

Evaluation of visualized vision planning and its outcomes

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Abstract

A vision means a concept at some point in the future or an image of the future which is too vague to be verbalized. A mission is the current appointed work specified by the vision. The authors propose a new method of visualizing a vision by visually expressing the vision with photos, illustrations, etc., which can effectively share information with stakeholders. This method fosters empathy in the participants, shares the direction and world view that a project should aim toward, and has other such characteristics. This research shows the effectiveness of the characteristics in a case study of a project for healthcare vision recommendations.

Keywords

Keywords: Service Design, Vision Planning, Empathy, Co-Creation, User-Centered

1 INTRODUCTION

Fujitsu practices service design in which a team of business, UX, and technology experts supports the startup of a client business.[1] As linchpins, the sense of values and purpose are unclear at the initial stage, so the vision imagined by each person involved is visualized and consolidated to create outputs that can provide a globally shared direction for the service. We call this work "vision planning."

A vision means a concept or an image of the future showing, for example, what kind of progress or growth will be achieved at some point in the future. Your vision would not only include a sense of values and purpose but also help you understand who you are, what you are aiming for, and the criteria for proceeding.[2]

Expressed as the appointed work for realizing the vision, a mission defines the value that should now be provided to the client.

Figure 1 shows the relationship between a vision and mission. They are interrelated with each other: the

vision is the driving force behind the mission, and the mission is the work toward achieving the vision.

The vision represents an unseen future state, which each person perceives differently, and it has the characteristic of being too vague to be verbalized. Since the vision also specifies the mission, it is difficult to accurately express both of them by language alone.

This research therefore proposes a new visualization method for visually expressing a vision with photos, illustrations, etc., which can effectively share information with stakeholders. This method fosters empathy in the participants, shares the direction and world view that a project should aim toward, and has other such characteristics. This research shows the effectiveness of the characteristics in a case study of a project for healthcare vision recommendations.

2 PRECEDING RESEARCH

A vision includes a sense of values and a purpose. These elements are assumed to exist inside companies

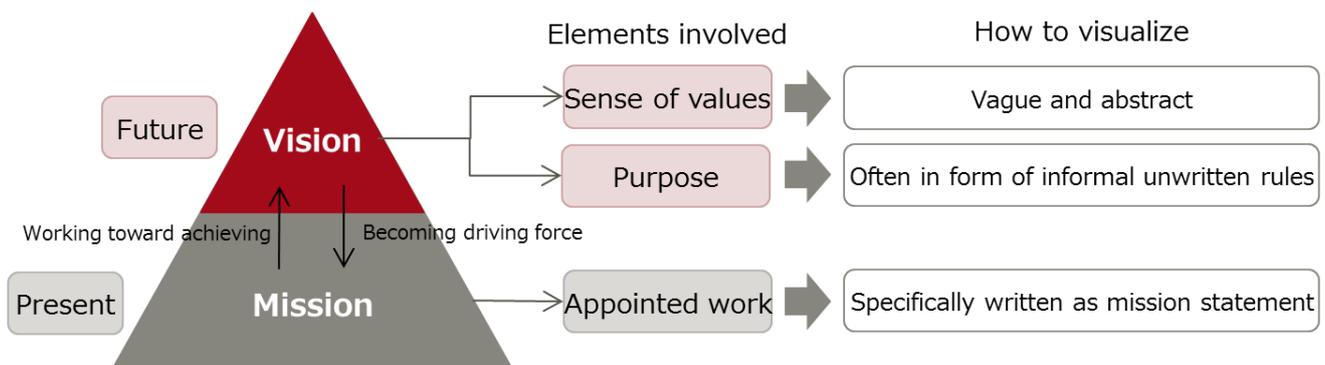


Figure 1. Conceptual Model of Vision and Mission

and to not be affected by the external environment.[3] A vision for a business entity consists of elements such as "what you are deeply passionate about," "what you can be best in the world at," and "what drives your economic engine." [4]

Similarly, a mission expresses a value proposition by a company or institution. Mission statements often use short sentences to express in writing mainly the value provided to clients, defining what can be done to grow business and improve customer value.

