Design thinking
The evolution of human-centred design

Design thinking is a problem solving approach that focuses on users and their emotional needs while experiencing products and services. It helps identify what adds value to various internal and external stakeholders in the organisational ecosystem. Design thinking practices help designers look beyond the functional needs and unearth their emotional needs, thus designing an experience that adds emotional value.
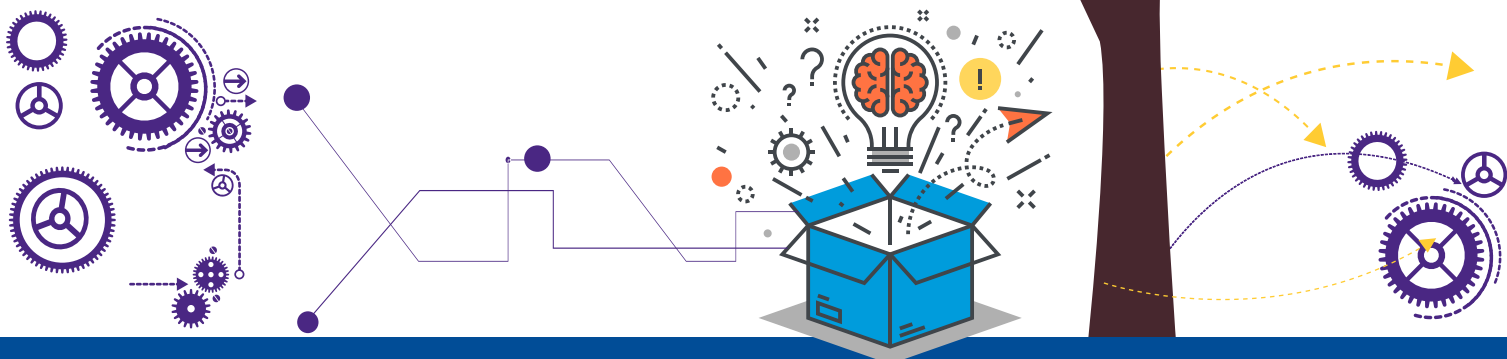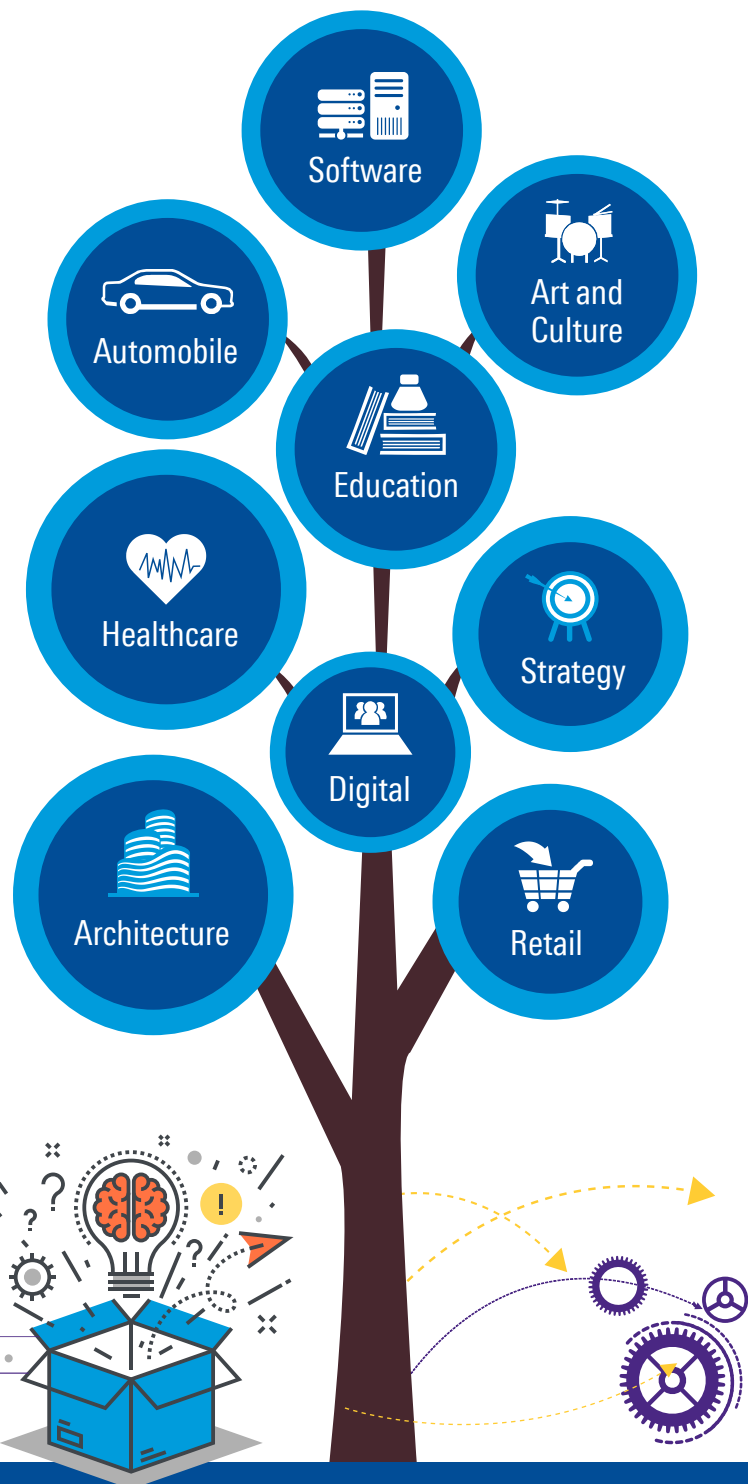
