

## ***Disentangling the microfoundations of resource integration in service ecosystems: a case study in health care.***

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### **Abstract**

Businesses do not operate on their own, they act in so-called service ecosystems. A service ecosystem can be described as an environment where different actors interact with each other and co-create value through service exchange. Although the literature points towards the importance of understanding the multiplicity of actors in service ecosystems, scientific research remains abstract and empirical knowledge about the microfoundations of resource integration and (mis-) alignment in this context is scarce. Responding to the call for developing the microfoundations of service ecosystems, this study focuses on the (mis-) alignment in resource integration practice. Based on a qualitative case study in the Dutch healthcare system and through multiple data sources, this article offers a detailed description of (mis-)alignment in resource integration in a service ecosystem. Overall, this study adds to the literature on service ecosystems and provides managers with a more solid understanding of resource integration in such complex settings.

**Keywords:** Microfoundations, resource integration, service ecosystem, (mis-)alignment, value creation,

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### **Introduction**

Businesses do not act on their own. They depend upon each other and collaborate in settings of multiple parties. In doing so, businesses can reinforce each other and create value through their interactions. Where one party demands a service or product, another organization can satisfy this demand by providing this. This system of different actors co-creating value can be understood as a service ecosystem and manifests in various settings, such as in healthcare or digital services. A service

ecosystem can be understood as “a relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange” (Vargo & Lusch, 2016, p. 11). Resource integration is “the process of effectively identifying, acquiring, and allocating external resources” (Ma et al., 2019, p. 4). These resource-integrating actors are thus involved in the processes around these resources.

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A service ecosystem is an environment where actors collaborate and (co)-create value through the exchange of products and services (Vargo & Lusch, 2016). Service ecosystems are centered around the concept of service, which is defined as the application of resources for the benefit of others (Vargo & Lusch, 2007). Several researchers have elaborated further on the existence of service ecosystems and their service-dominant logic. This development has resulted in the introduction of the “service-ecosystem view” (Vargo & Lusch, 2007). Besides this view only emphasizing service as the basis of exchange and value creation, it also “explicates the complex and dynamic nature of the social systems through which service is provided, resources are integrated, and value is co-created” (Vargo & Lusch, 2007, p. 207). The services that are the basis of exchange are defined as “the application of resources for the benefit of another” (Akaka & Vargo, 2012, p. 207).

Literature informs us that at one end of the dimension, called the “positive” end, there is value co-creation, alignment, and high value of the product/service. While at the other end, the “negative” side, value co-destruction, misalignment, and low value of the product/service occur (Echeverri, 2021; Keeling et al., 2020). Built on the idea of the integration of resources (e.g. value co-creation) in a dynamic practice, scholars point towards the interactive formation of value (Echeverri & Skålén, 2021, Keeling et al., 2020) and the close link between alignment and misalignment of the integration of resources (Sahhar & Loohuis, 2022).

The interest in understanding resource integration practice has significantly increased and its importance is acknowledged. However, the current understanding of these practices remains on a rather abstract level. This is problematic because collective concepts such as service ecosystems cannot be understood in detail (Brodie et al., 2019). Micro explanation shows by unpacking collective concepts how individual-level factors have an impact on organizations and collectives. The interaction of

individuals leads to emergent, collective, and organization-level outcomes and performance (Felin et al., 2015).

Over the past decades, there has been an emphasis on macro explanations. However, some scholars argue to more carefully unpack these macro factors because they exist and emerge as a result of micro factors and indicators. These micro factors and indicators are called microfoundations (Felin et al., 2015). This concept of microfoundations has different origins and concepts which can partially be traced to disciplines like sociology and economics (Felin et al., 2015). The microfoundation approach is focused on searching for potential micro explanations for outcomes on a macro level (Storbacka et al., 2016). The importance of micro-level explanation can be explained by multiple reasons. First, the macro-level explanation cannot make a distinction between potential explanations of macro-level behavior, because there are unobserved lower-level factors. Second, micro-level mechanisms are often the causes or explanations of events on a macro level, which makes it more sense to study at micro-level and identify micro-foundations. Third, an explanation on micro-level is more stable, since macro behavior is a result of the actions of its components, the micro-level analysis gives a more precise view (Coleman 1994).

There is already research on microfoundations in a wide span of areas, e.g. in innovation, networks, and dynamic capabilities (Felin et al., 2015). However, little is known about (mis-) alignment of resource integration from a micro-level perspective. Most studies, like Tronvoll (2017) or Vargo & Akaka (2012), that focus on this topic stop at just examining relationships and collaborations. This study will go beyond this and also focus on what goes right or to be even more specific, this study will mainly focus on the interactions between different actors within a service ecosystem. Which factors play a role in these interactions? Which factors hinder value (co-)creation, so where is misalignment, which factors have a positive effect, and is there alignment of

interests and resources? In response, this study aims to create a better understanding of the microfoundations of (mis-) alignment in resource integration in service ecosystems.

To arrive at a deeper understanding of the microfoundations of resource integration in service ecosystems, it is first important to understand the concrete activities that are at play in order to understand resource (mis-)alignment. In this line, I have stated the following research questions:

*What activities do actors conduct in value co-creation in healthcare ecosystems?*

*How does alignment & misalignment occur in multi-actor resource integration?*

To understand the actors in the service ecosystem, it is necessary to zoom out from the dyadic relationships and view the system perspective. Systems consist of actors, interactions, and the environment. The actors create value through reciprocal processes (Tronvoll, 2017). "To understand the importance of an actor's actions, we need to decompose the service ecosystem's components and characteristics and explore the forces that influence value co-creation" (Tronvoll, 2017, p. 2). Decomposing the service ecosystem is exactly what this research question will do and by doing so, zooms further into the service ecosystem. This study will contribute to the expansion of the literature on micro-level value creation within a service ecosystem. In this respect, this study is mainly unique in that it approaches these micro-interactions from the perspective of so-called triads. While in, for example, Echeverri & Skålen (2011) the main focus is on the interaction and value creation within a dyad, this study zooms out further and focuses on the interaction and value co-creation within triads in a larger service ecosystem. By approaching the interactions from a systemic view, we look at what paints a different picture from a larger whole than the interactions within a dyad. Where interactions between two actors are viewed at in

dyads, this study provides a different picture by looking at how this functions when a third actor interacts.

In addition, this study builds on the literature on (mis-)alignment between actors and the effects on value co-creation. Siltaloppi & Vargo (2014) focus in their paper on resource integration and value proposition as the basis of value creation. It also talks about (mis-)alignment. However, this study will delve deeper into the underlying factors that cause (mis-)alignment. While there are different studies in the scope of (mis-)alignment of resources, little is known about the potential factors that affect the degree of alignment. For example, we want to better understand which factors can have a positive or negative effect on the interactions themselves. Where Siltaloppi & Vargo (2014) look at the effect of (mis-)alignment on value creation, this study will also focus on the factors that ensure that alignment is promoted or prevented. This study will therefore also make a valuable contribution to the literature on (mis-)alignment of resources (knowledge, skills, and understanding), which can ultimately lead to value (co-)creation or -destruction.

Sudbury-Riley and Hunter-Jones (2021), mention already some examples of factors that can influence value creation. For example, communication, coordination, and collaboration are factors that are mentioned as important. This study investigates whether results can be found that can substantiate these statements. In addition, it is also examined whether these factors can also have a negative impact on value (co-)creation, and thus can cause value (co-)destruction.

Once the actors are identified, the focus will be on their activities in this service ecosystem and their importance. The purpose will be to identify the combination and exchange of resources and who is involved in these interactions (Hussmann et al., 2020).

The case which will be studied will be the Dutch healthcare system. This service ecosystem is a unique case because it is an innovative sector that has experienced some drastic changes as a consequence of the implementation of a healthcare reform plan (Jeurissen et al., 2021). Since the study focuses on interactions at the micro level, this case is truly appropriate to study because a lot is happening at this level. The parties in this ecosystem work together with many different partners, each of whom exchanges its services. So, in this case, there are a lot of interactions, which ultimately gives a complete picture of the thoughts behind it. To be more specific, the actors studied within this care network are different types of care providers. The care providers are arranged in so-called triads. These triads can be seen as a care pathway for the patient. In the method section, we will further elaborate on the triads. The care providers within the triads vary between physiotherapists, general practitioners, and home care. What happens during the exchange of these services and why do certain things happen? This question can be answered well based on this complete case.

