

The Wegwiezer

A case study on using video conferencing in a rural area



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This report is based on the product of students of the Master Course Business Processes and ICT who have investigated the embedding of video conferencing in business processes.

The report has been approved by the organisation for use in ECLIC.

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Executive summary

The Wegwiezer is a helpdesk concept at a sparsely populated area in the province of Drenthe intended to help people with services like providing people with information concerning issues of well being or redirecting them to the appropriate organisations that can help them. There are four helpdesk locations in different villages. The Wegwiezer is a service of a well-being organisation called Stichting Welzijn Aa & Hunze. Recently video conferencing at the helpdesk locations is introduced to support the business processes by connecting the appropriate organisations.

However the Wegwiezer concept and the video conference initiative have not yet met the expectations. One reason might be that the video conferencing is not yet sufficiently embedded in the existing business processes. So as part of the master course Business Processes & ICT a group of five students have investigated the business processes involved and supporting infrastructures.

In a number of interviews data was gathered about the business processes and they were modelled using Actor Activity Diagramming. In the analysis the business processes themselves are satisfactory but mainly manual processes. There were no integral information systems to enter cases and the results.

At design the functionalities of a Wegwiezer Information System have been specified in: supporting the workflow, providing management information, building a knowledge base and embedding video conferencing. Considering the status of the Wegwiezer concept obviously it is best to start with free facilities like Google docs and wikis.

Additionally some marketing issues were mentioned and in an evaluating discussion with the organisation a redefinition of the products and services was mentioned.

1 Introduction

The Wegwiezer is an information desk concept, where information about well-being issues is given to the citizens living in Aa & Hunze area in the province of Drenthe, the Netherlands. The Wegwiezer is a project started by the local government of Aa & Hunze in 2006 and applied and managed by “Stichting Welzijn Aa en Hunze”, a non-profit well-being organisation. The services provided by the Wegwiezer are answers to questions on issues of health care, living, relationship & child raising, financial problems and transportation as well as referring to appropriate organisations. These services are free.

In the Wegwiezer-concept a number of non-profit and profit organisations are participating. They are: the local government of Aa & Hunze, well-being organisation Stichting Welzijn Aa en Hunze, housing associations Woonborg and Woningstichting De Volmacht and care organisations GGZ Noord-Drenthe, I-care, Interzorg Noord-Nederland, Maatschappelijk Werk Noordermaat, Zorggroep Alliage and Stichting Zorg- en Dienstverlening '94.

The tax authority and a bank offer services in the Virtual offices.

The infrastructure of the Wegwiezer is made up of several helpdesks, currently in Annen, Gasselternijveen, Gieten and Rolde. These helpdesks are staffed with - voluntary - consultants. Customers can come to the helpdesks or use telephone or email. Customers can find the addresses, telephonenumber and mailaddresses on the Wegwiezer website (www.wegwiezer.nl).

At each helpdesk a ‘Virtual Office’ is set up, where videoconferencing with related organisations can be used. Figure 1 shows the Wegwiezer concept.

