

DE toolkit
SIGN
THINK
ING

a comprehensive guide
to innovation with expert
tips and insights

ECH
CS designing
desirable
futures

ECH
CS school
of design
thinking

ECH
CS innovation
projects

ECH
CS ventures

We believe in the power of design!

Echos is an innovation lab that aims to foster the new generation of innovators worldwide. Echos has three business fronts: Innovation Projects, School of Design Thinking, and Echos' Ventures.

our purpose_

We believe that innovation only happens through people and that every problem and solution carries in it a decisive human-factor. It is from this perspective that we project new realities.

Design has the power to transform realities and build desirable futures. We are the designers of invisible things. We project change, transformation, culture, behaviour, services, processes, business models and learning experiences. We project everything that cannot be touched but can be felt. We believe that, generally, those are the most important things in life.

Echos wants to have a positive impact on the innovation ecosystem, both locally and globally. We are a group of people and companies that think and act in a new way; that contest the status quo and raise the bar when it comes to innovation. We're constantly seeking new ways to do business and to foment network interactions. To us, innovation has to be for good.

We believe in the power of combining design with business to transform organisations, people and society. Design is responsible for bringing the human factor to the mic, whilst business brings the boldness that can generate groundbreaking, transforming ideas.

Echos has three business verticals:

Design Thinking toolkit



Developing learning experiences for innovation that help people and organisations to master the tools and mindset of innovation effectively.



Helping organisations to become more innovative whilst tackling complex contemporary challenges through consultancy with our experienced team of experts.



Echos Ventures is Echos' accelerating unit for new businesses. In partnership with our team of experts, projects and startup companies are hand-picked to have their growth process accelerated using Echos' design approach.

Part 1 Introduction & Summary



design thinking and zero gravity

Reinaldo Campos



“Design Thinking is an approach used to create human-centred, innovative solutions; it carries in itself a space in which two forces - connection and disconnection - meet. I call this space, metaphorically, the **zero gravity space**.”

MIN DSET

how do I let go of
my old mindset?

I noticed that because people are aching to find new ways to think, when they start to apply Design Thinking to their challenges, they forget to ask themselves: **how do I let go of my old mindset?**

Traditionally we are used to solving problems from a personal perspective in which we ask ourselves “How would I do this?” or “How would I get out of this situation?”. Rarely we consider other people’s needs. Design Thinking invites you to dive into other people’s universes, which means you would ask “How can you and I understand this challenge?”. It’s in the exercise of letting your ideas go and journeying towards the unknown that we can finally arrive at a discovery.

Practising “letting go”, exploring the unknown with someone else, have the power to make possibilities to emerge inside Design Thinking - this is a **(dis)connection** state.

This (dis)connection makes us able to create new alternatives for the journey ahead, from a fresh start point. No ties. As if gravity didn’t apply to us. As astronauts that propel themselves into space breaking the boundaries of our universe.

_Reinaldo Campos

**creative
confidence**
and
**leadership
through**

design



DO YOU CONSIDER YOURSELF CREATIVE?

“When we have a workshop or when we have clients in to work with us side by side, eventually we get to the point in the process that’s kind of fuzzy or unconventional. And eventually, these big-shot executives whip out their BlackBerrys and they say they have to make really important phone calls, and they head for the exits. And they’re just so uncomfortable. When we track them down and ask them what’s going on, they say something like, “I’m just not the creative type.” But we know that’s not true. If they stick with the process, if they stick with it, they end up doing amazing things. And they surprise themselves at just how innovative they and their teams really are.”

Do you consider yourself creative? How come? Ask this question to your friends, family members, work colleagues. Ask them also to define creativity and observe their answers.

You will likely hear things such as “I’m an analytical kind of person, numbers are my forte” or “I am not creative at all; I can’t even draw. My brother is really good when it comes to creative stuff, but not me”. Many of the responses you’ll get will be directly related to some artistic form of expression as if creativity could only be linked to artistic talent.

The people David Kelley mentions are not the only ones who feel this way. Many people don’t see themselves as creative because they see creativity as a fantastic

activity that is better suited for others; a gift you’re born with. The truth is that creativity is the act of creating something, and everyone creates things all the time.

