Facilitating Idea Generation Using Personas

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Abstract. Persona and scenario are important design tools for new concept development. Usually, scenario is used to generate ideas, and persona is for evaluation. This article proposes a new approach that embeds persona data in scenario-based design for idea generation. It includes a persona dataset, a facilitation process, and a working field. The persona dataset is a user profile collected in ethnographic research and categorized by subjects, motives, activities, goals and behaviors. The facilitation process helps designer create new ideas via re-matching the elements in the persona dataset. The working fields allow the freedom of implementing with different sizes of the designer team and persona dataset. This new approach provides a direct and effective way that materializes designers' internal experiences and persona data to create new ideas and scenarios.

Keywords: Persona, scenario-based design, ethnographic.

1   Introduction

Persona and scenario are important design tools for new concept development. Scenarios are usually synthesized from hypotheses and existing experiences, and scenario-based design is a story-telling platform for such syntheses. It is also a platform for idea leaping based on methods such as Claim Analysis. Claim Analysis, proposed by John M. Carroll, is an effective way to challenge the designers to generate new stories and drive the idea generation process forward.

Persona is majorly used as a communication tool to help design team focus on target users and prevent "self referential design" when the designers may unconsciously project their own mental models on the product design. Persona data should be extracted from field such as ethnographic researches. "It's easy to explain and justify design decisions when they're based on persona goal…", said Allen Cooper, who coined the term "persona".

The designer can create new ideas directly from the Persona data, the idea leaps will thus directly be grounded in ethnographic results. The question is how to create evolutional results using the static Persona data? This article provides the answer.

A designer can categorize the ethnographic results into S-M-O-m-o structure of the persona dataset and generate new products or service concepts via re-organizing S-M-O-m-o combination path by selecting different components from the persona dataset.

2   The Dataset

The Persona dataset includes daily activities, purposes and goals, tools and methods of the target user related to the research topic collected from observations, interviews, diary, and focus group meetings.

The persona data are categorized into five subsets. Under the subset "S"(capital S) are demographics and personality attributes such as name, age, gender, education, income, hobbies, and habits. In the activity level, the subset "O" (capital O) contains wishes, desires, or the purposes that S would like to achieve. The capital "M" subset contains S's daily or frequent activities and the services that support them. In the action level, "o" (lower case o) collects the goals that S would like to achieve, and "m" (lower case m) is the behavior framework related to "o".

Activity hierarchy	Subject	Object	Mediating Artifact
Activity level	"S": Personalities, demographics, psychographics, etc	"O": Purposes, needs	"M": Daily activities, frequent activities, services
Action level		"o": Key performance element, goals of regular actions.	"m": Framework of actions and Tools

3   Facilitation Process to Create New Ideas via Persona Dataset

The Persona Dataset reflects the user's current activities and life style. In Figure 1, for Persona S, an O-M-o-m combination is a linkage path with motives, activities, goals and actions that Persona S is used to do. If the "O-M-o-m" is an existed experience in persona's real life, there must be an existed product that supports o-m and persona applies that same product to do O-M activity in his life.

The following steps help the designer detour from the existing paths to generate different ideas.

Step 1. Select a purpose-activity pair from the "O" and "M" subsets in the activity level of the persona dataset.

Step 2. Select an effective element from "o" in the action level that supports the activity in step 1. Note that, this "o" may not be the usual o's associates with this activity, thus the path detours.

Step 3. Find a framework under "m" which may work with the element ("o") selected in step 2. By the same technique applied in step 2, this "m" may or may not be the ones that usually associated with "o".

Step 4. Create a new product or service idea based on the element-framework pair to support the activity (M) to achieve the purpose (O) in step 1.

Now the designer re-organizes the combination of path via selecting different components from the persona dataset, as the path in bold line illustrated in Figure 1.
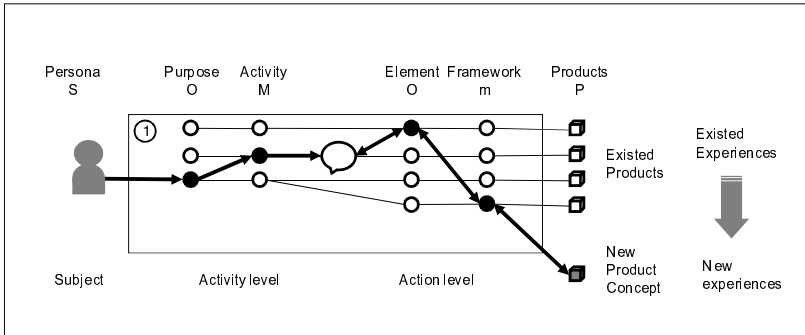
Fig. 1.

