Human Factors, Business Management and Society, Vol. 135, 2024, 158–162
https://doi.org/10.54941/ahfe1004941

How to Set Up Design Skills Appropriate for Each Organization

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ABSTRACT

In recent years, the definition of design has expanded with changes in the social environment. Companies are faced with the challenge of setting up the necessary design skills in accordance with the changes in their business and organization. Against this background, I organize examples of design skills that can be used as references and propose how to set up design skills.

Keywords: Design skills, Design approach, Workshop

INTRODUCTION

As the social environment changes, the definition of design has been extended and various design approaches have been proposed.

Companies are required to train people to utilize design skills, and the challenge is to set up the necessary design skills for each organization in accordance with changes in business and organization.

The definition of design skills in this research is the ability to think and practice to create strategy, scope, structure, skeleton, and surface regarding all assets of a company.

Organizing Design Skills

In order to comprehensively organize design skills, based on the literature review, I organized the overall picture of design approaches from the perspective of the philosophy underlying the various design approaches and the target of design (see Figure 1).

After organizing the overall design approach, I investigated the elements of design skills in terms of sense making, problem solving and human-centered design, business, brand, technology and human, and organized them into the following 10 skills (see Table 1).

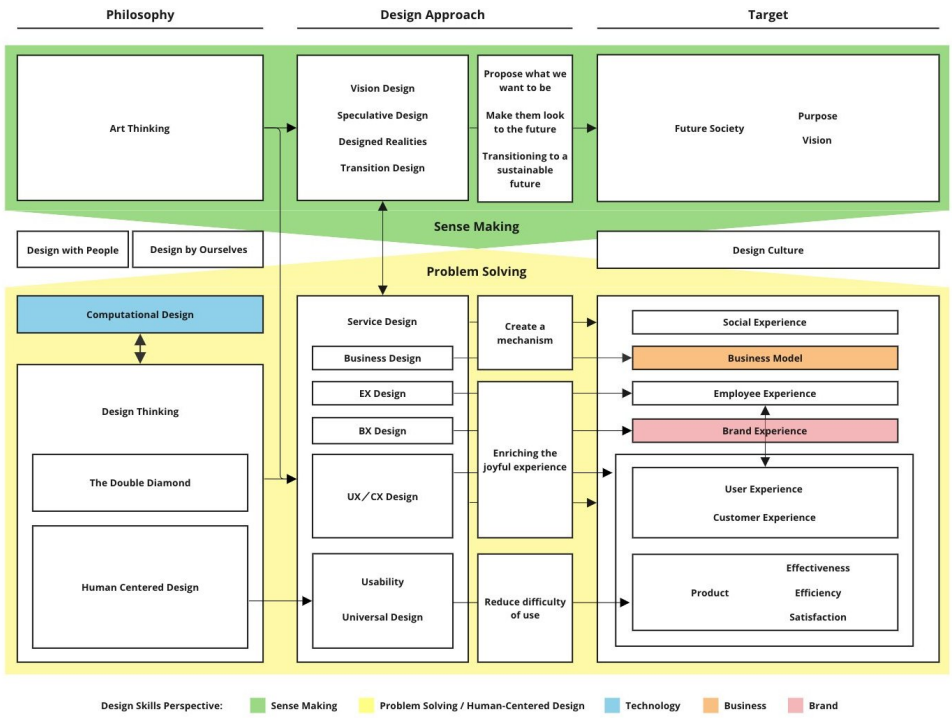

Figure 1: Design approach map.

Table 1. Organized design skills overview.

Skill Perspective	Design Skills	Skills Overview
Problem solving and human-centered design	Conception	Ability to go through trial and error until the concept is put into practice.
	Prototyping	Ability to create and evaluate prototypes to determine if product and service design proposals are suitable for users.
	Information Architecture	Ability to design structures that make it easier for users to understand information based on required specifications.
	Design Research	Ability to research and analyze to understand the stakeholders' situation, essential requirements, product, and business, and to evaluate whether the proposed design is appropriate for the user.
Business	Business Model Design	Ability to visualize the elements and flows involved in the business in order to consider design from both the user and business perspectives.
Brand	Brand Experience Design	Ability to design a consistent user experience so that users can recognize the link between brand symbols and value.
Technology	Technology Adaptability	Ability to utilize new technologies and paradigms for products and services.

(Continued)

Table 1. Continued

Skill Perspective	Design Skills	Skills Overview
Sense making	Conception	Ability to go through trial and error until the concept is put into practice.
Human	Design Management	Ability to manage projects and teams to utilize design in management.
	Technical Communication	Ability to convey your thoughts so that others can understand to facilitate the project.

How to Set Up Design Skills

Considering that design skills can be classified in a variety of ways, the skills are set up in two steps (see Figure 2).

1) Identify for each workshop participant the outputs required for each step of the work and the technical and portable skills needed for the outputs. Technical skills are the specialized skills of designers, while portable skills are those required regardless of the type of work.
2) Classify the skills identified by all workshop participants. Categorize the skills by technical skills and portable skills, and name the skills.