Design problems are complex – thus delivering solutions for those problems can also be complex. Design thinking helps remove organisational silos and thus drives a culture of collaboration and experimentation. This paper intends to provide readers an insight into Design thinking and its evolution, and to explain why it should be of utmost priority to both established and new age organisations as well as why it is here to stay and rapidly evolving.
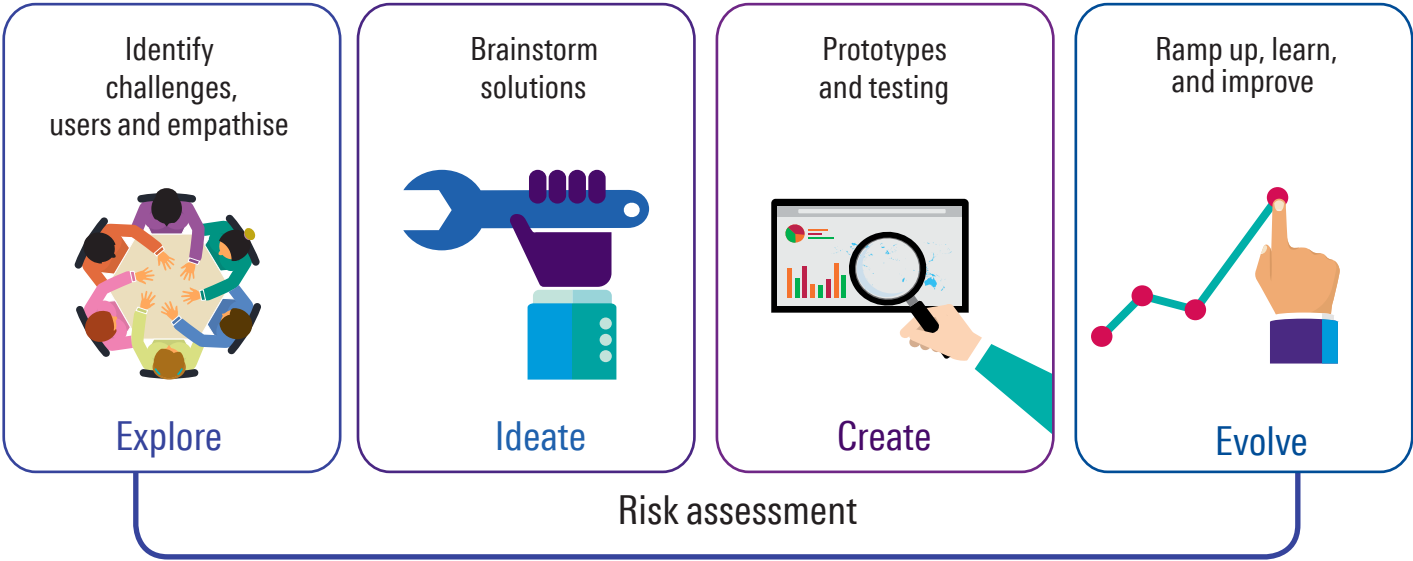
About Design thinking:

Design thinking is a structured process to find solutions to complex human problems.

