

## DESIGN THINKING: A TOOL FOR STRATEGIC INNOVATION

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### ABSTRACT

Companies are changing with their systems and procedures. With the changes in customer expectations and competitions, all companies need to change their practices. One of the present practices that companies are following is 'Design Thinking'.

Design thinking stands for design-specific cognitive activities that designers apply during the process of designing. Design Thinking starts from the consumer and innovation is its core. It is a human centered method to create a product process or system. Many companies like apple, Infosys, P&G, Virgin and Toyota have started incorporating design thinking in its processes and have started reaping its benefits. In the paper the process of design thinking is explained and the difference between business and design thinking is studied.

Design thinking being a recent advancement in the area of management helps to take companies towards reaching their objectives. Design thinking which started in the engineering division has now moved into even the delivery of services. With the study of design thinking the authors reckon that the practice of design thinking will penetrate other companies and will be one of the prominent practices in the business world.

Key words: Design Thinking, Innovation, Business, Competency, Strategy

**Introduction:**

In the modern businesses changes are incorporated in all segments. The changes are either planned or unplanned. The unplanned changes lead to unplanned results and planned changes give desired results. Design thinking is the recent advancement in management and is one of the planned changes to be incorporated in the businesses.

Design thinking is the new buzzword which organisation across the world are increasingly adopting to create discipline innovations that change the way of doing business. Design thinking as a discipline is more human, cultural, social, smart, and agile, and puts innovation at its core. It helps organisations imagine, organize, mobilize and compete in new ways, and creates organisational cultures which are more purposeful, passionate, disruptive and inspired.

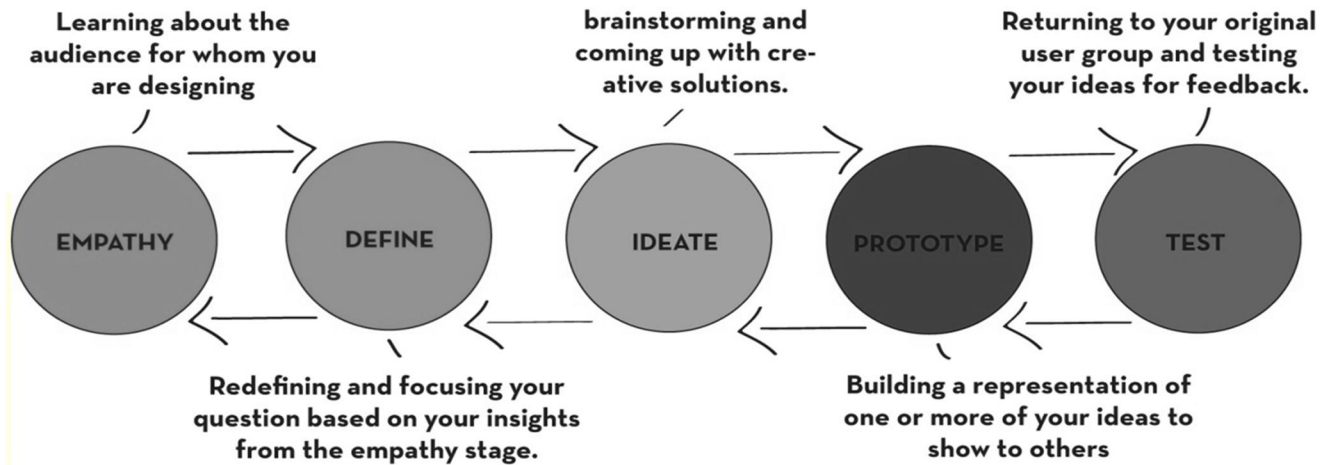
Design has been widely considered to be the central or distinguishing activity of engineering (Simon, 1996). Like problem solving, design is a natural and ubiquitous human activity. Although design thinking has become an integral part of the design and engineering fields as well as business, it can also have a positive influence on 21st century education across disciplines because it involves creative thinking in generating solutions for problems. At its core, design thinking refers to how designers see and how they consequently think (Liu, 1996). It is an iterative and interactive process where designers (a) see what is there in some representation of problem-solving concepts/ideas, (b) draw relations between ideas to solve the problem, and (c) view what has been drawn as informing further design efforts (Do & Gross, 2001; Lloyd & Scott, 1995). Braha and Reich (2003) viewed the design process as a generic process where designers modify either the tentative or current design or the requirements and specifications, based on new information that has become available. This ongoing process of modification is performed in order to remove discrepancies and establish a fit between the problem space, expressed through requirements and specifications, and the proposed design solution.

In order to innovate and win, companies need design thinking. This form of thinking is rooted in how knowledge advances from one stage to another—from mystery (something we can't explain) to heuristic (a rule of thumb that guides us toward solution) to algorithm (a predictable formula for producing an answer) to code (when the formula becomes so predictable it can be fully automated). As knowledge advances across the stages, productivity grows and costs drop creating massive value for companies. Leading companies such as Apple, Infosys, Procter & Gamble, Cirque du Soleil, RIM and others use design thinking to push knowledge through the stages in ways that produce breakthrough innovations and competitive advantage. Filled with deep insights and fresh perspectives, "The Design of Business" reveals the true foundation of successful, profitable innovation.

**Components of Design Thinking:**

Design thinking model developed at the Stanford D School is a methodology that teaches individuals new strategies to solve problems. The design process challenges innovators/designers

to combine empathy, ingenuity and rationality to meet user needs and create successful solutions with an innovator's mindset.



