FACILITATING THE EMERGENCE AND DEVELOPMENT OF ENGAGEMENT NETWORKS IN URBAN SURROUNDINGS

Astrid Mangs, Aalto University, School of Business, astrid.mangs@aalto.fi
Terhi Väistö, Aalto University, School of Business, terhi.vaisto@aalto.fi
Jessica Karhu, School of Engineering, jessica.karhu@aalto.fi
Arto Rajala, Aalto University, School of Business, arto.rajala@aalto.fi
Renita Niemi, School of Engineering, renita.niemi@aalto.fi

Abstract:

This work in progress paper discusses how the emergence and development of partnerships and networks can facilitate and enhance urban development. Our aim is to construct a conceptual framework, which draws its elements from network theory, urban development-theory and the so-called 5 Cs model. The empirical focus lies on the development of an urban district, Keilaniemi in the city of Espoo (which is part of Helsinki Metropolitan Area, in Finland). The urban development case is an infill project where a current office district is planned to be transformed into a district with a very heterogeneous mix of users as well as usages, including both domestic and international residents, service providers, students, employees, companies etc. The empirical study is conducted mainly by using a set of qualitative methods such as individual and focus group interviews, observations, map based surveys, and user journey-questionnaires.

The ultimate aim of this study is to construct a model for an urban planning development platform on which regional service and user networks and groups can grow and develop so that a strong sense of community can emerge. Specific allocated activity spaces, easily available services, and seamless safety and security are all necessary characteristics for such an urban region to blossom.

Keywords: Networks, Network management, 5 Cs, Urban Development, Sense of Community

Work-in-Progress-Paper

INTRODUCTION

Partnerships and networks are increasingly used to bring new and fresh ideas as well as user perspective in different types of innovation processes. This kind of collaboration is manifested for example through Public Private People Partnership (PPPP) (Majamaa, 2008) and several open innovation-related concepts such as Living Labs (Leminen and Westerlund, 2012). This approach to collaboration is recognized for example when planning urban areas where the early engagement of different actors such as existing and incoming inhabitants as well as other prospective players is a growing trend. This work-in-progress paper strives to understand the elements and drivers that facilitate the emergence and growth of networks in urban surroundings. More specifically, we are interested in a network consisting of multiple interest groups that enable the emergence and growth of a vibrant area and impact the sense of community within the area. This includes a very diverse mix of actors, such as all users of the area (both individuals residing, working or visiting the area and public and private actors). In addition, we look at the ways urban development influences the network and sense of community.

Urban sprawl and urban densification are hot topics at the moment. There is a clear demand for innovational ideas on sustainable planning and on the development of urban surroundings. For example, many Finnish cities strive to build sustainable communities using new, innovational solutions (Valovirta, et al., 2011). This is also the case in Espoo, Finland, where an office district called Keilaniemi[1] is being developed. Keilaniemi is an area traditionally occupied by large Finnish and multinational companies, which is now to become more diversified by building apartment buildings. Thus, the area will become very heterogeneous, both regarding users and uses. The development of heterogeneous areas (both when it comes to type of use and mix of users) are encouraged, as they are perceived more lively, safe and prone to facilitate the emergence of a sense of community. Among others, Saville and Cleveland (1998), suggest focusing on developing smaller neighborhoods, where residents live, work, socialize and interact with other users within the neighborhood.

This study is especially interested in ways to enhance an urban sense of community. A sense of community can be seen to be all about belonging (Hautamäki, et al., 2005: 10). Kumpulainen (2004) pictures sense of community as a situation where an individual feels connected to another individual or a group, within which the actors interact. To this definition Korpinen (2008) adds the individual's possibility to make a difference, their sense of being of value as well as their sense of belonging, i.e. of not being alone. According to THL (the National Institute for Health and Welfare), a sense of community includes several other social and infrastructural aspects as well, such as the physical area or building, developing and maintaining relationships as well as the ability to impact ones surroundings.