The uniqueness of the design thinking process is that it helps people to define and solve problems that are unstructured and have no historical references. It helps dissect problems that are complex and frame/reframe areas that require solutions.

There are several examples of where the application of Design thinking has been extraordinarily successful in design-led companies. Design has now evolved far beyond designing objects. Organisations now emphasise on learning how to think like designers and apply design principles at the workplace. In several organisations globally (including the non-profit sector), Design thinking is at the core of strategy development and organisational change. It is being applied to pull in efficiency, make the optimum use of resources, and convert business models to more sustainable practices for the future.

Software

Art and Culture

Automobile

Education

Healthcare

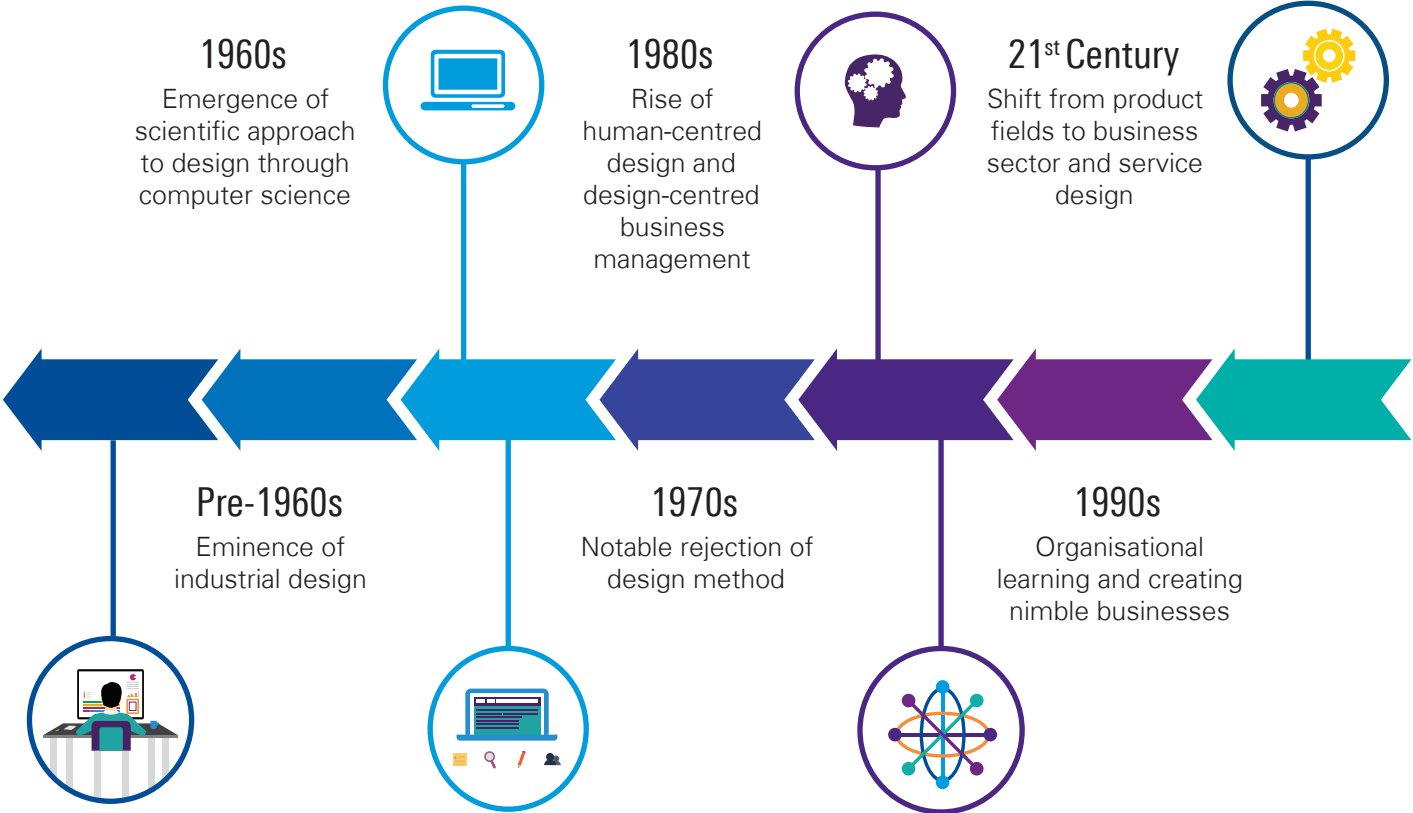Strategy

Digital

Architecture

Retail

KPMG's Design thinking practices have been segmented under four steps:
Explore, Ideate, Create, Evolve and are strengthened through continuous risk assessment and mitigation.

Identify challenges, users and empathise

Brainstorm solutions

Prototypes and testing

Ramp up, learn, and improve

Explore

Ideate

Create

Evolve

Risk assessment

The Design thinking process relies heavily on massive collaboration and creative chaos. It delivers great results when the silos of the organisation are broken and people come together to deliver solutions, keeping users at its core.

Design thinking evolution

1960s
Emergence of scientific approach to design through computer science

1980s
Rise of human-centred design and design-centred business management

21st Century
Shift from product fields to business sector and service design

Pre-1960s
Eminence of industrial design

1970s
Notable rejection of design method

1990s
Organisational learning and creating nimble businesses

Source: KPMG in India's analysis 2017 based on our research.

Design thinking has gone through a long journey of evolution. The foundation of the design thinking principles was laid in the pre-1960s era, and was further reinforced during the Second World War era in the form of industrial design. With the progress in technology and invention of computer science, design moved to a more scientific approach, where design was pre-conceived using computers and then brought to production. In the 1970s, design principles faced rejection as they could not keep pace with the fast evolving service economy. During the 80s and 90s, there took place a resurgence – with design principles evolving and taking the shape of human-centred design. This resulted in the evolution of specialised design firms, providing design services.

The 21st century has seen the further evolution of Design thinking, as it is continues being applied to product development, service design, organisational strategy design, and so on.

A design thinker's skill need not necessarily be technical expertise. However, they should be good with working in teams, should be empathetic towards humans and humanity, and should be willing to try and ready to fail. The designer's mindset is highly insight-oriented. The designer is typically an out-of-the-box thinker, a problem solver, and always maintains the consumer's requirement at the crux of all creation/ideation.