In step 4, the designer needs to figure out a new concept of product that supports the new path. The creations of new product concept and the new path are intertwined that the designer seems to play with different linkage paths and a couple of possible new ideas for an optimal result.

Changing different combinations of "O-M-o-m" paths can define an expanded coverage of possible new experiences. Since there are different choices of combinations, the designers can empathize with the persona experience during idea generation.

Here is an example to explain how to apply the above process to create a new "beauty" service for a persona of a female manager.

Step 1, she(S) usually builds up her professional image (O) by attending professional events (M).

Step 2, on the other hand, she polishes her appearance (o).

Step 3, she also refer to famous professional women (idols in the mirror , i. e. "m") to help her enhance her appearance.

Step 4, a new service concept of a hybrid service which provides business management as well as personal image consulting service may help boost her professional image (O). (Figure 2).
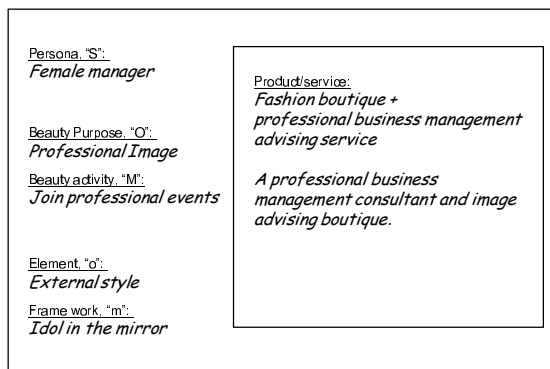

Fig. 2.

4   The Working Fields for Manipulating

With a different number of available Persona datasets, and players of various back-grounds to join in the idea generation process, different working fields are estab-lished. The followings are the working fields that we have used.

4.1   Persona's Field

In Persona's field, the S, M, O, m, o, are based on one persona's dataset. The designer can only alter the combination of Persona elements using the same user's Persona dataset. This field is useful when the ideas are required to be new but quite familiar to the persona.

4.2   Designer's Field

In the designer's field, the designer works with more than one persona datasets. He/She is given the freedom to select from all of the persona datasets the S, M, O, m and o's. Based on the integrated experience of the datasets, the designer can create new experiences and generate new ideas. The designer may eventually build a pseudo persona that synthesized from all the original personas for the following process of product development to work on.

The designer field is useful when the ethnographic study covers several research tar-gets to meet a wide spread of demands. When a new market segment emerges, one can create a designer field from the existing persona database to work around. (Figure 3).
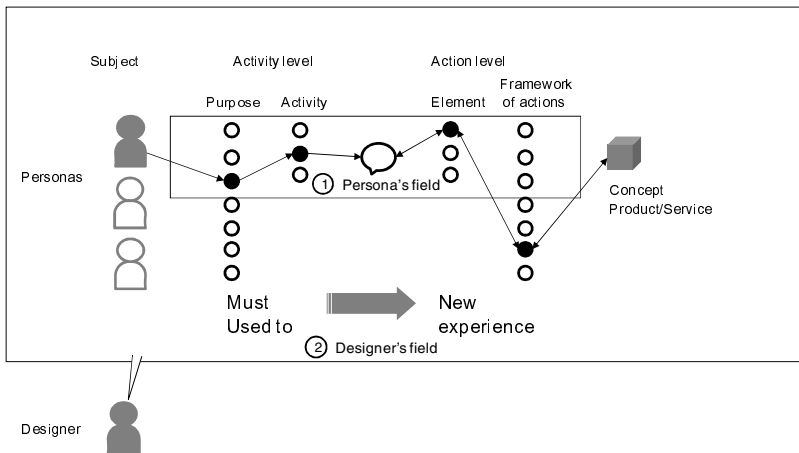

Fig. 3.

