



Study of Experience Value Design Method by Movie Prototyping

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Abstract. In Human Centered Design (HCD), prototyping is very important. Prototyping is mainly used for verification of functions and design. In addition to this role, movie prototyping is also used for image sharing of products and services. Recently, movie prototyping is used in many companies and projects, but its production method has been hardly clarified. The purpose of this study is to analyze the existing movie prototype and to propose a method of making a movie prototype. In this study, we first analyzed three movies prototyping, Amazon Go, FUJITSU ROBOT FUTURE VISION, OTON GLASS, and extracted six points of descriptions. The extracted points are shape, function, how to use, persona, scene, and feeling. We analyze more movie prototypes based on those six depiction points and propose a method of movie prototyping with experience value design.

Keywords: Movie prototyping · Human Centered Design · UX design

1 Introduction

Prototyping in Human Centered Design (HCD) is very important. There are two main purposes.

1.1 Verification of Function and Design

In the early stages of product development, design can be verified by actually shaping its functions and ideas. This also means that feedback can be obtained early from the user. By repeating prototyping and user tests, it is possible to discover and correct design defects and problems of ideas at an early stage (Fig. 1).

1.2 Image Sharing Among Divisions

According to Tagawa [1], “There is no reference case in the project where innovation is required, there are many cases where you have no choice but to plan and design from the earliest stages.” Innovative products and services that do not exist in the world are difficult to explain to others their attractiveness. Therefore, prototyping is also used as a

means for sharing intent within the project team and sharing images among internal divisions in the product development process (Fig. 2).

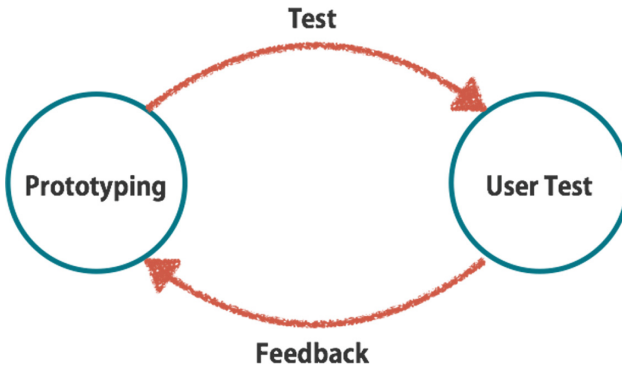


Fig. 1. Repeating prototyping and user test

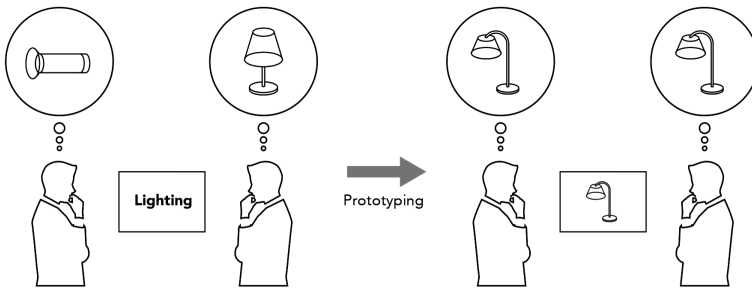


Fig. 2. Prototyping for image sharing among divisions

There are various types of prototypes, such as sketches, dirty prototypes, technical prototypes, styling prototypes, working prototypes, and movie prototypes. Movie prototypes have a role of verifying product usability and design. Also, the most characteristic aspect of the movie prototype is that it is suitable for depicting the user’s behavior and feeling when using the product. It helps to image the experiential value obtained through the product by drawing personas, scenes of use, feeling. From this, it can be said that movie prototyping is good for smoothing the sharing of UX, which is easy to disperse images among internal divisions.

Meanwhile, the method of making the movie prototype has been hardly clarified. In the movie prototype for “COIN Chareeen” made by the students of the Tokyo Metropolitan University, there were many explanations about the function of the product and it was effective to understand what kind of product it is. However, since the depiction of the scene where the user actually uses the product is insufficient, the experience value did not convey well to the viewers. In this way, as a result of producing the movie prototyping by looking for ways, it may happen that the depiction is different from the production intention, or that the thing to want to convey is not conveyed (Fig. 3).



Fig. 3. Movie prototype for COIN Chareeen

2 Purpose

The purpose of this study is to propose a method of movie prototyping in experience value design. Currently, movie prototyping is used in many projects. However, its production method is hardly clarified. In this study, we analyze many movie prototyping and propose a method to create movie prototyping that matches the production purpose.

3 Case Study

3.1 Selected Movie Prototypes

In this study, we analyzed three movie prototypings as a case study.

1. Amazon Go
2. FUJITSU ROBOT FUTURE VISION
3. OTON GLASS.

These are movie prototypes depicting future vision before products and services are completed. It seems that these emphasis is on drawing a vision that they want to realize rather than as a promotion aspect.