Everybody is creative!

We need to find our creative confidence and understand the potential we have in training it to make it better.

Design Thinking is a process that challenges and invites us to look into ourselves and others; to have ideas and manifest them in the form of creations whilst learning from people in the process.

In his TED Talk, Kelley extends his audience an invitation:

“I hope you’ll join me on my quest, you as, kind of, thought leaders. It would be really great if you didn’t let people divide the world into the creatives and the non-creatives, like it’s some God-given thing, and to have people realize that they’re naturally creative, and that those natural people should let their ideas fly.”

Enjoy the journey! Create, experiment, learn. To establish your creative confidence is the best way to position yourself within your . being confident in your creativity will transform you into an inspirational leader that can foster change through design.

everybody is
CREATIVE!

why design? a brief history lesson



design's evolution

Juliana Proserpio

In the past few years, design has evolved and expanded its horizons. One of the reasons behind this evolution is the growing complexity of how people deal with design challenges.

At first glance, the term “design” evokes aesthetics of tangible objects. It may also remind you of design’s sub-categories such as graphic design, product design, automobile design, fashion design, etc.

However, in the scope of design is broader than this.

DESIGN IS ABOUT HUMAN-CENTRED SOLUTION.

Design is broader and includes considering the intended outcome related to an action and planning human-centred solutions.

When dealing with complex problems, the way you do things and solve problems matters because it creates different results. The multiplication order that states “changing the order of factors does not change the product” doesn’t apply when we are dealing with systemic change and people - and this is why Design Thinking is so important nowadays.

The concept of design has been transformed in the past few decades and now includes a range of challenges and objectives that weren’t part of the spectrum before.

If design were a person, I would say that this person had started learning the use of aesthetics and gradually progressed to learn how to tackle and translate outcomes for information and communication problems through graphic and visual design.

After making this progression, our friend “design” took another step forward and started dealing with physical things. Specifically, “design” started creating products, spaces and every possible tangible outcome. When “design” took this step, it became easier to understand what “design” was capable of doing. One of the examples of this order of design is BAUHAUS that believes that “form follows function”. These abilities are essential in societal development. The design of tangible things helped shape our society since the industrial age until now.



the four orders of design

“Design” was already becoming famous, but “it” was still shy and material oriented. “Design” eventually understood that “its” life couldn’t be lived through a material perception only. Hence, “it” started experimenting with the creation and manipulation of things that weren’t material or tangible; the things that exist in between other relations.

how has design evolved

Richard Buchanan, in his ideas about Four Orders of Design theory, points out how design has changed over time in its overall scope; from a context of creating tangible things to accessing intangible change.

01

design of symbols

In the first order, using the principles of Graphic and Information Design, there is an emphasis on developing the necessary symbols for the communication process. From a visual point of view, it is a matter of projecting the message to be transmitted, persuasive arguments, syntax and semantics, enabling understanding and facilitating the exchange of information. This one is the order of design that involves typography, illustration, photographs, prints and everything related to the universe of graphic design, visual design and communication design.



graphic, information, communication



02

industrial design

The designer's intention in this order is to design physical objects that are useful to people, such as in Industrial Design and Architecture. It is about selecting and applying different materials, design tools and incorporating available technology, which will give support in use and interaction in the real world. This order is related to physical, tangible artefacts, objects and space (architecture).



product, space (architecture)



