

DESIGN THINKING



What is Design Thinking

Let's start with **Design**.

Some think that it is how-to design ... well ... not exactly!

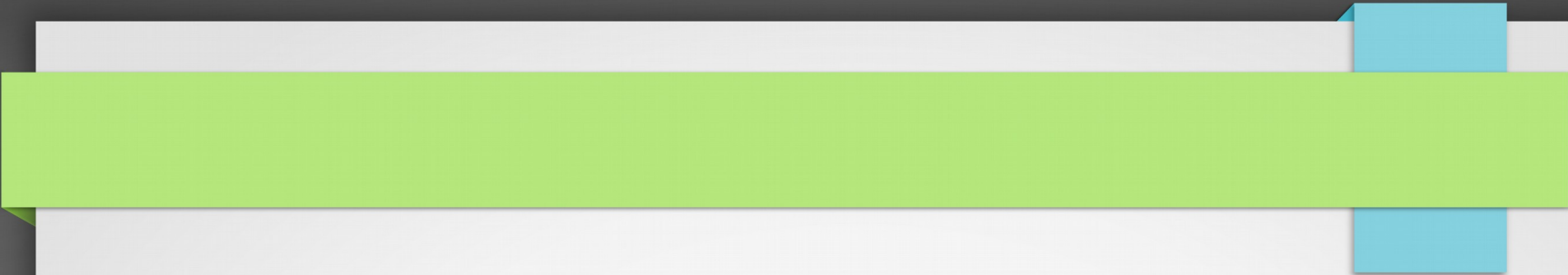
Originally, it was way to organize a team of product designers so that they would come up with better product ideas. However, today it is applied to solve all kinds of conundrums.

What is Design Thinking

And thinking?

Thinking refers to how-to organize your team. Think about it, this is not easy. In a team someone always wants to be the boss, big egos, shy people or just simply how to manage the information flow can be daunting.

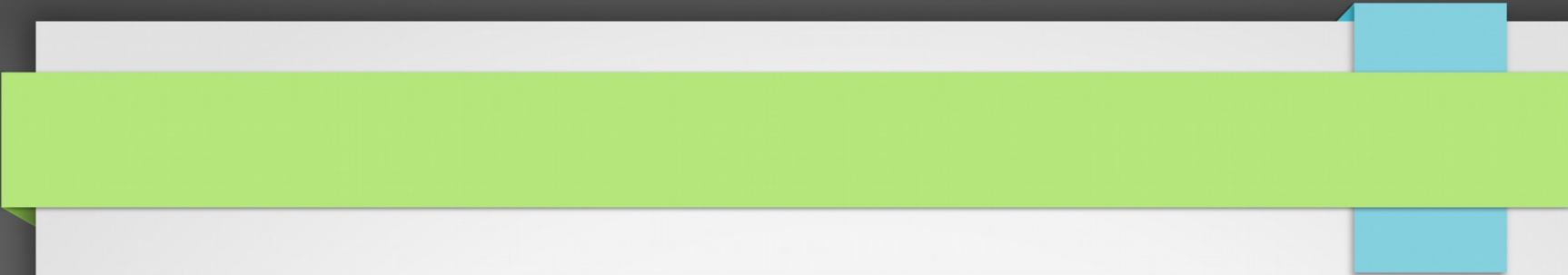
Design thinking is a set of rules and “tricks” that help you do all this well so you get the best out of your team. How? By influencing mindset: the way we think and work, hence thinking.