A designer's mindset

Collaborative

Optimistic

Human centred
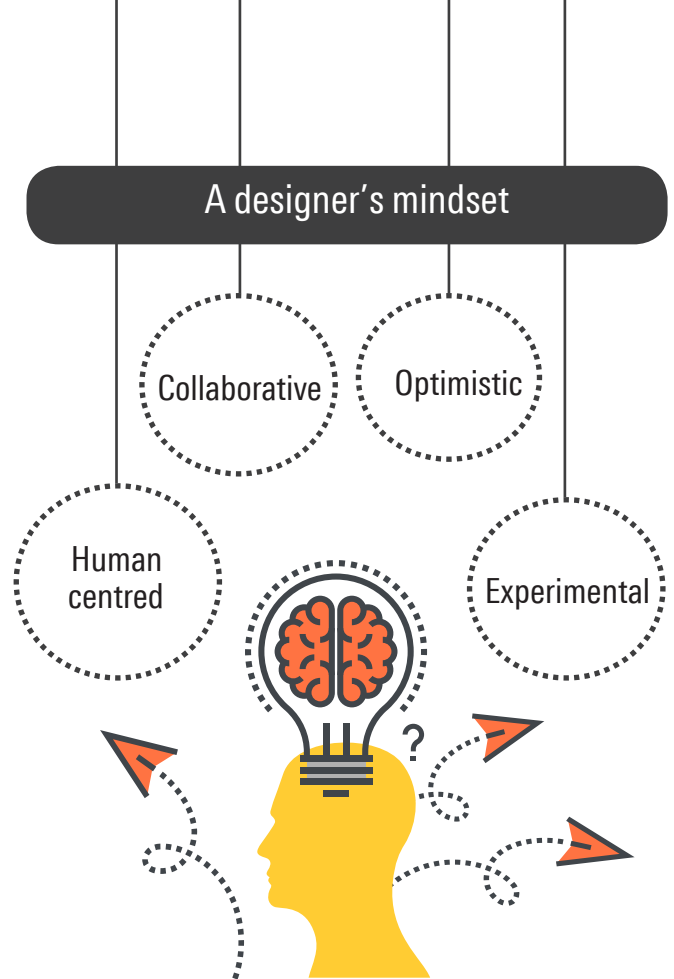
Experimental

Design thinking and other problem-solving methods:

Any organisation can be broadly divided into two spaces by virtue of how it serves a purpose – value creation and value capture.

The value creation space is where most of the new experiments and new solution development takes place. This space is typically known for the transformational innovations.

The value capture space is where the performance improvement initiatives lie. This space is typically known for incremental innovations to help extract even more value from the existing products and solutions that the organisation provides.
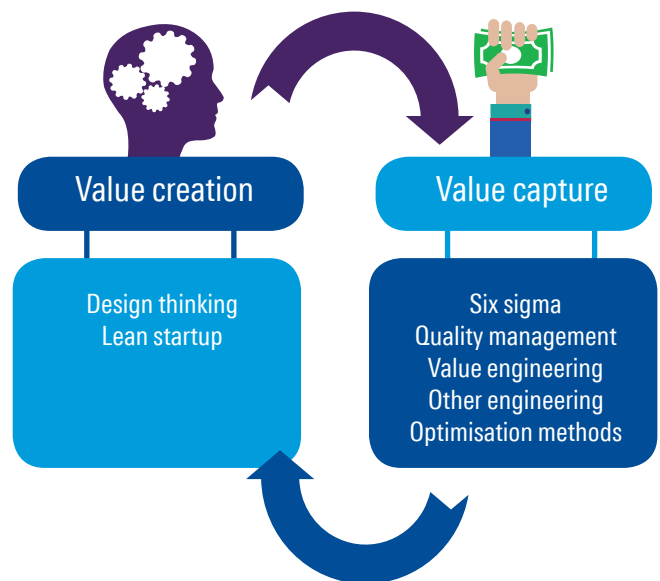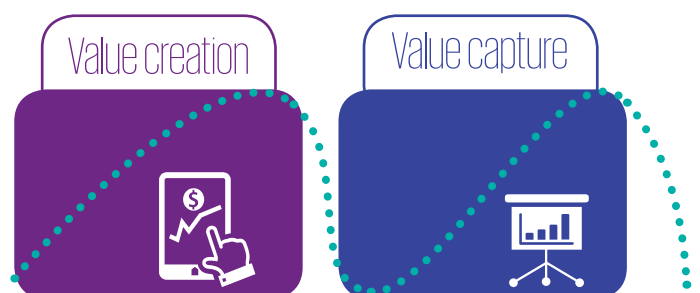
The solution value curve:

It is important for organisations to continuously invest in both the spaces; while the value creation space incubates the potential solutions that will bring long term growth to the organisation, the value capture space helps extract and optimise the value from current/existing solutions. A stagnancy in any one of these spaces can expose the organisation to a risk of short term stagnancy or extinction in the long term.

Classic examples of this can be seen in industries like photography and imaging technology, mobile phone manufacturing and so on.

While the practice of Design thinking has been defined in four steps, it is extremely important for companies to evolve in their practices that help drive organisational behaviour and thus a culture that is conducive to driving disruptive experiences and truly being customer-centric.

