

## Making a Net Neighbours Service

Mark Blythe, Andrew Monk, Gordon Baxter

Centre for Usable Home Technology, University of York

and

Jenny Jarred, Age Concern York

Version 1.0, 22.9.04

A Net Neighbours Service uses volunteers to access computer-based services on behalf of other people who for one reason or another do not have access to this technology. Such a service is particularly valuable for home shopping for older people. It may also be used for on-line information services.

This booklet explains how to set up such a service. With any service for vulnerable individuals there are numerous points where one could do harm as well as good. Also, adding a computer to any system introduces new ways in which things can go wrong. The booklet sets out a process by which you can ensure that your service is dependable. It was devised on the basis of our experience building Net Neighbours York. We will use this as an example throughout to explain the steps involved.

The booklet is provided free of charge to anyone who thinks it will be useful to them.

Please contact us if you would like help in setting up a Net Neighbour service and we will try to do what we can. We would similarly be very keen to hear of any services that have been set up using this booklet. Contact: Andrew Monk; a.monk@psych.york.uk; 01904 433148).

The booklet is the product of research carried out by the Dependability Interdisciplinary Research Collaboration (UK, EPSRC).

## Net Neighbours York



In 1999 15% of the European population were 80 years of age or older. In 2050, a conservative prediction is that the proportion will be 30% and current levels of professional care for the elderly will simply not be feasible. One response to this demographic is to envisage a world where we are all looked after by machines. There is a role for technology in the provision of care but it would be a bleak world if there was no human component.

One possibility is to make up the shortfall in younger professional carers by recruiting volunteers from the community. The role of technology here is not simply to replace the professional carer but to enable a volunteer to take on some of their work. The technology makes the work less burdensome by distributing it amongst several volunteers. It makes it enjoyable by allowing the volunteer to concentrate on the social parts while the technology does the physical labour.

Net Neighbours York is a shopping service for older people that follows this principle. Volunteers do on-line shopping for one or two older people, and have a chat at the same time. The process involved is depicted in the figure above.

At the time of writing, Net Neighbours York has funding from York Social Services and a York University Charity to cover the salary of a full time organiser for one year. There are three volunteers and we are gradually increasing the number of clients they serve. The story will be continued in updates of this document!

## How to set up a Net Neighbours Service

The process of service design involves 4 steps as it is described below. In fact, these may overlap and be re-visited several times in designing the final service.

### *Step 1 - First cut at identifying who will be affected by the introduction of the service and what their concerns are.*

One of the main reasons that services like Net Neighbours fail is that the needs of some key individual is forgotten. The first step is to avoid such pitfalls.

- a. Arrange a meeting of the core team who will be responsible for designing the service and the relevant people in the organisation who will "own" the service (henceforward "the organisation").
- b. At this meeting make a list of all the people who could possibly be affected by the new Net Neighbours service (the stakeholders). Start with the obvious ones: the client (e.g. older person); the volunteer, and the organisation. Then brainstorm more peripheral people (e.g., PCT, Informal Carers).
- c. Next, make a list of concerns for all these stakeholders (see below for examples). The main concerns to discuss are those of the organisation, but you should also make some guesses at the concerns of the other stakeholders.
- d. Decide whether you have enough information about the other stakeholders to start the design or whether further meetings are needed with other individuals.
- e. Record the stakeholders and their concerns in a document that can be updated at the end of each of the other steps as new concerns emerge. The final table of stakeholders, concerns and implications for design derived when building Net Neighbours York is presented at the end of this booklet.

