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How Can Organizations Adopt and Measure Design Thinking Process?

Abstract

Tim Brown, CEO of IDEO and one of the foremost thought leaders on design thinking, defines the approach as “a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.” The concept has emerged as a key source of competitive advantage: 79% of surveyed executives consider design thinking to be important. (Appendix 1) When applied to reconceiving organizational people processes, powerful results emerge: the most value-adding HR teams are almost 5 times more likely to be using design thinking than their peers. This executive summary presents a general framework for the process, ways to measure efficacy, and case studies that illustrate successful utilization of design thinking principles.

Keywords

human resources, measurement, design thinking, idea generation, feedback, prototype, traditional KPIs, questionnaires, surveys, working culture, employee engagement, metrics, learning and development, qualitative information

Comments

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EXECUTIVE SUMMARY

RESEARCH QUESTION

How can organizations adopt and measure design thinking processes?

INTRODUCTION

Tim Brown, CEO of IDEO and one of the foremost thought leaders on design thinking, defines the approach as “a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.”¹ The concept has emerged as a key source of competitive advantage: 79% of surveyed executives consider design thinking to be important.² (Appendix 1) When applied to reconceiving organizational people processes, powerful results emerge: the most value-adding HR teams are almost 5 *times* more likely to be using design thinking than their peers.³ This executive summary presents a general framework for the process, ways to measure efficacy, and case studies that illustrate successful utilization of design thinking principles.

PROCESS OF DESIGN THINKING

1. Empathize with Users: Understand people within the context of the design challenge by asking: How and why do they do things? What are their physical and emotional needs? What is meaningful to them?⁴ It is critical to move beyond traditional notions of value by supplementing user understanding with emotional resonance through observation, interviews, focus groups, etc.⁵

2. Define the Challenge: Work to make sense of what is learned through observation to craft a *meaningful and actionable problem statement*.⁴ This step involves identifying patterns, synthesizing user needs, and continuing to ask “why” to understand the underlying meanings behind the observed behaviors.⁶

3. Idea Generation: Address the problem statement by generating a large quantity of ideas.⁴ Move beyond typical organizational approaches to idea generation such as spreadsheets, specs, etc. to more fluid methods such as brainstorming, mind mapping, sketching, etc.⁵ During this process, it is critical to defer all judgements and withhold from any early evaluation of ideas.

4. Build Prototypes: Iterate the ideas in various forms -- physical, digital, diagrammatic, etc. -- to communicate and elaborate on the ideas broadly.⁵ (See Appendix 2 for example) It is key to emphasize the act of building, not getting too attached to any one idea, and always keeping the user in mind.⁴

5. Test: Gather feedback on prototype(s) from users to gain an even greater understanding about the user and their needs. While testing with users, it is important to show rather than tell, create a full user experience, and ask for their opinions, thoughts, and reactions.⁴

INDICATORS OF SUCCESS

Due to factors such as confusion over what to measure, too little experience with design thinking, and lack of resources, only 24% of design thinking users measure impact of their programs.⁷ The measurement process differs for regular projects versus design thinking projects, as innovative projects are defined by exploration rather than execution. In this way, companies traditionally focus on productivity goals and rewarding aligned employee behaviors. However, within the context of design thinking, companies must begin to employ metrics that measure not only executional behaviors but creative behaviors as well.⁸ If not, companies face the potential for invalidating design thinking programs and disincentivizing the use of design thinking.⁸

Although there is not a consistent framework for design thinking measures, suggested measures include:⁷

- **Customer feedback** – customer satisfaction gleaned from testimonials
- **Design thinking activities** – number of design thinking processes and employee participants
- **“Immediate” results** – amount of projects implemented as a result of design thinking sessions

- **Traditional KPIs** – units such as financial performance, market success and revenue of design thinking projects
- **Reflective Measurements** – questionnaires and surveys completed by participants in design thinking processes
- **Working culture** – aspects such as motivation, team collaboration and engagement

Another approach designates design thinking measures into three categories: (1) Empathy, (2) Iteration, and (3) Team Collaboration.⁸ (See Appendix 3 for sub-metrics included in each category)

Ultimately, in developing and choosing metrics, companies can follow three guidelines.⁸ First, metrics should be easily understood and used by employees. Next, metrics should align with the company's goals for using design thinking. Finally, employees should monitor for accurate use of the metrics.