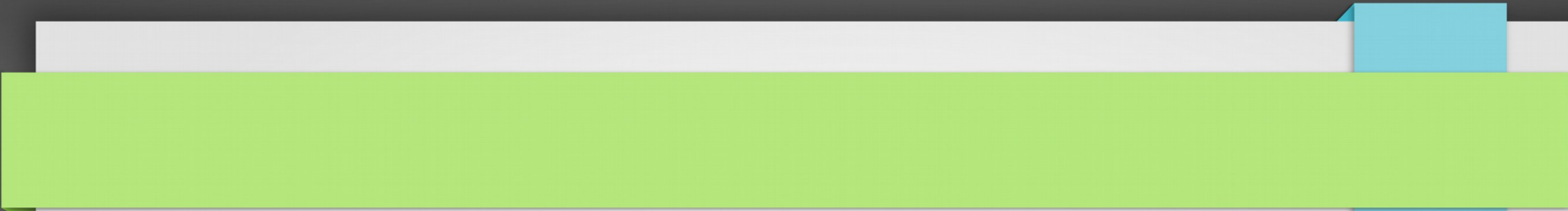


*In a world that needs innovation and
well-run companies,
design thinking
is an approach to problem solving that
allows us to
combine right-brain creative thinking with
left-brain analytical thinking*

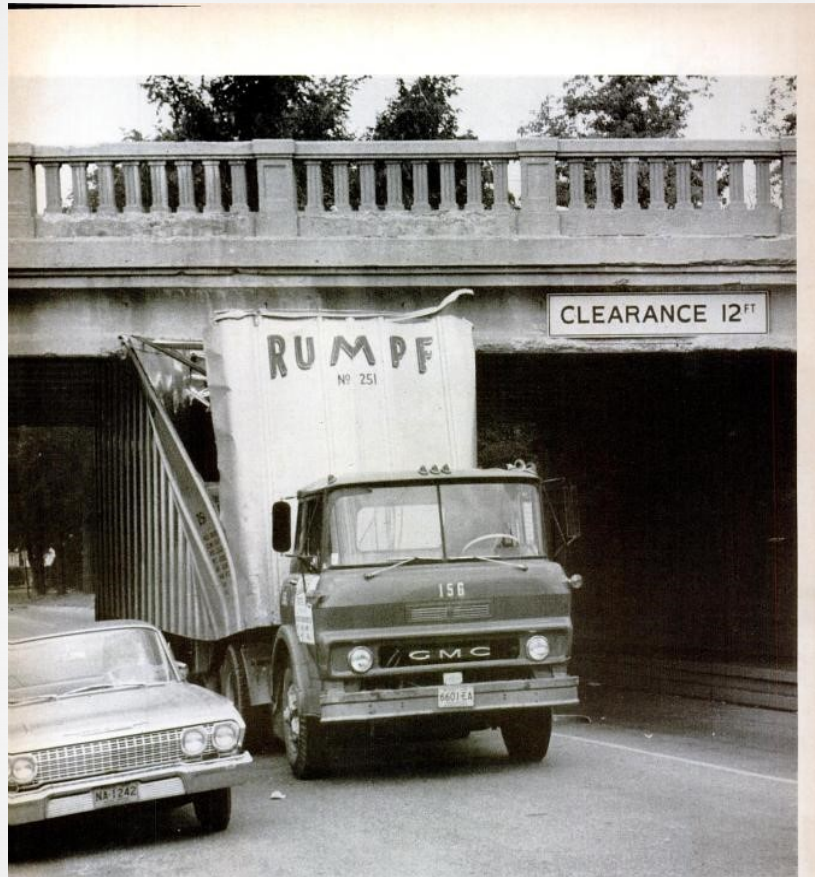
What is Design Thinking

- Design thinking is a discipline that solves problems and redesigns tasks by working from the viewpoint of the user to come up with a new approach to processes that addresses common pain points.
- Solve problems in a creative and innovative way.

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- Some of the world's leading brands, such as Apple, Google, Samsung and GE, have rapidly adopted the Design Thinking approach.
 - Design Thinking is being taught at leading universities around the world, including Stanford, Harvard and MIT.

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- Design Thinking is an iterative process in which we seek to understand the user, challenge assumptions, and redefine problems in an attempt to identify alternative strategies and solutions that might not be instantly apparent with our initial level of understanding.
 - Design Thinking provides a solution-based approach to solving problems. It is a way of thinking and working as well as a collection of hands-on methods.