### **Net Neighbours York - Identifying stakeholders and their potential concerns**

Two Age Concern York (ACY) staff met with researchers on two occasions. Stakeholders were identified and initial expectations of their concerns brainstormed. Key stakeholders were identified as: the client, the volunteer, the charity and the retailer. In addition we identified informal carers and relatives, the York Primary Healthcare Trust (health services) and York Social Services. Having listed the people who could potentially be affected by the introduction of Net Neighbours the next step was to enumerate any concerns they might have that should be considered when designing the service. The concerns listed in Table 1 are based on ACY's perspective of

what these stakeholders would require of the service. The first concern for ACY, was access. That is to say the service should be available to any of their clients who needed it. If, for example, the design chosen required clients to write a cheque and some did not have a bank account, that design would be unacceptable. This is also reflected in the concern for flexibility. The other concerns were accounting and staff costs, appropriate training, making the client more dependent and the risks to client and volunteer identified elsewhere in Table 1.

<b>Client:</b> Cost; security; feedback; isolation; fear of change; flexible payment methods.
<b>Volunteer:</b> Ease of use (retail sites); accuracy of order; method and time of reimbursement.
<b>Charity</b> Access; risk to client and volunteer; accounting and auditing; staffing costs; training; flexibility, avoiding making client dependent on service.
<b>Retailer:</b> Cost; profit; liability; fraud; competition; publicity.

**Table 1:** Summary of Stakeholders and Concerns

For the client (the older person) the principle concerns considered were: cost (the delivery fee could be an obstacle as many older people do small weekly shops, though paying someone else to do the shopping would cost a great deal more), and potential isolation. For many older people shopping is a social as well as a functional activity. It is as much about having a chat with neighbours they meet as it is getting the groceries. Sometimes it is the only reason to leave the house, or the only reason a neighbour might visit. There was a danger, then, that the scheme could increase isolation - a grave problem for the elderly (Age Concern 2002).

The principle concerns anticipated for volunteers unfamiliar with online shopping were learning to use the sites and being reimbursed when they had placed orders for clients. For the retailer a number of possible concerns were identified. The advantage of the Net Neighbours scheme however was that it did not change the supermarket's current provision in any way, indeed the supermarkets did not know anything unusual was happening during the pilot study. Table 1 summarises the main concerns of each of the major stakeholders.

## Step 2 - Design the telephone interaction

You will now have some idea what the service is to achieve and can make a start on designing the interaction the volunteer will have with the client. You may think this is common sense and that the volunteer can just be left to work it out on their own. Experience shows that this is not a good idea and one needs to explore the potential pitfalls in a controlled environment before getting real volunteers and real clients involved.

- a. Explore the use of the online services, e.g., make online shopping orders for yourself or friends.
- b. When you are confident with the external service (e.g., the web page for a supermarket) try it with some real users. Select these users so that they are representative of your eventual clients but tolerant of mistakes and problems. Explain in advance this is experimental and will not be a permanent arrangement. They must not think they can become dependent on you performing this service for them indefinitely.
- c. Record the new concerns of the clients and organisation in the stakeholder document generated in step 1 and the implications for the way the service will work.

### **Net Neighbours York: Designing the Telephone Interaction**

We drew on the expertise of Jenny Jarred who runs the Hospital Aftercare Service for ACY. In this way we came to understand what the possible problems were by actually doing it.

The hospital aftercare service included grocery shopping for a limited period of time. It was decided to link the pilot scheme to this so as not to raise expectations about a long-term service amongst clients if the scheme proved impractical in the long run. Previously, Jenny would visit clients at home, take their orders, drive to the shops, do their shopping and deliver it to their door. During the Net Neighbours pilot study, Jenny placed orders on line and paid using her own credit card for clients who agreed to try the new service. Over a period of nine months around one hundred deliveries were made to eleven clients. Project funds covered the cost of each delivery so that the service was no more expensive to the clients than it would have been if Jenny were doing it in the usual way.

