

# Value Driven Transformation of Care Work – A Use Case

Vanita Römer, Julia Friedrich, Christian Zinke-Wehlmann, Robert Wolf

### ▶ To cite this version:

Vanita Römer, Julia Friedrich, Christian Zinke-Wehlmann, Robert Wolf. Value Driven Transformation of Care Work – A Use Case. 23th Working Conference on Virtual Enterprises (PRO-VE), Sep 2022, Lisbon, Portugal. pp.555-563, 10.1007/978-3-031-14844-6\_44. hal-04642044

# HAL Id: hal-04642044 https://inria.hal.science/hal-04642044v1

Submitted on 9 Jul 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.





This document is the original author manuscript of a paper submitted to an IFIP conference proceedings or other IFIP publication by Springer Nature. As such, there may be some differences in the official published version of the paper. Such differences, if any, are usually due to reformatting during preparation for publication or minor corrections made by the author(s) during final proofreading of the publication manuscript.

## Value Driven Transformation of Care Work – A Use Case

Vanita Römer<sup>1</sup>, Julia Friedrich<sup>1</sup>, Christian Zinke-Wehlmann<sup>1</sup>, Robert Wolf<sup>2</sup>

 University of Leipzig, University Computer Center, Research and Development Department, Augustusplatz 10, 04109 Leipzig, Germany {vanita.roemer, julia.friedrich, christian.zinke-wehlmann}@uni-leipzig.de
Bosold Pflege GmbH, Bornaische Straße 109, 04279 Leipzig, Germany rwolf@pflege-in-leipzig.de

**Abstract.** A holistic design of person-related services, like care work, requires a combined vision, that takes into consideration the customer's, as well as the care-giver's, and the organizational perspective. This is especially important when agile and collaborative work-systems are being implemented in person-related service systems, as different perspectives - and therefore beliefs, needs and values of the people involved - are to be considered. This paper presents a new perspective on values that need to be mapped and shaped when agile work systems in care-giving services are being designed. As a result, it describes a transformational process that has, at its center, concrete collaboration and service values out of which practical implications and an organization (re-)design process is deduced. This leads to a value-driven transformational process that takes into account all aspects of an organization to sustainably develop person-related service systems and that challenges existing service management and design approaches.

**Keywords:** value mapping; care-giving service; person-related service; agile work systems

#### 1 Introduction

Providers of home care services in Germany face a variety of challenges these days. The aging society, economic pressure and a fading of social welfare systems are impacting health-care providers at a large scale. The Covid-19 pandemic represented an extraordinary challenge to the current health care system. As a result, work place satisfaction among health care professionals is comparably low [1] and the lack of specialized workers in the health care sector [2] is a pressing issue that calls for action on various levels of society. At the same time, the aging society is bringing about a steady increase in the number of clients [3], which makes the question of how to improve elderly and health care services in terms of both quality and efficiency more and more urgent.

In practice, these questions were very often answered by focusing on documentation and monitoring as well as efficient process design in the health care provision. The creation of Collaborative Networks (CN) between e.g. hospitals and other care providers can be seen as an example for that [4]. Yet, such structures often focus on the care provider's and the service provision perspective and do not consider the employee's perspective nor the perspective of the local community or neighborhood. The reform of home care, which started in Germany in the mid-1990s, and the associated economization of care, led to staff reductions, an increase in time pressure, reduced scope for decision-making in care, and an increased volume of work [5]. The focus on efficiency criteria in a strongly body- and activity-related understanding of care (which neglects the social components of care) led to the interaction component, i.e. the importance of personal attention and the consideration of individual values and needs, being pushed into the background (ibid.). As a result, neither employees' nor clients' needs and values are fully addressed.

Only recently, new approaches try to develop a holistic collaborative structure that involves efficient service delivery as well as humane values for both employees and clients. Also, in CN literature, elderly care became more and more present and strategic development and research plans were presented [6]. One concrete example of an elderly care institution that follows the new collaborative paradigm is the Buurtzorg ("Neighborhood Care") home care concept that was originally developed in 2006 in the Netherlands [7]. Its idea is to challenge the ruling system of healthcare, where rigid structures and hierarchies were an obstacle to delivering optimal and personalized home-care (ibid.). Out of three central principles, Buurtzorg created a CN by developing and designing organizational structures for person-related services. Similar to the *Values of Agile* as stated in the Agile Manifesto for software development [8], which also take the customer and the service into the center of business development, Buurtzorg started to organize around a set of values that guides their organization's development strategy.

