutions are not developed in isolation but instead reflect the input and perspectives of a diverse group of stakeholders. One of the key features of design thinking is its focus on empathy and understanding the needs of others. This approach can build trust and improve communication between team members. By taking a collaborative process, team members can learn from each other, share their perspectives, and work together to create solutions that meet the needs of their customers.

However, some challenges are associated with implementing design thinking in corporate houses. For example, in their article "The Limits of Design Thinking," researchers Liedtka and Ogilvie (2011) note that design thinking can be challenging for organizations focused on efficiency and cost-cutting. Design thinking requires a culture encouraging experimentation and creativity, which can take time to foster in risk-averse organizations. This mindset can be particularly challenging in large organizations with entrenched cultures and established ways of doing things. Design thinking requires a willingness to challenge the status quo and to be open to new ideas and perspectives. Another challenge associated with implementing design thinking in corporate houses is the need for cross-functional collaboration. Design thinking requires input from diverse stakeholders, including customers, employees, and external partners. This approach can be challenging in organizations with siloed departments and where communication between different teams is limited.

Despite these challenges, many organizations have successfully implemented design thinking in their operations. In their article "The Business Value of Design," researchers Kim and Mauborgne (2015) argue that design-led companies outperform their peers regarding revenue growth and shareholder returns. They suggest this is because design-led companies can better create products and services that resonate with customers. Moreover, design-led companies are often more innovative and agile than their peers. They can respond more quickly to market changes and develop new products and services that meet emerging customer needs. By taking a user-centric approach to product and service design, these organizations can identify new opportunities for growth and stay ahead of the competition.

Objectives of the Study

- To ascertain whether consumers are responsive to Design Thinking.
- To understand how Design Thinking can be applied to identify new opportunities and improve customer value proposition.

RESEARCH METHODOLOGY

The primary survey methods were used to collect data from the consumers. This included e-questionnaires. Secondary survey methods were used to gather information about the marketers. These included studying dissertations, literature reviews, articles, journals, newspapers and other research papers. The sampling method used in this paper is Stratified Sampling. Each stratum represents an age group, i.e. Below 18, 18 - 24, 25 - 40, 41 - 60, and Above 60. However, the number of samples chosen from each stratum is unequal. The primary data was mainly collected from West Bengal and Delhi. The questionnaire was distributed via WhatsApp, email, telegram, and other social media applications. The secondary data was collected on a global basis. The total number of respondents to the e-questionnaire is 165. Out of the respondents, the number of males is 49, the number of females is 116, and 1 person preferred not to say their gender. The number of respondents in each age group representing a stratum is as follows:

- 18 - 24 years- 127 responses
- 25 - 40 years- 12 responses
- Above 60 years- 11 responses
- 41 - 60 years- 10 responses
- Below 18 years- 6 replies.

This information is as per the date 11 May 2023

The sample has been selected in such a way that consumers from every age group are taken into consideration. The chosen model is such that justice is given to gender as well. The primary data is both qualitative and quantitative. It is a short-term data. The secondary data is also both qualitative and quantitative. It is a long-term data. Responses to the e-questionnaire were accepted from 24 February 2023 to 11 May 2023. Data was collected from studying various research papers and articles dated from 30 January 2023 to 11 May 2023. SPSS and Google Spreadsheets are this survey's primary data analysis tools. Data was correctly cleansed, and appropriate techniques were used to identify null records. Data has been appropriately organized so the viewers can easily understand the study.

ANALYSIS

Reliability Test

As the first step, the Reliability test was carried out to measure the stability and consistency of the data collected through the questionnaire. The value of the Cronbach alpha was obtained to be .810. The deal was found to be in line with the general rule of thumb value of Cronbach alpha (≥ 0.7), and based on this, the data was concluded to be reliable.

Correlation Analysis

OBJECTIVE 2: To understand how Design Thinking can be applied to identify new opportunities and improve the customer value proposition.

Questions:

How likely are the following factors influencing your purchasing decision of a Hindustan Unilever product?

This correlation table shows the Pearson correlation coefficients among five variables (Price, Quality, Brand Reputation, Product Design, and Sustainability). The table also includes the significance level of the correlation coefficient and the sample size (N).