3 CURRENT PROBLEMS

In service designs aiming to generate new business, the clarification of a vision and mission at the initial stage makes it easier to share a sense of values and a purpose with stakeholders and to envision an image of the future of the service.

Currently, however, a vision may be so vague, often in the form of abstract expressions and informal unwritten rules, that it is difficult to convey only by the written word. The research related to this vision visualization method includes a vision proposal design approach that takes advantage of the structured scenario advocated by Yamazaki and Ueda, even though their aim was to develop new products, systems, and services, and the procedure to visualize the vision itself was not shown.[5]

4 APPROACH

Diversity and uncertainty due to globalization, the growth of communication technologies, SNS growth, etc. make it harder to predict the future. Therefore, based on a user-centered perspective, our approach is to imagine a vision and the common good in a co-creation process with various stakeholders participating.[6] It is important for us to empathize with our target users to plan a vision that we think has

value to them. Figure 2 shows the approach of this proposal.

4.1 Imagining "Why" of What is Ideal, Not Extending From Present

First, imagine what is ideal under a situation with the least impact from the preconceived ideas you can think of. Your imagination should have a picture of a future state not imaginable from a prediction that is an extension from the present. The visualization of your latent thoughts and empathies will lead to the definition of a sense of values and a purpose (definition of "Why").

Someone pointed out that the patterns of behavior by successful individuals and organizations make people's hearts beat faster and inspire them by following an approach that starts with "Why" (reason), goes to "How" (method), and then goes to "What" (behavior). The Why not just serves as a purpose, cause, and principle but also is an element leading to a shared sense of values.[7]

4.2 Clarifying "Why to What" for Mission After Several Years

Next, with an aim to realize the vision, visualize a mission that should be accomplished in several years (definition of "What"). This visualization is characterized by an approach from the future, not the present, when imagining the vision and mission; that is, you are not considering an improvement to a current situation but instead visualizing an approach to realizing what is ideal.

4.3 Defining "What to How" to Accomplish Mission

Finally, perform a concrete study on accomplishing the mission (definition of "How"). So you will be imagining overall ideas before seeking individual strategies and means, which is meaningful from the management perspective in that it avoids a collection of partial optimizations.[8]