Sense of community can be extended to exist in a neighborhood, a district or even a city. Building a regional sense of community is a lengthy process that includes the users' and outsiders' perception of the area as well as the image and the attractiveness of the area. According to Lehtonen (2010), a flexible urban structure can be seen to strengthen and facilitate the development of a sense of community. Although more and more effort is put into developing urban sense of community, it is important to remember, that every member of a community first

[1] Keilaniemi is situated just 7 km west of Helsinki city centre.

is an individual, and only after that part of a community. In addition, many of today's individuals are simultaneously members of several communities.

This study focuses strongly on the user (in this case the user of the target area), as user centricity is a vital part of building a sense of community (Kumpulainen, 2004) as well as of any network (Toivonen and Tuominen, 2009). The users of the area, and thus the members of the community (and actors in the network) in this study are defined as those living, working and visiting the area. In addition the users include non-human actors such as companies with headquarters and those providing services in the area.

THEORETICAL BACKGROUND

In exploring the drivers facilitating the emergence and growth of engagement networks in urban surroundings we focus on three theoretical approaches: network theory, urban development, and the so-called 5C's model. The literature analysis of the different approaches functions as the base for the case study.

Networks and network management

All networks consist of actors (Håkansson and Ford, 2002; Thorelli, 1986) that are linked to each other through complex interactions, through which mutual trust slowly is built (Gulati and Gargiulo, 1999). The term actor includes for profit and non-profit organizations, the public sector, the authorities, and individuals such as the users (Håkansson, 2006; Peppard and Rylander, 2006; Parolini, 1999). These ongoing interactions form relationships between the actors (Batt and Purchase, 2004; Ford et. al., 2006: 18; Holmlund and Törnroos, 1997; Thorelli, 1986). The relationships within the networks are interdependent, as every actors and relationships actions affects the other actors and relationships in the network (Ritter, Wilkinson and Johnston, 2004; Håkansson and Snehota, 1995: 25). In short, the actors build networks of relationships that are based on mutual trust through *interaction, participation, cooperation* and *co-creation* (Mangs and Nykänen, 2012).

Every actor, that is part of a network, influences and is influenced by the network (Solitander and Tidström, 2010; Håkansson and Ford, 2002; Parolini, 1999). Developing and maintaining cooperative networks is challenging, as it necessitates mutual investments from all involved actors as well as time and effort for the network to evolve (Wilkinson and Young, 2002). Ongoing communication and interaction between the actors are essential in every network (Ritter et al., 2004), as all interactions between the actors either can strengthen or weaken the relationships within the network (Håkansson and Ford, 2002). Ballantyne (2004) sees open and honest communication and through that the building of mutual knowledge as prerequisites for the emerging of mutual trust in a network. Trust is an essential part of networking, as it in addition to personal relationships can be seen as a prerequisite for successful networks. Batt and Purchase (2004) go as far as to question the existence of a network if the trust between the actors is lacking.

There are many advantages in being part of a network. It is among other aspects seen as a way to gain competitive advantage in relation to competitors (Gulati, Nohria and Zaheer, 2000), as networks bring actors together so that they can achieve the best possible outcome by combining

their resources (Håkansson and Snehota, 2006). Being part of a network often entails advantages that can be difficult to obtain alone, such as the possibility to gain access to contacts, organizations and resources such as knowledge, know how and markets as well as co-create resources and value (Ritter et al., 2004). Therefore, being part of a network allows the actor to gain important resources from its environment, such as *information, access, capital goods, services* and *relationships*.

