Original

Charity as a motivational factor for participation in user-driven innovation

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P. Heikkilä, J. Leikas. Charity as a motivational factor for participation in user-driven innovation. Gerontechnology 2014; 12(4):229-236; doi:10.4017/gt.2014.12.4.008.00 **Purpose** The aim of this explorative study was to discover the possibilities of connecting charity and ideation as a workable method for product and service innovation, and to introduce a preliminary new approach to participatory design: to donate money for charity work by participating in service innovation. The target for innovation was new sustainable services for the ageing population, and the possibilities for citizens to discuss societal problems in relation to sustainable development. Method The study was carried out at the Open Web Lab of the VTT Technical Research Centre of Finland. Different cases of societal problems were presented to the participants for ideation and discussion. The participants were supposed to add their own ideas and experiences and expose them for general discussion. Every added idea or comment from the participants increased the amount of money targeted at charity work by 50 cents. **Results & Discussion** Based on the qualitative data received and a content analysis of ideas, it can be estimated that this preliminary idea for a co-design approach suits well for discussion of societal problems and for solution ideation. A co-design activity of this kind offers a significant advantage compared with many other co-design methods: it provides a possibility of truly empowering people who, because of their genuine interest in the subject, will actively participate in the discussion. Furthermore, as the participants were informed of the fact that the amount of the individual charity donation was tied to the amount of comments and ideas of the person in question, they were amenable to attend the discussion for a relatively long period. The study approach was found to be beneficial also to that extent that it made it possible to produce a great many ideas and generated active discussion, which led to both new and refined ideas.

Keywords: co-design, charity, user involvement, RRI, open innovation

Many corporate social programmes involve a mixture of charity and limited beneficence such as developing and sustaining relationships with customers and corporate philanthropy. The term charity implies acts of kindness and mercy, and relates to the term beneficence. Beneficence is suggestive of altruism, love, humanity, and promoting the good of others¹. Beauchamp¹ examines the connection between beneficence and benevolence, and argues that whereas beneficence refers to an action done to benefit others, benevolence refers to the morally valuable character trait - or virtue –of being disposed to act to benefit others. Benevolence is Hume's most important moral principle of human nature, but he also uses the term to designate a class of virtues rooted in goodwill, generosity, and love directed towards others. Hume² finds benevolence in many manifestations, from which charity is one example.

Corporate Social Responsibility (CSR) has become an active source of competitive advantage for corporations^{3,4}. The basic theory of CSR was established by Carroll⁵, and this activity has been strong in the European Union from the 1990's. It

is considered as any discretionary activity of a corporate intended to further social welfare⁶. In addition to legal and economic responsibilities, CSR includes also the ethical responsibility to do what is right, just and fair; and the philanthropic responsibility to contribute to various kinds of social, educational, recreational or cultural purposes.

In this paper we discuss the possibility for a corporation to benefit from carrying out acts of beneficence in its innovation work. Would it be possible for industry to enhance its productivity by applying the principle of benevolence in its business strategy, and by organising acts of charity in innovation practises? And furthermore, how can innovation strategies make good use of charity and thus meet the needs of companies in the new millennium who seek for competitive advantage?

We argue that the answers can be sought from the principles of co-design: the idea that ordinary citizens are experts in their own lives, and that by involving citizens in innovation work it would be possible to create products and services that would meet the needs of people. Involv-

ing citizens in product design and innovation is not a new approach. Companies constantly seek new ways for creating innovations, and a popular form of innovation has for some time already been open innovation, where companies are challenged to efficiently utilize intellectual capital regardless of its source. The main principle of open innovation highlights the fact that external design ideation can create significant value, and that design ideas do not have to originate from the company in order to profit from them⁷⁻⁸.