The remainder of this study is outlined as follows. In the next section, I will further elaborate on the existing and missing theory about microfoundations of resource integration in service ecosystems. The following section will explicate the research design and techniques for data collection and analysis.

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## Theory

The following section will be divided into the three parts of the theory to which this study will contribute.

### ***Service ecosystems***

As mentioned before, businesses act with each other in settings of multiple parties, they do not act on their own. These settings where different actors interact and (co-)create value are called service ecosystems. The actors in a service ecosystem (co-)create value through service exchange (Vargo & Lusch, 2016), this happens when providers and customers interact

with each other (Prahalad & Ramaswamy, 2004). A service ecosystem is regarded as self-containing in relation to other systems, due to the different parties acting within this ecosystem. These actors are all dealing with separate and mutual-beneficial procedures (Vargo & Lusch, 2016). The services that are exchanged can be defined as the application of special competencies, such as knowledge and skills, through actions and processes, for the benefit of yourself or others (Vargo & Lusch, 2004).

In service ecosystems, value is co-created through service exchange between different actors. Besides “the focus on service as the basis of exchange and value creation, the service ecosystem view also explicates the social systems through which services are provided, resources are integrated, and value is co-created” (Akaka & Vargo, 2012, p. 207). The creation of value is a joint process of integration and exchange of resources between multiple actors, which means that value is not created by the actions of one entity but through combined actions and processes of several actors (Vargo et al., 2017). The shift of the understanding that value is not created by one entity but by multiple actors aligns with a partial shift in marketing towards a S-D logic of market exchange. The S-D logic advocates that service is the basis of exchange and that value is always co-created (Akaka et al., 2013). This S-D logic extends the scope from dyadic to many-to-many interactions, which adopt a network view (Akaka & Vargo, 2012). As mentioned earlier, several researchers have elaborated further on the existence of service ecosystems and their service-dominant logic. This development has resulted in the introduction of the “service-ecosystem view” (Vargo & Lusch, 2007).

An ecosystem view can be quite explanatory because of the capability to identify institutional structures defining the ecosystem elements that explain why organizational routines on lower levels are arranged in a certain way aligning their objectives (Vargo & Lusch, 2014, 2016). The smallest variant of a service ecosystem consists of an individual interacting with another individual. The largest variant

covers the entire world economy. A service ecosystem grows in parallel with the development of relationships between actors involved in resource integration (Brodie et al., 2019).

### ***Shifting the focus towards microfoundations***

Another development in the literature is that the emphasis of scholars is, in the last decades, mainly on macro explanations in macro disciplines instead of focusing on microfoundations (Felin et al., 2015). There is tension about whether the explanations of specific outcomes should focus on individual (micro) or societal and cultural level (macro) (Felin et al., 2015). Macro explanation is the explanation of a phenomenon on societal level, such as firm-level or higher (Felin et al., 2015).

Since the start of the last decade, the literature on microfoundations started to grow. More researchers started to use the concept of microfoundations in their studies on organization, strategy, and management (Barney & Felin, 2013). However, not all researchers are equally pleased with the emergence of literature on the phenomenon of micro foundations. Going back in time, this discussion has been going on for some time, according to some studies for as long as a hundred years. Several researchers question whether investigating this microphenomenon is necessary at all. Some researchers say that microfoundations confuse with the literature on macrofoundations (Hodgson, 2012). Other researchers argue that collective factors influence things much more than individual factors, suggesting that macrofoundations have greater influence (Felin, 2015). In particular, there is a great deal of discussion about the fact that one researcher, on the one hand, thinks that macro explanations already take everything into account and micro explanations are therefore superfluous. While, on the other hand, researchers find that is not enough and micro foundations offer a more specific explanation of phenomena (Felin et al., 2015).

Researchers who delve into macro explanations are fundamentally silent about individuals, treating them as interchangeable parts of the real explanatory primitives, such as organizational routines or factors such as population density (Felin et al., 2015). Various researchers argue that individual-level considerations are simply not relevant for macro scholarship (Murmann et al., 2003). Their focus is mainly on the bigger picture. The emphasis in macro-organizational theory has been predominantly on organizational environments over the past two decades, rather than on the individual. This theory emphasizes how organizational environments demand conformity and legitimacy in the form of the adoption and diffusion of practices.

The microfoundations literature can be seen as a response to an overemphasis on collective factors. According to proponents of this phenomenon, it seems that considerations at the individual level and social interaction are neglected in explaining organizational outcomes (Felin et al., 2015). The study on microfoundations says that all higher-level events are explained by lower-level phenomena and actors (Felin et al., 2015). This study on this phenomenon is not solely about the interactions of individuals, microfoundations emphasize the unique, interactional, and collective effects of individuals (Barney & Felin, 2013). This study will argue that there are significant opportunities to unpack macro explanations and prove that they originate from microfoundations, which consist of underlying actors, social mechanisms, and interactions that lead to value-creating outcomes (Felin et al., 2015). To contribute to the literature on microfoundations, this study will disentangle these macro explanations and focus on the microfoundations in resource integration in service ecosystems.

Although several researchers claim that studying micro explanations is unnecessary, there are indeed several researchers who have done a lot of research on this subject. According to these researchers, there is enough reason to investigate this phenomenon. There are several reasons to choose to research

micro explanations. It helps to explain certain events at a lower level and avoid explanatory black boxes. Black box explanation refers to “the implicit and unquestioned assumption that distinct types of activities and associations represent homogeneous and consistent realities that do not warrant further analytical decomposition (Hustinx & Denk, 2009, p. 2).” With the help of micro explanations, organizations can be unpacked to understand the underlying components that make them up. These underlying components are the individuals within the organization but also the sets of processes, routines, and structures that play a role in organizational outcomes (Felin et al., 2015). Researchers argue that macro-level explanations cannot make the difference between the potential alternative explanations of macro phenomena because they left lower-level factors and mechanisms unobserved. Another reason to prefer micro explanation over macro explanation is that micro explanation is regarded as more stable (Felin et al., 2015).

Ultimately, there is no perfect way to investigate. There are pros and cons to both methods of research. Though, in the various studies, the emphasis is mainly on the interactions on a micro-level within companies, instead of focusing on interactions on a micro-level among different parties. In this study, the focus is on the microfoundations which consist of underlying actors, social mechanisms, and interactions that lead to value-creating outcomes (Felin et al., 2015) among the different actors in the service ecosystem.

In service ecosystems, value cocreation is influenced by actors' ability to access, adapt, and integrate resources, shaped by the social context (Akaka et al., 2014). From a service ecosystem perspective, value creation goes beyond the dyad between company and customer. According to studies, value creation in these contexts is about the interactions between multiple actors such as companies, customers, and other partners. All these actors contribute to the creation of value for others and themselves (Vargo et al., 2008).

Various studies have referred to microfoundations or service ecosystems. However, it is difficult to find studies that cover both topics. The topics are often studied separately from each other. In these studies, the topics such as microfoundations (e.g. in relation to macrofoundations) are then discussed. Or we mainly look at the phenomenon of service ecosystems, after which we focus on the actors that make up them. Although both phenomena appear more frequently in various studies, they are rarely researched in the same study (Beirão et al., 2017).