4.3   Director's Field

As the idea generation project gets larger in scope and more members are involved, Director's field is introduced to guide and coordinate design team members. It is on top of the designer's field where the director appoints roles of designers and oversees the entire idea generation process to make sure the work is in focus.

In director's field, multiple team members of different expertise share the job that one player does in the designer's field. The essence is to collect individual wisdom of the members while selecting and combining S-O-M-o-m components from persona datasets.

A sequential multi-player game, especially in the director's field, is conducted as the members select components from persona datasets in the order of S, O and M, and o and m. When a member makes a selection, the team is expected to justify the new selection with all the choices made, and thus may involve in intensive brainstorming. Players' internal wisdom will be externalized and shared with one another during the brainstorming process.

It is especially valuable while team members come from different divisions. For example, members from the marketing division can select S, as marketing personnel is sensitive in segmentation; the sales are the right persons to select O and M, as they understand the value of the activities to different users; while the designers select o and m, as the designers are familiar with user's capabilities and habits. (Figure 4).
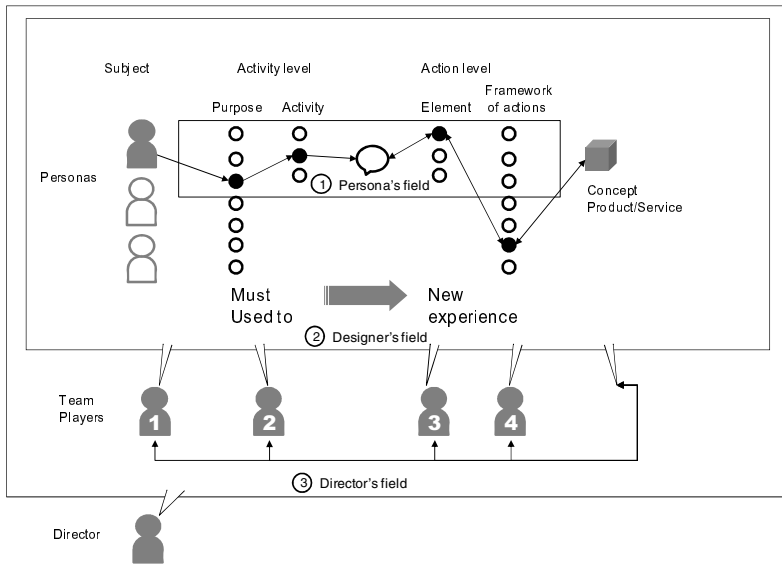

Fig. 4.

5   A Case of Facilitating Idea Generation Using Personas Dataset

This case is to propose an innovative service and/or product for the beauty industry. It was facilitated in the director's field that a 4-designer team used 24 persona datasets to create innovative products or services.

Ethnographic research of 24 users has been conducted. The collected information includes daily activities related to beauty, tools or services employed for being beautiful, the memories of beautiful moments, and their values of the beauty. The persona datasets are collected and filed in the S-O-M-o-m structure. (Figure 5).

The 24 persona datasets of action-level ethnographic data contain tons of trivial elements, which need to be grouped and consolidated into a reduced set of common key words or phrases before they are considered an effective lowercase "o" or "m". For example, skin color, skin elasticity, winkles, and age spots are grouped under "quality of skin" as one of the lowercase "o"s. "Beauty cycle", one of the lowercase "m"s, consists of actions such as applying skin care products, putting on makeup, makeup deterioration, repair makeup, and removing makeup.

After the consolidation process, a workshop in director's field was held to create product/service concepts, scenarios, and a pseudo persona.