The first clients were the Andersons (all names have been changed to protect client confidentiality), a married couple who were in their eighties. Mrs Anderson had been discharged from hospital after a serious operation. The first online shop arrived promptly and the couple were impressed enough to want to continue with the arrangement. The situation was complicated when Mrs Anderson was taken back into hospital. Mr Anderson continued with the service but was not happy with the second experience as this email from Jenny indicates:

Mrs Anderson is still in hospital with no immediate discharge date. I have spoken with Mr Anderson who was less than happy with his last delivery. Although within the time slot of 12 - 2 it didn't arrived

until 1.55pm and he was getting worried. I think as the first delivery arrived 5 minutes into the time slot I believe he was expecting the same again. There were several items wrong with this delivery [...] He didn't check any of it until later that afternoon. [...] He didn't feel he wanted to continue an[y] more [...] after he had spoken with his wife.

When working with such vulnerable people error tolerance can be low. Some of the mistakes were the supermarket's but most of them were made while ordering. It was decided that Jenny should phone the clients back after she had placed the order and read it to them before confirming it.

It quickly became clear that this was indeed much more than just a shopping service. While talking to one client, Jenny, as a matter of course, asked him how his foot was after an operation. Upon hearing of his pain, Jenny strongly encouraged him to report it to his doctor as older people are often extremely reluctant to report and problems may go undiagnosed for a long time (Age Concern, 2002). Similarly, another client mentioned that she had had a second banister rail put up and she wanted to employ someone to paint it. Jenny then told her about the Age Concern list of tradesmen checked with trading standards and the police. There were then other functional uses of the Net Neighbours scheme. But there were also the crucial social and conversational aspects. Here Mr Edgewell relates a conversation with a driver who had bumped into his car:

Mr Edgewell: and he said ... put a claim in. I said - just a minute, it's only superficial damage we'll sort that out, I'll have it done at Honda - it costs quite a bit but it's only a little bit of paint scratched off

Jenny: You said you'd have it done at Honda?

Mr Edgewell: Well if he was going to be funny about it

Mr Edgewell told the story not seeking advice, but simply sharing his day, and the two of them ended up laughing about the incident.

Because the shopping accounts were set up with the client's name, address and phone number each was able to use the usual complaints procedure. On one occasion, a driver left an entire bag on the van leaving Mr Underhill's order short. He simply rang the supermarket, told them what had happened and the driver was sent back to correct the mistake.

Table 2 shows how the concerns table (step 1) was updated to record what we found out at this stage. Table 3 shows the interaction with the client as it was envisaged at this stage.

<p><b>Client:</b> Cost; security; feedback; isolation; fear of change; flexible payment methods; <i>incorrect orders (add checking procedure during order); delivery not exactly what was ordered (add follow up call after delivery, add procedure for recording variance); need to "just chat" (allow time and emphasise in volunteer training); preferred supermarket.</i></p>
<p><b>Volunteer:</b> Ease of use (retail sites); accuracy of order; method and time of reimbursement; <i>problems with quantities when ordering (add imperial/metric conversion tool); problems managing client details (add software support)</i></p>
<p><b>Charity</b> Access; risk to client and volunteer; accounting; staffing costs; training; flexibility, avoiding making client dependent on service; <i>new clients confused about how scheme works (write leaflet explaining what to expect); need to talk about other ACY business (add communication channel between ACY and volunteer)</i></p>
<p><b>Retailer:</b> Cost; profit; liability; fraud; competition; publicity.</p>

**Table 2:** Updated Summary of Stakeholders and Concerns, new concerns *in italics*, implications for design of service (in brackets).

1. Visit client and explain service, leave leaflet.
1. Ring client and take down order, explain will ring back shortly.
1. Place order online, but do not finally confirm it, and obtain delivery slot.
1. Ring client back to check: goods ordered, cost, delivery slot (ask them to write this down). Arrange time for next chat/order (ask them to write this down). Log all details for future reference.
1. After delivery slot ring client to check it all went well and to remind them to send the receipt (may not be necessary after first 2 or 3 deliveries). Log any problems.

Payment model not yet specified, see step 3.