### ***(Mis-)alignment of resource integrators***

The core domain this study contributes to is on the literature about (mis-)alignment of interactions and relations between the different actors in the service ecosystem. Knowing if there is alignment or not can contribute to the success of interactions in service ecosystems (Husman et al., 2020). Some studies delve into the topic of (mis-)alignment of different interests. Different ecosystems are discussed here. Most studies are still focused on coordination within production environments. This study can thus contribute to expanding the literature in the field of service ecosystems. As mentioned, in service ecosystems, different entities work together to exchange services and co-create value as a common goal (Vargo & Lusch, 2016). All resource-integrating activities involve some kind of cooperation and thus require coordination of the actors' behavior and interests. This coordination can be achieved by a set of rules (Husmann et al., 2020). Because different parties work together, different interests will be involved and misalignment can therefore arise (Husmann et al., 2020). Therefore, it is important to coordinate the different interests to ultimately end up with aligned points of view. In the literature, a distinction is made between two types of (mis-)alignment. There is talk of "alignment within" and "alignment between" actors. "Alignment within actors" is about the alignment of the same knowledge about something between actors. In this case, alignment occurs when both parties share the same know-how on a subject. "Alignment between actors" means that one of the parties has more knowledge

about a certain subject. When the actor, who is supposed to possess more knowledge, is somehow unable to meet this expectation, misalignment will only occur (Echeverri, 2021). This study is therefore mainly concerned with "alignment between actors" since the various actors often have their specializations and deploy other parties for their specializations. Ultimately, this study tries to find out which factors affect the degree of alignment of the different resources such as knowledge and skills. Sudbury-Riley and Hunter-Jones (2021) are among the researchers who have investigated the factors that positively influence value creation. This showed that communication and coordination, among other things, can have a positive effect on value creation. In this case, coordination means that resources and interests are aligned. This coordination then leads to value (co-)creation. In addition, according to Sudbury-Riley and Hunter-Jones (2021), communication has the same positive effect. This study will investigate whether these examples can be supported.

As described, within a service ecosystem there can be different stakeholders working together. It is vital to ensure that the interests of these different actors are aligned. The coordination of these interests is formed by procedures such as those described in Hussmann et al. (2020). When the interests of the parties are aligned, we speak of alignment (Echeverri, 2021). Several studies show that ecosystem alignment is a crucial part of the exchange of services and knowledge and inter-organizational coordination. Aligning interests can play an important role in an organization's profitability and productivity (Geleilate et al., 2021).

Misalignment occurs when the interests of the various parties are far apart. The studies that write about this phenomenon all agree that it will harm the organization and the collaboration with others (e.g. Huo et al., 2022; Geleilate et al., 2021). Ecosystem misalignment can lead to a lag in the supply of core products (Huo et al., 2022). It, therefore, has a detrimental effect when interests are not properly

aligned. Processes can be slowed down and valuable time is lost. Misalignment can also be a potential source of tension and conflict within the service ecosystem (Beirão et al., 2016). As described in Sudbury-Riley and Hunter-Jones (2021), there are already some examples of factors that can influence value creation. For example, communication, coordination, and collaboration are factors that are mentioned as important. This study investigates whether results can be found that can substantiate these statements. In addition, it is also examined whether these factors can also have a negative impact on value (co-)creation, and thus can cause value (co-)destruction.

Studies on (mis)alignment often focus on the effect of this phenomenon on organizational performance. However, little attention is paid to (potential) factors that affect the degree of alignment. This is what this research will ultimately contribute to. Alignment has been pointed out in several studies like Henderson & Venkatraman (1993) and Powell (1992). In these studies, the complexity of the concept and the challenges of measuring it emerged because of the abstraction of the term (Carillo et al., 2019). As mentioned before, profitability and effectiveness are vital for organizations to ensure that there is a high degree of alignment. Since previous studies have barely focused on the phenomena that can affect this, this study will therefore be a valuable contribution to the literature.

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## Method

### *Research design*

To end up with useful information, it is important to use the right and effective methods. This study comprises a qualitative case study involving multiple data sources, such as interviews and desk research. This exploratory case study method is the most appropriate method to gain a deeper insight of phenomena in contexts of value (co-) creation (Yin, 2009; Granot et al., 2012). Like other studies in the field, this study will first try to identify the resource-integrating actors and actions in the service

ecosystem and analyze this empirical data (Echeverri & Skålén, 2011). After identifying the actors and interactions, this study will zoom in on the alignment of the relations and interactions between the actors in this service ecosystem.

### **Case selection**

For this further elaboration, the Dutch healthcare system will be used as a case study, where the focus will specifically be on the healthcare system in the region Gelderland-Midden. This Dutch healthcare system is a unique service ecosystem. "In the Netherlands, the national government has overall responsibility for setting health care priorities, introducing legislative changes when necessary, and monitoring access, quality, and costs" (Wammes et al., 2016, p. 113). The Dutch healthcare sector is an innovative sector that has experienced some drastic changes as a result of the implementation of the healthcare reform plan (Jeurissen et al., 2021).

The Dutch healthcare system can be regarded as a big part of the Dutch healthcare ecosystem, and it consists of three sections. The first section is long-term care. This kind of care includes elderly care and disabled care. Until 2015, the government takes care of this and it is financed by a particular act, the "Algemene Wet Bijzondere Ziektekosten" (AWBZ). In the year 2015, there were major reforms in the Dutch healthcare system, other acts like the wmo, Zvw, and jeugdwet took over the AWBZ (Badir, 2014). This means that this section of healthcare became more scattered and complicated than before. This scattered section is just one part of the Dutch healthcare system. The second section is curative care, which is accessible to any Dutch resident. This kind of care is the visits to hospitals and general practitioners. This healthcare is financed by insurance companies. The third and last section of the Dutch healthcare system is the additional care, these are the visits to dentists and physiotherapists. This kind of care is financed by insurance companies but these are additional costs for the person himself (Badir, 2014).

Ultimately, the reason why the healthcare context is so suitable for this research has to do with the extent and levels of interactions. This research aims to find out what promotes or worsens interactions. In this specific service ecosystem, a lot of interactions take place between a large number of different parties. By thoroughly researching these collaborations, a good picture can be drawn from different perspectives among the actors. The translation can then be made to the theory by describing several overarching themes that emerge.

### **Data collection & analysis**

This study's data is based on desk research and interviews. An important note regarding the sampling method in this study is that this study stems from a larger project called dRural. The dRural project is a project from the University of Twente that focuses on improving life in various rural areas in Europe, one of which is the Gelderland-Midden region where the focus is on the healthcare sector (dRural, 2020). I was closely involved in this research. As a student assistant, I contributed to transcribing the interviews within this research. The interviews conducted by the researchers in this project also served as a source of information for this study. From these interviews, follow-up interviews are conducted with the actors that are relevant to this study. These interviews will further zoom in on the points that are relevant to this research. The focus will be on the actors with whom the various parties collaborate, what they think is positive about the collaborations, and what the negative experiences are in these interactions. The interviewees come from the actors within the service ecosystem in the case study. The interviews will eventually give an extensive picture of the relationships. The desk research will mainly consist of analyzing relevant literature. This is to find out, among other things, which gaps exist within the theory and how this study can contribute to the theory. To ultimately be able to paint a good picture of the underlying reasons that can improve or worsen interactions, this study will use actor-network mapping. Actor-network mapping helps to identify relevant actors and their relationships (Morelli &



Tollestrup, 2007). In addition to this model, the results of the interviews are also analyzed in a table. This is where the striking statements and answers of the interviewees are noted. Subsequently, overarching themes are sought to be able to draw a conclusion from these which (potential) influential factors can be when it comes to the degree of alignment of resources.

When the actors and their interactions are clear, there will be the question of whether the resources of the different actors are successfully integrated. Resource integration consists of interaction (Vargo & Lusch, 2015), and is not possible without coordinating behaviors of the actors. Coordination of these interactions is possible by using a set of rules, to regulate the activities (North, 1990). In this section, the purpose is to identify if these interactions are coordinated, how they are coordinated, and if they are successfully coordinated or not. According to Hussmann et al. (2020), misalignment can negatively impact the resource integration experience and the perception of the value-in-use, which can be defined as “a customer’s outcome, purpose, or objective that is achieved through service” (Macdonald et al., 2011, p. 6). Knowing this alignment can contribute to a better understanding of the service ecosystem. Different actors, such as general practitioners, care workers, and residents of the region Gelderland-Midden, are studied to create an overview of the service ecosystem. Snowball sampling allows us to expand our range of data collection to get deeper into the ecosystem over time (Noy, 2008).