While (predominantly) technology-driven transformation processes in production and tech organization have been studied intensively in the past, we see a lack of research on processes of innovation in CNs in person-related services. Therefore, the main objective of this paper is to answer the following research questions:

- What values are relevant for CNs in person-related service systems in the use case?
- What are the practical implications of these values for the organization itself and the different stakeholders of person-related services in the use case?

To provide an answer, we are going to examine the transformation process of a service supplier from a conventional home care service approach towards Buurtzorg with a focus on the concept of value that is implied and its practical realization. Before the transformational process the care provider offered a conventional home care as well as a day care service for elderly persons. Networking with local hospitals were close, as often former hospital patients required homecare for the following phase of recovery. The work organization was top-down and centrally organized through the central office, therefore documentation processes were a daily chore.

The analyzed Buurtzorg team is attached to this conventional care provider and was created by employees of this outpatient care provider who were enthusiastic about the care concept of Buurtzorg. At the beginning of the research process, the Buurtzorg team consisted of 6 professionals forming one team in a local neighborhood. The challenge

for this team was to create an organizational structure under the given circumstances that allowed care work in accordance to the leading values of Buurtzorg.

#### 2 Methodology

While the concept of care work in accordance to the Buurtzorg concept is well established in the Netherlands after it started in 2006, the approach is relatively new in Germany. This paper is based on the findings of an empirical analysis of a Buurtzorg team, which was founded in 2019 and is based in a German city. Therefore, qualitative data were collected through semi-structured interviews in 2020 with two representatives of the service organization. These initial interviews marked the second step of the research process of Social Service Engineering (SSE) approach, which built the basis of our approach [9]. The aim of the SSE approach is the creation of a design process for humane person-related services which focuses on the interaction between people as the core of the service by combining methods of work science [10] with those of service engineering and design and supports value creation within the service network.

Starting with the (1) preparation and selection as well as planning of use of analytical methods, the (2) analysis of the actual state of the service, with regard to processes, work conditions and service environment or framework conditions, itself states the second step of SSE. This is followed by (3) an assessment, (4) a concrete objective and (5) the development of solutions (technical or methodological), which are finally (6) implemented and (7) evaluated. At this point of the research process all steps are ongoing, with the evaluation process still to be carried out. For the analysis and assessment, various workshops have been carried out, involving different members of the Buurtzorg team and management. These workshops focused on the analysis and description of roles within the service providing organization as well as on the identification of crucial values, their implications of the organization and requirements for the organization itself. The evaluation will include qualitative semi-structured interviews as well as an analysis that focus on the defined values and their deployment regarding the organization. Here, we will focus on the outcome of steps (3) to (5), which are described in sections 3.2 and 4 of this paper. Yet, also the other steps form part of the transformational process and therefore need to be mentioned here, although they do not show in the presented results.

The fact that the analyzed Buurtzorg team is part of an organization that employs conventional home care teams in parallel to the collaborative structure also allowed us to compare the different understandings of care and their impact on the understanding of values as well as their implications for the organization. It also has an implication on the organizational structures and the transformation process, as i.e. finances and administrative support are shared among the different sectors of the home care provider. Yet, it is only to be mentioned here and cannot be examined deeper in the context of the presented results.

#### 3 Understanding Values of Buurtzorg

#### 3.1 Values of Buurtzorg Netherlands Put in Practice

In the development of the Buurtzorg model, the central motivation was to improve elderly home-care, with humane values at the center of transformation [11]. With the aim of changing radically the way home care is provided in the Netherlands, Jos de Blok created a business model around central values and principles on which self-managing clients and self-managing teams can recur. The central principles of Buurtzorg can be stated as follows [12]:

- 1. humane values above the bureaucratic administration
- 2. simplicity above complexity
- 3. practical above hypothetical

In practice, these principles lead to a fundamentally different work system that allows professionals to act more flexible, creative and autonomous on the job, creating space for appreciation of the individual needs of clients and, thus, lead to a high quality in personal interaction. In addition, the high efficiency of administration that is created on basis of these principles states an economic advantage of the model. This is achieved by creating network structures around the patients that are based on the individual needs of the patient. Other than in different home care settings, where the goal is to keep patients as patients, the Buurtzorg model aims to empower patients to be or become as autonomous as possible with the support of their care networks. This implies also a collaboration between the formal (i.e. physicians, therapists, etc.) and informal (neighbors, family, partner, friends, etc.) care networks that surround the patients, which is facilitated by the Buurtzorg team. All in all, a holistic and practical care-giving approach is fundamental to the Buurtzorg care concept.