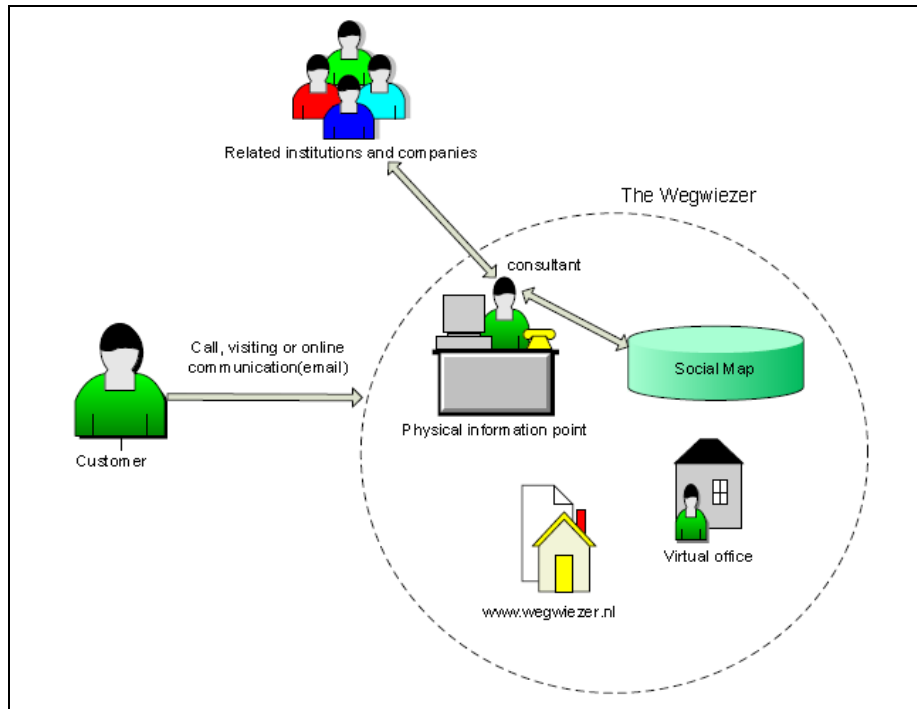


Figure 1: the Wegwiezer concept

At the Wegwiezer helpdesks consultants help people with searching for information. When people have questions, the consultants first search in their local maps, checklists or excel sheets database for answers. If no answers are available the consultants contact the appropriate related organisations. When the questions are too complicated to be answered by the consultants, they direct people to the appropriate related organisations. So the Wegwiezer is used by the consultants in three different ways: 1. providing information, 2. providing advice after questioning external organisations and 3. redirecting customers to the related external organisations.

The consultants are volunteers who usually work in pairs. The activities of the consultants are coordinated and managed by the well-being organisation “Stichting Welzijn Aa en Hunze”. Currently there are about 35 consultants. Three coordinators from several organisations facilitate the process. The consultants are trained at an “The Wegwiezer Academy” for their communication skills and knowledge of the appropriate procedures and business processes.

In the start of the business process consultants fill in a registration form for information on the next issues: the way the question is coming in, the question and its category, the service provided, the result, the date and consultant. The name of the customer is not included. Customers are informed about privacy issues.

2 Problem statement

The Wegwiezer seems to be a promising concept. The participating organisations were expecting that after a startup fase a considerable number of citizens living in the Aa & Hunze area would be using the Wegwiezer to get information when they encounter problems related to well-being issues.

However, in reality not many people tend to use the Wegwiezer as an information helpdesk. Most people go directly to the related organisations when they need help. When they don't know which organisation to go for, they simply just contact the reception desk of the local government. The Virtual Offices, which are very well equipped for video conferencing with external organisations does not generate extra customers.

The management of the Wegwiezer wants to know what is going on and has formulated the next research question: *"Can improvements of the current business processes and the video conferencing facilities make the Wegwiezer more succesfull as an information helpdesk"?*

This research question is approached by investigating the current business processes, including the video conferencing facilities and come up with some improvement suggestions that will make the Wegwiezer concept more succesfull.

3 Analysis

The main business process of the Wegwiezer is the business process of handling questions which is in fact a helpdesk process. Depending on the difficulty of the question the consultant will answer the question himself direct or after contacting an external organisation or will redirect the question to the external organisation.

The business process will be modeled using Actor Activity Diagramming (AAD), which is a way of modeling business processes from a management and organizational perspective. In the modeling methodology actors and activities are modeled in a chronological way, that is the order in which they enter the business process. Work that is going from one actor to the next actor, called transitions, is modeled explicitly to stress the flow of responsibility. Actors can be persons, departments, whole organisations as well as information systems. The Actor Activity Diagramming methodology is explained at www.aadmodeling.eu.

3.1 Current business process

The business process of handling questions has the following actors:

Customer	arriving at one of the four helpdesks
Consultant	at the helpdesk on a voluntary basis and according to a schedule
Projectleader	at the headquarters, coordinating all activities
External organisation	one of the participating organisations
Social map/ checklist/ excel sheet	supporting the consultants
Registration forms	mainly to feed the management reports on numbers and categories

The current business process is presented in figure 2.