**Table 3:** First cut at the procedure for interacting with a client

### Step 3 - Design the financial model

Some services will require payment (e.g., shopping) whereas others will not (e.g., a travel information service). If your service does not require payment, skip this step. You will need to have identified a source of volunteers by this stage.

- a. Re-visit the concerns of the organisation with regard to finances and talk to people involved with accounting. Concerns will probably include: establishing an audit trail of some kind; minimising the effort needed to keep accounts, and satisfying the needs of the volunteers and clients (see below)
- b. Re-visit the concerns of your volunteers with regard to finances. Talk to some potential volunteers about this if you can. Concerns will include: minimising paper work, not being out of pocket, and not being open to accusations of fraud.
- c. Re-visit the concerns of your clients with regard to finances. Talk to some clients. Concerns will include: flexibility in methods of payment (or at least not being excluded), not being out of pocket, and not being open to accusations of fraud.
- d. Re-visit the concerns of all other stakeholders involved in payment and consult with them if necessary.
- e. Record the new concerns of stakeholders in the document generated in step 1.
- f. Write down the way money will be moved, i.e., *who* it moves between and *when*. For example, "*cheque written by client payable to ACY is posted with receipt to ACY on receipt of goods*".
- g. Check the procedure against the concerns and try to think of places where it could go wrong. Do not assume that all volunteers and clients are nice and/or reliable! Re-adjust and check again until you are satisfied.
- h. Adjust your record of the telephone procedure (step 2) and the concerns document (step 1) as needed.

### **Net Neighbours York: Designing the financial model**

There was considerable interest in the scheme from "ActiveYork" an organisation within the University of York that encourages staff to take up voluntary work in the community. They offered possible support in the form of supplying volunteers and limited funding.

Numerous options for how payment and reimbursements were to be made were considered. Funds have to be transferred from the client to the supermarket, but there are different routes it can take. There were difficult issues to reason about and it was important to involve the ACY staff in this part of the design, as they would be responsible if the system was not financially dependable. To make this possible financial models were expressed as diagrams showing how monies could move around the system.

It was quickly realised that the volunteer would need to pay the retailer directly. It is possible to imagine configurations where the older person or



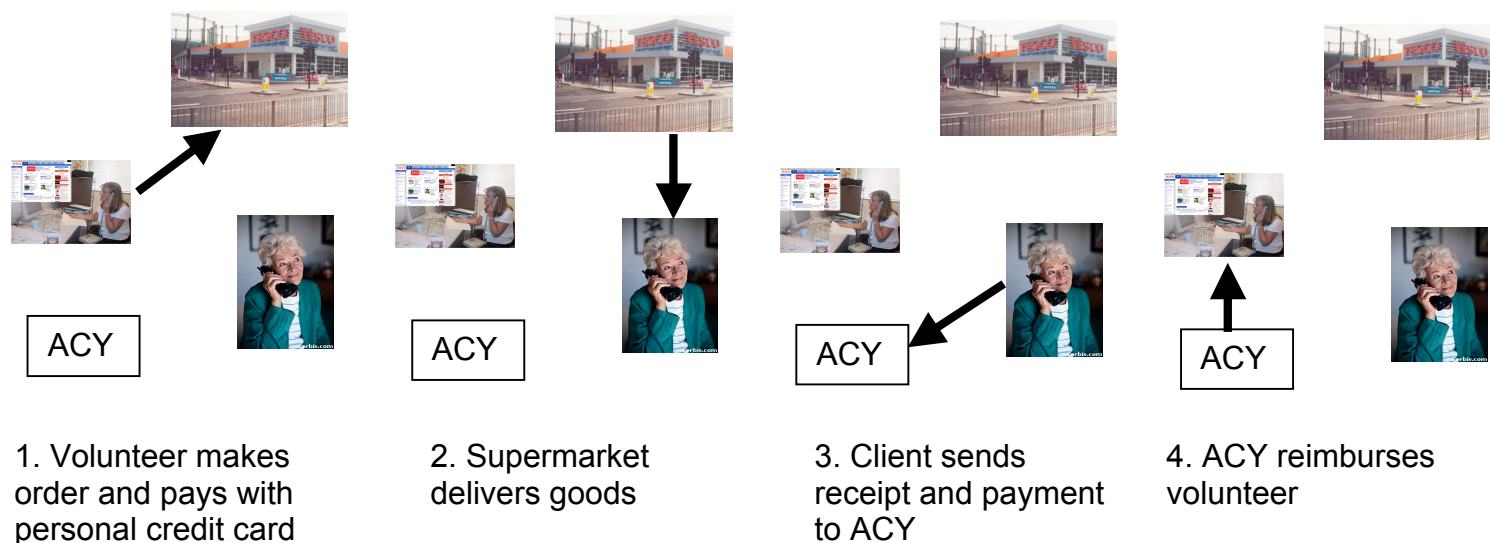
the organization would pay while the intermediary placed the order but this would be complex and open to fraud. The older person could for example, give the volunteer their own credit card details and the volunteer could enter them on her behalf. This would be illegal, however, posing as another person online is against the law with or without their permission. Alternatively, the organization might set up a general card that could be used by a number of individuals; the volunteer would then enter the general ACY card details. However, many organisations are wary of such cards and this was not attractive to ACY.