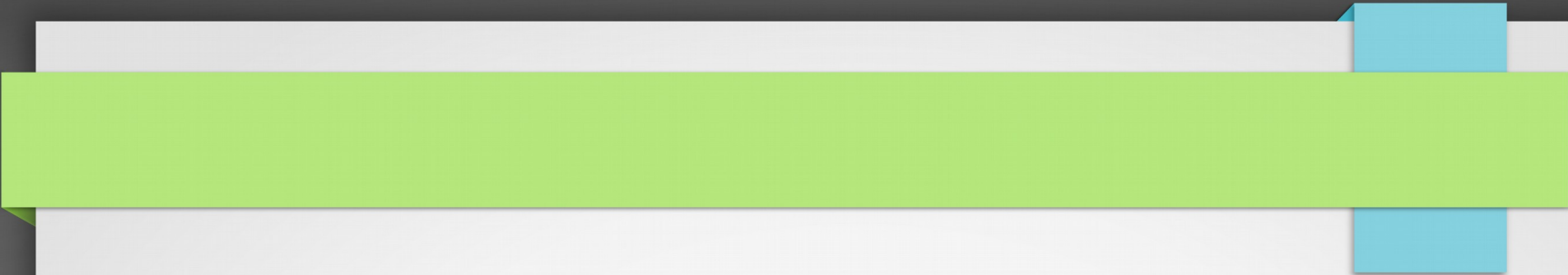
Problem: 1



MISCELLANY / THE TRUCK THAT COULDN'T

Hoffa-hoffa-hoffa-hoffa-hoffa throbs the engine of the big trailer truck, hurtling down from Ypsilanti and on into Ann Arbor. *Beck-beck-beck-beck-beck* clack the tires on the pavement along State Street, a sound to fill a teamster with reverie and may be set him to thinking of pulling in soon for a bite . . . you know what the truck drivers always say: if you

want a good meal in Ann Arbor, look for a place where the University of Michigan football players eat . . . easy now, underpass coming . . . sign says 12-foot clearance . . . plenty of room—this rig stands only . . . what was the figure? . . . got it here someplace . . . ah, here . . . 12 and a half feet . . . let's see . . . that gives six inches to spare so . . . RUMPF!

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- The story symbolizes the struggles we face where oftentimes the most obvious solutions are the ones hardest to come by because of the self-imposed constraints we work within.

Example

- “How Design Thinking Transformed Airbnb from a Failing Startup to a Billion Dollar Business” - Article

AIRBNB

Airbnb growth rate was zero.

A design team member was going through the app like a user that he realized the pictures looked terrible! They decided to rent a camera, travel to New York and spend some time with their customers to replace the amateur photos with more professional-looking ones.

A week later, their revenue nearly doubled. By taking a risk on a non-scalable solution, they witnessed their dwindling start-up transform into a thriving enterprise that revolutionized the travel industry.

AIRBNB



Braun/Oral B Electric Toothbrush

In 2016, Braun and Oral B recruited expert designers to create a smarter electric toothbrush.

The manufacturers suggested them to design an electric toothbrush with a variety of sophisticated data-tracking features including a music player, ways to sense how well the user's were brushing every single tooth, and even how sensitive their gums were.

Braun/Oral B Electric Toothbrush

However, advised them to think more about the customer's experience as opposed to their own vision for the product.

They added on-the-go, USB charging and made it easier for user's to order replacement brush heads, problems that Braun and Oral B consumers had already expressed.

The result was an exceptional product that took user feedback into consideration to boost sales and increase customer loyalty.

Braun/Oral B Electric Toothbrush



Uber Eats



Uber Eats

“To understand all our different markets and how our products fit into the physical conditions of each city, we constantly immerse ourselves in the places where our customers live, work, and eat.

Sitting in our offices in San Francisco or New York, we can't truly understand the experiences of a person on the streets of Bangkok or London.”

NIKE

In the 80's Nike combined Sports and Design and launched Air Force One-The first sneaker with pressurized air technology to absorb shock to help athletes perform better. It became a fashion sensation of New York.

