Proposal of extended persona scenario method
- Trial of "the organization persona and scenario" -

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Abstract: In practical cases of the human centered design, the persona scenario method is used in the processes of "Understand and identify condition of use" and "Identify requirements of users and organizations." The general persona scenario method designs an individual target persona and scenario. However, as for a business information system and a computer based training system in a company, the goal of a system depends on not only individual needs but also organization missions in many cases. If a target user is an organization, we think that we need to know both individual and organization behavior and "the organization persona and scenario" is required.

In this paper, we investigated the method of describing the relation of people in an organization for a certain mission, and analyzed efficiency and description technique. Such kinds of methods are found in film making, novel writing and use case figure of system development process. Moreover, we applied the organization persona scenario method in practical case to examine effectiveness and problems. We found that the organization scenario is useful to not only system but also contents. At the end, we mention future agenda for the practical use of "the organization persona scenario method."

Key words: Design Methodology, Human Behaviors, Perception, and Emotion, Service design.

1. Introduction

The persona scenario method is an excellent tool for a project team to share a concrete image of target users. [1] However, in actual system development, especially for business purpose, introduction and smooth functioning of the system depends on not only one persona but also relation based on role among managers, users, and other various stakeholders.

In this paper, we propose the "Organization Persona", useful to get a picture of how an organization evaluates and decides to use the system. Before creating the organization persona, we analyzed the three description methods; the person correlation diagram used in creation of movie and drama for illustrating stakeholders' relation, the use case chart for defining required specification, and the organizational chart for illustrating relation among business sections. We also considered required elements for system development with user research to create usable relation diagram of the organization persona.

1.1 Decision Making in Organization

System introduction requires not only end users' opinion but also consensus building among related sections. According to other previous research of decision making process, despite that decision in management organization should be rationally-based, the reality is opinion of a few powerful key persons or project process might influence the final decision.

Kees van der Heiden[2] referred that the flaming, our viewpoint of a problem, depends on where we stand. Ishikawa investigated the amount of influence on decision making from various people; ordinary workers, supervisors, middle managers and executives. [3]

Decision is made by stakeholders' sense of values and their standpoint in the organization, and various researches have shown the organization varies according to corporate culture, business category, and business trends. [4,5]

1.2 Performing Task in Organization

In business organizations, tasks are performed by not only the main section but also various related sections. We investigated several cases in system introduction and focused on problems associated with the relationship of workers-and-workers or sections-and sections.

Newly introduced system sometimes get into awkward to use because of the gap in understanding of the IT section and the user section, managers' lack of understanding about the system, or lack of explanation process to fill in the knowledge gap.

For example, it is said that bringing in ERP (Enterprise Resource Planning), companywide business management system, is difficult in Japanese enterprises. One of the disincentive factors is difficulty to get consensus among related sections. Generally, user section expects user-friendly convenient system to reduce the stress. On the other hand, management section focuses more on work restructuring to improve efficiency. [6]

Another example is developing a system to handle internal confidential information like personnel system, most of which is developed in-house for information protection. Such a project often get into development delay and scope creep because of consensus gap among related sections, that need additional development period and cost.

2. Expression Technique of Relation

2.1 Person Correlation Diagram in Production for Movie and Drama

Production for movie and drama uses figures which respectively describe relation of characters. The figures are used for helping viewers understand the story as well as sharing common perceptions among production staff.