All the correlation coefficients are positive, indicating a positive relationship between each pair of variables. Additionally, all the correlation coefficients are statistically significant at the 0.01 level, meaning the correlations are unlikely to have occurred by chance.

The strongest correlation in this table is between Product Design and Sustainability, with a Pearson correlation coefficient of 0.620. This indicates a moderate to strong positive correlation between these two variables. There could be several reasons for a strong correlation between Product Design and Sustainability. One possible explanation is that.

Companies that prioritize sustainable practices and environmentally friendly products are more likely to invest in product design that is innovative and attractive to consumers. This could be because ecologically conscious consumers are often willing to pay a premium for sustainable products, and companies that invest in sustainable practices may be able to differentiate themselves from their competitors by offering visually appealing and environmentally friendly products.

Another possible explanation is that sustainable design principles inherently encourage innovation and creativity in product design. For example, designing products that can be easily disassembled and recycled may require new approaches to product design that prioritize modular components and easy assembly. Similarly, creating products that are energy efficient or use sustainable materials may require new policies to product design that prioritize minimizing waste and maximizing the use of resources.

The weakest correlation in this table is between Price and Product Design, with a Pearson correlation coefficient of 0.296, indicating a weak positive correlation between these two variables. This could be due to several factors. One possible reason is that while innovative product design can lead to higher production costs, it only sometimes translates into a higher selling price. In other words, a product with a high-quality and innovative design may still be priced competitively, especially if it faces a lot of competition in the market.

It's also worth noting that there are several moderate to strong correlations in this table. For example, Quality strongly correlates with Brand Reputation (0.561) and Sustainability (0.395). Brand Reputation is strongly associated with Sustainability (0.348). These correlations suggest that these variables are related and may be significant predictors of each other.

Regression Analysis

The survey participants were asked to provide their subjective evaluation of their comprehensive involvement with Netflix, a service-oriented company that integrates the design thinking approach. Subsequently, a regression analysis was conducted to scrutinize whether the alterations made by Netflix, considering design thinking principles to enhance customer value, have actually resulted in their satisfaction.

The questions that were asked and the results are as follows:

Hypothesis:

The 'null hypothesis' might be

H0: There is no significant relationship between user perception of Netflix's user interface, content suggestions, personalized experience, content variety and overall satisfaction.

An 'alternative hypothesis' might be

H1: There is a significant relationship between user perception of Netflix's user interface, content suggestions, personalized experience, content variety and overall satisfaction.

Based on the Model Summary table, we can see that the model has an R-squared value of .531, which means that the independent variables can explain 53.1% of the variance in the dependent variable. The adjusted R-squared value is .519, indicating that the model fits the data well.

The standard error of the estimate is .839, which means that the average distance between the predicted values and the actual value of the dependent variable is .839 units.

The independent variables included in this model are "variety_of_content," "user_interface," "suggestions_based_on_viewing_history," and "personalized_experience." These variables together can explain 53.1% of the variance in the dependent variable.

The ANOVA table provides us with information about the overall significance of the regression model. The "Sum of Squares" column indicates the sum of the squared differences between the predicted values and the actual values of the dependent variable. The "df" column represents the degrees of freedom, the difference between the sample size and the number of parameters estimated in the model. The "Mean Square" column represents the sum of squares divided by the degrees of freedom. The "F" column represents the F-statistic, calculated as the regression's mean square divided by the residuals' mean square. The "Sig." column represents the p-value associated with the F-statistic.

This table shows that the regression model is statistically significant ($p < .0001$) based on the F-statistic of 45.268. This indicates that the independent variables in the model are jointly substantial in explaining the variance in the dependent variable. The regression model explains 52.9% of the conflict in the dependent variable, as indicated by the "Regression" row divided by the "Total" row's sum of squares.