Today's design processes are tremendously hectic by nature, and fast design and innovation sessions are expected to produce design outcomes, under time pressure, that would be sense-making and meaningful for users^{9,10}. It is commonly known that ideas become innovations only when they are accepted and used as a part of everyday life. From this point of view, the challenges for design management are extensive. The design has to be able to find solutions that have real meaning in life and would seamlessly fit people's daily lives¹¹⁻¹³. This is critical for innovation management. A substantial challenge in open innovation is to gather together a large group of interested citizens and to recruit them to participate and to be motivated in innovation. What could, then, be the incentives for citizens to sacrifice their time and effort for the benefit of a company? What kind of things would motivate people to participate in innovation work? Answers to these questions can be examined from the perspectives of human motivation.

HUMAN MOTIVATION AND ALTRUISM

Motives make people act. Therefore, when considering the nature of any innovation phenomenon as the result of human action, it is good to pay attention to the motivational patterns involved. Analysis of motivations can shed light on why people have behaved as they have, and why they behave as they do. Motives give a sense to human action, and the analysis of motives makes it understandable why people pursue some definite goals in their lives. Hence, charity as a part of a form of life can be investigated from a motivational point of view.

By the concept of motivation, it is normally referred to the drives or engines of goal-directed action. Motives express the causes of certain definable forms of human behaviour¹⁴. Thus, the analysis of any form of goal-directed action or behaviour should be considered in terms of motivation research. This field of modern psychology has provided a large set of properties for motivation, and has empirically illustrated how different types of factors can explain human motivation. Respectively, different types of factors

can be used to explain some particular form of behaviour, such as charity.

However, explanatory models for motivation vary and not all of them are relevant or purposeful in analysing some particular form of behaviour. Maternal instincts, for example, can certainly be considered to be important when a mother takes her sick baby to hospital. Not all behaviour can as easily be understood as self-evident. In the case of charity and related behaviour, maternal instincts may have some role, but they certainly cannot be considered to be the primary cause for donating money to purposes that are estimated as worthwhile. When investigating what kinds of motives and motivational patterns make sense in the case of charity, it is logical to narrow down the possible motivation-based explanations by considering the general and specific concepts and conceptions of human motivation.

On a general level, the explanations for motivated behaviour vary from biological issues such as hunger and thirst to highly mental and social issues such as curiosity or the need for self-realization and self-esteem^{14,15}. Though these phenomena are vital in understanding human motivated behaviour, they are still quite broad to give an accurate understanding of why people see charity as an important form of acting in their lives.

Perhaps one should pay some attention here to the idea of 'explaining', and related forms of human action. In general, explaining can be seen as an answer to a why-question¹⁶. The 'why questions' provide reasons or causes of why some phenomenon has emerged, and what the conditions are for generating this form of human action. Why questions define the set of phenomena, i.e. the explanans, which enable researchers to understand why the explanandum has appeared.

In general motivation theory, two issues are evidently related to charity. They are altruism and intrinsic versus extrinsic behaviour. Both are central concepts of motivation theories and are thus relevant on a general level here. However, they also have their intimate links with the behaviour relevant in analysing charity. Therefore, it seems logical to begin with these concepts.

Intrinsic and extrinsic motivation

Altruism or selflessness is the principle or practice of concern for the welfare of others¹⁷. By altruism is meant behaviour that benefits other individuals' chances of a quality of life at the cost of the benefactor. In its most dramatic forms, altruism means that people can risk their life for other people. In terms of hedonic thinking and values this can be insane, but it is also a fact of

life. People can, for example, reduce the quality of their own life in a biological sense by donating one of their kidneys to another person without getting any real compensation for this act.

Datye¹⁸ argues that, besides altruism, there may be many factors influencing people's decisions to make donations for charity. The reasons for an individual playing the donor's role can range from the passion to address the specific needs of the beneficiaries, becoming a good corporate citizen, earning brownie points on the stock exchange, adhering to the stipulations of a trust towards the dispersal of resources, and many others. Motivation can here be considered from two opposite perspectives. A person may be intrinsically motivated, when she has an internal desire to reach a goal^{19,20}. In these cases, the action itself, the good deed, is motivating.

In addition to internal motivation, a person can also be motivated by external factors, which compel her to pursue a certain action goal²¹. Both types of motives have their meaning in charitable actions. Intrinsic motivation can be based on a person's will to do good for other people and to enhance one's own self-esteem. It may also be linked with altruism. Extrinsic motivation may arise, for example, from the desire to publish one's name on a public list of donators because of social pressure.