The process has five stages, which can occur simultaneously and can be repeated. Through these stages, problems can be framed, the right questions can be asked, more ideas can be created, and the best answers can be chosen. Each individual step helps innovators/designers solve problems using the essential skills of collaboration, communication, creativity, and critical thinking.

### Stage 1: Empathy

Empathy is generally the starting point and encourages innovators/designers to ask questions. The process starts with learning about the audience for whom the designers design. In the process any existing obstacles are identified.

### Stage 2: Define

The stage begins with redefining and focusing on the questions based on the designers insights from the empathy stage. The stage identifies the needs and motivations of end-users.

### Stage 3: Ideate

This is a brainstorming stage and designers/ innovators come up with creative solutions.

### Stage 4: Prototype

In this stage the representation of one or more ideas of designers are shown to others in order to combine, expand and refine them and the stage ends with creating multiple drafts.

### Stage 5: Test/Feedback

In this stage the innovators/ designers seek feedback from a diverse group of people including the end-users. They also review the objective and determine if the solution has met its goals. The stage avoids consensus thinking and ownership of ideas and discussions are held as to what could be improved.

### Business Thinking vs. Design Thinking:

The difference between business thinking and design thinking is a good start to understand how strategy, business and management is shifting information age (numbers, facts & info dominate) towards the conceptual age (relationships and understanding dominates).

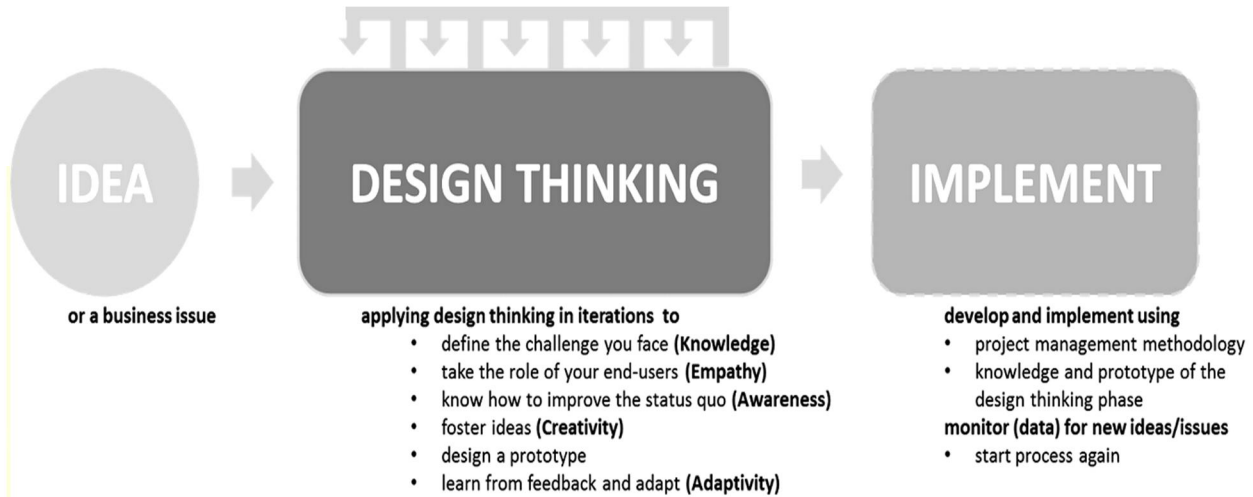
	<b>Business Approach</b>	<b>Design Approach</b>
Problem Solving Approach	Definitive. Relies on equations for “proof”.	Iterative. Relies on a “build to think” process dependent on trial and error.
Validation through	What customers say: often a combination of qualitative (focus groups) and quantitative (surveys) research.	What customers do: often direct observation and usability testing.
Informed by	Market analysis and aggregate consumer behavior.	Direct consumer observation and abductive reasoning (“what might be”).
Completed	Completion of strategy phase marks the start of product development phase.	Never: continually evolving with customers.
Focused on	An understanding of the results of customer activities.	An understanding of customer activities.
Tools used to communicate strategic vision	Spreadsheets and PowerPoint decks.	Prototypes, films, and scenarios.
Described through	Words (often open to interpretation).	Pictorial representations and direct experiences with prototypes.
Team members	Vertical expertise and individual responsibilities.	“T-shaped” expertise: a principal vertical skill and a horizontal set of secondary skills. Collaborative (team) responsibilities.
Work patterns	Permanent jobs, on-going tasks, and fixed hours.	Temporary projects with associated tasks and flexible hours.
Reward structure	Corporate recognition based on the bottom line.	Peer recognition based on the quality of solutions.

**Conclusion:**

Design Thinking is generally understood to evolve a creative and systematic approach to problem solving by placing the user at the centre of the experience. The focus of the process as said is on the end user understanding, problem awareness and creativity that could lead to higher quality, acceptance and success rates of solution generating business projects. Design thinking



process alone may not solve all problems and may not find solutions to all situations but, with meaningful iterations it could help to address many current problems.



Design thinking is said to be a process of investigating innovating and implementing ideas taken from the mind to the market with skill, speed and imagination. Thus it helps in building design competencies in the employees using design thinking which include imagination, curiosity, empathy, focus and discipline and a shift from mechanically delivering solutions to creating solutions that deliver new value to customers. As customers expand and move into newer areas of technology, they look to companies to deliver services which are much more innovated, agile and speed. Thus to conclude design thinking is a recent advancement in the business world which was a strategy when initiated and in the future will become a philosophy.

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