Coefficients

The standardized coefficients, or Betas, show the effect of each independent variable in terms of standard deviation units. These coefficients allow us to compare the relative importance of each independent variable in predicting the dependent variable. The p-values in the "Sig." column show the statistical significance of each independent variable. A p-value less than 0.05 indicates that the independent variable significantly affects the dependent variable. In this case, we can see that user_interface, suggestions based on viewing history, and variety of content significantly affect overall satisfaction, with p-values less than 0.05, personalized experience does not affect substantially overall satisfaction, with a p-value greater than 0.05.

In this case, we can reject the null hypothesis because the p-value for the overall model is less than 0.05, indicating that the independent variables collectively have a significant relationship with the dependent variable. The individual p-values for the independent variables are also less than 0.05, further supporting the rejection of the null hypothesis. There is a significant relationship between the independent variables (user interface, suggestions based on viewing history, personalized experience, and variety of content) and the dependent variable (overall satisfaction).

FINDINGS AND OBSERVATIONS

Objective 1:

Based on the collected data, there appears to be growing awareness and recognition of the importance of design in business, as most of the respondents were familiar with the concept of "Design Thinking." This is a positive sign for Hindustan Unilever, as it suggests that customers are more likely to appreciate and value the design of their products.

The fact that respondents reported purchasing Hindustan Unilever products very frequently further supports this notion. It suggests the company has successfully created products that meet customers' needs and preferences. This indicates that Hindustan Unilever has been utilizing design thinking principles to develop products that resonate with customers.

Additionally, the data shows that slightly more than 50% of the respondents demonstrated knowledge of the term "Design Thinking." While this may seem like a small percentage, it is still a positive sign that the concept has gained some recognition. Furthermore, even those not consciously aware of the design thinking principles used in Hindustan Unilever's product creation would likely be willing to try their products, given the high frequency of their product purchases reported by the respondents.

Furthermore, the finding that respondents reported purchasing Hindustan Unilever products very frequently suggests that the company has successfully created products that meet their customer's needs and preferences, which could be attributed to the use of Design Thinking principles in product development. This indicates that consumers are responsive to Design Thinking as they are willing to purchase and use products created through this approach.

Objective 2:

Correlation Analysis to find the strength and direction of the linear relationship between different design constraints.

Based on the findings, there is a strong positive correlation between product design and Sustainability, and companies that prioritize sustainable practices and environmentally friendly products are more likely to invest in product design that is innovative and attractive to consumers.

Therefore, applying Design Thinking methodologies can help companies leverage this relationship to identify new opportunities for creating sustainable products with appealing designs that meet the needs of environmentally conscious consumers. Using a user-centred approach, companies can gather insights about their target audience, including their preferences, conditions, and pain points related to Sustainability. This can help companies create products that meet their customers' functional needs and align with their values and beliefs.

In addition, Design Thinking can help companies explore new approaches to product design that prioritize Sustainability while maintaining a competitive price point. This could involve working with suppliers to source sustainable materials, rethinking the supply chain to reduce waste and emissions, and exploring new manufacturing techniques prioritizing energy efficiency and resource conservation.

Overall, the findings suggest that applying Design Thinking can be a valuable tool for companies looking to improve their value proposition for customers by creating sustainable products with appealing designs. By prioritizing Sustainability in product design and using Design Thinking methodologies, companies can differentiate themselves from their competitors, meet the needs of environmentally conscious consumers, and create products that positively impact the environment.

A regression analysis was used to evaluate if design thinking changes made by Netflix increased customer satisfaction.

Based on the study's results, there appears to be a significant relationship between several independent variables (user interface, suggestions based on viewing history, personalized experience, and variety of content) and the dependent variable (overall satisfaction) for Netflix. This suggests that by applying Design Thinking methodologies,

Netflix can identify new opportunities to improve customer value proposition and enhance overall satisfaction.

Design Thinking can be applied to gain a deeper understanding of the needs and preferences of Netflix users. Using a user-centered approach, Netflix can gather insights about its target audience, including its preferences, needs, and pain points related to user interface, content recommendations, personalization, and variety of content. This can help Netflix create a better user experience and enhance overall satisfaction.

For example, by using Design Thinking, Netflix can explore new approaches to user interface design that prioritizes ease of use and intuitive navigation. They can also use customer data to develop more accurate content recommendations based on viewing history and other preferences. By personalizing the user experience and offering a wider variety of content, Netflix can improve customer satisfaction and differentiate itself from its competitors.