NIKE

It is just one of the examples how Nike has been Using Design to improve the User Experience by understanding what they need.



Design Thinking

- In the simplest of words, Design Thinking can be explained as the process of redefining problems - in an attempt to figure out alternative strategies or better solutions.

Design Thinking

- “Most people make the mistake of thinking design is what it looks like. People think it’s this veneer — that the designers are handed this box and told, ‘Make it look good!’ That’s not what we think design is. It’s not just what it looks like and feels like. Design is how it works.” — Steve Jobs

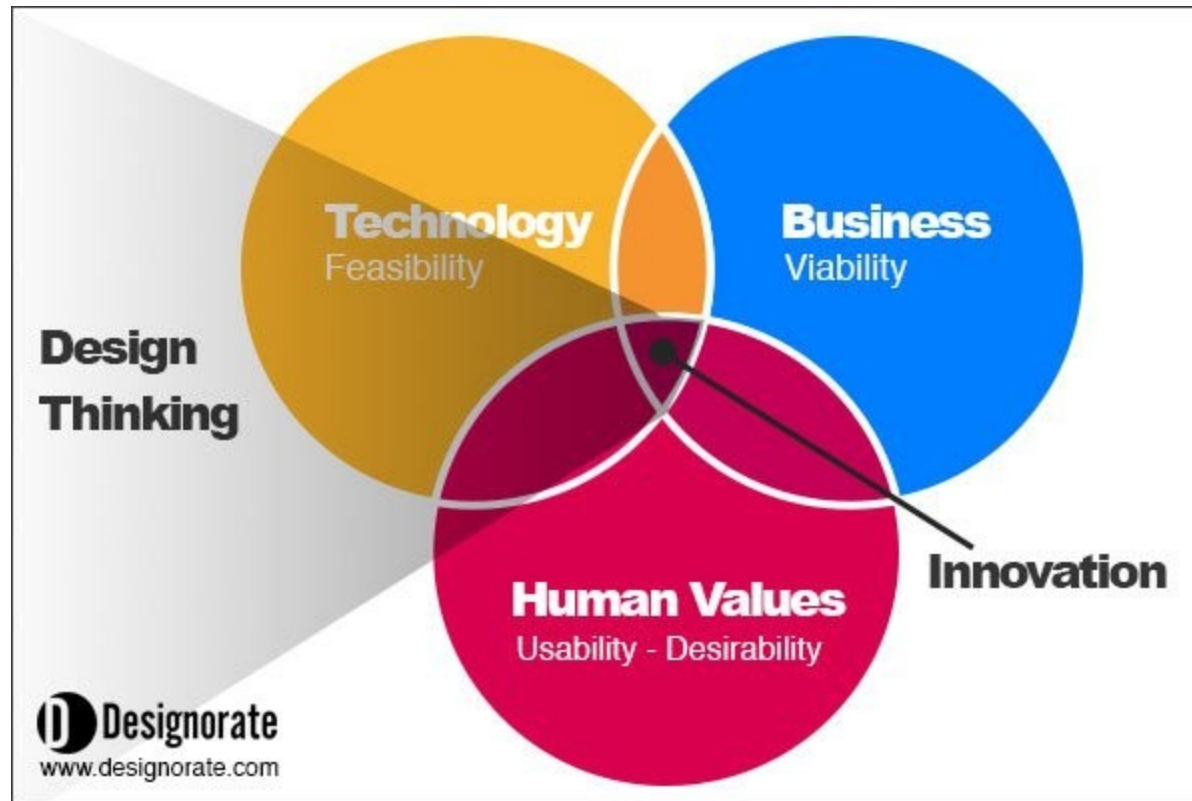


Figure: The relation between design thinking and innovation

User Desirability

- The product should satisfy the consumer's needs by solving everyday problems through a user-centered process.
- This can be achieved through a deep understanding of the user and through an empathic design process, which can only be achieved by putting ourselves in the shoes of our consumers.