CASE STUDIES

1. Telstra, Australia's leading telecommunications and information services company, used design thinking in their Learning and Development function to create a "90-Day" onboarding experience for addressing turnover and engagement issues of new employees. The company leveraged a design thinking process: **(1) Empathize with Users:** Conducted interviews and focus groups with employees, managers, and HR to explore challenges and needs. **(2) Define Challenge:** Synthesized the challenges and needs with key HR data to identify objectives for the program that could be dramatically improved to "delight" employees. **(3) Idea Generation & (4) Build Prototypes:** Developed a variety of tools and solutions that were then refined multiple times to allow for "fast failure" and the integration of lessons learned. **(5) Test:** Piloted the program in an engaging way by using persona-based blueprints to describe the onboarding journey and results. As a result of this design thinking process, productivity rose, employees became more committed and engaged, and new hires integrated more quickly into the organization.^{2,9}

2. Intuit, a business and financial software company, succeeded in developing an original method for measuring and conveying the impact of design thinking. Rather than focusing solely on quantitative measures, Intuit depicts impact information in a *qualitative, story based way*. The company publishes success stories of design thinking into books that are shared internally amongst various departments. The stories are not simply anecdotes; they also weave in traditional measurements such as revenue, cost and profit. Intuit leaders spearheading this work make the following recommendations: begin by measuring design thinking activities, continue by measuring impact of activities, and allow new measurements to emerge during the process.⁷

LIMITATIONS

There are several limitations and key considerations for design thinking use. In general, design is not necessarily a core competence of all types of employees, and many companies do not have cultures of strong creativity.⁵ As a result, companies should be prepared to accept more ambiguity and embrace more risk than usual. Most notably, companies must reset expectations.⁵ Advocates of design thinking often brand the practice as a magical fix that will transform a traditional company into a creative one as well as replace formal processes such as planning and analysis.¹⁰ In reality, expectations for design thinking impact should be balanced and practices should be integrated with other strategies and skills.¹⁰ It is also important to keep in mind that the outlined process is a general guideline. Within organizational contexts, the process need not be so linear in nature; rather success is highly dependent on adapting the process to each unique context, team, organization, etc.

CONCLUSION

Through design thinking, HR teams can create more productive, meaningful solutions that are both useful and enjoyable to employees. A design thinking approach that builds a true empathy of employees and then delivers tested solutions can create powerful organizational results. Special considerations for how and when to measure impacts of design thinking is crucial to long term sustainability. Learning from the basic framework, measurement suggestions, and corporate examples, organizations can develop a design thinking process best suited to meet their unique needs and culture.

CITED REFERENCES

1. Brown, T. (September 2008). *Definitions of Design Thinking*. Retrieved from: <https://designthinking.ideo.com/?p=49>
2. Bersin, J., Solow M., & Wakefield, N. (February 2016). *Design Thinking: Crafting the Employee Experience*. Retrieved from: <https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends/2016/employee-experience-management-design-thinking.html>
3. Gonzalo, P. (October 2016). *HR Design Thinking*. Retrieved from: <https://www.linkedin.com/pulse/hr-design-thinking-pedro-gonzalo>
4. An Introduction to Design Thinking: Process Guide. *Institute of Design at Stanford*. Retrieved from: <https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=bef23daa7cc7c1d9e7f454f972105619a28d08ba>
5. Kolko, J. (September 2015). *Design Thinking Comes of Age*. Retrieved from: <https://hbr.org/2015/09/design-thinking-comes-of-age>
6. Beckman, S. L. & Barry, M. (2007). Innovation as a Learning Process: Embedding Design Thinking. *California Management Review*, Vol. 50. Retrieved from: http://static1.1.sqspcdn.com/static/f/425112/4863286/1259043624957/2_InnovationAsLearningProcess.pdf?token=0QMhVIkbpG8AOF10uLfbDM81BQc%3D
7. Schmiedgen, J. et al (2016). Measuring the Impact of Design Thinking In H. Plattner et al (Ed.), *Design Thinking Research: Making Design Thinking Foundational* (pp. 157-170). Switzerland: Springer International Publishing.
8. Royalty, A. & Roth, B. (2016). Developing Design Thinking Metrics as a Driver for Creative Innovation. In H. Plattner et al (Ed.), *Design Thinking Research: Making Design Thinking Foundational* (pp. 157-170). Switzerland: Springer International Publishing.
9. Bersin, J. (July 2016). *Using Design Thinking to Embed Learning in our Jobs*. Retrieved from: <https://hbr.org/2016/07/using-design-thinking-to-embed-learning-in-our-jobs>
10. Keeley, L. (April 2015). *Beyond design thinking*. Retrieved from: <https://dupress.deloitte.com/dup-us-en/focus/business-trends/2015/beyond-design-thinking-business-trends.html>