To delineate the research, specific triads of different actors are selected. Triads are defined as the interaction and mutual response between 3 voices with joint attention on an object or goal (Keeling et al, 2017). The triads that have been formed are examples of one of the most common patient journeys. These patient journeys are common routes that people take when they end up within a certain care trajectory. The actors in the triads are the care professionals who are responsible for these journeys. The prepared journeys are common routes. The triad

with home care, GP, and transfer agency is common as the population ages. The triad with a physiotherapist, medical specialist, and GP is also common among the elderly population, but certainly also among sports injuries. These examples give a small idea of the extent to which these journeys occur.

The triads this study focuses on are:

*Triad 1: general practitioner – physiotherapist – medical specialist (hospital).*

*Triad 2: general practitioner – transfer agency – homecare.*

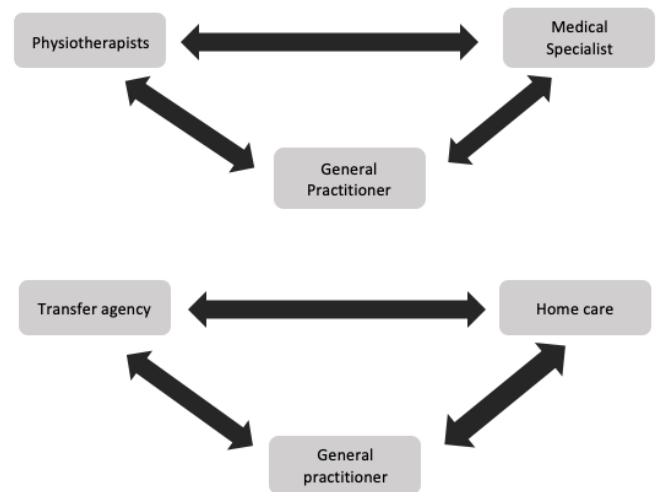


Figure 1. Triads

The first triad consists of the general practitioner, a physiotherapist, and then a medical specialist. An example situation is, a person comes to the GP with a shoulder complaint, who sends the patient to the physiotherapist. If the physiotherapist cannot resolve this either, the patient is referred to a medical specialist via the general practitioner. The medical specialist can then perform more complex examinations. Ultimately, all three parties are in contact with each other.

The second triad consists of the general practitioner, transfer agency, and home care. This situation mainly concerns elderly care and palliative care. The transfer office arranges that patients are accommodated at a home care organization, this is ultimately passed on to the patient's GP. It is also possible that the GP engages in home care for his patient. In this triad, it is therefore mainly about home care, but all parties are once again in contact with each other.

By focusing the research on these specific triads, it is possible to zoom in better on the relationships and collaborations between parties. In this situation, the interactions between the parties can be specifically looked at and different perspectives can be compared. When all actors within the entire ecosystem are compared, there is a chance that it is not possible to paint a clear picture of the interactions.

In order to get a clear view of the actors, the co-created value, and the relationship, I will make use of the Ecosystem Pie Model (EPM) (Talmar et al., 2020). The EPM is a strategy tool to map, analyze, and design ecosystems. The model maps<sup>3</sup>, in a clear way, the constructs and relationships of the actors in an ecosystem and how they interact in creating and capturing value (Talmar et al., 2020)

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## Findings

This section illustrates the results of this case study. Through a thorough data analysis, this study identifies the actors in the healthcare service ecosystem in Gelderland-Midden. The study has focused on the most important actors in this service ecosystem, in order to keep the study specific and relevant to the literature. Furthermore, the relationships of the most important actors are explicated in order to understand the (mis-)alignment between these service integrators.

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<sup>3</sup> See appendix A and Appendix B

<sup>4</sup> See appendix C

<sup>5</sup> See appendix D

In the interviews, it emerged that the general practitioner (GP) has an important gatekeeping role, which is why the GP is placed in the center as well. Furthermore, this map segments the actors into specific categories: institutions, hospitals, daily life care, and social network.<sup>4</sup>

### *Institutions*<sup>5</sup>

The category "institutions" consists of the municipality, government, and health insurance. These actors are all present because healthcare is all regulated and bought by municipalities and health insurers. In the Dutch healthcare system, the government has overall responsibility. The government is responsible for setting healthcare priorities, legislative changes, partly financing healthcare, and monitoring access, quality, and costs. Municipalities and health insurers are responsible for long-term services and youth care. (Wammes et al., 2016).

### *Social network*<sup>6</sup>

The social network is an important factor in the life of the resident. Several actors in this ecosystem indicate that the social network of the patient partly influences their lifestyle and health. The social network consists of the actor's family, friends, and neighbors. Especially family and friends play a big role in influencing the lifestyle of someone, these actors are often around.

"Yes, it indeed has to do with your social context whether you need that professional help or not."  
(Interview pediatric nurse, 2022)

Besides that, the network also affects the lifestyle of a person, it can also help in supporting or reducing the need for care. Having a social life improves the quality of life for people of a certain age. Without a social life, the elderly stay at home, do not move, and do not participate in society.

<sup>6</sup> See appendix E

### *Hospital/medical specialists<sup>7</sup>*

A lesser-known actor in this segment is the transfer agency. The transfer agency is a special department in the hospital, responsible for the throughput of patients. In some cases, it is not completely clear if a person can return to their home or not. In these cases, the transfer agency will assess the situation whether the patient can go home, to a care home with, or must remain. The reason this department exists is because of the high costs of hospital beds. To make sure that unnecessary costs are made, this department assesses patients to release them from a hospital bed, which will then be available again for someone who needs it more. Besides only being responsible for the throughput of patients, the transfer agency is also important in helping the patients with everything they need once they leave the hospital. Everything that is needed to provide the best care possible at home, is arranged with the help of the transfer agency. This means that the patient does not have to take care of this by themselves. The transfer agency helps to make the step from a hospital bed to one's own home smaller, from both the hospital's and the patient's point of view.

*"...people in a hospital do not often realize how you should look at care differently when you bring it out to the public." (Interview transfer agency, 2021)*

### *Daily life care/paramedics<sup>8</sup>*

A vital actor in the healthcare service ecosystem is homecare. Because of their unique way of offering care, it is valuable to zoom in on this actor. People normally have to go somewhere to receive the care needed, homecare comes to the homes of their clients, which makes them unique. Not everyone can receive home care. Normally, requests for home care come through the GP or the transfer agency. These requests are for people who are not able to live on their own anymore. However, requests coming through the transfer agency differ in nature from those coming from the GP, which will be explicated further on in this study. Homecare is ultimately

responsible for helping their client in almost everything in daily life, hence this depends on the care that is needed for their client.

*"...everything related to personal care and nursing procedures." (Buurtzorg, 2022)*

*"More and more care that was actually given in the hospital, we do it at home." (Buurtzorg, 2022)*

Another crucial care provider is the GP. With their gatekeeping role, they are key figures in the healthcare journey. The Dutch health care system is designed in such a way that when someone has physical complaints, they report to their GP. From there, the GP determines whether he or she can treat it himself or whether another healthcare provider should be engaged. In that sense, the GP is a gatekeeper when it comes to assessing whether and which care is needed in that case.

In addition to only treating the patient, the GP is also responsible for the referrals that take place. An example, someone comes to the doctor with a knee injury. In most situations, the GP will choose to refer the person to a specialist in this area, this is the physiotherapist. The physiotherapist will then start working on this. When the physical therapist feels that there is more to it than what he can do about it, a logical step is to refer the person to the hospital. Since the physiotherapist cannot and may not refer someone to the hospital, this is again done via the general practitioner. This once again shows what a crucial function as a gatekeeper the GP occupies.

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<sup>7</sup> See appendix F

<sup>8</sup> See appendix G

### **(Mis)alignment dynamics within triads in the ecosystem.**

Because of the size of the ecosystem, this study will focus on the most common relationships in the service ecosystem. As already mentioned, this study creates so-called “triads”.

The triads this study focuses on are:

Triad 1: general practitioner – physiotherapist – medical specialist (hospital).

Triad 2: general practitioner – transfer agency – homecare.

### **Instances of alignment**

In this section, there will be a detailed explanation of the situations when alignment improved the phenomenon of service exchange. To come up with this information, I interviewed different actors to find out how the parties collaborate and what makes these collaborations go so well.