<p>ACTOR ACTIVITY DIAGRAM</p> <p>Organisation = Well being Aa & Hunze</p> <p>Business Process = Handling questions</p>	<p>Setting: Present situation Date = 12/12/09 Source = interviews and wegwiezer.nl</p>
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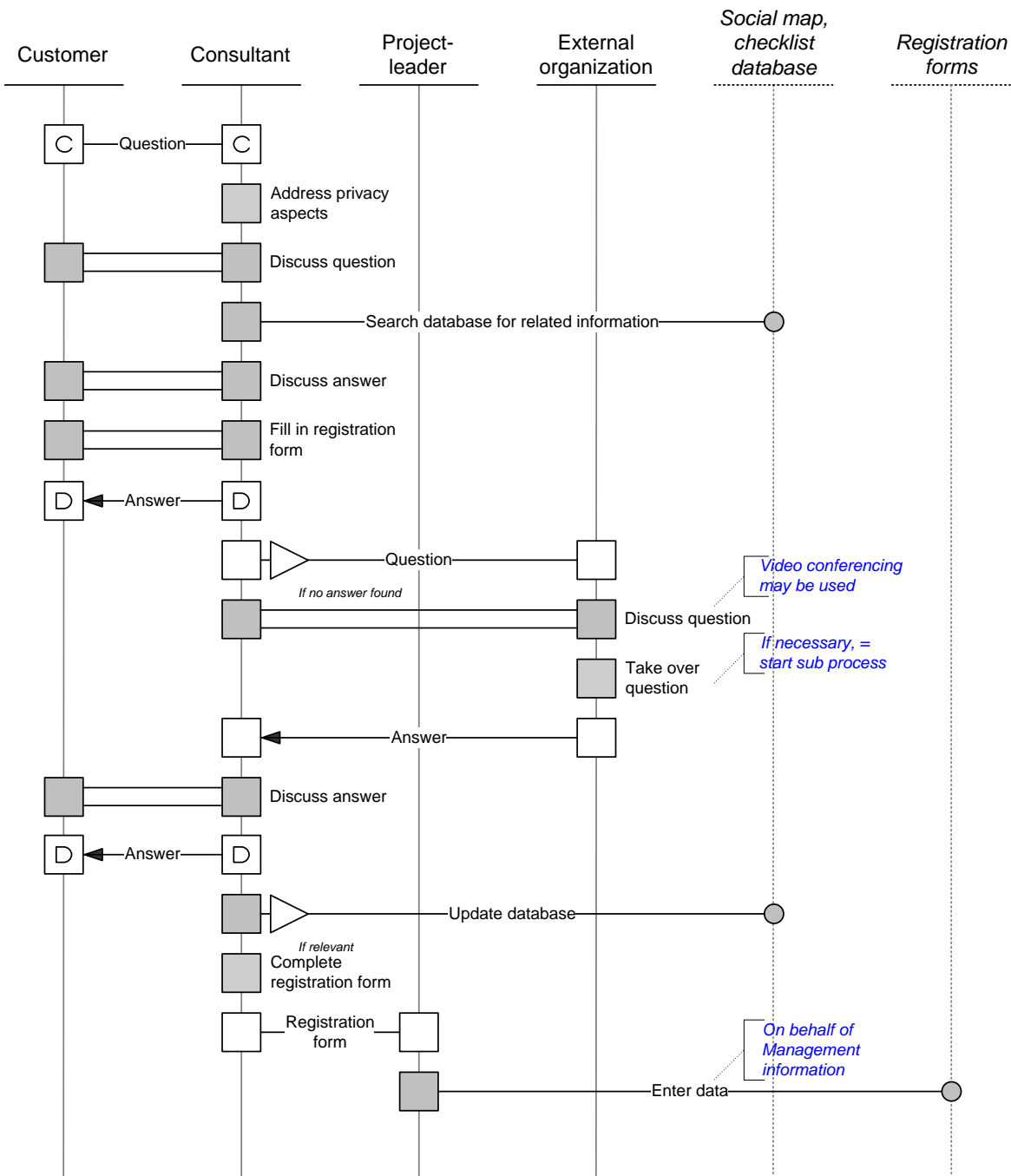


Figure 2. Actor Activity Diagram of the current business process of handling questions

3.2 Discussion

The helpdesk business process seems to be well designed. There are three mainstreams to be recognised: 1. the consultant answering questions straight away, 2. the consultant answering questions after consulting the appropriate organisations and 3. the consultant redirecting the questions to external organisations.