Actors in the field of charity

A donor is a person who donates something voluntarily. Usually the term is used to "represent a form of pure altruism, but sometimes it is used when the payment for a service is recognised by all parties as representing less than the value of the donation and that the motivation is altruistic. In business law, a donor is someone who is giving the gift, and donee the person receiving the gift"¹⁷. A beneficiary in the broadest sense is "a natural person or other legal entity who receives money or other benefits from a benefactor"¹⁷.

In ethics, the principle of *beneficence* refers to doing good for others; the prevention of harm, and active intervention to positively benefit another²². It tells us to care for persons and their needs, to look after their good, interest, and well-being. In recent years, issues of beneficence have been re-examined in bioethics and business ethics, although the value extends to many other areas of moral philosophy. After reviewing recent and traditional views of this value, Beauchamp¹ states that the term beneficence is understood:

...to include effectively all forms of action intended to benefit or promote the good of other persons. The language of a principle or rule of beneficence refers to a normative statement of a moral obligation to act for the benefit of others, helping them to further their important and legitimate interests, often by preventing or removing possible harms.

A beneficiary is a person or legal entity who receives donation (or other benefits) from a benefactor. Ultimately, donors are working towards achieving goals that will benefit beneficiaries in some way¹⁸. In many cases, various non-governmental organisations (NGO's) represent or act on behalf of the ultimate beneficiaries. "NGOs are highly diverse group of organizations engaged with a wide range of activities, and take different forms in different parts of the world. Some may have charitable status, while others may be registered for tax exemption based on recognition of social purposes. Others may be fronts for political, religious or other interest groups"¹⁷.

Co-design

Co-design with users or citizens has become a rather established way of innovating novel services and practices, finding new solutions or designing better user experiences²³. Design research has evolved from a user-centred process to collaborative innovation and design, which changes how something is designed, what is designed, and who designs it²⁴. Co-design does not only fit in with enhancing products or services, but it can also be utilised for democratizing decision making and gaining a communal response to social challenges.

The endeavour for enhancing user involvement in innovation and development processes has been going on for decades as documented by different human-centred methods. Most of these methods are based more or less on traditional closed innovation where, in order to profit from R&D, companies play the role of discovering, developing and shipping new ideas⁷⁻¹⁰. People are considered as 'users' of technology, and the designers determine what the users should be able to do in different steps of the usage of applications and services. Hence, the design principles of humancentred design are built mainly to ensure the usefulness and ease of use of the developed product. However, although products have been designed according to user-centred models and tested for high usability, they do not necessarily become closely linked with people's lives on an emotional level. In fact, the desire towards technology arises from the needs in people's everyday life. Thus, in order to understand everyday life, the design should seek for users' active, co-creative involvement throughout the design span. In contrast to closed innovation, co-design can mean a process of open innovation where non-designers truly

participate in the design or innovation process, and where the value comes from the collective creativity of stakeholders^{24, 25}. In co-design activities, equality between participants is important: everyone's experiences and views are appreciated and may contribute to the end-result.

Older people in Finland have already gained experience in co-design and open innovation activities and shown interest on influencing their future. For example, during 2006 VTT Technical Research Centre of Finland carried out a campaign called the Idea Movement of Aging Citizens²⁶, where mobile service ideas were collected from aging citizens for open use. Around 4300 ideas were collected in 13 innovation workshops with 750 Finnish older adults. The Idea Movement of Aging Citizens was an open social innovation that offered aging people a possibility to attend in the society and feel social equity. Aging persons expressed ideas that were distinct experienced needs, closely related to everyday life, and not technology-driven.