*Triad 1: general practitioner – physiotherapist – medical specialist (hospital).*

The patient journey is a cross-functional process where patients and service providers share action and information flows between people and systems across various touchpoints (Gualandi et al., 2019). The service providers in the first triad are physiotherapists, general practitioners (GPs), and medical specialists. This triad is a common patient journey for people with all kinds of physical, movement, and lifestyle problems. According to the various interviews, the journey normally starts at the GP. The activities of the relevant actors have already been described, the focus is now on the service exchange and resource integration between the various parties and what makes it possible to make this run as optimally as possible.

In general, the parties within this triad are very pleased with the cooperation. In the interviews with the various parties, hardly any structural problems emerged that could jeopardize the service exchange. One reason for this satisfaction may arise from the ongoing coordination between the parties. It is

indicated that the parties consider it important to keep each other continuously informed of developments or other important matters. This alignment of interests takes place in several ways. For example, lectures are given by medical specialists, there are multidisciplinary consultations, and a committee has been set up consisting of healthcare providers from the first and second line. The various parties indicate that based on this continuous coordination, processes can continue to run more efficiently so that care can continue.

To cite a good example, the parties have set up certain meetings in which a presentation is given by the hospital to explain how they view certain elements within healthcare. These meetings serve as informative sessions for general practitioners, who in this way get a better idea of where the medical specialists are based. On these teaching days, the general practitioners are asked about what they would like to know from the medical specialists. This knowledge is then transferred by the medical specialists to the general practitioners. This way of sharing knowledge is experienced as crucial by both medical specialists and the GPs.

In addition to these education days, a committee has also been set up, consisting of care providers from both the primary and secondary care lines. This committee monitors the mutual coordination between the two lines and ensures that the interests are aligned as closely as possible. The committee organizes meetings to discuss these points. Since the Covid-19 period, the step to organize these meetings has become a lot smaller. Since then, meetings are easier to plan because they are organized online. In this way, it is easier to schedule a meeting somewhere and people can join freely or leave the meeting earlier. Due to this constant coordination between the various parties, one notices that the cooperation is positively influenced.

*Triad 2: general practitioner – transfer agency – homecare.*

The second triad this study focuses on has a slightly different patient journey. This journey mainly occurs in elderly care. The role and activities of the actors are also already explicated before. An appropriate coordination of interactions in resource integration can positively influence relations between different actors. In this triad, several good examples can greatly improve cooperation.

The actors in this triad are mainly responsible for care for the elderly or palliative care. Home care receives requests for their available services from the transfer office and the GP. During these applications, the necessary information is exchanged to ensure that home care has the best possible picture of the patient. A clear picture of what is to come helps in this case for the best possible transition of care for the client. A clear example of a well-organized transfer is the one between the transfer agency and home care. In the interview with the home care, they indicated that they were very pleased with how the transfer agency provides them with information about the patient. An announcement is made in advance from the transfer office so that home care can check whether there is room for this person at that time. In this announcement, a detailed description of the person is also sent from the transfer office. The advantage of this detailed description is that home care will not be faced with any surprises at a later time. It could therefore be said that a good provision of information can greatly improve the exchange of services and optimizes the resource integration.

In addition to the fact that the information exchange itself is considered pleasant, the way of communicating is also experienced as pleasant. A fitting example is the communication between home care and its partners. In particular, cooperation with the general practitioner is positively stimulated by the implementation of the "OZOverbindzorg" program. All parties around the client are connected to this platform. These parties are, for example, the general practitioner and home care, but also the attending

physician or a family member who may serve as a caregiver. On Ozoverbindzorg, the general practitioner creates a file for the client. Then all kinds of things can be viewed by the related parties. In addition, care requests from the general practitioner often go through this platform. Home care indicates that the handy thing about this way of applying is that everyone can respond when it suits him or her. What is prevented by this is that people miss each other, which slows down processes. The implementation is seen as a positive impulse for the collaboration between home care and the general practitioner. This platform ensures the integration of the various parties, each bringing its own resources and services.

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### **Instances of misalignment**

In this section, a detailed explanation will be given about the situations where misalignment has worsened the phenomenon of service interchange. To arrive at this information, I interviewed various actors to find out how the parties work together and what goes wrong in these collaborations.

*Triad 1: general practitioner – physiotherapist – medical specialist (hospital).*

As described earlier, the actors are generally very pleased with the cooperation between the parties. There are no structural examples of misalignment. However, there are always things that can be done better to promote the service exchange. An example of this can be found in the willingness and consensus of everyone to keep to the agreements and to use the right way of communication. Systems are a good solution, provided they are used properly.

“Ozoverbindzorg can improve cooperation if it is properly implemented.” (Interview medical specialist, 2022)

An example that was mentioned in the interviews is that the use of the "Ozoverbindzorg" platform is not complied with by every actor in the triad. Some actors in the collaboration find the use of this system superfluous or find themselves too busy to use this system. This results in a poor provision of information and can be detrimental to keeping the care process going. In addition, it also costs the other parties extra time to be able to retrieve the necessary information so that they can then get to work.

In addition to the use of different platforms, it is also indicated that the abundance of different systems is experienced as disturbing. One healthcare provider uses a different system than another healthcare provider. This means that information sometimes has to be entered several times somewhere. Besides the loss of time when duplication of work has to be done, it sometimes also happens that information is sometimes forgotten to fill in. A person then thinks that he has processed all the information, but in the meantime forgets the other system that another healthcare provider works with. By using the different systems, the overview is often lost.

*"...where one inserts a plain text, the other puts in some kind of PDF file that goes very in-depth."  
(Interview GP, 2022)*

*Triad 2: general practitioner – transfer agency – homecare.*

In addition to the things that go well in the collaboration between different parties, some examples can hinder the collaboration and possibly slow it down. An example of this is the communication between the GP and home care. When a general practitioner has a patient, who can use the care provided by home care, an application is made. These applications are mainly made via the Ozoverbindzorg platform but are sometimes also requested by telephone. The problem that often occurs is that the care requests from the general practitioner are often incomplete in terms of information. Where the requests from the transfer agency are very detailed, those from the general

practitioner often lack the necessary information to get started right away. This again indicates the importance of information exchange. Where the information provision is good, the process of applying for care is not delayed. Where this is not properly aligned, it will take extra time to initiate the further care process. A good example of misalignment is resource integration.

Continuing with the subject of communication and the use of systems for this, the difference is in the use of these systems. This difference can be viewed in two ways, in both the different types of systems and the different ways of using these systems. It emerged from the interviews that different healthcare professionals use different systems. The adverse effect of this is that the systems are not integrated with each other and in some cases the information transfer, therefore, requires duplication. In that case, the professional must therefore state the relevant information in his own system, but also in the system that the other party uses. The logical effect is therefore that here again the information transfer takes longer than would be necessary if the same system were to be used. In this situation too, it is again shown that the correct integration of resources can have an enormously positive effect on value creation.

Not only aligning the systems should have a positive effect, but tuning the way these systems are used would also help. One of the interviewees indicated that he found it disturbing that everyone interprets the use of the systems in their own way. Where one person does an extensive transfer of information, other people stick to a concise piece of text from which little can be concluded. According to the interviewee, it would therefore be nice if agreements were made about the way of communication via the system. An unambiguous line in communication again saves time.

Differences in expectations and views are also points that are often mentioned in the interview. These differences occur both in the points of view between the patient and the care providers and between the care providers themselves. A situation that often occurs among the older generation is that they expect more from care than can or may be provided. The older generation has the idea that they pay for care and the rest is taken care of for them. However, this has long since ceased to be the case and only the care is provided that is necessary per situation. The transfer office and the GP, therefore, explain in advance what the patient can expect as clearly as possible for each patient. This is done to avoid disappointment later in the process. On the other hand, it also happens that the care providers do not completely agree with the choices of other parties. For example, in some cases, there is a preference for a different institution to provide care than the one chosen in that case. This indicates that there are often different views among the care providers.