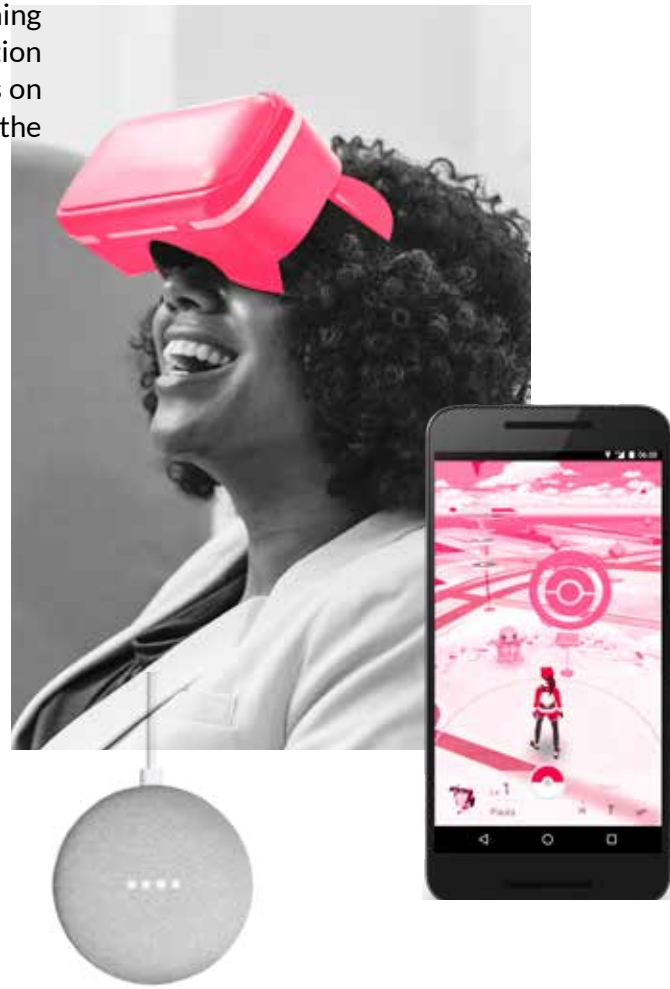
03

design of interactions

This order is related to people's behaviour, as occurs in Interaction and Service Design. The third order is about designing the processes involved in how people act; designing transactions and activities over time, as well as defining the points of contact and choice options. In the interaction order, the field of design is in action. The focus here is on drawing experiences rather than objects. In this order, the focus is on interaction, services and experience design.



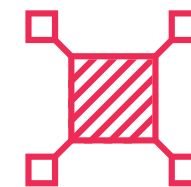
services,
experiences,
interfaces



04

design of systems

The last order of design is the most complex of all. In it, we talk about designing dynamic environments and systems. It is about designing the transformation of systems and their structures. It also involves designing their functions and flows as well as using its dimensions and constraints. The last order focuses on human systems, the integration of information, objects, interactions and social, work and learning environments. In this order the focus is to design businesses, learning experiences, systems, culture, organisations, and cities.



business, organizations,
education, government



At Echos, we focus on the third and fourth order of design; an area that few people endeavour because of its ambiguity and complexity. We call this design area the

“INVISIBLE DESIGN”

We believe that the things that cannot be touched are the things that matter the most to people. Consequently, this is why we, as humans, cannot leave the design of the most important things, such as services, experiences, systems, organisations, and culture left to unconscious design.

DESIGN THINKING GLOBALLY

Design Thinking has been practised since the 60s, but it became popular in 2002*. Nowadays, Design Thinking is practised by hundreds of companies and schools. Echos School of Design Thinking was launched in Brazil in 2011 and arrived in Australia in 2017. Since then, we have answered to growing market demand from companies, organisations, entrepreneurs and

professionals seeking innovation in a complex work environment. Our purpose is to foster the next generation of innovators worldwide whilst designing desirable futures. We aim to do that by capacitating professionals around the world so that they can adopt a new mindset based on the Design Thinking pillars, that will be shown in the following pages.

Echos has an impressive client portfolio with companies such as Janssen, Accenture, Ernest Young, Faber-Castell, Tafe, University of Tasmania, Telstra, Worksafe, Bendigo Bank, and many others.

(*For design thinking origin story plus some of the people who made it all happen, visit: <https://bit.ly/2taChUM>)

BIG COMPANIES ARE AT THE FRONTIER OF INNOVATION AROUND THE WORLD.

An example is Procter & Gamble that implemented a Design Thinking process for the creation of new products in 2001 generating in 5 years a significant growth in their market share, as Roger Martin points out on his book "The Design of Business".

Another example is IBM*, that used Design Thinking's Double Diamond to create an

innovation culture focused on the consumer. In 2012, IBM had an average of 1 designer for every 80 programmers. In 2016, the numbers significantly changed to 1 designer for every 15 programmers. With a diverse team of professionals and a robust framework, IBM aims to become the biggest tech company in the world that has a human-centred approach to design.

