Proposal and evaluation of a method to induce a chat leading to organizational learning

Motoki URAYAMA*1, Takayoshi KITAMURA*1*2, Daisuke KAMIHIGASHI*1, Hirotake ISHII*1, Hiroshi SHIMODA*1, Hidenori FUJINO *3

*1 Graduate School of Energy Science, Kyoto University
*2 College of Information Science and Engineering, Ritsumeikan University
*3 Faculty of Economics, Fukui Prefectural University
Introduction

<Background>
Importance of Organizational Learning has been recognized.

(Organizational Learning is not only getting knowledge, but also changing the thoughts and behaviors.)

<Problem>
Information sharing by communication in the organization is one of the important factors, but most of the members cannot share the practical information.

<Goal>
Promote Organizational Learning by informal communication.
Roles of informal communication

Definition

• Unscheduled and unofficial communication which occurs in the organization

Example:
Chats which occurs in break room, smoking room and so on

Effectiveness

- Information sharing
- Creation of ideas
- Building trust
- Discussion of troubles
Research purpose

Rich contents in a chat

Inducing a work-related chat

Research purpose is to propose a method to induce a chat leading to organizational learning
Principle to induce theme of chat

Interpersonal distance

Chat is induced by feeling ill at ease when the interpersonal distance is too short

Idea Association

Incident
- activated
- not activated
Train delay
Operation
Doze

Contents of chat is controlled by presenting work-related information
Proposed system

16 people were injured by collision accident between train and track.

Display the titles of work related news on the internet.

Everyone can see the information on the display.

<Other Functions>
- Animation
- Sliding operation
- Pop-up window
Example

Example of use.avi
System configuration

**Hardware**
- Web server
- Wireless router
- NUC PC

**Software**
1. **Google Alert**
   - Create RSS from preregistered keywords.

2. **Web Server**
   - Store accessed data from RSS into database.
   - News titles, News URLs

3. **Large Display**
   - Create screenshot of web page from URLs in database.
   - Display news titles in random.
   - Display popup window for detail information.
Case Study

Outline of case study
Analyze chats of participants which occurred in the resting room where the proposed system was installed.

Purpose of case study

1. To confirm whether the proposed method can induce work related chat or not
2. To confirm whether the induced chat promotes organizational learning

Participants

- Two female child minders
- Two female masseuses

Overview of experimental protocol

One day (10:00 ~ 16:30)

<Flow>
Task → Rest → Task
15min
Display information or not display information

Layout of resting room
Results

Classification of chats

- Work related utterance
- Others

*** p<.001

Number of utterance

- Childminder
- Masseuse

Chat to lead the organizational learning (Flow of association)

Children’s Christmas party on December 24th

Displayed information

Christmas

Christmas song sung in their class

Promote work related chat for the workers who usually talked about work related matters in their daily chat.

Learning the lyrics of the Christmas song through their chat.
<Conclusion>

✓ There was a possibility for the proposed method to promote work related chat for the workers who usually talked about work related matters in their daily chat.

✓ It was confirmed that there were a few work related chats which led their learning activities.

<Future Work>

I. We should verify the influence of conditions of participants (number of participants, gender, relationship between participants).

II. We should confirm the effectiveness of the method when the proposed system will be installed into a resting room of an actual workplace for a long term.

III. It should be considered that work related chat can be promoted even in the case when they usually don’t talk about work related matters.
Break 1 & Lunch break: general news was displayed
Break 2 & Break 4: There is no news
Break 3 & Break 5: Work-related news was displayed

<comments>
• Task includes Slip classification & Sudoku & Flicker measurement
• Small task is Flicker measurement
• The reason why the contents is changed:
  General news → get used to the system
  non-text → investigate whether differences of frequency of work-related chat exist or not
Mode A
(Public news)

Mode B
(No text)

Mode C
(Work related news)
The system showed the blog of Christmas party for kids.

They talked about Christmas song which was sung with kids in class.

C1 didn't know the lyric of the song.

C1 told the lyric while singing the song.