Another point that was mentioned as a disturbing factor in the interviews is the abundance of choice when it comes to providers in home care. All parties agree that more choice leads to better dynamics and a better attitude because there is competition. However, too many providers make the choice more difficult. There has been a kind of proliferation among the start-up of home care organizations. This growing number makes it more difficult for healthcare providers to give everyone a fair chance. The result of this is that the general practitioner or the transfer agency will stick to the home care organizations that they know well and where their own preference goes. Too much supply can therefore also have a negative influence on the course of the care process.

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### **Interpretation and characterizing of the findings**

From the interviews, several overarching themes have been drawn up that have resulted in improved or deteriorated service exchange, which in turn affects resource integration. The themes that have been drawn up have all come up more often in the conducted interviews and can therefore be seen as important facets in service exchange. The EPM model supports and visually shows that many of the same themes emerge.<sup>9</sup> These themes emerged from the interviews and are further explained.

#### *Communication*

Communication can both promote and disrupt cooperation, and a few examples of this have also been mentioned. Examples of communication in both the right and wrong sense have appeared in several examples. The correct communication of information between different actors has a positive influence on the eventual resource integration. When information is conveyed correctly and completely, this has the effect that processes can run more efficiently. This research has shown several times that if the information is exchanged incorrectly or incompletely, the consequence is that contact has to be sought again. The final effect is noticeable in the extra time the process takes. A good example that has emerged is the meetings that are held to continuously align the interests of parties. The result of this is that both parties involved are satisfied with the information that is exchanged in exchange for the care that must be provided. The use of the same system can also promote the exchange of services between different actors. The danger of using multiple systems is the loss of valuable information. Integrating the systems ensures clearer collaboration. Good information provision is vital to keep processes going. When one of the parties does not properly transfer its information, this can have a negative impact on the value creation between the parties. The insufficient execution of an action leads to a negative influence on the exchange of services.

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<sup>9</sup> Appendix B

Researchers indicate that within a service ecosystem, value is (co-)created through service exchange (Vargo & Lusch, 2016) when providers and customers interact with each other (Prahalad & Ramaswamy, 2004). Information exchange is part of the exchange of services. This must go well in order to create value. It has been found that when this does not go well, the interactions are halted and the processes take longer. The completeness and correctness of the information that is exchanged can therefore be seen as an essential part of value creation at the micro level.

The lack of information can cause one of the two actors to have a different perception of the collaboration.

Communication also includes the use of certain systems and applications. The use and impact of this have increased considerably in recent decades (Al-Jaberi, 2018). The use of these systems also has an impact on their effectiveness. When systems are used incorrectly, it has the same effect as incomplete information exchange. When these resources are not properly aligned, the effect will also mainly be felt in the quality of the service exchange and the duration thereof. The correct integration of these resources will ultimately make a positive contribution to the collaborations between the parties. What also plays a role in this is the alignment in the use of these systems. When actors each interpret the use in their own way, misalignment will also occur. It is important to achieve coordination in this regard so that this can promote the process of service exchange. Once fixed agreements have been made, no additional steps will need to be taken to continue.

#### *Differences in opinion*

A frequent phenomenon in the collaborations between parties is the differences in points of view. These differences can have a hindering, clarifying, or innovative effect. When different points of view are aligned with each other, this can have a positive effect on collaboration. In collaborations, it is more common for parties to have different views regarding certain actions or standpoints. These differences can

have both a negative and positive impact. According to several interviewees, these differences of opinion stem from differences in interests. A good example of these different interests is a physiotherapist who also focuses on the preventive side of treatment and on changing the patient's lifestyle. While a medical specialist is only concerned with curing the problem. Now this is just an example and it can also differ per person, but this shows the differences between the parties. The advantage of these differences is that parties do not get stuck in certain patterns. There is a chance that at these moments the sharpness may be lacking, which will in turn be at the expense of the quality. Being open to newer options can make the process more efficient and provide a new perspective on the situation. When we talk about the disadvantages of a different view, it is mainly about the risk of conflict. When actors become accustomed to their fixed patterns, it can become more difficult to take a new path and move away from these patterns. Making agreements and staying in constant consultation is a suitable way to continuously learn from each other and encourage improvement.

In addition to the difference in opinion regarding certain actions, it can also happen that people have different expectations in advance than they will experience. For example, if you think you will get a certain level of service in return, expectations may be too high. In order to prevent this, it can be of great importance that both actors inform each other in advance about what they have to offer and whether this is sufficient. Here too it comes back to the fact that it is crucial to make clear agreements and to ensure that the interests of different actors are aligned in order to avoid further delays in the service exchange. In addition, it also comes back that everything stands or falls with clear communication between actors.



### *Availability of alternatives*

As a follow-up to the differences in points of view, the (abundance of) number of choices can be grouped below. As a follow-up to the differences in points of view, the (abundance of) number of choices can be grouped below. When there are multiple choices for a party to work with, this can contribute to healthy competition. As a result, parties do not have a monopoly on what they have to offer and will therefore have to be unique in order to remain relevant. What was mentioned in the interviews is that the arrival of alternatives does indeed contribute to the spirit of companies. Because there are several parties in the market to work with, everyone also realizes that they have to keep doing their best. The effect of this development is that parties also help to make processes run more smoothly. For example, communication will be improved or partners will have to wait less time to continue with the process.

While multiple alternatives can contribute to healthy competition, it also has a maximum. The study also revealed several examples of what happens when there is too much choice. When there is a plethora of alternatives, this will ultimately slow down the process rather than promote it, provided the actor is willing to give everyone an equal chance and consider everyone. Only when the partner has been chosen can the exchange of resources begin, the longer this consideration takes, the longer the entire process will take.

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## **Discussion**

### *Reflection*

The ultimate goal of this study is to gain a better understanding of the interactions between actors at the micro level. This study contributes to expanding the literature on service ecosystems, and (mis-)alignment between actors at the micro level. This study contributes to a better understanding of the phenomenon of micro-level interactions and the value created through resource integration and service exchange. Where other studies in the field of micro-foundations have mainly focused on the

interactions between actors, this study zoomed in even further. It examines the causes of (mis-)alignment at the micro level and contributes to the literature on this topic. Compared to other studies, this research has further zoomed in on the interrelationships. The focus is on the interactions between actors. What is going well or not in these interactions and what are the underlying reasons for this happening? Several overarching themes have emerged from these interactions. These overarching themes can catalyze the process of resource integration and service exchange, but can also hinder these processes.

Building on the literature of Siltaloppi & Vargo (2014) where they mainly focus on the underlying factors of (mis-)alignment between actors and the effects on value co-creation, this research zooms in even further. As described in Sudbury-Riley and Hunter-Jones (2021), there are already some examples of factors that can positively influence interactions and value creation. Among other things, communication, coordination, and collaboration were mentioned as factors. Supportive to this literature, similar results emerged in this study. Three overarching themes emerged from the interviews. These themes are similar to the factors described according to Sudbury-Riley and Hunter-Jones (2021) as factors that enable value (co-)creation. While this study has mainly examined the positive influence, this study has expanded this literature by examining whether the overarching themes can also hinder value (co-)creation. Communication and differences of opinion are quite similar to the communication and coordination factors mentioned in the study by Sudbury-Riley and Hunter-Jones (2021). Communication can both promote and disrupt cooperation, and a few examples of this have also been mentioned.