Co-design activities often take place in online communities, as they enable a flexible way to engage in innovation and design at a time and place suitable for a participant, and they typically reach more and more diverse participants compared to the traditional face-to-face methods. However, as the group members meet each other only virtually, it is challenging to facilitate collective creativity and not only individual creativity. Antikainen²⁷ has concluded that it would be important to reward participants of open innovation communities as a group for their mutual collective work, but doing it in the right way and with the right kind of reward has proved to be practically and theoretically challenging. Traditional rewards tend to increase participation, not collaboration. Donating a collective amount of money to charity could be one new approach to encourage a sense of co-operation and communality.

OPEN WEB LAB (OWELA) CASE Purpose

An explorative and preliminary online study was carried out to discover the possibilities of connecting charity and ideation as a workable method for product and service innovation. Hence, a new approach to participatory design was introduced: The participants were able to donate money for charity work on the basis of their activity rate in the innovation process. The compensation for every commented idea that would normally be paid for the participants was given to charity from the project funding. The more the participant commented, the more money was donated to a voluntary work concept: 'With

a Big Heart', which operates in the field of social work carried out by the Finnish Lutheran Church. The concept 'With a Big Heart' is created around the idea of Internet based activity that allows an easy way to help fellow citizens in individual ways. 'With a Big Heart' is the fastest growing voluntary help brand in Finland, whose Internet pages are visited by over 7500 people monthly.

The target for innovation in our study was new sustainable services for the ageing population and possibilities for citizens to discuss societal problems in relation to sustainable development. The study was conducted as a case study of the SHAPE (Shaping markets for sustainability) research project, which belongs to the Green Growth programme²⁸, funded by the Finnish Funding Agency for Innovation (Tekes).

Method and participants

The study was carried out at the Open Web Lab of the VTT Technical Research Centre of Finland²⁹. This tool for user-driven design and innovation consists of various human-driven design possibilities, such as a blog-based discussion platform, user diaries, real-time online chatting, online surveys, and polls, all of which can be used flexibly for various design and innovation purposes. For the study in question, a blog-based discussion was selected as a tool for innovation.

The participants were recruited from VTT's enduser register and a user pool of an open innovation community. Altogether 40 participants, 18 males and 22 females, took part in the ideation and discussion. They lived in different parts of Finland, and represented a variety of backgrounds, life situations and age groups. Different age groups were represented rather evenly, also including a significant percentage of older respondents. People over 60 years old formed 40 percent of the respondents, and almost one fifth of the all participants were over 70 years old. The proportion of younger participants (people under 30) was slightly smaller than other age groups, which may be related both to the topics of the research and the active participants of the Owela community. The remarkable percentage of people over 70 years shows that people from this age group are interested in having an impact on societal issues and can be involved also in research conducted by online methods.

Different cases of societal problems were presented to the participants for ideation and discussion. These consisted of: (i) Wastage of food: How to exploit the leftover food from groceries that usually ends up in the bin? (ii) Homelessness: How to improve the situation of homeless people? (iii) Support for the elderly: How to sup-

port living at home for as long as possible? In this paper, we concentrate on the third case: support for the elderly.

The topics were open for discussion for two weeks, during which time the participants were supposed to add their own ideas and experiences and expose them to general discussion. In addition, they completed a short questionnaire concerning the study method. Every idea or comment added by the participants, as well as every response to the inquiry, increased the amount of money targeted at charity work by 50 cents.

All three discussion topics raised active discussion, but the topics of support for the elderly and food wastage were the ones that received most comments, both receiving twice the number of ideas compared to the topic of homelessness. Especially the topic for supporting elderly evoked more personal experiences and more ideas and contributions for solutions. Solution ideas for food wastage and homelessness were mainly proposals that involve the decision makers, such as shopkeepers or municipalities. In contrast, the topic of supporting the elderly generated several solutions, which can be acted upon by anyone who sees the issue as important.

Various ways of supporting the elderly in living at home were brought up in the discussions. The participants suggested means to support and reward voluntary work and the possibility of neighbours helping each other, and pondered on ways to increase social interaction between the peer group and younger generations. They discussed which services could be delivered at home (e.g. medication), and ideated ways of encouraging the elderly themselves to provide co-operative services within their own community. It was suggested that elderly home care be taken as a part of education planning, both in occupational training and in schools. Schools could teach 'citizen responsibility' targeting at increasing awareness and participation in voluntary work. Also, learning and maintaining technological skills were mentioned as one way to support living at home. Technological solutions and services when designed to be easy and smooth to use were seen as useful in supporting daily tasks, bringing recreation, alleviating loneliness, helping to stay 'up-to-date' on news and increasing social interaction.