IBM's got a plan to bring design thinking to big business

(*For IBM story, visit: <https://bit.ly/2taChUM>)



this why toolkit?

The Design Thinking Toolkit will give you a step-by-step guide by providing you with tips, background, case studies and tools for the Design Thinking method. Its objective is to facilitate the practice and the process of human-centred projects so that anyone can to adopt this method.

It is important to note that Design Thinking itself isn't a tool, but a mindset that helps people deal with complex problems keeping the focus on the human factor when choosing solutions to such problems.

this toolkit is useful if you

are an innovator, intrapreneur or entrepreneur

that wishes to work with multidisciplinary groups that are willing to find new ways to tackle challenges



want to develop new skills inside of a team



have the intention

of identifying non-trivial solutions for your daily challenges



want to develop

a human-focused team project inside your organisation



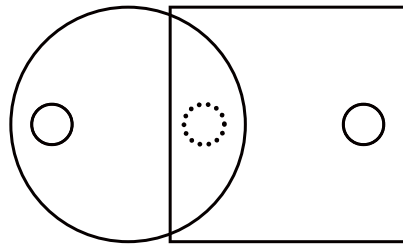
see Design Thinking as something that has the potential to transform your reality



THE DESIGN THINKING'S VALUES

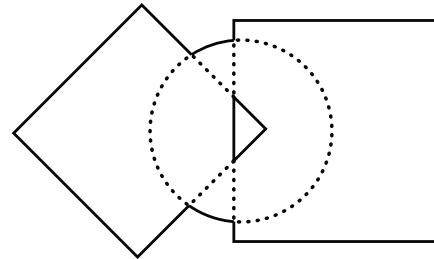
Empathy, Collaboration
and Experimentation.

Values are characteristics that define something or someone. Design Thinking is based on three values: Empathy, Collaboration and Experimentation. Each of these values is vital to ensure Design Thinking best practices, and they cannot exist without each other.



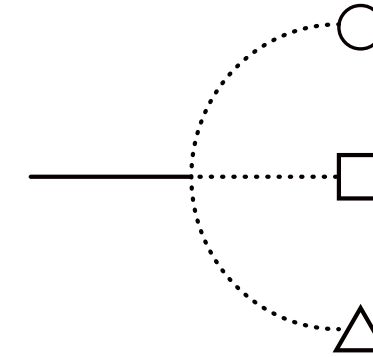
empathy

Empathy is innate to all human beings; it is the ability - paraphrasing Dev Patnaik - to see the world through someone else's eyes. When you put yourself in the shoes of another person and understand their way of seeing the world without judgement, you're feeling empathy.



collaboration


To collaborate means to think together, to co-create in multidisciplinary teams so that our thoughts and capacity to understand can multiply. It is in the process of working with others and building a trust relationship in which everyone is actively listening, that collective intelligence surfaces. Collective intelligence is crucial when solving complex problems.



experimentation

To experiment means to leave the world of ideas, of speech. It means testing solutions, experimenting with them to avoid problems during its implementation phase. When creating something new, it's impossible to learn from data from the past. It's only through experimentation that innovation can emerge.

thinking with your
HANDS



The key is to see the mistakes that happen during the co-creation process as stepping stones to success.

In simple terms, experimentation can be used as a way of “thinking with your hands”, being fearless and learning with the mistakes along the way.

The objective is to leave the abstract realm and execute ideas into tangible objects. The intent is to provoke feelings, emotions and experiences using simple materials, learning from the people around you. By doing so, we receive fast feedback that allows us to iterate, which minimises the risk of creating

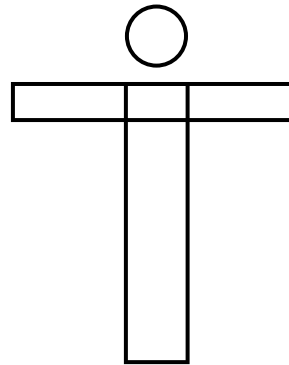
something meaningless or useless in the eyes of the final consumer.

The only way to develop new solutions is by experimenting. When building the future, we can count on data alone, because data is based on the past. Through experimentation and prototyping, designers can visualise and test the future so that they can create relevant solutions and reduce the risks linked to innovation.