There are some problems identified in the supporting infrastructure. These are:

3.2.1 No electronic case files

For customers asking questions at the Wegwiezer helpdesk a registration form is filled in concerning the question. The registration forms are mainly used to periodically report the number and type of questions to management. The outcome is not entered in any file. Incidentally for a new type of question the consultant takes a note in the social map, checklist or local excel sheet.

Information of the customer is not entered in any file, which is obvious because of the privacy aspects.

3.2.2 No feedback of results to the Wegwiezer

In the case of redirection the customer to an external organisation no tracking mechanism does exist to check the solution to the customer's questions. The business process of the Wegwiezer part stops after customers are redirected to an external organisation. The consultants have no idea whether the questions of the customer have been solved or he has to be redirected to another organisation.

An example is used to make this clear. A customer is directed by the Wegwiezer to Icare (homecare organisation). The manager of Icare is called by a Wegwiezer consultant informing him that a customer is redirected by the Wegwiezer. After a take in, the manager of Icare could decide that the customer does not fit into the Icare program and rejects the customer. The process than stops. The customer is not redirected back to the Wegwiezer. Since there is no feedback to the Wegwiezer, the consultants of the Wegwiezer have no idea whether the customer gets an answer from Icare or whether more advice is needed.

3.2.3 No shared information on procedures

Currently all Wegwiezer helpdesks and participating organisations have their own procedure descriptions and handbooks for handling the questions. There is no sharing and exchanging of this information. This conflicts with the idea that the Wegwiezer is a uniform solution to customers who need information concerning well-being issues. Also the lack of information limits the ability of the consultants to find accurate answers for the customers, which does not improve effectiveness and efficiency. Opportunities to improve the training of consultants and building of a knowledge base are not used.

3.2.4 The use of video conferencing is not rewarded

Although good video conferencing facilities are available, there is hardly any use. There is no policy for using it.

4 Redesign

4.1 Supporting the business process

In order to solve the problems mentioned above a Wegwiezer Information System (WIS) is proposed with the following functionalities:

4.1.1 Supporting workflow

Questions that are coming in are entered into the WIS and are available for all consultants of the Wegwiezer. The customers are marked by arbitrary number and possibly postal code. At any time the cases can be completed by answers or other steps thus leading to a different status. The consultants can use all available information to help new customers.

4.1.2 Providing management information

The information in the WIS can be accumulated to management information for the coordinators of the Wegwiezer and other managers. The information might also be used to negotiate with new partners to participate in the project.

4.1.3 Building a knowledge base

In the proposed information system all standard questions and answers will be stored in one database. By setting up such a unified database, questions and answers with similar topics are classified into the same catalog. Information is reorganized and reclassified. Questions and answers will be tagged and with the same theme will be found when a customer needs information related to a certain topic. So the consultants who are searching information for the customers can get more accurate information at a shorter time. In the future the database or part of it may be made available for the customers to find the answers themselves.

4.1.4 Embedding video conferencing

Using video conferencing will be encouraged to speed processes and make them more efficient. Referring customers to organisations might be extended by helping them to introduce the problem to the other organisations. When using video conferencing a higher priority of handling the questions might be considered. For the consultants a rewarding system has to be set up to promote the use of video conferencing.

4.2 Redesigned business process

Applying the Wegwiezer Information System will introduce changes to the architecture of the business process. In figure 3 the redesigned business process is presented using Actor Activity Diagramming.