The final design then assumes that the volunteer makes a direct payment and is then reimbursed. Reimbursement for the volunteer may be direct (from the client) or indirect (from Age Concern). There are five possible payment methods: cash, cheque, (standing or postal) order, direct debit or credit card; and two payment periods: before and after the delivery. Volunteers could receive payment either through the post or by having the volunteer or an Age Concern employee visit the client to collect the money. Obviously a visit would be more time consuming and for this reason might be less preferable for the volunteer and the organisation. If payment is made before the delivery then the client (the older person) must bear a risk (that goods will not arrive). If payment is made after the delivery then the volunteer or the organisation must bear a risk (that payment will not be made). The payment period is also important because there is often a discrepancy between the bill estimated at the point of placing the order online and the bill received when the groceries are delivered. Certain items may not be available and substitutions may be made so the actual bill may be slightly higher or lower than the estimate. A number of diagrams were made to express the numerous possible reimbursement options.

All Age Concern volunteers must be vetted by the organization and most take a half-day training course on the principles of the charity. This registration process would mitigate the risk to clients of being defrauded by volunteers. Indirect payments where the clients paid the organisation rather than the volunteer were also preferable with regard to mitigating risk to the client. It is a principle at Age Concern that volunteers do not lose money by volunteering and also that volunteers do not take money from clients.

It was decided that for the next stage of the project volunteers would pay the retailer using their own debit or credit card and ask the older person to send Age Concern a cheque for the supermarket bill when the goods arrived. If the older person could not do this then an Age Concern employee (not the volunteer) would visit them to collect the money. The volunteer would then claim their expenses back from Age Concern. Depending on the level of administrative support possible, a part time Age Concern administrator would administer this either electronically or by cheque. It was decided that the procedure would have to be flexible because inclusivity is such an important principle for Age Concern. If, for instance, the clients could only pay by cheque this excludes those without bank accounts and for Age Concern this would be a form of discriminatory practice.

The financial model is summarised above. Tables 4 and 5 show how the concerns table and procedure were modified after this step.



<p><b>Client:</b> Cost; security; feedback; isolation; fear of change; flexible payment methods; incorrect orders (add checking procedure during order); delivery not exactly what was ordered (add follow up call after delivery, add procedure for recording variance); need to "just chat" (allow time and emphasise in volunteer training) ); preferred supermarket.</p>
<p><b>Volunteer:</b> Ease of use (retail sites); accuracy of order; method and time of reimbursement; problems with quantities when ordering (add imperial/metric conversion tool); problems managing client details (add software support); <i>prompt reimbursement; would be breaking the law if they used the client's credit card for them;</i></p>
<p><b>Charity</b> Access; risk to client and volunteer; accounting; staffing costs; training; flexibility, avoiding making client dependent on service; new clients confused about how scheme works (write leaflet explaining what to expect); need to talk about other ACY business (add communication channel between ACY and volunteer); <i>volunteers should not handle client's money; simple accounting procedure (separate account for Net Neighbours); collecting all money from clients impractical but could do for some; variance in orders (e.g., substitutions) may create problems balancing accounts</i></p>
<p><b>Retailer:</b> Cost; profit; liability; fraud; competition; publicity.</p>