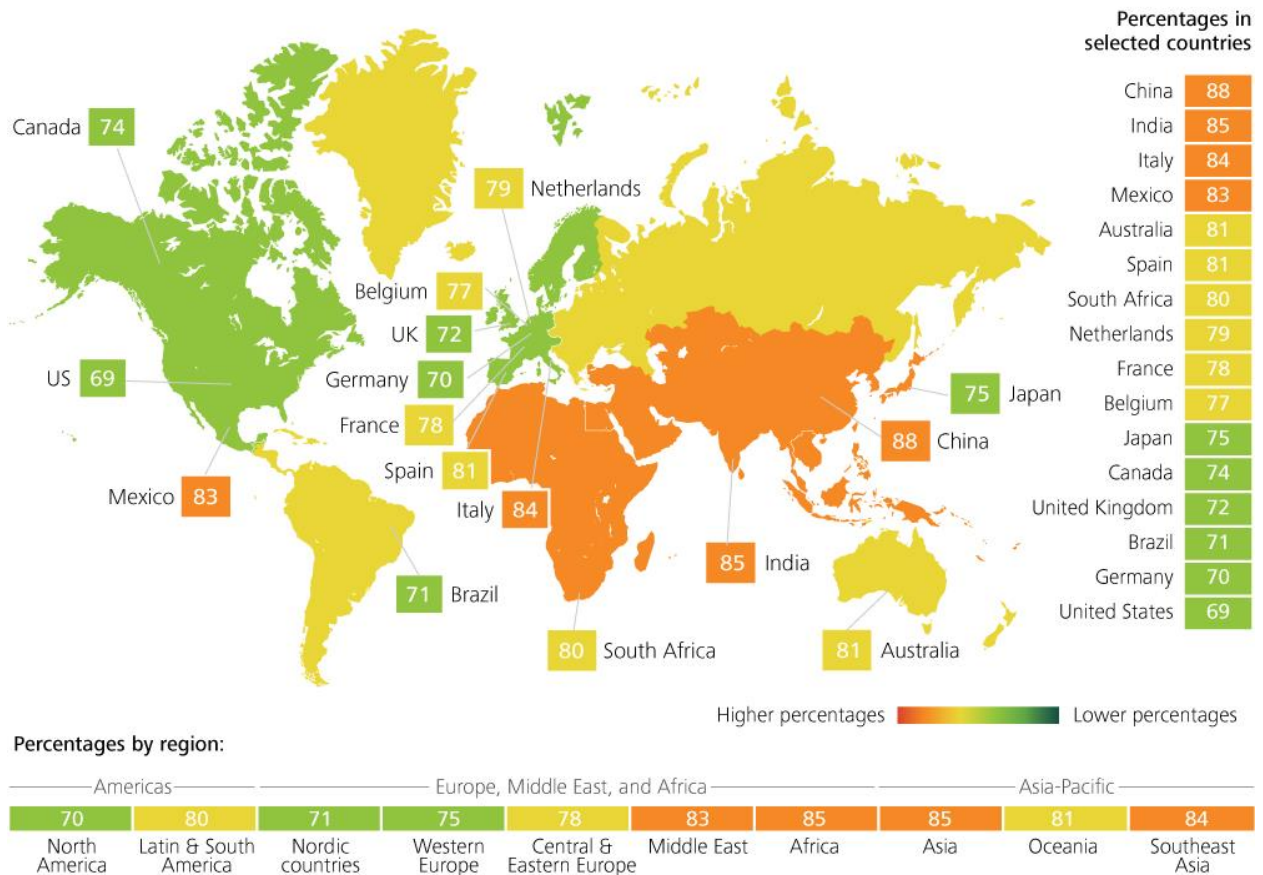
FURTHER READING

1. An Introduction to Design Thinking: Process Guide. *Institute of Design at Stanford*. Retrieved from: <https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=bef23daa7cc7c1d9e7f454f972105619a28d08ba>
2. Bersin, J., Solow M., & Wakefield, N. (February 2016). *Design Thinking: Crafting the Employee Experience*. Retrieved from: <https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends/2016/employee-experience-management-design-thinking.html>