The correct communication of information between different actors has a positive influence on the eventual resource integration. When information is conveyed correctly and completely, this has the effect that processes can run more efficiently. If the

information is exchanged incorrectly or incompletely, the consequence is that value (co-)creation and thus alignment can be hindered. As described in Geilenalter et al. (2021) coordination is of great importance in the performance of actors. The study showed that communication ensures the correct coordination of information and interests of actors. When properly communicated, the interests will be spread throughout the service ecosystem and promote both the performance of actors and the collaboration between them. In the integration of resources and the exchange of services, communication is crucial. Differences in opinions correspond to the coordination factor. The alignment of different interests and resources is of great importance to be aligned with each other. When different points of view are aligned with each other, this can have a positive effect on collaboration. However, when parties are not aligned with each other, processes can be delayed. This prevents value creation, so it may take longer for the exchange of resources and services to be established, or for this to occur at all. In addition, there is also a third factor that emerged in addition to those that corresponded to the study by Sudbury-Riley and Hunter-Jones (2021). The third factor is the availability of alternatives. Besides the fact that the influence on resource integration is only sought within the interaction of the parties, the other actors within the service ecosystem can, possibly unintentionally, also play an influence. The (abundance of) alternatives regarding the supply in the market can play both a negative and positive role when it comes to value (co-)creation. When there are multiple choices for a party to work with, this can contribute to healthy competition. While multiple alternatives can contribute to healthy competition, it also has a maximum. The study also revealed several examples of what happens when there is too much choice. When there is a plethora of alternatives, this will ultimately slow down the process rather than promote it, provided the actor is willing to give everyone an equal chance and consider everyone. This study ultimately confirms what has been described in previous studies on (mis-)alignment of interests. That

a high degree of alignment will have a positive effect on the outcome of the collaborations between parties and individuals. If the overarching themes are not properly organized, this will harm the degree of alignment,

In addition to supporting and expanding the literature on factors influencing value (co-)creation, this study also contributes to expanding and building on the literature on interactions between actors. As mentioned, actors within the ecosystem can (unintentionally) influence interactions between different parties. This study zoomed out from the dyadic view to a more systemic view and focused on triads. Studies such as Echeverri & Skålen (2011), examine the interactions between two actors. By setting up triads consisting of different care professionals, it was possible to examine the effects of a third actor within the interactions. By using this more systemic view it was possible to look at other effects within the service ecosystem, such as the abundance or shortage of alternatives. This research has shown that the presence of multiple/other actors (unconsciously) can lead to a delay in processes. As mentioned, when options are abundant, this can harm the value (co-)creation process and this is mainly reflected in the duration of the process.

#### *Managerial implications*

Value co-creation is a great way to become stronger together through collaboration. However, it is not always easy to collaborate with other parties and misalignment regularly occurs between different actors. In almost all cases, misalignment has a negative effect on the performance and collaboration of actors. It is therefore important for everyone to prevent this.

To counter this, this study has drawn up three overarching themes that can have a major effect on the degree of alignment between parties. These themes are communication, the degree of alternatives, and the difference of opinion. These themes can be supported by the literature of e.g. Sudbury-Riley and Hunter-Jones (2021), who write

that, amongst others, these factors have a positive influence on the degree of alignment and value creation. To specify the recommendations, it will also be stated for several themes for which parties these recommendations are particularly important since this is not relevant in some situations.

Firstly, the communication between the parties must be clear and complete. This study has shown that when this is not the case, the processes are slowed down or the quality deteriorates. Clear and complete communication can therefore have a positive effect on the duration and quality of the processes. Clear communication will be beneficial for every party that interacts within this service ecosystem.

In addition, there mustn't be too many choices, having a limited number of options. An example could be that a company offers an x number of services, a burden of choices makes it difficult to make the right choice. When all choices have to be considered, this takes longer or there is a chance that a hasty choice can lead to a decline in the quality of the process. This can happen, for example, when the wrong service is chosen. In line with the research, this advice is particularly important for the actors who work together with home care organizations. The interviews strongly showed that a wide range of options is available, especially with this group of actors. For example, for the transfer agency, advice could be to work with fixed providers, build a strong relationship with them, and then maintain a confidential collaboration. By collaborating more intensively, resource integration between parties will also be promoted. This is also supported by Edvardsson et al. (2014), who write that "value co-creation is maximized when there is minimal resource integration conflict."

The difference of opinion can also affect the alignment of the collaboration. However, for actors, this is quite in line with the theme of communication. A good way not to be too bothered by these differences is to communicate clearly and honestly about them. When this happens, both parties know

where they stand and what effect this can have on the collaboration. Ultimately, the best possible adherence to these three themes will have to make a positive contribution to the interactions between different actors.

#### *Limitations and Further Research*

Despite the attempt to elucidate the subject of microfoundations as broadly and as accurately as possible, this study will also have several limitations. Since the subject of resource integration and microfoundations is so broad, this research cannot touch on all the points of these phenomena. In addition, this research is linked to a region and a certain context. There is therefore a high probability that this will generate different results in a different region and/or industry.

Since the research has focused on the service ecosystem in the healthcare context, it will be of great importance for further research that this research is done in other service ecosystems. Since this is an extremely broad and complicated subject, it will yield truly interesting and valuable results when this research is done in another industry.

In addition, it will also be an added value that, in addition to the reasons for preventing service exchange and resource integration, we will also look further. A suitable follow-up to this study will be what can be done to overcome these barriers. When these ways have become clear, this can greatly benefit the research and implementation of interactions between actors.

What will also be a vital contribution to the literature is that further research will be done on resource integration at higher levels. What do interactions at the meso or macro level look like? What happens in these relationships and how can the interactions at the meso or macro level be influenced? Researching at higher levels can lead to a better understanding of phenomena such as resource integration and alignment of resources.

A final potential topic for future research is to approach the researched context of the triads within the service ecosystem in healthcare, from the perspective of the patient. While this research has mainly focused on the interactions between healthcare professionals themselves and has also approached this from their point of view, this research lacks the approach from the patient's point of view. Since healthcare is a separate world in which people talk with and about patients, this can provide valuable insights into the literature on micro-level interactions.