Value creation	Value capture
Design thinking Lean startup	Six sigma Quality management Value engineering Other engineering Optimisation methods

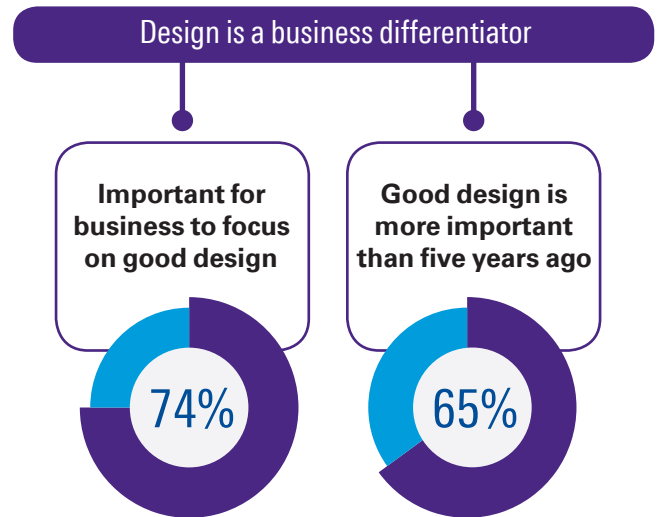Value creation

Value capture

The Future of Design thinking:

The journey of design principles has been fascinating from being applied as a method to design products through industrial design to now re-designing the organisational mindset and the very weave of its culture. However, the future of design looks bright and it is here to stay. Some data substantiating the potential it carries:

While Design thinking as of now is being applied to solving complex business problems across sectors and domains, designers and design thinkers across the globe are working towards writing the future story of design thinking. It is possible that design thinking principles will be applied to even more complex areas like human behaviour design, space ecosystem design, humanity design or even nature design.
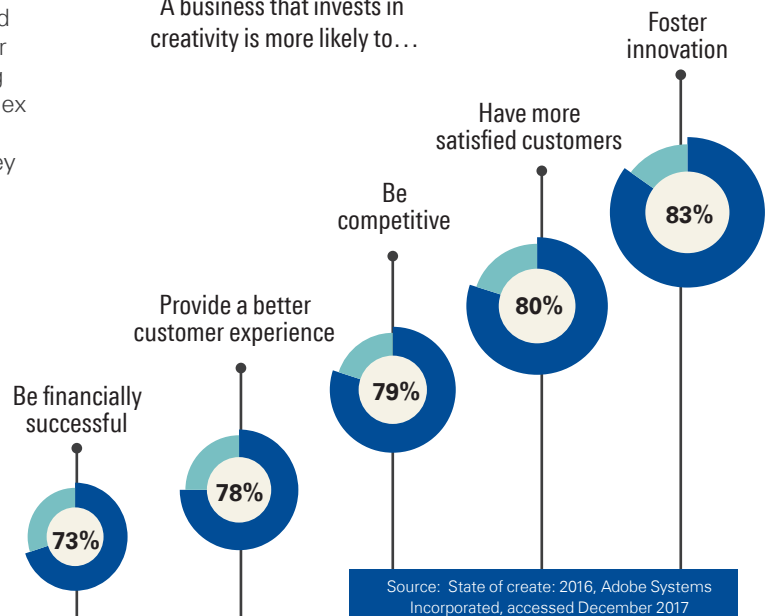
In conclusion:

The requirements of the consumer are changing rapidly and they are now looking at not a product or service in isolation, but to the entire experience as a whole. It is more and more important for companies to break old assumptive models and reimagine products, services, and business models to deliver experiences beyond consumer expectations. Design thinking could play a key role in helping companies identify the complex latent needs of consumers. It can also help design solutions to deliver experiences that can help them traverse the journey from customer satisfaction to customer advocacy.

Design is a business differentiator

Important for business to focus on good design

74%

Good design is more important than five years ago

65%

Investing in creativity brings business success

A business that invests in creativity is more likely to…

Be financially successful
73%

Provide a better customer experience
78%

Be competitive
79%

Have more satisfied customers
80%

Foster innovation
83%

Source: State of create: 2016, Adobe Systems Incorporated, accessed December 2017

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