The participants emphasised that the services should not be targeted based on the age of the person, but on their health, attitude and capabilities. One senior participant mentioned that the neighbours and the community might make elderly people living at home delighted by very

small things. Even such acts as a friendly "Hello" and smile may make a difference.

Results

Altogether, 319 comments or ideas were posted to all conversation topics. Although each idea increased the amount of money given to charity, we could not identify any tendency to write shorter or less insightful comments or ideas only to raise the amount of money - than in other participative studies conducted with the same methodology and the same online tool. On the contrary, as the research subject was felt by the participants to be meaningful, many shared experiences of their personal life and described and argued their ideas in detail. The proposed ideas were multilevel, realistic, and showed understanding and caring of the challenges presented. This can be seen as one indication supporting the widely accepted – but in practice often forgotten - principle that older people should not only be seen as a target for research, but active contributors to the issues concerning them.

Discussion stayed active during the two weeks research time, having a peak in the beginning and gradually decreasing towards the end of the period. Two weeks was a sufficient time to enable participating several times – leading to several small increases to the amount of joint donation - but still have the conversation active for the whole period. By lengthening the time the conversation could have been facilitated to focus on new societal challenges, specific sub-challenges or further innovating of the proposed solutions. Naturally this would have required more research resources and thus was not implemented.

Seventeen participants answered a short guestionnaire concerning their motivations in participating in this case study. Among the respondents, the main reasons to participate in the ideation were (i) the interest in the subject of the study, and (ii) a possibility to have an impact on the topics of the study. Also, (iii) donating money to charity was seen as important, and listed as one reason to participate by half of the respondents. Some respondents would also have appreciated monetary rewards, such as movie tickets (which are a common reward in studies conducted in Owela). but most of the respondents did not see this kind of reward as necessary. Based on these responses and some open feedback, it seems that charity is welcomed, but it cannot be the only motivation to take part in co-design or innovation activities. It must fit the subject of the study, which needs to feel meaningful and important for the participants.

Based on the qualitative data received and the content analysis of ideas, it can be estimated

that the research approach is well suited to a discussion of societal problems and for solution ideation. A co-design activity of this kind offers a significant advantage compared with many other co-design methods: it provides the possibility to truly empower people who, because of their interest in charity and the subject under discussion, would actively participate in the discussion. Furthermore, as the participants were informed of the fact that the amount of the individual charity donation was tied to the number of comments and ideas produced by the person in question, they were amenable to attend the discussion for a relatively long period. The study approach was found to be beneficial also to that extent that it made it possible to produce a lot of ideas and generated active discussion – as donations were the main trigger here - which led to both new and refined ideas.

The next step in the process, in order to develop workable real life solutions, would be to elaborate and further develop the ideas together with relevant business actors and decision makers^{30,31}. The existing platform also provides support for this kind of co-design where representatives, municipalities and citizens can engage in a dialogue with each other online. In doing this, it is important that the initiatory debaters are also involved in the process and informed of the state and value of their initial ideas.

DISCUSSION

The design frame – to include charity in codesign activity – is promising. The idea of using motivation for charity as a trigger to participate in innovation is worth studying further. Based on this case study, we see charity as a good way not only to increase participants' motivation but also to enhance the communality and feeling of togetherness among them. In this study, the accumulated amount of money for charity was continuously visible in Owela, which aimed at making the contribution more concrete, and highlighting the joint mission of the group. After each comment, the participants could see to what extent the amount for charity had increased.

Participation in co-design activities can be seen as an act of goodness as such. It provides people with an opportunity to make the world a better place, to do one's bit. In participation in charity-oriented co-design there is even a deeper motive than that of creating a service or a product as such. It is, with the help of charity, to do something good and in this way to leave a mark in life.

