

PAS QUICKNOTES

DESIGN THINKING

Design thinking has emerged in recent years as a way to bring more creative, “**right brain**” insights into linear, “**left brain**” processes. Design has existed as long as the human species itself, enabling us to adapt to new conditions and innovate in the face of changing needs. But design has traditionally focused on the function and appearance of products and physical environments, while largely ignoring the creation and delivery of services.

This disparity has led to a lot of badly designed systems, processes, and policies, resulting in unnecessary dysfunctions and ugly consequences. Through design thinking, we can improve these services. For the planning profession, design thinking also represents a creative, humanities-based approach to the physical environment, complementing more data-driven, social-science approaches.

BACKGROUND

Design thinking represents an epistemological turn in the design disciplines. Design has traditionally been thought of as a subjective activity, one that eludes analysis and that gets assessed according to the quality of the final products and places it creates. But as the level of dysfunction in processes and services has grown and the demand for design has increased accordingly, the design community has had to become more explicit and transparent about its own methodologies and to articulate the reasoning and rigor of what it does, something that even many designers have not always understood.

We learn in school about inductive and deductive reasoning, the former deployed in the sciences and social sciences and the latter in mathematics. Both forms of reasoning seek consistent ways of understanding or describing the world, and both have proven powerful in our efforts to control the world, for better or worse.

But there is a third form of reasoning—**abduction**—that lies at the very core of design thinking. This third form of reasoning emphasizes creativity as much as consistency, making lateral connections among seemingly disparate phenomena and reframing existing situations in new ways to achieve improved outcomes. In a time of great social, economic, demographic, and technological disruption, design thinking’s abductive form of reasoning has become especially valuable.

ENHANCING THE PLANNING PROCESS

The design thinking process comprises **five steps**:

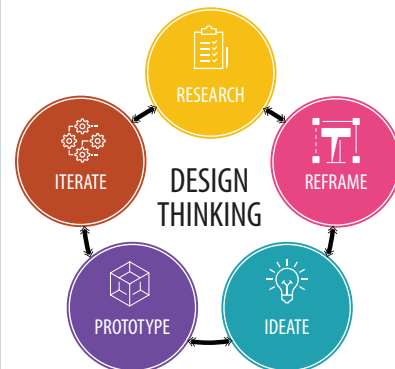
1. **Researching:** understanding a situation by mapping relationships and connections
2. **Reframing:** repositioning or reimagining the problem to achieve better outcomes
3. **Ideating:** describing and diagramming as many responses or solutions as possible
4. **Prototyping:** testing the most promising ideas as quickly and at as low a cost as possible
5. **Iterating:** assessing the results and repeating the process to find the best solution

These methods have some parallels with standard planning processes. Research is key to both, as is idea generation as part of a community engagement process. The other aspects of design thinking, however, differ from—and can add value to—the more linear paths that planning often follows. The use of lateral thinking can help reframe problems in new and unconventional ways, and prototyping can allow for the testing, evaluating, and iterating of ideas in low-cost, rapid ways before they become policy.

THINKING OUTSIDE THE BOX

In a situation that involves unprecedented change or that requires innovative approaches, design thinking offers a variety of strategies to help people think in new ways. Some of the most common design strate-

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Design thinking offers a creative, agile five-step process that can help improve planning processes and outcomes.



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Creating Great Communities for All

gies that planners can use to move a community beyond problem identification to see opportunities and possibilities include:

- **Analogy:** taking something that works in one area and applying it to another one
- **Metaphor:** describing a problem as something else to see it in a new way
- **Juxtaposition:** combining seemingly unrelated things to discover new connections
- **Improvisation:** using what is at hand to make something useful from it
- **Rescaling:** imagining or perceiving something at a smaller or larger scale
- **Rearranging:** putting things together in new and unexpected ways
- **Reinterpreting:** viewing or explaining a situation as others might see it
- **Reimagining:** looking at a problem from another, radically different perspective

NEW WAYS TO ENGAGE

Like planning, design thinking involves participatory processes: the more diverse the perspectives, the better the research phase of design thinking and the more productive its reframing and ideating phases.

The community engagement methods of planners have been a model for designers. But design thinking also offers some other engagement methods of possible use to planners. These include:

- **Asset identification:** To maximize value creation and competitive advantage—which applies to communities as much as to products—designers seek to understand a situation from as many perspectives as possible and identify assets: what is working well and what distinguishes a situation or a place. This includes moving quickly from a focus on problems to an exploration of potential solutions. While understanding a problem is essential, dwelling on it kills creativity and distracts from the discovery process.
- **Mapping:** As in planning, design thinking involves the use of maps. But in addition to mapping actual geographies, designers will map ideas, emotions, associations, histories, and other intangible or non-physical phenomena that can say as much about a place as its infrastructure or topography. Maps about how people feel about a situation and how they experience a place can help spur conversations among community members and help them make connections that might not happen otherwise.

A NEW TOOL FOR THE TOOLKIT

Design thinking **isn't right for every situation**. It has little to add, for example, when problems are clearly defined, or in places that are highly stable with few conflicts and little change. In such situations, extending existing trend lines into the future may suffice.

Design thinking has the greatest value when dealing with unprecedented situations, unexpected disruptions, and uncertain change, in which the future will almost certainly be unlike the past. In such cases, design thinking helps us answer not only the question of “what is?” but also “what if?” or “what could be?” based not only on existing data, but also on emergent trends and creative potentials. As such, design thinking offers another set of tools in the planner's toolkit, to be used in situations where it will bring the most value.

CONCLUSION

We live in a tumultuous era, with widespread social unrest, extreme weather events, and enormous racial inequities, exacerbated by the **COVID-19 pandemic**. Those simultaneous disruptions have made planning based on previous trends increasingly difficult, as so many past assumptions about how people live, work, learn, shop, and move around may no longer align with the new, post-pandemic reality.

All of this makes design thinking an especially useful process for planners to explore. It offers a set of innovation methods and creative strategies that can help communities imagine a better future for themselves, one that is more socially equitable, environmentally sustainable, and economically just.

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FURTHER READING

Published by the American Planning Association

Schweke, Tim. 2020. “User-Centered Planning.” *Planning*, February. bit.ly/3fTxXyX

Other Resources

Brown, Tim. 2009. *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. New York: Harper Collins. bit.ly/3ls5EJ1

Fisher, Thomas. 2016. *Designing Our Way to a Better World*. Minneapolis: University of Minnesota Press. bit.ly/2VWqDIIEO

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