Moreover, Design Thinking can help Netflix identify new opportunities for growth and expansion. By applying Design Thinking principles to customer research and product development, Netflix can uncover unique user needs and preferences and develop new services and features that meet those needs. This can help Netflix remain competitive and continue to grow its customer base.

RECOMMENDATIONS

Creating a thriving design-thinking culture requires fostering empathy among employees. Encouraging employees to understand the needs and desires of customers by placing themselves in their shoes is crucial to achieving this. Methods such as customer research, feedback collection, and persona creation can help achieve this goal. Empathy is a critical component of design thinking as it enables a better understanding of the customer's pain points, which can lead to more effective solutions. By empathizing with customers, employees can gain valuable insights into their needs and use this understanding to create more innovative and successful products and services.

For a successful implementation of design thinking, it is essential to establish cross-functional teams. These teams should include employees from different departments, such as marketing, design, and engineering. The collaboration of employees with diverse skill sets can foster creativity and promote innovation. The team can leverage each other's strengths to create a more comprehensive solution by working together. This approach ensures that the answer is open to the perspective of a single department or function, leading to a more effective outcome. Cross-functional teams are essential to implementing design thinking and achieving successful results.

Design thinking requires a problem-centric approach, where employees are encouraged to focus on the problem before proposing solutions. This ensures that the team gains a deep understanding of the problem before attempting to solve it. By understanding the problem in detail, the team can identify the root cause, which can help develop more effective solutions. Focusing on the problem also allows the team to avoid jumping to conclusions and investing resources in solutions that don't address the underlying issue.

Encouraging the team to build prototypes early in the design process and testing them with users is an essential aspect of design thinking. This approach helps the team to get early feedback, make iterative improvements, and identify potential issues before investing significant time and resources. By testing early in the process, the team can understand the user's needs and preferences, which can guide them towards developing more effective solutions. Building prototypes also allows the team to visualize their ideas and better

understand how the solution will work in practice. Overall, prototyping and early testing can lead to a more user-centred approach and ultimately result in better outcomes for the project.

Implementing design thinking can be a challenging and resource-intensive process. To ensure success, providing the team with the necessary support and resources is crucial. This includes providing access to design thinking tools, funding for prototypes, and training on design thinking principles. By investing in the team's success, they can more effectively utilize design thinking to solve complex problems and create innovative solutions. Providing the necessary resources and support can also foster a culture of innovation and creativity within the organization, leading to more successful outcomes in the long run.

CONCLUSION

Design thinking has emerged as a game-changer in the corporate world, providing a fresh perspective on innovation and customer satisfaction. By focusing on empathy, collaboration, iteration, and problem-solving, design thinking can help companies create user-centric solutions that resonate with their customers. It's a process that requires time, resources, and commitment, but the rewards can be substantial.

By embracing design thinking, companies can foster a culture of innovation, increase customer loyalty, and stay ahead of the competition. So, whether you're a startup or an established company, design thinking can help you unlock your creative potential and transform your business for the better.

Furthermore, design thinking can help organizations to break down silos and bridge the gaps between departments, allowing for more effective communication and collaboration. By bringing together individuals with different skill sets and perspectives, organizations can develop innovative solutions that are more likely to meet the needs of their customers. This approach fosters a more inclusive work environment and encourages diverse thinking, which can lead to breakthrough ideas and better outcomes.

Design thinking also encourages experimentation and risk-taking. Companies can foster a culture of innovation and creativity by creating a safe space for employees to test new ideas. This approach can lead to breakthrough ideas and transformative solutions that help organizations stay ahead of the curve in today's rapidly evolving business landscape.

Design thinking has the potential to revolutionize the way that businesses approach innovation and customer satisfaction. By putting empathy, collaboration, iteration, and problem-solving at the forefront of the design process, organizations can create user-centric solutions that meet the needs of their customers. Through embracing design thinking, companies can drive innovation, build customer loyalty, and achieve sustainable growth in today's competitive marketplace.

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