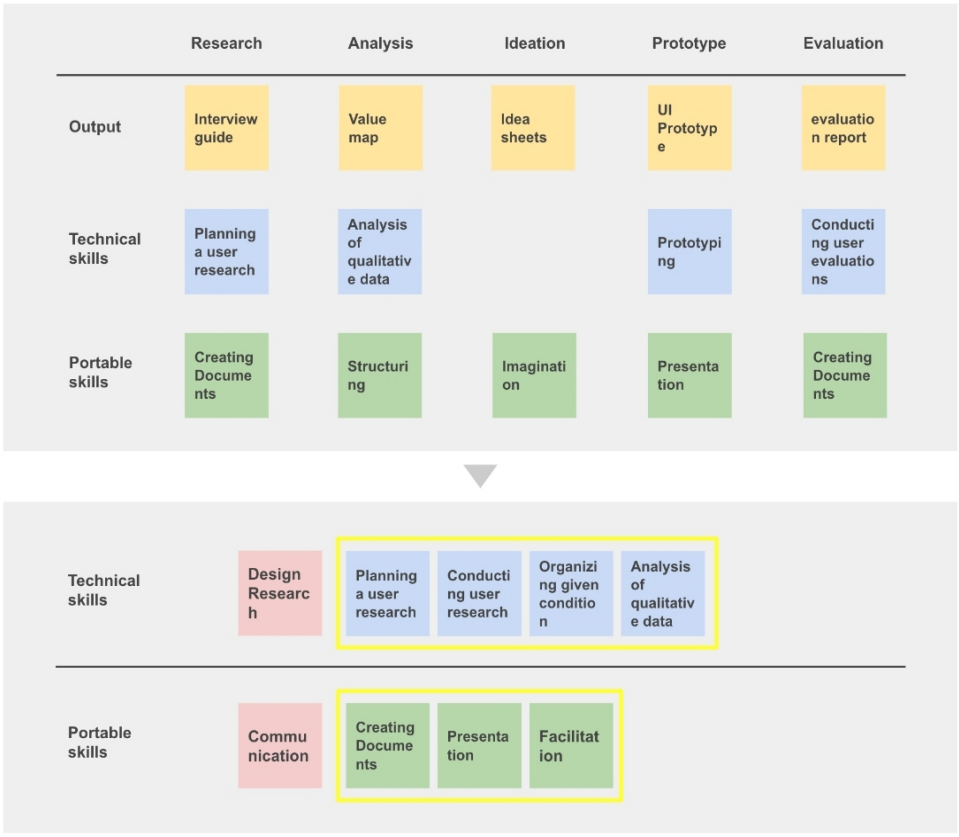

Figure 2: How to set up design skills.

METHODS

I experimented with a two-hour workshop for eight designers from various companies. Workshop participants were divided into two teams, and each team set up design skills for a fictitious company (see Figure 3).

Figure 3: The scene of the workshop conducted.

RESULTS

As a result of the workshop, design skills were established for each team as shown in Table 2 (see Table 2). In addition, the following comments were observed in the questionnaire regarding what was learned.

- It is hard to verbalize skills.
- It gave me an opportunity to learn how other people think about their skills. I would like to review my company's skills and my own skills based on the examples of design skills that will serve as references.
- I could notice areas where I want to break down my skills further and areas where I want to improve resolution.
- I also learned from the grouping of skills.
- I honestly enjoyed being able to think together with people from different backgrounds. I would like to try this at our company immediately.
- I learned that we need to be able to set up the necessary skills by ourselves.

Table 2. Design skills set up in the workshop.

Team	A	B
Assumed fictitious company	Digital product design company	Smartphone app production company
Set up design skills	• Insight Excavation Skills • Analytical skills • Visualization and visual creation • Knowledge and experience • Material vision skills (UI creation / art direction / expert review) • Design facilitation • Driving force (adaptability / team management / leadership skills) • Overhead (marketing / reframing / ideas) • Human skills (empathy / communication/listening) • Thinking Skills (Problem Discovery / Logical Thinking)	• Knowledge (business understanding/framework/color) • Communication skills (questioning / negotiation) • Digital literacy (Excel / typing / coding) • Planning skills (recruiting interviewees) • Willingness to go through the trouble/fear of taking risks • Expression (sketching / verbalization / editing) • Thinking (imagination / analytical skills / deciphering structure / hypothesis building / comparison / bird's eye view)

DISCUSSION

It is believed that having reference design skills will make it easier to set up the design skills needed for their organization.

Since what constitutes a specialized skill varies from organization to organization, design skills may be set without separating technical and portable skills.

For example, some abilities may be seen as sense, such as "being able to find essential awareness". Considering that sense can be honed through diverse experiences, it could be set as a conceptual skill.

Familiar terms vary from organization to organization, and it can be difficult to verbalize the image of a skill. In such cases, it may be easier to set skill names that are appropriate for the organization by sharing specific scenes of work in which the skills are utilized.

CONCLUSION

Through experimentation on how to set up design skills with the help of organized examples of design skills, it was found that it is possible to set up a rough draft of design skills appropriate to the organization. After the workshop, it may be possible to establish design skills appropriate for the organization by refining the definition of terms and categorization of skills.

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