Market Viability

- Successful products require an integrated marketing strategy that identifies the target segment and builds the product brand in accordance with this target segment.
- Also, tools such as the SWOT analysis allows us to understand the strengths, weaknesses, opportunities, and threats of the specified product.

Technology Possibility

- Technology provides state-of-art tools for designers to innovate and build products that meet today's needs.
- Technology should be adopted through the development process, including the prototyping stage where a visual presentation of the product is made to the team.

Phases of Design Thinking

Empathise



Define



Ideate



Prototype

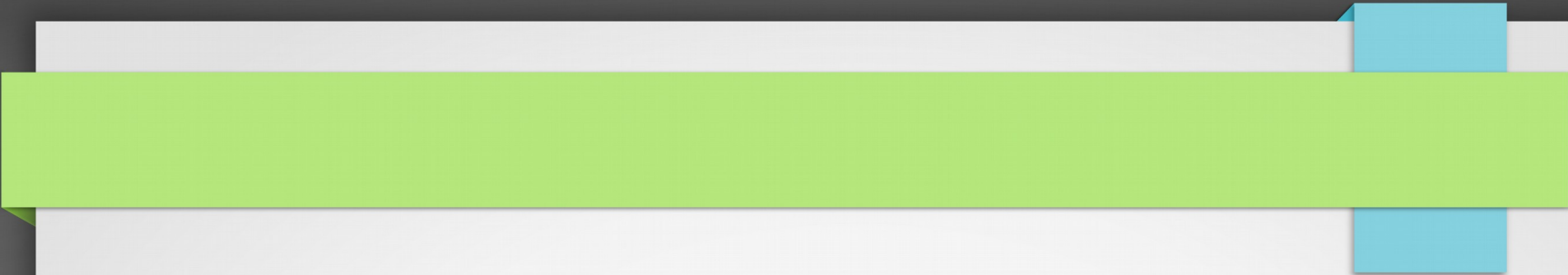


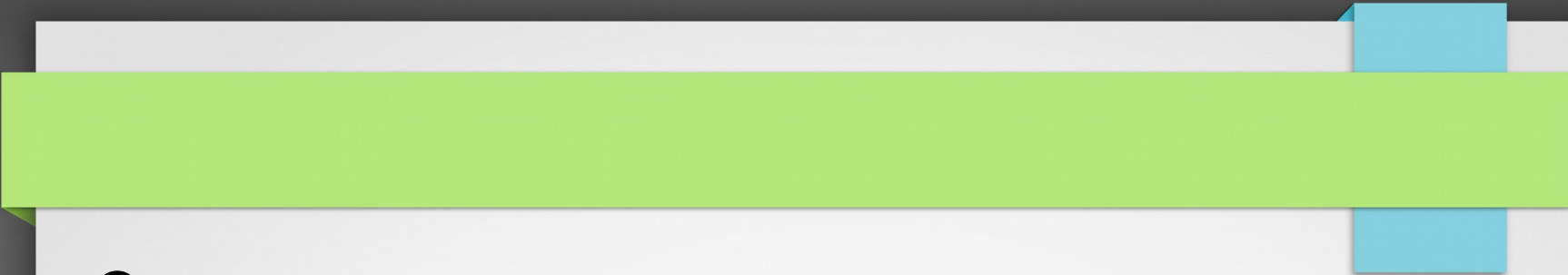
Test



Phases of Design Thinking

- Empathise – with your users
- Define – your users' needs, their problem, and your insights
- Ideate – by challenging assumptions and creating ideas for innovative solutions
- Prototype – to start creating solutions
- Test – solutions

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- It is important to note that the five phases, stages, or modes are not always sequential.
 - They do not have to follow any specific order and can often occur in parallel and repeat iteratively.
 - Given that, you should not understand the phases as a hierarchical or step-by-step process.

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- Design thinking is a human-centered approach toward problem solving. It provides you with a framework of how to tackle complex problems.
 - Design thinking reminds you to always be a questioning thinker as it prompts you to examine and test propositions of any kind which are offered for acceptance.

DT brings the focus back to the learning individual



Knowledge



Learning individual