Each 4-player team had 24 persona cards which contained S, M and O, a set of "elements of beauty" cards (lowercase "o"), and a set of "behavior framework" cards (lowercase "m"). The team brainstormed based on the cards. They were free to discuss and share viewpoints with one another.
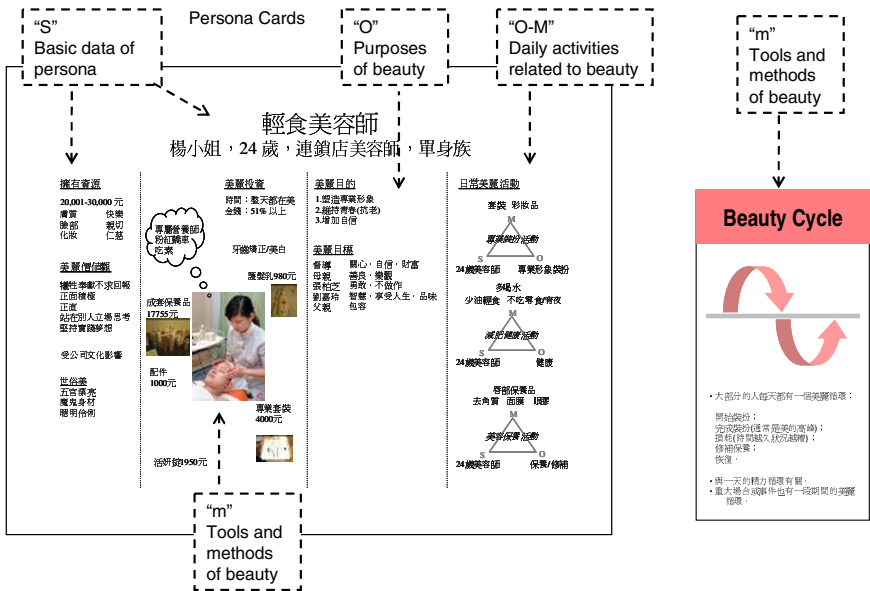

Fig. 5.

From 24 persona datasets, the first player chose a target persona. In this example, it was an office lady who worked on the computer 8 hours a day. The next player selected a motive for her, for example, "staying young". The third player spotted an activity, namely, recreation, for her. Then, the forth and last player searched among the "elements of beauty" cards (lowercase "o") and "behavior framework" cards (lowercase "m") for behaviors and elements that recreate the office lady for staying young and being attractive. For example, "Beauty cycle "("m") and "stay healthy" ("o") were chosen.

The team members were encouraged to think out loud and discuss while making selections. All team members worked together for a new product/service idea for this office lady. The process worked successfully although the team had never heard about

persona before. The team generated very innovative but proper idea during 1-hour brainstorming.

Figure 6 illustrates the final proposal for this office lady to stay young at all times, a web-based alarm clock that reminds the owner time to take actions to stay beautiful. A schedule such as time to have some water, time to stretch and take a walk, time to take vitamins, and time to repair makeup, is recommended by the web-based system. This e-type alarm not only reminds things to do, it also can be backed up by a natural food company to support the consumables needed.
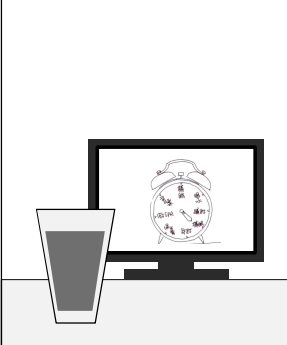
	Persona: **Miss Tsun-tsun Ji** 42 years old, Taichung city Office lady 8 hours a day on the computer. Nature, organic life, cooking
	Product /service concept: **Beauty Alarm Service** Features: alarm service for regular beauty care. 　　1.　A web-based service 　　2.　Send short message to members 　　3.　Customized service by member.
	Scenario: **It is time to drink water** Miss Ji is an office lady. Busy with her daily job, she tries to balance between mind and body, as her means to stay beautiful. She wishes somebody can remind her to do beauty care. It is 1pm, she gets a message from BEAUTY ALARM service on her mobile phone, "It is time to have some water. More water, prettier!"

Fig. 6.

6   Conclusions

This article proposes a new approach which consists of a persona dataset, a facilitating process, and a working field for idea generation. The persona datasets are user

profiles categorized into the structure proposed in Activity Theory. The facilitating process helps designer create new ideas; the working fields defines different sizes of designer team and persona datasets to access.

There are several benefits to apply the proposed scheme to facilitate idea generation:

1. The new service or product idea derived from the proposed scheme is rooted to the original ethnographic data; therefore is grounded with reliable facts and expected to be more acceptable in the market.
2. Any S-O-M-o-m linkage path externalizes the activity experience of a persona. It helps designers understand and create ideas easier.
3. By changing one or more of the S-O-M-o-m elements, the designer will endeavor to justify the new user applications associated with the chosen S-O-M-o-m path.
4. In different working fields, the range of available persona data and players' capability are manageable. If needed, a director can join in the scheme and oversee the entire idea generation process.

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