3.2 Analysis

The movie prototype for Amazon Go, the word “JUST WALK OUT” frequently appears in video and narration. Although there is no detailed depiction on how to use the service in the video, it focuses on the point that it makes us experience “JUST WALK OUT” by interlocking with the application (Fig. 4).

The movie prototype for FUJITSU ROBOT FUTURE VISION does not explain detailed functions, but it depicts what kind of robot will do in the actual scene. Throughout the story is built in, and personas and their feeling changes are well drawn (Fig. 5).

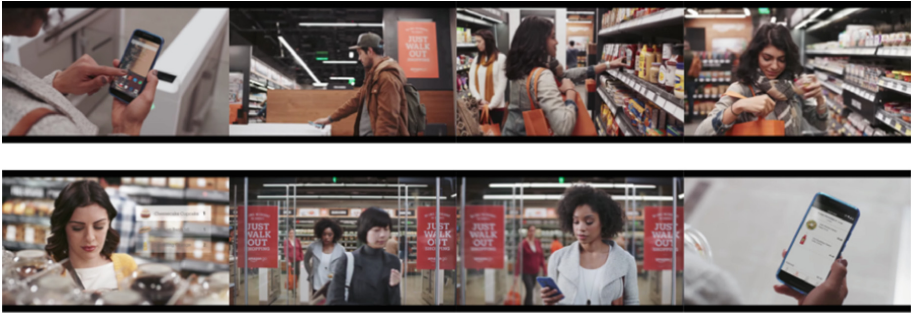


Fig. 4. Movie prototype for Amazon Go (Source: [3]).



Fig. 5. Movie prototype for FUJITSU ROBOT FUTURE VISION (Source: [4]).

The movie prototype for OTON GLASS depicts a scene in which the problem is solved by the product after drawing the scene in which the current user is in trouble. This tells the value the product brings to the user. In addition, there are many depictions on the shape and structure of products (Fig. 6).



Fig. 6. Movie prototype for OTON GLASS (Source: [5]).

4 Discussion

From the analysis of the existing movie prototype, the following six points are considered as points for producing movie prototype.

1. What type of product (Shape)
2. What can be done (Function)
3. How to use (How to use)
4. Who uses it (Persona)
5. When to use (Scene)
6. How do you feel (Feeling).



Fig. 7. Six points for producing movie prototyping

Table 1. Six points for producing movie prototyping in movie prototyping for FUJITSU ROBOT FUTURE VISION (Source: [4]).

| | | | | | | |
|------------|---|--|---|--|---|--|
| | | | | | | |
| | The woman trying to start a new business is shown. | The Woman are consulting with bankers about financing new business. There is a robot between them. | The robot is presenting financial plans. | The robot installed at the entrance is watching a visitor. | The robot is analyzing visitor information. | A woman is communicating with a craftsman by the robot. The robot projects the hologram. |
| Shape | | | | | | |
| Function | | ○ | ○ | ○ | ○ | ○ |
| How to use | | | | | | |
| persona | ○ | | | | | ○ |
| Scene | | ○ | | | | ○ |
| Feeling | | | | | | ○ |
| | | | | | | |
| | Children are gathering in the library. Children are touching the hologram projected by the robot. | The robot is presenting informations for children. | The robot safeguard a woman against traffic accidents. The woman is smiling with confidence | There is a robot at the entrance of the exhibition hall. | When a visitor touches the robot, the robot analyzes her information. | The organizer recommends products to visitors. The visitor is satisfied with the products. |
| Shape | ○ | ○ | | ○ | ○ | |
| Function | ○ | ○ | ○ | | | |
| How to use | ○ | | | | ○ | |
| persona | ○ | | | | | ○ |
| Scene | ○ | | ○ | ○ | ○ | ○ |
| Feeling | | | ○ | | | ○ |

“Form”, “Function”, and “How to use” are a depiction of the product itself. This depiction helps to understand the product. “Persona”, “scene”, and “Feeling” are depictions focusing on the experience of using the product. This depiction encourages empathy.

These will be applicable to movie prototypes in various fields such as product design, UI design, service design (Fig. 7).

Focusing on these six points, we reanalyzed movie prototype for FUJITSU ROBOT FUTURE VISION (Table 1). By extracting six points as in Table 1 also in other movie prototypes, it seems that it is possible to clarify the production purpose and expression points.

5 Future Work

We will analyze more movie prototypes and verify the six assumed points. In addition to extracting the scenes in which six points are drawn in the movie, if there are other points, we will analyze them.

We also analyze the method of presenting the movie prototype. By analyzing various movie prototypes such as live-action photography and animation, we will clarify the method of presenting the movie prototype suitable for the production purpose.

Based on the results obtained from those analyzes, we proposes a production method that everyone can make movie prototyping that matches the production purpose.

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