THE DESIGN THINKING PILLARS

the T profile, adaptable
spaces, the double diamond

Design Thinking rests on three pillars
to guarantee project success.

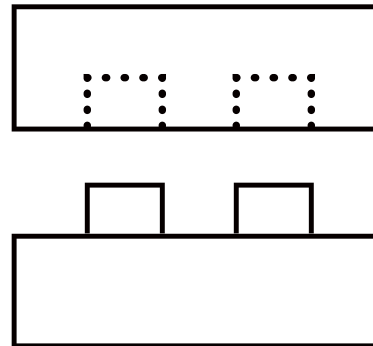


the T profile

In the course of our lives and careers, our studies and professional experiences more often than not turn people into specialists in their fields.

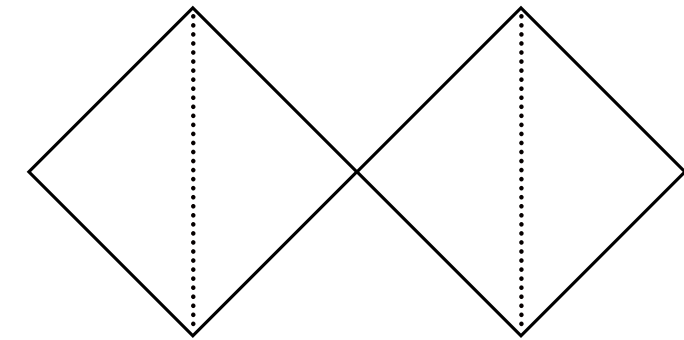
Specialists have in-depth knowledge in one or more fields and tend to communicate with peers using industry lingo and technical jargon. They also tend to share similar ways to approach problems with their fellow specialist colleagues.

On the other hand, this can become problematic when we recruit a group of specialists to co-create innovative solutions. The lack of common language between specialists of different fields can make the process of getting to a common ground long-winded and pointless.



adaptable spaces

It is very important that teams can work in spaces that serve their purpose. Adaptable spaces are those that ease the workflow and encourage people's input and collaboration in a fluid way. Stools and portable tables help with the formation of small discussion groups; whiteboards and white planners help people register what they have been working on in a way that remains visible to everyone at all times; free space to move around is also crucial.



the double diamond

Created by UK's Design Council, the double diamond is a visual representation that came from a study that mapped the application of Design Thinking in partnership with the business departments of 11 innovative companies such as Google, Whirlpool and Sony.

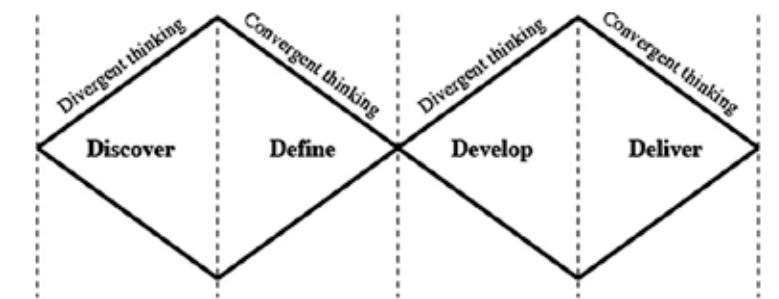
the approach



double diamond

design thinking approach

The double diamond consists of two “diamonds” that stand side by side. The first diamond represents the problem-studying time and, the second represents the solution to the problem. The process is made up of moments of diversion (opening) and conversion (closing) of thinking.



During the divergence phase, we provoke thought expansion, the enlargement of repertoire, as well as the creation of new ideas and the development of concepts that will add to the data. In the convergence moments, the team gathers everything they have in order to synthesise.

Echos uses the double diamond approach in 7 different steps: Understanding, Observation, Point of View, Ideation, Prototyping, Testing & Iteration.

These steps, as well as the tools used throughout the Design Thinking process, will be explained in detail in the following chapters.

A large red graphic on the right side of the page, consisting of a triangle at the top right and a vertical bar extending downwards from its base, with a small triangle at the bottom right corner.

DE toolkit SIGN THINK ING

PART 1
Introduction
& Summary