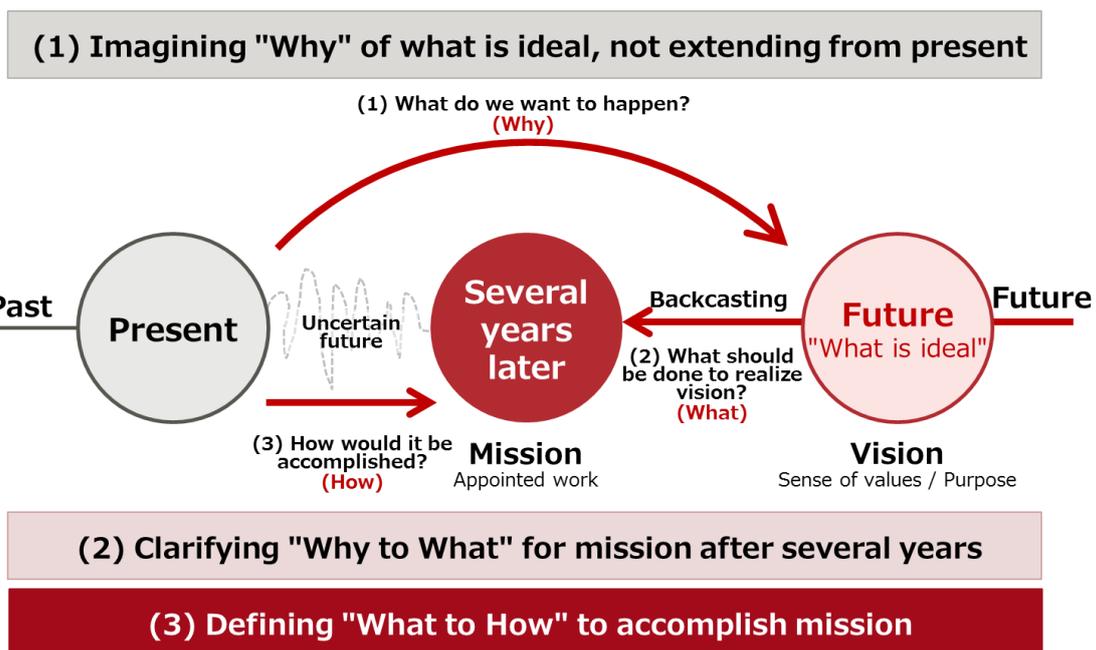


Figure 2. Approach to Vision Planning

In addition, as defined in value engineering, a structured approach reduces the failure rate and oversights, and can optimize the benefits gained from experience. And the resulting focus on innovation aimed at client interests makes it easier for designers to innovate.[9][10]

5 PROPOSED VISUALIZATION METHOD FOR VISION PLANNING

Figure 3 shows the visualization method in vision planning. Each of the steps extracts information through co-creation with stakeholders, and the information is consolidated by designers to select a design expression matching the purpose. The procedure is described below.[11] [12]

5.1 Imagining "Why" of What is Ideal

From the various business- and technology-related information collected in advance, write the keywords of the points in question to see related changes in the surrounding environment. Then, engage in conversations based on the keywords to find indicators of the changes. Here, the aims are to show the value of intuitive awareness and extract empathetic value. Based on extracted keywords, analyze values by using an affinity diagram.

5.2 Clarifying "What" for Mission After Several Years

From the conversations, imagine a future state with visualized keywords, and then engage in further conversations to refine changes in the surrounding environment and get concrete subjects for consideration. Based on the generated subjects, analyze the tentative subject by using an affinity diagram.

5.3 Defining "How" to Accomplish Mission

Repeat a cycle of divergence and convergence of ideas in order to make the considered subject a reality. Based on the generated ideas, visualize what is ideal and ideas by using an affinity diagram.

From these analysis results, select a design expression matching the purpose. Table 1 lists design expressions. The procedure is described below.

5.4 Selecting Design Expression

Collage

Based on the keywords obtained from analysis results, collect abstract photos, illustrations, etc. Adjust the abstraction level of the keywords, copy write what to express together with a message. In some cases, participants choose a photo from the prepared photos and think of a message in a co-creation process.

Concept

Based on the keywords, express the vision and mission with short sentences, and create concept sentences. Often, together with a collage, multiple concepts are created for every scene and scenario.[13]

Map

First, graphically represent the direction to what is ideal. At this time, it is important for the diagram to show the relationship. Some representative examples are a circular map, a concentric map, a sectoral map, and a spiral map. Next, arrange service ideas. From the perspective of chronological order, feasibility, etc., attach meaning to the relationship with the whole. The map makes it easier to explain the project to third parties, who will see the parts together with the whole picture.