Apart from patients' autonomy, also the caregivers' autonomy within teams of 6 to 12 professionals plays a central role in the management concept. This is based on the idea, that a top-down management of professionals is hindering for efficient and practical solutions. The teams themselves have a better insight and concrete knowledge of the situation as well as of the environment and, thus, must have the autonomy to make crucial as well as on non-critical decisions. This also means a valuation and exploitation of the specific and local knowledge that is provided by the active professionals, in the Buurtzorg care concept.

The caregivers' autonomy comes along with a minimal administrative effort: Currently in Buurtzorg Netherlands, for more than 10,000 care workers and assistants, there are only 15 regional coaches and 45 back-office staff members who assist them. This means a percentage of 8% of the whole staff is administrative, in a comparison to the usual percentage in the Netherlands of 25% [13]. This is also possible due to an evaluation system, in which the administration provides key business indicators to the teams as a clear and practically applicable overview on their current performance.

This approach is supported by a web-based IT structure that is embedded in the above described processes and supports communication and knowledge management as well as administrative processes of the everyday care work.

As outlined here, Buurtzorg can be considered a self-organized and digitally enabled collaborative system that consists of autonomous teams, supported by a lean and effective administration. Its success and growth are extraordinary and need to be analyzed on various levels [14], but would be beyond the scope of this paper. The presented values can be seen as guiding lines, that allow a basic understanding of what the Buurtzorg model is built on. Yet, practical implications of these values can differ from organization to organization, adapting to the different starting points, ecosystems and framework conditions, especially, when the system is transferred to other countries, as in our use case.

#### 3.2 Values of Buurtzorg in the Use Case

The German health care and elderly care system is different to the Dutch, which is why a separate description for our use case and the system in which it is embedded is necessary. Generally, it has to be stated that the German care system is based on the mostly public health care and long-term care insurance system, which determines the reimbursement of costs for each of the three care levels. Quality in the sector is subdivided in structure, process and outcome quality and measured with preliminarily set professional standards [14]. Section 71 (1) of the social security statute book ("Sozialgesetzbuch", abbr. SGB) prescribes that each home care providing organization is under the permanent responsibility of a certified nursing professional. In practice, this responsibility is assumed by a nursing service manager ("Pflegedienstleitung"), who takes over all administrative and organizational tasks, such as personnel planning, organization of care tours and monitoring of compliance with legal quality standards. In addition, the accounting of services is highly complex due to the separation of medical and nursing activities, which may not be carried out by all nursing team members but depends on the individual qualification. The associated meticulous planning and invoicing of services generates framework conditions that come with a high administrative effort. In this use case, the Buurtzorg team was therefore faced with the challenge of examining the extent to which this new understanding of care is also valid under the German conditions and which transformation processes are necessary with regard to the organizational and cultural structure.

In the conducted interviews, the team stated, that it previously defined core values that can be understood as guidelines for their collaboration. In addition to the understanding of care, these values also focus on the understanding of their work and also include sustainability aspects.

Value in Service(s) (client perspective): At the heart of Buurtzorg's understanding of care is the premise that care should empower the client to achieve the highest possible level of autonomy or, if possible, ultimately help them out of their need for care. Following the Dutch model, it is therefore necessary, to exploit the social network of the client (communities are strengthened). In contrast to conventional health care providers, the Buurtzorg team aims to improve the client's health condition and wellbeing in order to achieve independence from the care provider. The CN in Buurtzorg is not only understood as a network of caring and medical professionals, but also includes relatives, neighbors, and other relevant stakeholders such as the

hairdresser. Social embedment and value creation for all stakeholders within the CN is understood as an integral part of the service.

Value in Collaboration (care worker perspective): Self-organization of care work is another core value for the team. The Buurtzorg team decides together on the admission of new clients, plans all processes with regard to care of their patients themselves, communicates with doctors and client's relatives and sets its own roster without the support of a nursing service manager. In accordance with the Dutch model, two external roles support the team. One is the coach, who mediates, reflects and coaches in terms of team-building measures and advises on conflicts, reflects on communication structures. The second is the team facilitator, who provides professional support and guidance, in setting up, and ensuring billability of services. The Buurtzorg premise of minimum documentation in favor of strengthening the interaction between client and care worker and, thus, taking into consideration humane values and the social dimension of care work, is also one of the guidelines of work. The culture of trust and empowerment enables the care workers to work in a highly self-determined way.

Community Value (sustainability perspective): The team values the approach of neighborhood care. This means that the care team shows presence in the local district and is an active part of the community. As the distances between the clients and the office are short, this approach also allows car-free home care service. The team members visit their clients by bike which supports ecological sustainability as well as increases the neighborhood's attractiveness. At the same time, it is a stress reducing factor because it eliminates the need to search for parking spaces at every client visit and keep of logbooks for company cars.