In our case study, the subject of the study and charity as a positive outcome supported each other as two different forms of doing good and contributing to a valuable goal. For other types of research or design purposes, charity may not provide as successful or desired an incentive, as it may feel artificial, controversial or even hypocritical. It may not work as successfully as the only incentive for participants, but may work better as a bonus or an alternative to other rewards.

As this study focused on addressing societal challenges, it does not give us insight into how charity could be harnessed in order to motivate participants to innovate or co-design for commercial product or service design purposes. This would be an interesting dimension to explore and experiment on in the future. As far as the intention of the co-design activities is honest and good, and the organiser's attitude towards the participants is humble and appreciative, we would see charity as a worthy method for motivating participants, offering an additional shared goal for the study and ultimately, doing good.

The action of participating in design work can be based on the will to make the world a better place by giving ones 'vote' for different design ideas. When it comes to human-technology interaction design, the usage situation has for a long time been the main area of concentration, at the same time ignoring the real needs that arise out of the daily life of people. For a 'dogooder', a design solution for the sake of creating technical solutions is not enough. Instead, she looks at technology as one of the possible enablers and as not as the default tool¹⁸. She is not interested in the likes and dislikes of the usage of a certain technology, but is motivated by understanding how technology might enhance the quality of life of people.

For private people, the reasons for charity may be very different from those of business companies. The motives of companies to carry out charity seem to be linked to an extrinsic motivation. Beauchamp¹ argues that benevolence can be expected from business companies only as it affects their own interest. In most cases, this is probably connected to the need to improve corporate social image. Companies may, for example, be primarily interested in softening their public image by having the company name and logo presented in a charity context.

In our explorative study, the way to introduce charity in the work was twofold: firstly, charity was involved in a traditional way to donate money for the good of other people. Secondly, the subjects for innovation – e.g. elderly people's wellbeing – included by definition themes of beneficence. Although the proposed ideas were very versatile, they all were concerned with the

wellbeing of older people and showed respect and care for the elderly. An appreciative attitude was seen to be a key factor in succeeding in finding truly useful solutions.

In addition to these reasons above, companies could make a good use of human will to do good for other people in order to be able to create successful products for the great challenges of health, demographic change and wellbeing. They could use people's motives for charity as a force striving for innovation and co-design, and based on this will for enhancing the quality of life – receive ideas with deeper understanding of the added value and meaningfulness of technology in life. Freenberg³² concurs that the advantage of greater public participation in the design of products and services is to open up a process to the consideration of a wider sphere of values than if the design process were only to be left up to technology professionals.

Considerations of beneficence could be incorporated into technology design processes with the help of co-design approaches. Co-design methodologies should be refined so that they can be open to exploiting the will of goodness. Some attempts in this direction have already been made by three different approaches, which all introduce co-design as a possible method for technology and service concept design: (i) Value-Sensitive Design, (ii) Responsible Research and Innovation and (iii) Life-Based Design.

Friedman, Kahn and Borning^{33, 34} have discussed the significance of moral values in technology

design. Their approach, Value-Sensitive Design (VSD), brings forth moral issues in product design. According to VSD, the developer includes human values in the design, either intentionally or unconsciously, through the design methods as well as the design decisions. VSD does not, however, explicitly consider co-design as a tool for applying beneficence in design.

The concept of Responsible Research and Innovation (RRI) aims at helping industry work productively together with societal actors in integrating the principles and methodologies of RRI into research and innovation processes. RRI refers to "a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view on the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products"³⁵. In order to fulfil the demand of working together with societal actors, the principles and methods of co-design should be more effectively incorporated in the methodology of RRI.

Yet another suitable approach for designers to exploit the intrinsic motivation of people to do good in their design processes can be found from the Life-Based Design (LBD) approach, which aims to increase citizens' quality of life and considers the development of the information society from the perspective of humans instead of that of technology^{11,36}. LBD integrates human-technology interaction design issues with the concepts of human life sciences and calls attention to a careful analysis of people's forms of life as a basis for technology design.

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