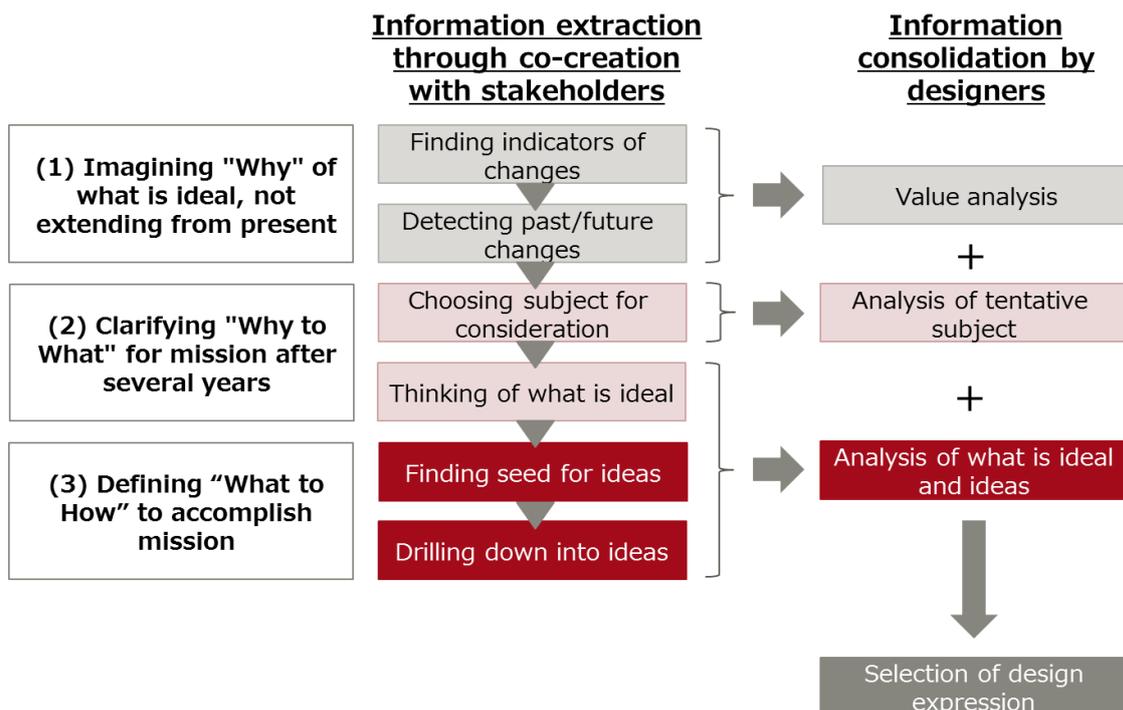


Figure 3. Visualization Method in Vision Planning

Visualization method	Collage	Concept	Map	Movie
Purpose	Showing world view of project and service to share thoughts of those involved	Visualizing basic concepts to share direction and purpose of project	Showing relationship between what is ideal and service ideas to share whole structure of project	Sharing expected user experience with third parties such as stakeholders
Function	To abstract keywords to convey them intuitively	To show concept of project and convey its direction in detail	To show whole picture of project, so that one can get overall view, and convey its direction and relationship between components (ideas, etc.)	To intuitively convey direction of project so that context for field or user can be expressed by scenario or production
Means	<ul style="list-style-type: none"> - Make collage with picture, figure, etc. to form image of what is ideal - Compile vision book, concept book, etc. as booklet 	<ul style="list-style-type: none"> - State what is ideal by using text and figures - Combine with collage to show textual information such as in scenario or scene 	<ul style="list-style-type: none"> - Express structured information as infographic - Write down components (ideas, etc.) in detail 	<ul style="list-style-type: none"> - Set scene or scenario based on service idea to use storytelling to convey what is ideal
Information	<ul style="list-style-type: none"> - Key message - Concept - Metaphor - Analogy 	<ul style="list-style-type: none"> - Key message - Concept - UX scenario - Scene - Collage 	<ul style="list-style-type: none"> - Key message - Concept - Direction - Component - Relationship between elements - Value 	<ul style="list-style-type: none"> - Key message - Concept - UX scenario - Scene - Persona - Value

Table 1. Design Expressions

Movie

Select a service idea for realizing what is ideal, and imagine a future state in which the idea actually becomes reality. Refine a hypothesis--such as a persona, scene, and scenario--as much as possible, create a storyboard, and shoot a video. Depending on the contents of the service, you may need to design and integrate a product, UI, or the like. It is effective to, for example, deliver a presentation to upper management to intuitively convey the information more easily.