**Table 4:** Updated Summary of Stakeholders and Concerns, new concerns *in italics*, implications for design of service (in brackets).

1. Visit client and explain service, leave leaflet.
1. Ring client and take down order, explain will ring back shortly.
1. Place order online, but do not finally confirm it, and obtain delivery slot.
1. Ring client back to check: goods ordered, cost, delivery slot (ask them to write this down). *Ask them to get the van driver to note any substitutions or omissions by pen on the receipt.* Arrange time for next chat/order (ask them to write this down). *Confirm order and pay with personal credit card.*
1. After delivery slot ring client to check it all went well and to remind them to send the receipt *to ACY* (may not be necessary after first 2 or 3 deliveries).
1. *ACY credit volunteers bank account.*
1. *ACY balance variances (to be worked out!)*

**Table 5:** The procedure as it was envisaged at this stage. Changes made *in italics*.

#### Step 4 - Design paper or software support for the volunteer

The volunteer will need some prompts to take them through the procedure you have designed for their interaction with the client on the telephone. They will probably also need to record certain things as they go along. Support for this can be provided with a paper form, general purpose software (e.g., a spreadsheet) or tailor made software (as we did for Net Neighbours York).

- a. Step through the telephone interaction you have designed. Decide what prompts would be useful to the volunteer. Examine the informal notes made by whoever made the orders during step 2 when making test orders with clients.
- b. Decide what sort of support you are going to provide. This will depend on the resources at your disposal. We would very strongly recommend that there is at least a printed check list of steps on a form for recording notes and essential details.
- c. Test your form or software with the person who did the testing in step 2 and then with a volunteer less familiar with the project. Make sure that it does not overly constrain the order in which they do things, or get in the way of chatting to the client.
- d. Adjust your record of the telephone procedure (step 2) and the concerns document (step 1) as needed.

#### **Net Neighbours York: Designing the Interface for the Volunteer**

It was important to provide a reliable tracking system to mitigate risk to the client and the volunteer and to allow the organisation to monitor the system in overview mode while allowing volunteers secure access to their client details from any computer. The first stage of the pilot project gave us an understanding of the job that the volunteer is to carry out. The exploration of the financial models allowed us to specify what was to be recorded in the process. It was thus relatively easy to construct top-level design requirements for the interface that will support the volunteer.

A secure database stores clients' details such as account names and ordering and payment details but also notes on clients' hobbies, interests, children's names and so on to facilitate conversation. The interface will guide the volunteer through each stage of the process, first presenting the clients' phone numbers and details but then showing notes about what they had last discussed (the volunteer would enter, for example, that the client wanted to have their banister painted) stressing the importance of conversation. It incorporates a table for filling in shopping lists (with metric and imperial measures converted automatically) and it will link to the various retail sites.

The database will be accessed from a web server and volunteers and account managers at ACY will have differing levels of access it. The volunteers for instance, will only be able to access the details of their particular clients. Co-ordinators at ACY will be able to view all details for all clients and all volunteers.

Jenny and Mark co-designed a series of PowerPoint slides mocking up the interface. This then was user-centred design from initial discussions to the very first sketch. The notion was that the conversation period would be built into the interface; much as a software wizard directs the user through a complex computing procedure so the interface would offer prompts for the social interaction though in a far less directive way.