Similar to the persona sheet, document about each character is made in the aspect of trait, physical data, personality, and background. The person correlation diagram describes the name of the character, facial portrait, relation with other characters, job position, family relatives, emotional relation like love or respect, reason of creating relation, purpose of holding relation, attitude to other people and so on.
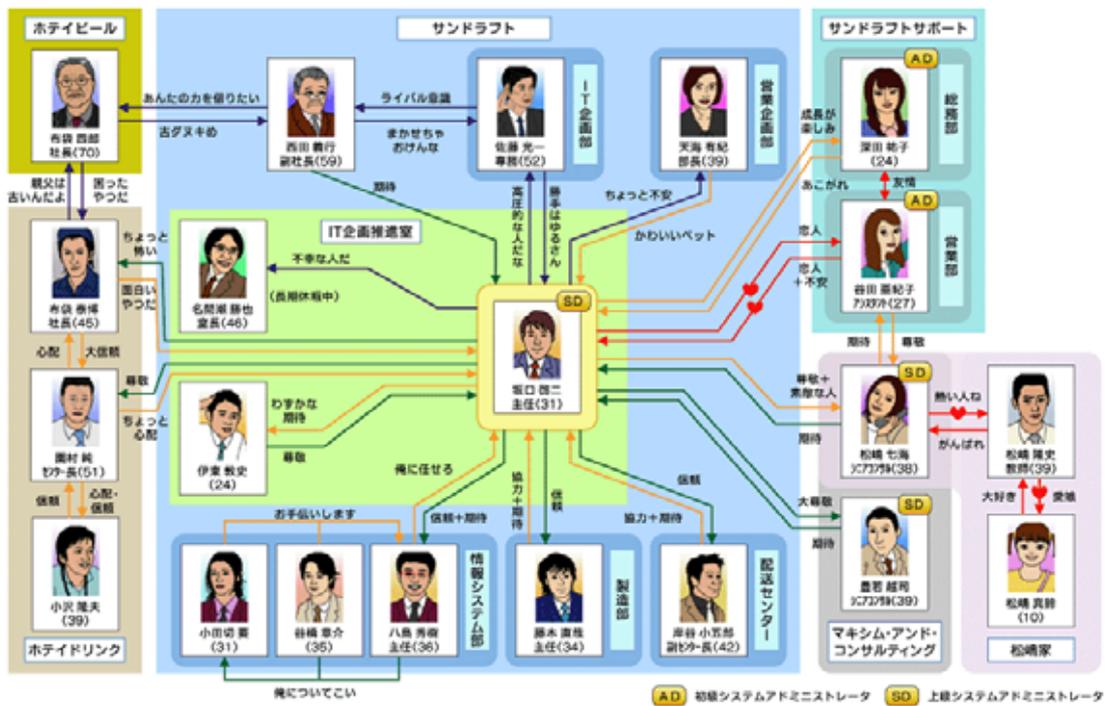
Figure.1 Example of Person Correlation Diagram[7]

2.2 Organizational Chart in Enterprise or Group

As we mentioned in 1.2, it is necessary to get consensus among sections to introduce and operate new system in organization. Every organization has the organizational charts to show hierarchical and horizontal structure and the simplified one is open to the public. Most of them are cluster charts consisting of section names and relations. Some charts have name of managers with the section name for internal use.
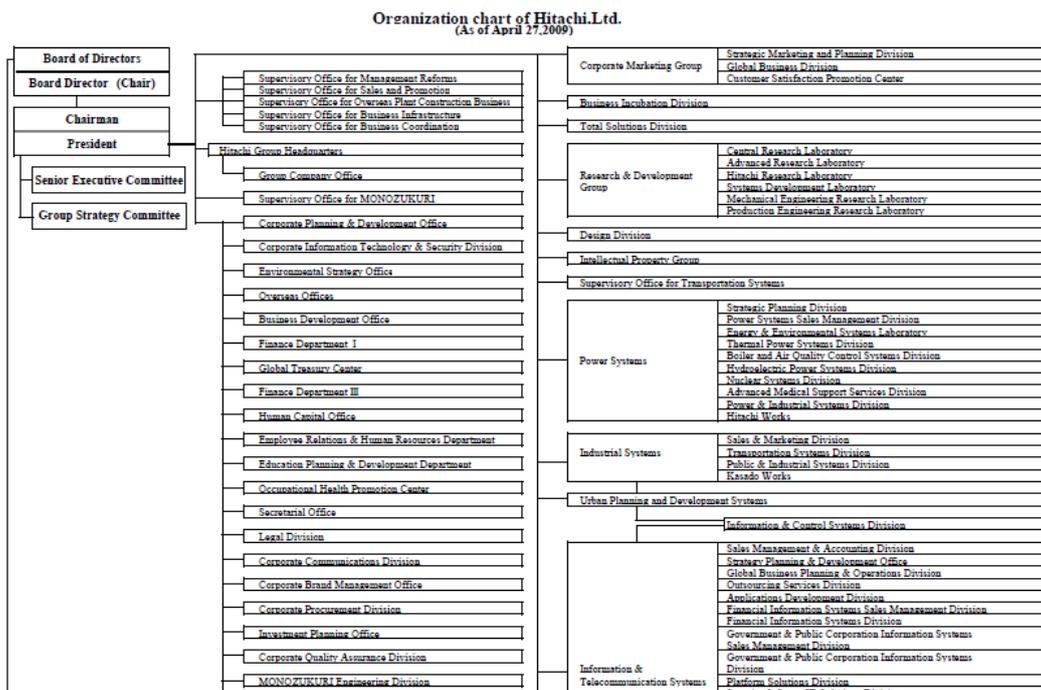

Figure.2 Example of Excerpt Organizational Chart (Hitachi Ltd.) [8]

2.3 Usecase Chart in UML

Many projects of information system development have used modeling methods for bridging the gap between the user and the developer [9]. UML (Unified Modeling Language), de facto international standard, defines models including the use case chart and the sequence chart.