6 CASE STUDY

Workshop for thinking about near-future healthcare equipment (held in August 2015)

In the internal project discussed here, the objective was to plan a service vision to recommend to customers. The subjects focused on the healthcare field. The 31 participants included consultants, salespeople, sales promoters, engineers, and designers. A two-day program appropriate for the visualization method in vision planning described above (Figure 4) was created.

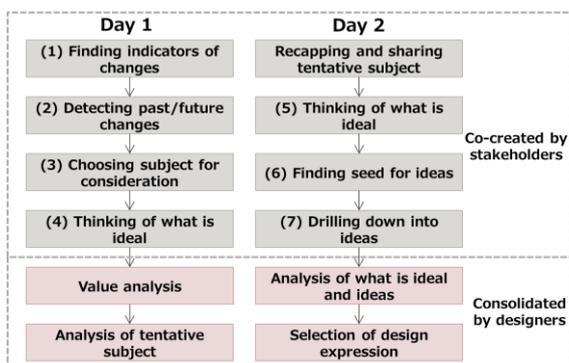


Figure 4. Practical Example of Visualization Method in Vision Planning

6.1 Finding Indicators of Changes

Initially, for business prospects, all the participants shared trends in the industry and the trends of competitors. They shared, understood, and set an industry trend baseline to generate ideas for new businesses that meet market needs. Also, indicator cards were shared with all the participants. These cards summarized case examples from healthcare-related exhibitions and news, and technical trends in technology, services, etc. While looking at the indicator cards, the participants wrote down "what they became aware of" (new awareness) on sticky notes, from the following perspectives (Figure 5):

Empathy: What now makes sense

Surprise: What is admirable

Question: What is questionable

Inspiration: Other use or new idea



Figure 5. Finding Indicators of Changes

6.2 Detecting Past/Future Changes

Based on their awareness, the participants conversed and imagined future states. In the World Cafe format, all the participants changed their tables several times to share information with the others (Figure 6).



Figure 6. Detecting Past/Future Changes

6.3 Choosing Subject for Consideration

By sharing clients' fresh opinions obtained by our sales representatives at customer sites, the participants got insight into the needs of new businesses.

After talking about client needs, they wrote down their new awareness on sticky notes, from the following perspectives:

- Issues of healthcare equipment manufacturers
- Expectations on Fujitsu

Next, after listening to an introduction of Fujitsu's latest technologies, they wrote down their new awareness on sticky notes, from the following perspectives:

- What we can propose to healthcare equipment manufacturers
- Strengths of Fujitsu

6.4 Thinking of What is Ideal

The participants held conversations about the direction of proposals on new products and services provided by healthcare equipment manufacturers and Fujitsu, and the conversations broke down into two subjects (healthcare institutions and home healthcare). On that basis, the participants presented their own proposed subject, following the format of "I propose a healthcare equipment/service that is XX for YY."

6.5 Finding Seed for Ideas

The participants generated service ideas for realizing what is ideal. Ideas were put in the format of sketch plus explanation, with the participants trying to diverge out to as many ideas as possible. On that day of the workshop, they generated 104 ideas.

6.6 Drilling Down Into Ideas

The participants posted all the generated ideas on the wall and then held a vote. After extracting the top 10 ideas, each group brushed up service ideas with one person from each of the business section (consultant/salesperson/sales promoter), technology section (engineer), and UX section (designer) joining the group. They performed a concrete study on the base ideas by using six framework sheets (concept, product details, business model, UX scenario, UI, and review

sheets). Finally, they created working mock-ups and held presentations.

6.7 Results

The vision planning results are described below.

Vision: Healthcare becomes a greater part of everyday life.