At the time of writing Budi Aref, a programmer at the University of Newcastle, has created a system that is soon to be used by one of the volunteers.

Tables 6 and 7 show how the concerns table and procedure were modified after this step.

<p><b>Client:</b> Cost; security; feedback; isolation; fear of change; flexible payment methods; incorrect orders (add checking procedure during order); delivery not exactly what was ordered (add follow up call after delivery, add procedure for recording variance); need to "just chat" (allow time and emphasise in volunteer training; <i>support with "chat notes" in database</i>); preferred supermarket.</p>
<p><b>Volunteer:</b> Ease of use (retail sites); accuracy of order; method and time of reimbursement; problems with quantities when ordering (add imperial/metric conversion tool, <i>support in database</i>); problems managing client details (<i>support in database</i>); prompt reimbursement; would be breaking the law if used clients credit card for them;</p>
<p><b>Charity</b> Access; risk to client and volunteer; accounting; staffing costs; training; flexibility, avoiding making client dependent on service; new clients confused about how scheme works (write leaflet explaining what to expect); need to talk about other ACY business (add communication channel between ACY and volunteer <i>support with "chat notes" in database</i>); volunteers should not handle client's money; simple accounting procedure (separate account for Net Neighbours, <i>support in database</i>); collecting all money from clients impractical but could do for some; variance in orders (e.g., substitutions) may create problems balancing accounts; <i>confidentiality (add password protection for different levels of access to the database)</i>;</p>
<p><b>Retailer:</b> Cost; profit; liability; fraud; competition; publicity.</p>

**Table 6:** Updated Summary of Stakeholders and Concerns, new concerns *in italics*, implications for design of service (in brackets).

1. Visit client, and explain service, leave leaflet.
1. Ring client and take down order (*directly into database, if they want; facilities to make repeat ordering and quantity estimation easy*), explain will ring back shortly.
1. Place order online, but do not finally confirm it, and obtain delivery slot.
1. Ring client back to check: goods ordered, cost, delivery slot (ask them to write this down). Ask them to get the van driver to note any substitutions or omissions by pen on the receipt. Arrange time for next chat/order (ask them to write this down). Confirm order and pay with personal credit card. *Record in data base.*
1. After delivery slot ring client to check it all went well and to remind them to send the receipt *to ACY* (may not be necessary after first 2 or 3 deliveries).
1. ACY credit volunteers bank account. *Record in data base.*
1. ACY balance variances (to be worked out!)

**Table 7:** The procedure as it was envisaged at this stage. Changes made *in italics*.

**Step 5 - Design the introduction of the service: recruitment of volunteers and clients, training of volunteers, managing the service**

Planning the introduction of the service is important. We assume this will be obvious to anyone likely to read this guide. Also, what you do at this stage will be very specific to the local circumstances and so this section is necessarily under specified.

- a. Appoint someone to run the service.
- b. Recruit some volunteers.
- c. Devise a way of covering for volunteer who are on holiday or sick.
- d. Organise training for the volunteers.
- e. Recruit clients.
- f. Design a procedure for introducing volunteers to clients.
- g. Review all procedures after they have been used for a while.
- h. Record statistics to impress current and future funders.

**Net Neighbours York: the service.**

Funds to run the system for the first year were obtained from York Social Services and Active York. The post of administrator was advertised by ACY and given, in the event to Jenny Jarred whose current job, at the time of writing, had just been advertised. Jenny will organise recruitment and training in conjunction with Active York. In the initial stages she will cover for volunteers who are on holiday or off sick, and pick up the pieces in the event of anything going wrong.

Three volunteers are currently going through the standard training for Age Concern volunteers and are familiarising themselves with online shopping by shopping for each other. The first clients will be recruited from the hospital after care service as soon as Jenny is full-time on the Net Neighbours York. We are confident that if we can demonstrate that this is a dependable and effective service it will not be hard to get corporate sponsors.