#### 4 Practical Implications for Value-Centered Care Work

In the use case, the Buurtzorg approach was implemented into already existing infrastructures of a day care provider. This implied a secure and established network of suppliers and clients in which it was introduced, on the one hand, but also existing organizational structures and therefore a preconditioning on the other hand. In addition to the different country-specific legal and bureaucratic framework, this also required an adapted and specific model and transformation process. In various workshops and interviews, the case-specific requirements were collected and framed into principles and values for the local Buurtzorg model, as described above At first semi-structured interviews were conducted in order to frame the existing values that underly the current status of the organization as well as their employees. On this basis, moderated workshops were carried out that included a collective idea collection and a moderated prioritizing in order to form a of the organizational values as well as a perspective on the development of the organization. Then, practical implications for the transformation were deduced out of the central values and principles.

As a theoretical base, the MTO ("Mensch-Technik-Organisation") concept [15] was introduced. The MTO concept is a socio-technical approach for transformational processes in organizations to facilitate a holistic design approach that includes three aspects of an organization: human, technology and organization. The three aspects, as

well as their interdependencies, must be considered equally for a holistic transformational process. For the use case the practical implications as shown in **Fig. 1** have been defined:

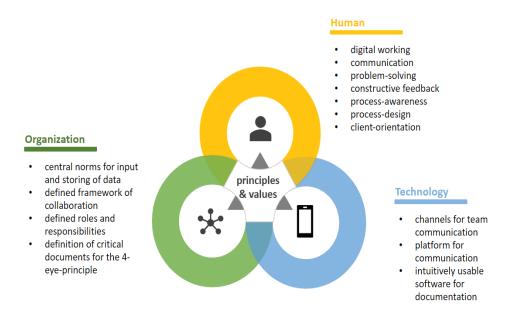


Fig. 1. Practical implications of central Buurtzorg values in the use case

Central fields of action can be defined for each of the three aspects. In the organizational aspect, areas of responsibility as well as concrete role definitions have to be developed. Also, central norms of digital collaboration have to be defined and established. This addresses the Value in Collaboration in the organization by facilitating and clarifying the communicative and collaborative processes for all persons involved. Additionally, the Community Value is represented in the way, the organization delivers the service to the individual and therefore needs to be represented in the collaboration and service framework. In the human aspect, capacity building for employees and managers is a field of action, that means, that new skills and knowledge have to be gained in order to put into practice a different working system. This is especially crucial when, as it was partly the case, the same persons had been working beforehand in a different constellation and/or collaboration model. The previous experiences and patterns have to be considered and worked on respectively, in order to not unconsciously recreate the underlying patterns and values. Apart from that, the internal organization's culture has to be considered. A base of trust and feedback-culture is essential not only for the transformation, but also for the ongoing work of autonomous and self-organized teams. Apart from that, the client orientation needs to be a

fundamental part to be considered. In this way, an inclusion of the Value in Service can be assured in the transformation process. Finally, also the implemented technology and software need to fulfill the specific requirements of the defined values as well as of the organization and the persons who will work with them. In the use case, the managers had very specific ideas and requirements of the software that should be implemented in the new teams. This was also due to the, above described, German care system that demands for specific documentation and control instances. Apart from that, a not yet implemented knowledge and communication platform is considered to be introduced to support the collaboration within the care network and growing number of Buurtzorg teams. Of course, all of the implemented software needs to be aligned with the standards of the European Union's General Data Protection Regulation.

#### 5 Discussion and Conclusion

The value of a service is subjective to the perspective of each person/entity involved in the service system or ecosystem. Especially in person-related service it is a complex operation to frame and define the implied and generated value. Yet, the design and development of a (person-related) service also always needs to consider the values it (re-)creates and represents.

In this paper, we presented a way to include humane values in a transformation of a collaboration and service system and the practical implications that derived from the inclusion of those values. Starting from the example of Buurtzorg Netherlands, case specific values and their practical implications were assessed in order to create a framework for a local Buurtzorg model that fits into the organization's legal environment as well as the organization's preconditions. Three central value concepts were defined on this basis, that were Value in Service (client perspective), Value in Collaboration (care worker perspective) and Community Value (sustainability perspective), which then set the basis for the development of the practical transformational approach.

Finally, practical implications and areas of action were defined, which were put in practice in the use case. It can be seen, that a thorough use case analysis is fundamental for the transformation process and service development. The interlinking organization's aspects as well as the underlying values form a complex figure, which could be used for developing further methodological approaches. Too long, value has been only regarded on a business level, which was rather damaging especially when applied to person-related service systems. The here presented approach does not only clearly state and concretize the system's underlying values, but also considers them as a central starting point for organizational transformation. This is a new and innovative way that can fundamentally change work and collaboration systems.