UML defines nine models which describe a system in static, functional, dynamic, and physical side. Among them, the use case chart, the sequence chart, and the activity chart are associated with human relations. Unlike the sequence chart and the activity chart associated with personal activities, the use case chart illustrates organizational activities. This time, we focused on the use case chart because we need to consider organizational activities.
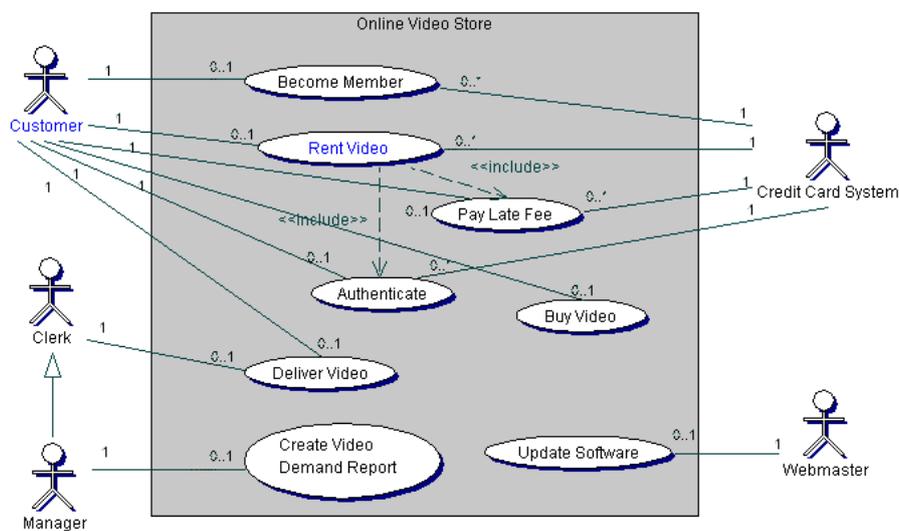

Figure.3 Example of Use Case Chart [9]

3. Evaluation of Expression Technique of Relation

We interviewed producers and system engineers and extracted the evaluation framing and the expression element required for the organization persona by evaluation grid method [10] as we mentioned in chapter 2.

We analyzed interview data to build evaluation structure model for organization persona chart as Figure4. There are two categories for evaluation concept of organization chart. First category relate to emotional and conceptual information about an organization to create basic specification. Second category relate to more practical task information about human relation in an organization. This category information is almost defined system function.

We concluded that organization persona should have human relation information and some kind of order and task flow information.
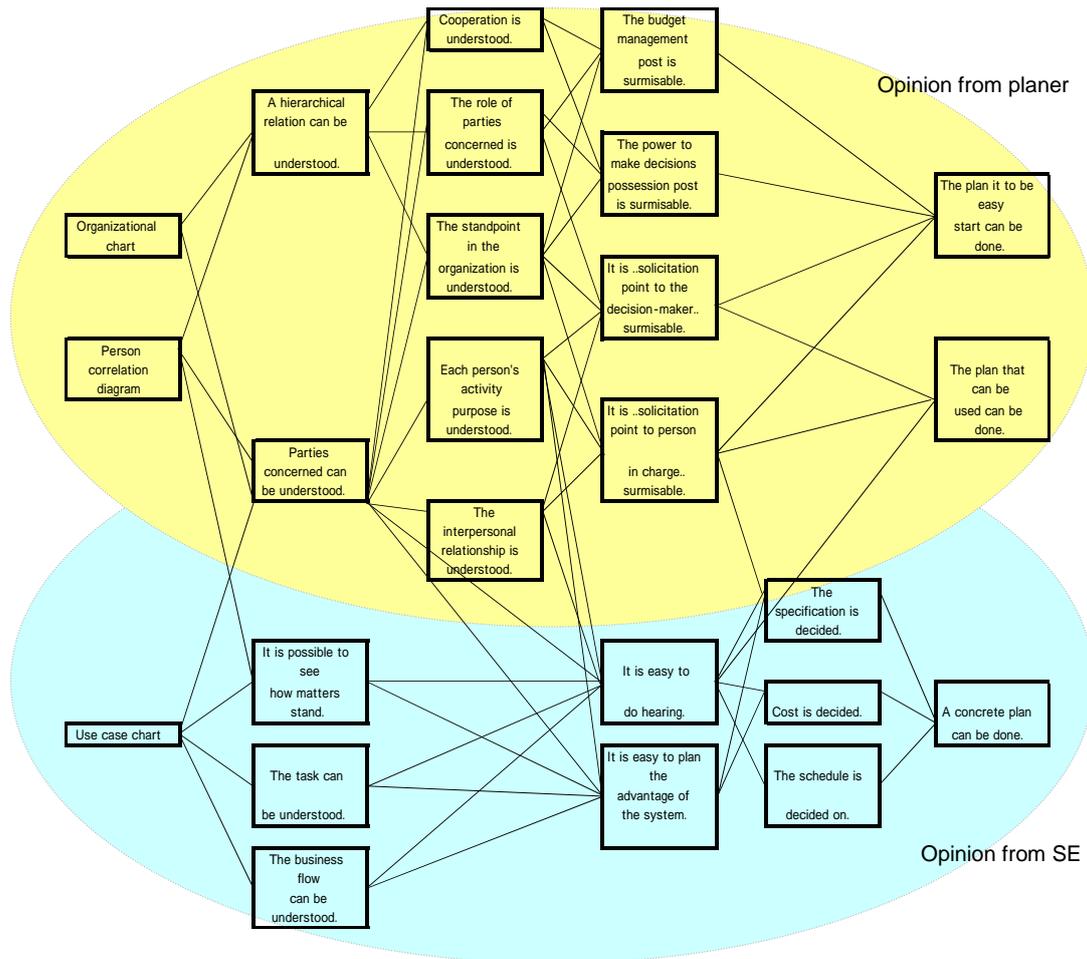
Figure.4 Evaluation structure model