Mission:

- (1) Always be watching over us
(Healthcare becomes one with ourselves without us having to be aware of it.)
- (2) Being healthy by knowing ourselves and taking care of ourselves
(Optimize care for us in a style that suits us.)
- (3) Supportive hometown
(Home, community, and daily life are the main stages of future healthcare.)
- (4) Naturally possible without pressure
(Maximize effects with minimum stress.)
- (5) Making "more" come true with advances in technology
(Create benefits from technologies gathered across disciplines.)
- (6) Opening up the possibilities of life
(Healthcare meets various senses of values and provides choice to individuals.)
- (7) Reading emotions to be good to the mind
(The future places importance on health of mind and quality of life.)

To convey the deep relationship between healthcare and the various scenes of everyday life as a vision, a map was used to express the whole picture, in consideration of people's ability to intuitively envision life in the future (Figure 7).



Figure 7. Design Expression for Vision

For the mission, concept expression was adopted together with commentary on specific service ideas in order to convey the details of the direction in scenarios (Figure 8).

いつもの私を見守る
意識する必要がなく、自分と一体になったヘルスケア



ウェアラブル装置などの進化によって、自分では何も意識することなく 24 時間 365 日の体の状態をログ化できる未来。たとえば収集された詳細なデータが医療現場での診断精度や診断効率 UP に役立つだけでなく、必要な相手とリアルタイムで情報が共有されることで、これまでにないアクティブなヘルスケアサービスが実現できそうです。

Figure 8. Design Expression for Mission

6.8 Utilization Performance

These results were compiled into a handbook, which has been utilized as a medium to convey Fujitsu's vision to customers, with the utilization performance so far described below.

Service design project for a parts manufacturer

After an order for a service design project in the healthcare area was received, vision planning was done based on this proposal. With the handbook utilized as an input for idea generation, 241 ideas were generated.

User group workshop for healthcare equipment clients

As one of the activities of sales expansion, a workshop in a user group was organized, and this workshop utilized the handbook as an input for generating service ideas (Figure 9).



Figure 9 Utilizing Handbook to Generate Service Ideas

6.9 Discussion

From questionnaires given out after the workshops ended, all the participants understood the contents of the workshops, and 85% of them answered that setting a subject was beneficial. The results confirmed that setting the subject was effective for sharing the direction and world view that the project should aim toward, which is a characteristic of this proposal. On the other hand, opinions about the lack of time to read industry and technology trends were received.

In the procedure described in Section 6.6, the participants drilled down into the top 10 ideas as a team. Since 79% of them answered that this effort had benefits, we can say that the procedure had a certain

effect in fostering empathy in the participants. Meanwhile, some participants opined that it was difficult for them to drill down into an idea while taking another person's idea as their own.

We also confirmed that a vision visualized from the results in Section 6.8 had an effect on third parties, emerging as an input for generating service ideas. Generally, in most cases when a project is conveyed to a third party, logical explanations and quantitative comparison information from a functional aspect are given to promote understanding. In contrast, a visualized vision can have the effect of making it easier to envision an image of the future.

From the above, you can see that it is possible to effectively share information with stakeholders by visually expressing a vision with photos, illustrations, etc. Visualized vision planning has the following effects:

1. Empathy of the participants
2. Sharing of the direction and world view that the project should aim toward
3. Input for generating service ideas

This case study covered the utilization in a project with internal members. We therefore think that further verification is necessary to apply this approach to different stakeholders involving clients and users.

7 LOOKING FORWARD

This research has clearly shown not only the visualization method of a vision but also the effects of vision planning, which include the fostering of empathy in participants, the sharing of the direction and world view that a project should aim toward, and adding an input for generating ideas.

To generate new business by taking advantage of a service design, an essential process is to imagine a service vision that includes UX. To this end, vision planning clarifies the purpose and issues of a project, drawing them up as requirements for business and technology considerations, so it can be expected to improve the quality of outputs and decrease labor hours.

While the needs for generating new business are increasing, we think that vision planning is becoming increasingly important from perspectives such as sharing with third parties and internal budgeting. It may be expected to take a communication or promotion role. Through trial and error with a variety of utilization methods, we will continue pursuing methods of expression.

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