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## Appendix A

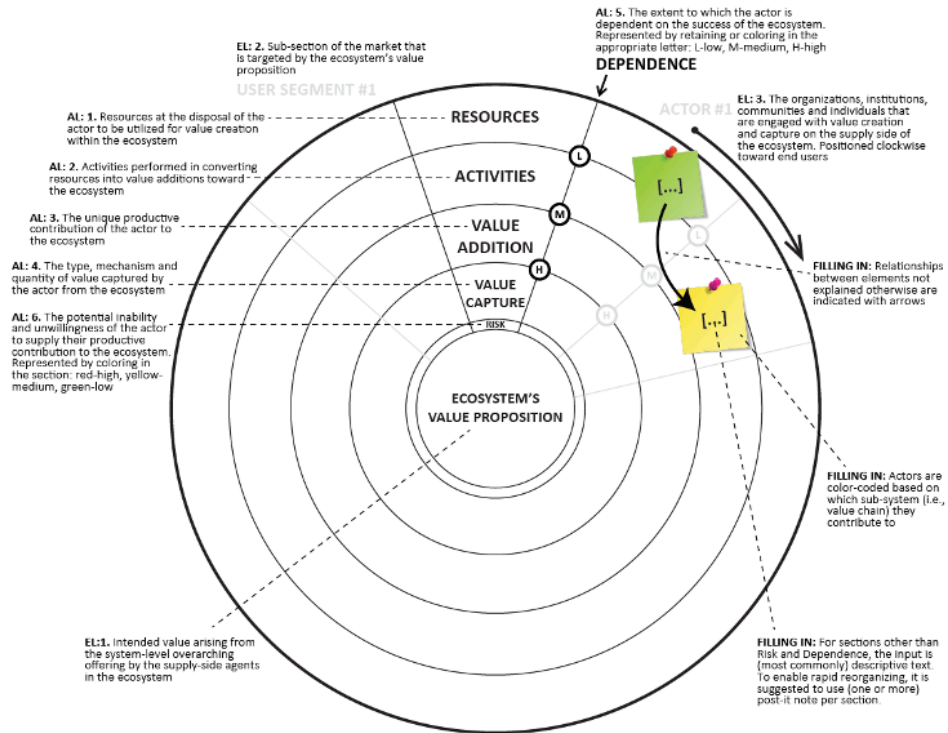


Figure 2. EPM-model

## Appendix B



Figure 3. EPM-Model

## Appendix C

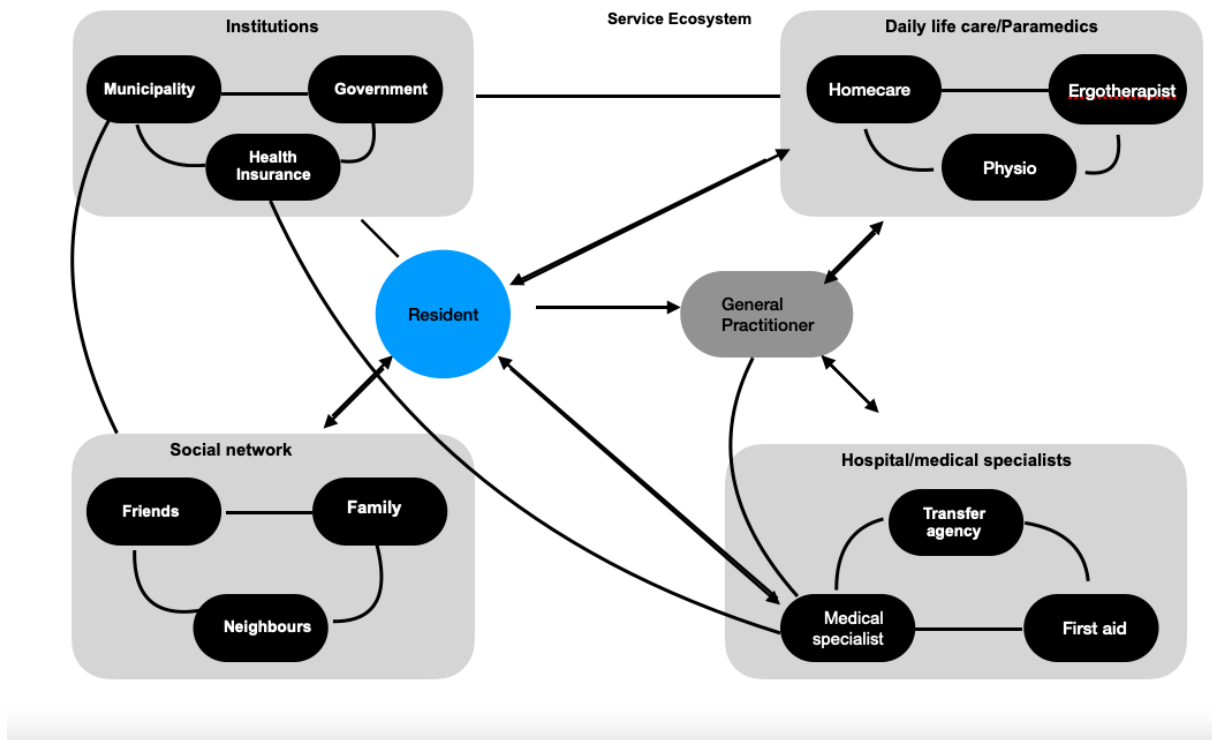


Figure 4. Service ecosystem



### Appendix D

Cluster	Actor	Description	Core activities	Illustrative quotes
Institutions	Municipality	Local level of government	<ul style="list-style-type: none"> <li>Responsible for long-term care services and youth care. Since the decentralization of care, it is up to the municipalities themselves to decide what to do with the money they receive from the government. It is therefore up to the municipality how these available funds are spent and what the resident gets in return.</li> </ul>	<p><i>"If we organize this closer to the municipality, we get a much better picture of how the network works, what options are available and work more preventively."</i> (Interview municipality, 2022). Referring to the offering care closer to the resident.</p>
	Government	National level of government	<ul style="list-style-type: none"> <li>Overall responsibility. Responsible for financing the healthcare, monitoring access, quality, and costs.</li> <li>The government makes money available to the regional authorities/municipalities that they can then spend on care and welfare</li> </ul>	
	Health insurance	Institute responsible for provision of care	<ul style="list-style-type: none"> <li>Buying care for their insurers and making arrangements with healthcare providers.</li> <li>Health insurers purchase care from a hospital, which can then be used by the people who are affiliated with this insurer and who need this care</li> </ul>	<p><i>"Health insurers are not looking for prevention to pay for this. Because the scoring moment is often later."</i> (Interview GP, 2021). Referring to that insurers do not focus on the prevention of care but are only there to help with existing health problems.</p>

### Appendix E

Cluster	Actor	Description	Core activities	Illustrative quotes
Social network	Family	Family of the patient/client	<ul style="list-style-type: none"> <li>Responsible for influencing the lifestyle of a person and providing informal care.</li> </ul>	<p><i>"...if they have children and family around them, they are fine, but if nothing comes along or if they have nothing to do, they need to be very stimulated." (Interview Buurtzorg, 2022)</i></p>
	Friends	Friends of the patient/client	<ul style="list-style-type: none"> <li>Responsible for influencing the lifestyle of a person and providing informal care.</li> </ul>	<p><i>"...it indeed has to do with your social context whether you need that professional help or not." (Interview pediatric nurse, 2022)</i></p>
	Neighbors	People living next to the patient/client.	<ul style="list-style-type: none"> <li>Providing informal care.</li> </ul>	<p><i>"...it indeed has to do with your social context whether you need that professional help or not." (Interview pediatric nurse, 2022)</i></p>

## Appendix F

Cluster	Actor	Description	Core activities	Illustrative quotes
Hospital/medical specialists	Transfer agency	The transfer agency is a special department in the hospital, responsible for the throughput of patients.	<ul style="list-style-type: none"> <li>Assessment of patient in the hospital who are able to be released.</li> <li>Assess whether a person is able to return home or another place where he/she can receive the care that will be needed.</li> <li>They also have contact with homecare when their care is needed.</li> </ul>	<i>"Everything related to the demand for care runs through this central point." (Interview transfer agency, 2021)</i>
	Medical specialists	The range of medical specialists within the hospital, varying from pediatrician to an internist.	<ul style="list-style-type: none"> <li>To provide more complex care which cannot be provided by the GP or other caregivers. Patients will be referred to hospital when more difficult procedures need to be performed</li> </ul>	<i>"So high-volume, low-complexity care really doesn't belong in Rijnstate." (Interview Internist, 2022). Referring to the fact that only low volume, highly complex care belongs in the hospital.</i>
	First aid	Where urgent care will be conducted.	<ul style="list-style-type: none"> <li>The first aid operates in order of urgency. First aid receives and accompanies these patients who come to the hospital themselves or who have been transported by ambulance.</li> <li>They treat all kinds of injuries, from minor to major.</li> </ul>	

### Appendix G

Cluster	Actor	Description	Core activities	Illustrative quotes
Daily life care/ Paramedics	GP	Gatekeeper function in the healthcare system. Is the first person in the patient journey.	<ul style="list-style-type: none"> <li>• Has a gatekeeping function in the patient journey. When people have complaints, they are the first to report to the general practitioner.</li> <li>• The care process for the resident starts from here.</li> <li>• The GP will then look at which steps are necessary in terms of care.</li> <li>• The general practitioner will then see whether he can provide the care himself or whether a referral must be made to another care provider or medical specialist.</li> </ul>	<p><i>"...that general practitioner care will absorb a larger part of the care because they will take care of the high volume of low-complex care." (Interview internist, 2022).</i></p>
	Homecare	Organization focused on providing care at people's homes.	<ul style="list-style-type: none"> <li>• Homecare is specialized in the care of people at home. This care is often requested from the transfer agency or the general practitioner, varying in severity, necessity, and amount. The care tasks often include nursing care tasks. The care ranges from helping with dressing to palliative care.</li> </ul>	<p><i>"...Varying from starting people in the morning, medication, wound care, medication, piece of guidance, social and emotional, GP consultation, family consultation. But always with the consent of the client." (Interview Buurtzorg, 2022)</i></p>
	Physiotherapist	Care provider focused on movement problems.	<ul style="list-style-type: none"> <li>• Physiotherapists are health care providers who specialize in muscles and joints. The care therefore focuses mainly on the treatment of movement problems. The physical therapist has a good picture of the patient's daily life because this can influence the type of problem that the patient has.</li> <li>• In addition to just treating, the physiotherapist also has an important monitoring function.</li> </ul>	<p><i>"We have a dashboard... so you can see where the complaints are. And one of the codes therefore ends with muscle/tendon phasia, and that code actually becomes the most important, both in our practice, regionally and nationally. most commonly used. So those kinds of complaints are the most common..." (Interview physiotherapist, 2021)</i></p>