4. Trial of Organization Persona

We qu alitatively evaluated the o rganization p ersona wh ich co ntains the ele ment o f the p erson correlatio n diagram, as we m entioned it is ef fective for the planning process of creating education system in the prev ious chapter. We c reated the persona s heet of the persona scenario m ethod base d on e very s heet of t he service scenario, the or ganization persona, the st akeholder persona, a nd t he i nteraction scenario. After that, we interviewed the project members in the following aspects;

- Effectiveness of the development process

Even in the stage where service was not concrete yet, we could get practical opinions and utilize it for the compatibility evaluation.

- Effectiveness of creating user characteristic

Without the persona method, the type of user may turn into ambiguous because experience and viewpoint of participants vary, which make the discussion failure. With defining the organization persona and the stakeholder persona, a person who should participate could speak in the discussion and people could help other participants who did not have enough knowledge to understand the discussion. Especially in the kickoff meeting, the persona method was very effective to activate discussion even without sufficient opinion exchange beforehand. It was also helpful to prevent from getting off the subject.

- Effectiveness of the communication tool

It was very effective to extract opinions when interviewing not only the project members but also the users who should do a monitor test for accuracy of interaction scenario. Especially, because interviewed users did not have technical knowledge of the information security, it might be difficult to hear their real opinions by using technical terms. In this project, we explained the interaction scenario when they had enough sympathy with the organization persona and the stakeholder persona. Therefore, they could understand the scenario and could talk about the issue in the same level with interviewers.

- Consensus with development team

It was necessary to adjust slightly when developing the tool. However, because the big picture had been defined, what we should correct was clear, so we could avoid wasting time. Moreover, we could pass on user's true voice to the development team which usually did not have enough opportunity to hear it, so we got very good result.

- Contribution for the final tool

Because HCD methods, such as persona and scenario, were used for making the tool with assuming the actual use scene, satisfied result is expectable after tool completion. Especially, user expressed the expectation of the tool to improve situation in the pre-research interview. We believe it means that the tool is not for just filling functions but for meeting the usage demand.

Figure.5 Example of organization persona

5. Conclusions

We considered the description method of the organization persona, which shows relation among stakeholders as well as users. We also considered the evaluation framing of organization structure and got qualitative data from the case study.

We found that relation charts such as the person correlation diagram and the organizational chart were required to understand the advantage for the organization in the planning stage. In the stage of the system design, information of users' role, the workflow, and the work descriptions were required.

The organization persona helps defining requested specifications for the system to achieve a satisfactory result by creating the relation diagrams with tasks. It is an effective communication tool to bridge producers to engineers as well as developers to users.

6. Future agendas

We assume that the organization persona will be user for various purposes like content planning, system design. In next study, we will build practical methods with more generalized model by applying findings of this study.

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