APPENDICES

Appendix 1

Figure 1. Design thinking: Percentage of respondents rating this trend “important” or “very important”

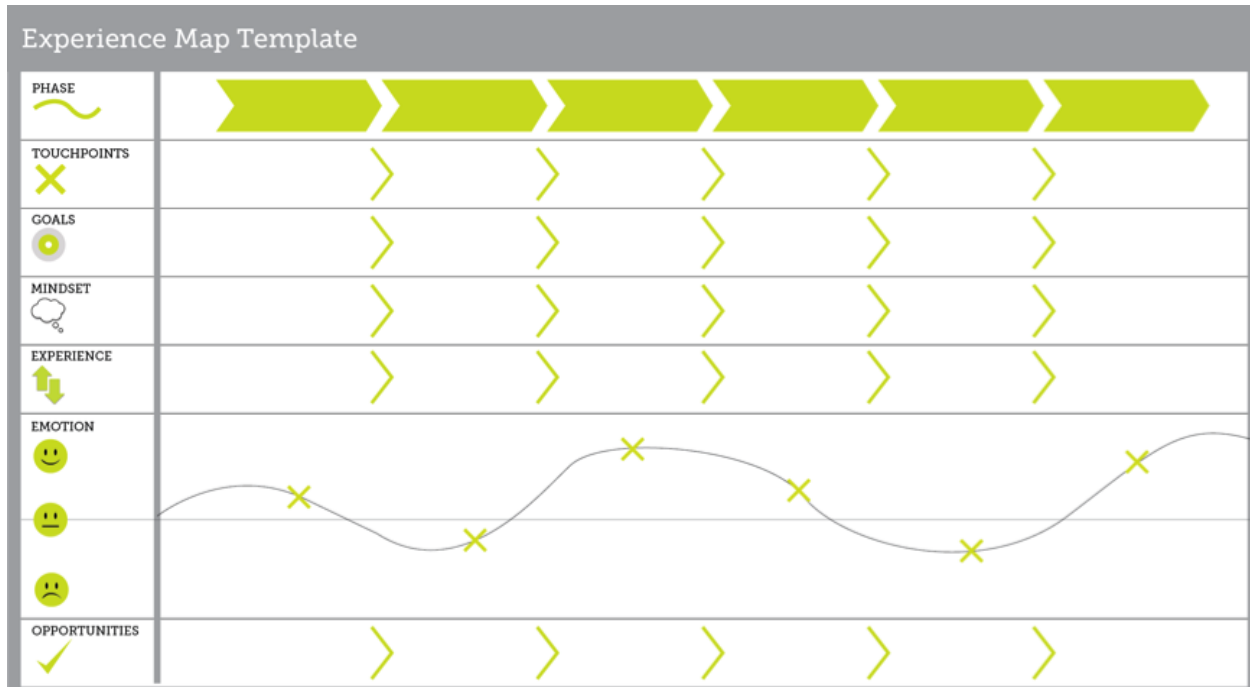


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Bersin, J., Solow M., & Wakefield, N. (February 2016). *Design Thinking: Crafting the Employee Experience*. Retrieved from: <https://dupress.deloitte.com/dup-us-en/focus/human-capital-trends/2016/employee-experience-management-design-thinking.html>

Appendix 2

Journey maps are a useful tool for communicating service interactions, needs, and opportunities through a highly visual approach. For example, employee experiences with specific processes can be prototyped by mapping phases, touchpoints, and emotions.



Wechsler, J. (February 2016). *How to Innovate with Design Thinking*. Retrieved from: <http://jaxwechsler.com/how-to-innovate-with-design-thinking/>

Appendix 3

	Sub-Metrics
Empathy	Measure 1E - number of days gone without contact with end users Measure 2E - number of users spoken to Measure 3E - number of categories of people spoken with
Iteration	Measure 1I - number of prototype iterations Measure 2I - number of prototypes worked on in parallel
Team Collaboration	The Interaction Dynamics Notation tool created by Neeraj Sonalkar and Ade Mabogunje is highlighted as a prime way for teams to evaluate collaboration; the tool is still in development, but in the future, it will allow teams to submit video of themselves for analysis

Royalty, A. & Roth, B. (2016). Developing Design Thinking Metrics as a Driver for Creative Innovation. In H. Plattner et al (Ed.), *Design Thinking Research: Making Design Thinking Foundational* (pp. 157-170). Switzerland: Springer International Publishing.