We made a very useful visit to an Age Concern Branch that have been doing online shopping for 300 clients for some while, but using staff rather than volunteers. Considerations that emerged during this meeting included:

- Older people are very willing to pay the delivery charge which is not seen as expensive. They get cheaper goods than from local shops or getting a taxi to the supermarket and back.
- Some clients only order monthly or fortnightly.
- Close collaboration with the supermarkets is possible and brings dividends, e.g., ASDA have opened extra slots for them and asked drivers to annotate the receipts where there are variations. User names signal to the supermarket which are Age Concern orders.
- Do not attempt to take orders over the Christmas week.

Now we have a working service we are ready to meet with the supermarkets. We are also starting a major recruitment drive for volunteers.

Tables 7 and 8 show how the concerns table and procedure have been modified during this last step, which is, at the time of writing, still on going. Table 8 summarises the training process devised. These tables represent the current state of the design for Net Neighbours York.

<p><b>Client:</b> Cost (<i>may not be a problem for most clients</i>); security; feedback; isolation; fear of change; flexible payment methods; incorrect orders (add checking procedure during order); delivery not exactly what was ordered (add follow up call after delivery, add procedure for recording variance); need to "just chat" (allow time and emphasise in volunteer training; support with "chat notes" in database); preferred supermarket.</p>
<p><b>Volunteer:</b> Ease of use (retail sites); accuracy of order; method and time of reimbursement; problems with quantities when ordering (add imperial/metric conversion tool, support in database); problems managing client details (support in database, <i>ACY set up account</i>); prompt reimbursement; would be breaking the law if used clients credit card for them; <i>the total commitment (hours per week and total weeks)</i></p>
<p><b>Charity</b> Access; risk to client and volunteer; accounting; staffing costs; training; flexibility, avoiding making client dependent on service; new clients confused about how scheme works (write leaflet explaining what to expect); need to talk about other ACY business (add communication channel between ACY and volunteer support with "chat notes" in database); volunteers should not handle client's money; simple accounting procedure (separate account for Net Neighbours, support in database); collecting all money from clients impractical but could do for some; variance in orders (e.g., substitutions) may create problems balancing accounts; confidentiality (add password protection for different levels of access to the database); <i>easy way to credit volunteers account (fax seems best); easy ways to recruit volunteers; how to vet volunteers and match them to clients.</i></p>
<p><b>Retailer:</b> Cost; profit; liability; fraud; competition; publicity. <i>Supermarkets to be approached and this section developed soon.</i></p>

**Table 7:** Updated Summary of Stakeholders and Concerns, new concerns *in italics*, implications for design of service (in brackets).



1. *ACY set up client account on preferred supermarket site (user name, password, new email address and contact details), record in database).*
2. Visit client, *introduce volunteer* and explain service, leave leaflet. Ring client and take down order (directly into database, if they want; facilities to make repeat ordering and quantity estimation easy), explain will ring back shortly.
3. Place order online, but do not finally confirm it, and obtain delivery slot.
4. Ring client back to check: goods ordered, cost, delivery slot (ask them to write this down). Ask them to get the van driver to note any substitutions or omissions by pen on the receipt. Arrange time for next chat/order (ask them to write this down). Confirm order and pay with personal credit card. Record in data base.
5. After delivery slot ring client to check it all went well and to remind them to send the receipt to ACY (may not be necessary after first 2 or 3 deliveries).
6. ACY credit volunteers bank account *by fax*. Record in data base.
7. ACY balance variances (to be worked out!)

**Table 8:** The procedure as it was envisaged at this stage. Changes made *in italics*.

1. Leaflet explaining what it is, how it works and the commitment required.
2. Standard half-day Age Concern Volunteer training.
3. Make orders for self, friends or other volunteers, with all three supermarkets to be used.
4. Training on procedure (see above).
5. Face to face introduction to first client (see step 2 above)
6. Follow up call from ACY after first order.

**Table 9:** Training for volunteers