ACTOR ACTIVITY DIAGRAM		Setting: Redesign Date = 12/12/09 Source = interviews and wegwiezer.nl
Organisation	= Well being Aa & Hunze	
Business Process	= Handling questions	

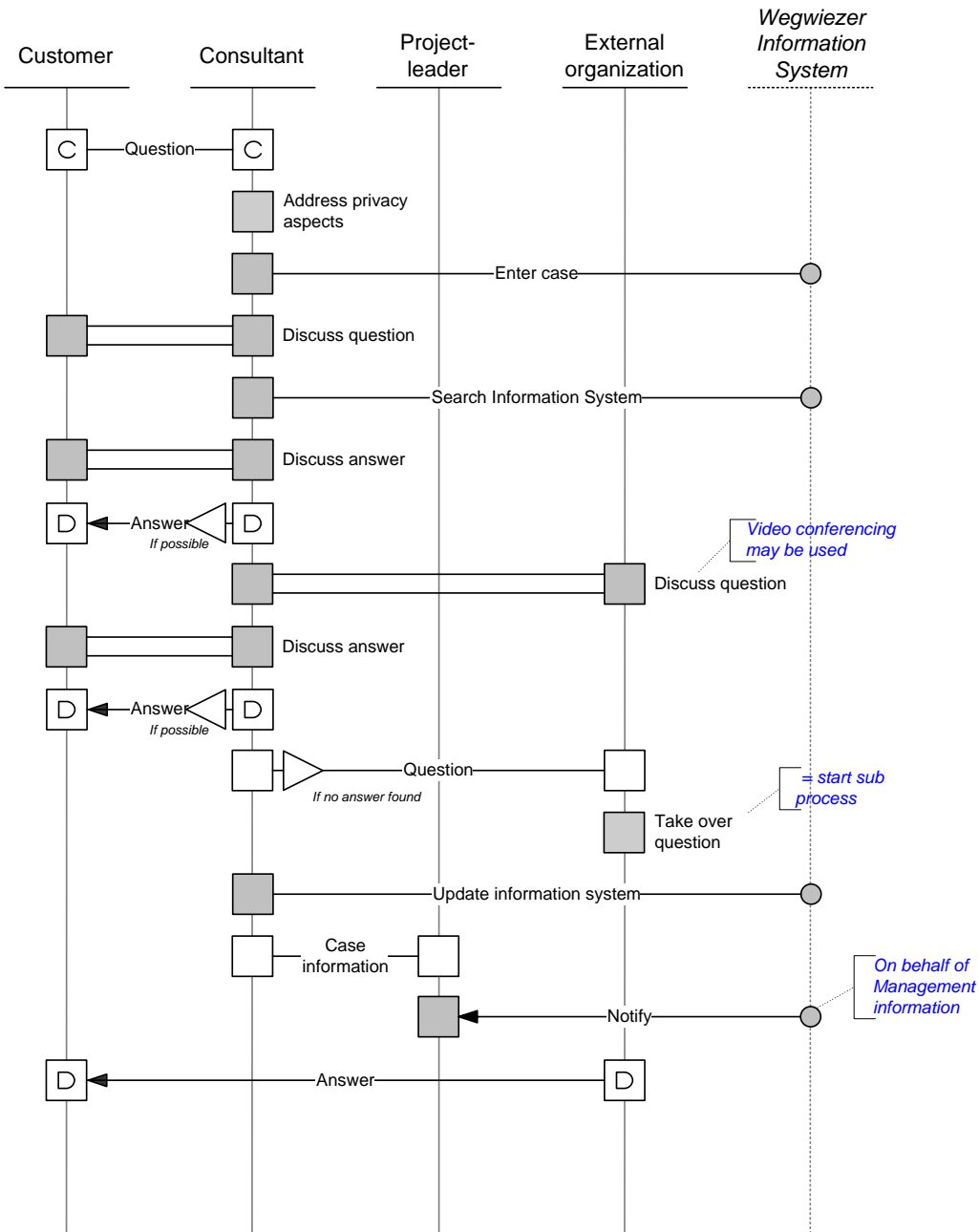


Figure 3. Actor Activity Diagram of the redesigned business process of handling questions

5 Implementation

Acquiring and implementing the Wegwiezer Information System as defined is considered the status of the Wegwiezer concept too ambitious. Yet elements of it might be implemented. For example using free facilities like sharing documents (Google docs) and Wikis to exchange information and building a knowledge base. Students could make a contribution by developing prototypes and examples. If the Wegwiezer project develops this experiments could be changed into more structured information systems.