Of course, the here presented results have limitations. On one hand, the critics of a possible self-exploitation of the care workers has to be taken into consideration when a self-organized collaborative system is to be applied in care work. Although this was not an issue that occurred in this use case, competencies might need to be developed also on this matter. On the other hand, the qualitative approach has not been validated or scaled up yet and, thus, has a limited generalizability. The validation and theoretical

enhancement are ongoing processes. However, the results are mainly empirically driven principles that have the potential to enrich exploratively the approaches of agile and human-oriented transformation of organizations.

#### Acknowledgments.

This research and development project are funded by the German Federal Ministry of Education and Research (BMBF) within the "Innovations for Tomorrow's Production, Services, and Work" Program (funding number 02L18A182) and implemented by the Project Management Agency Karlsruhe (PTKA). The authors are responsible for the content of this publication.

#### References

- Janson, P., Rathmann, K.: Berufliche Belastungen, psychische Beanspruchung und Gesundheitskompetenz bei Pflegekräften in der ambulanten Altenpflege: Eine quantitative Online-Befragung in ausgewählten bayerischen Großstädten. Präv Gesundheitsf (2021). https://doi.org/10.1007/s11553-020-00826-5
- 2. Ehrentraut, O., Huschik, G., Moog, S., Sulzer, L.: Langzeitpflege im Wandel (2019)
- OECD: Elderly population (indicator). https://data.oecd.org/pop/elderly-population.htm (2022). Accessed 14 April 2022
- Baldissera, T.A., Camarinha-Matos, L.M.: Designing Elderly Care Ecosystem in Collaborative Networks Environment. In: 2017 International Conference on Computing Networking and Informatics (ICCNI)., Lagos, 29.10.2017 - 31.10.2017, pp. 1–9. IEEE (2017)
- 5. Auth, D.: Ökonomisierung der Pflege Formalisierung und Prekarisierung von Pflegearbeit. WSI (2013). https://doi.org/10.5771/0342-300X-2013-6-412
- Camarinha-Matos, L.M., Afsarmanesh, H., Ferrada, F., Oliveria, A.I., Rodas, J.: A Comprehensive Research Roadmap for ICT and Ageing. SIC (2013). https://doi.org/10.24846/v22i3y201301
- 7. Kreitzer, M.J., Monsen, K.A., Nandram, S., Blok, J. de: Buurtzorg nederland: a global model of social innovation, change, and whole-systems healing. Global advances in health and medicine (2015). https://doi.org/10.7453/gahmj.2014.030
- 8. Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., Grenning, J., Highsmith, J., Hunt, A., Jeffries, R., Kern, J., Marick, B., Martin, R.C., Mellor, S., Schwaber, K., Sutherland, J. & Thomas, D.: Manifesto for Agile Software Development. https://agilemanifesto.org/ (2001). Accessed 14 April 2022
- 9. Friedrich, J., Römer, V., Gilbert, K., Zinke-Wehlmann, C., Steputat-Rätze, A., Pietrzyk, U.: Collaborative Networks in Person-Related Services Designing Humane and Efficient Interaction Processes in Childcare. In: Camarinha-Matos, L.M., Boucher, X., Afsarmanesh, H. (eds.) Smart and Sustainable Collaborative Networks 4.0, vol. 629. IFIP Advances in Information and Communication Technology, pp. 374–381. Springer International Publishing, Cham (2021)
- Friedrich, J., Gilbert, K., Pietrzyk, U., Römer, V., Steputat-Rätze, A., Zinke-Wehlmann, C.: Perspektiven auf die Gestaltung von Interaktionsarbeit (2021)

### V. Römer et al.

- Nandram, S., Koster, N.: Organizational innovation and integrated care: lessons from Buurtzorg. Journal of Integrated Care (2014). https://doi.org/10.1108/JICA-06-2014-0024
- 12. Nandram, S.S.: Organizational Innovation by Integrating Simplification. Springer International Publishing, Cham (2015)
- 13. Buurtzorg. https://www.buurtzorg.com/about-us/our-organisation/. Accessed 14 April 2022
- 14. Johansen, F., van den Bosch, S.: The scaling-up of Neighbourhood Care: From experiment towards a transformative movement in healthcare. Futures (2017). https://doi.org/10.1016/j.futures.2017.04.004
- Strohm, O., Ulrich, E.: Unternehmen arbeitspsychologisch bewerten. vdf, Hochschulverl. an der ETH Zürich, Zürich (1997)