For any activity the usual steps in implementation projects like communication, testing and training the users should be taken care of lead by multi-disciplinary teams.

6 Participants

The students that have worked on this project are: Jeroen de Vries, Maurits Greving, Ping Yu, Jan-Harm Boer and Jacob Strikwerda. They followed the Master course Business Processes & ICT at the University of Groningen, Faculty of Economics and Business in autumn 2009.

Interviews are held in the month of November 2009 with several employees of the Wegwiezer and related organisations: a manager from Icare, a person that is responsible for WMO (Social Support Act) and also a project leader of local government of Aa and Hunze and a coordinator, a project leader and a consultant from the Wegwiezer.

7 Evaluation

The student's supervisor has evaluated the students' project with the management of the Stichting Welzijn Aa en Hunze. In a meeting some additional issues were discussed.

There is no clear definition of the scope of the services. Is it just giving an answer to questions or is it also lends a helping hand with filling in forms? In future more people are expected to be able to "google" their information. So there should be a shift towards really assisting people. Video conferencing than will be of great value. At any rate a redefinition of product and (paid) services to be offered is important.

Also an extension of tasks of the helpdesks might generate more success. They might act as a branch post for the related organisations. Examples of successful new services are Telecare services.

8 Appendix A - Other improvements

In the investigation some other issues were mentioned. Our suggestions concern the following aspects:

- **Extend the service time**

This is easy to say but hard to do. As mentioned before, the consultants are 11 volunteers who serve all four Wegwiezers. If we want to extend the service time, we have to have more volunteers. How can the Wegwiezer attract more volunteers to work for the Wegwiezer? First of all, volunteers work to help people, if they can see that the Wegwiezer is doing a great job in helping people, more and more people would like to join the group. This links to the other suggestion that will be discussed later—more advertisement and promotion. It is also necessary to check if the current service schedule of the Wegwiezer is matching with the service time of external organizations or institutions. For instance, some institutions only provide consultant service from 10:00 to 16:00, while the Wegwiezer is open from 14:00 till 17:30, the time after 16:00 is not really very efficient. So by adjusting the service time, we can make the limited service time more efficient.

- **Provide more training to the consultants**

Both the coordinators and the consultants felt that there was a lack of training of the consultants. As a consultant is the first person that the customers contact, the skills and the methods of the consultant decide the customers' first impression of the Wegwiezer, especially at the first stage of the implementation. What's more, the relevant training can also improve the work efficiency of the consultants, which is also critical to the service of the Wegwiezer. As introduced in the former chapter, the consultants refer to the database to get the answers on frequently asked questions and they also update the data in the database from time to time. The training can also help them to make a better use of the database as well as contribute more to the database.

- **More advertisement and promotion**

Although we can see the logos, the banners and the brochures in the physical points of the Wegwiezer, there is still an apparent sign of lack of advertisement. Only when citizens know that the Wegwiezer is a new way of getting information, which is easier, faster and more convenient, they are willing to give the Wegwiezer a try. As ways of promoting the Wegwiezer, the local government can hold some open days to demonstrate how to use the system. More brochures can be distributed at the local supermarkets, libraries and hospitals instead of only keeping them at the physical points of the Wegwiezer. In one word, let the advertisements of the Wegwiezer appear as much and as often as possible.

- **Show the positive effect brought by the Wegwiezer**

The more amenable to demonstration the innovation is and the more visible its advantages are, the more likely it is to be adopted (Zaltman et al, 1973). During our interviews, we realized that there was almost no demonstration of the results. We suggest that the organisations do some statistics about how the Wegwiezer helps to improve the work efficiency and decrease the work load. Another suggestion is that the organizations can collect some successful cases from the customers who used the Wegwiezer. The organizations can then demonstrate the positive results by making exhibitions.