A network often needs to be managed or at least coordinated by a network manager. The way a network is managed depends on its characteristics, actors, goals etc. (Kenis and Provan, 2006). There are several schools on the manageability of networks, ranging from networks being easily controlled and managed to networks never being controllable or manageable by a single actor. This study follows the view of Wilkinson and Young (2002), who state that no actor can fully dominate a network. Kenis and Provan (2006) consider the role of a network manager to be all about coordinating the activities (Kenis and Provan, 2006), so that the network is managed in a collaborative, non-hierarchical way (Agranoff, 2006). This study advocates that actors work as part of the network, instead of striving to control the network (Håkansson and Ford, 2002). In other words, the actors should focus on managing the interactions with each other instead of trying to manage each other (Ritter et al., 2004). This involves seeing the network manager as a coordinator, inspirer, participator, co-creator and knowledge sharer within the network (Wilkinson and Young, 2002).

Urban planning, development and sustainability

Urban development is a major enabler of sense of community, innovations and sustainability, and the influence of urban planning and urban development on networks as well as on the growth of a sense of community within an area is substantial. According to Pol (2002), sustainability is not possible without a well-established social fabric that allows people to recognize themselves as a group or as a community sharing prototypical features and having achieved certain levels of social cohesion. We call that identity. Pol assumed that in some cases, the urban quality of a place might help in the construction of a person's identity. He writes that any environmental intervention will affect not only the physical structure or the available resources but also that the direct and indirect interventions will alter the relationships of interdependence between people and groups, social cohesion, identity, identification, and the ways in which people and groups perceive the place to be their own or alien to them. According to him, environmental intervention may alter environmental attitudes, and lead to more ecologically responsible behavior to the achievement of sustainable development. (Pol, 2002)

According to Heinonen and Ratvio (2007), it is possible to support the identity of the housing area by improving the physical, functional and social environment, which is an important element when creating a sense of urban community. Even if it is not possible to solve the social problems by improving the physical environment it is possible to prevent the social segregation by taking care of the maintenance of housing. Inhabitants may be very much aware of a neighborhood's social problems but it does not necessary lead to an elimination of the problems if inhabitants are content with the environment and the services. In addition, the quality of the housing environment is a crucial competitive edge in the competition between areas.

Pol argues that every city is different, and that each city therefore must find its own road towards

sustainability (Pol, 2002). In Finland, legislation gives a significant autonomy to cities when it comes to planning and developing their own areas. The planning bureaucracies differ, and some cities are more open to co-operation with stakeholder than others. According to the legislation, the hearing procedure of stakeholders and inhabitants is obligatory in Finland, but cities use the possibilities of real co-planning in very different ways.

The specific development process (Keilaniemi) studied in this case strives to include all important actors in the urban planning and development process. This makes the case especially interesting from a network and urban development perspective. So far, there are not many examples available of this kind of an urban planning concept. Our understanding of how these kinds of best practice models can be implemented and scaled up is very limited at the moment. However, we have examples where municipal city planners are planning housing areas together with inhabitants. In addition, we have considerable amounts of research studies in Finland that aim at building an understanding of why this co-planning between inhabitants and municipal planners does not lead to successful planning projects but to compromises that merely fulfill the demands of high-quality built environments (Staffans, 2004). The main reason seems to be that the traditional planning process does not allow the inhabitants' wishes and knowledge to really affect the planning- and decision-making process. Therefore, this new innovative mindset of the municipality and the other actors in the case area is encouraging when striving to achieve a real change in today's hierarchical planning routines.

The 5 Cs model

In order to apply the network perspective into the urban planning process, we introduce the so-called 5 Cs model. The 5 Cs are developed by Professor John Worthington and are based on his extensive experience in urban design. The model offers a robust framework to structure thinking, and can be used to deepen the understanding of different factors that affect urban networking and to define the serviceability of an area. Originally, these five themes were developed and used in the Learning Cities Platform (Worthington, 2012) for managing urban change in places, and for learning from major inner city restructuring projects for the successful management of structural change.

In this paper we focus on areal characteristics by focusing on the five elements of the model (the 5 Cs): changing, connecting, communicating, collaborating, and controlling. The areal characteristics, is a factor that together with strategic intention and emergence form the serviceability of an area. It is important to notice that our focus is on activity-based urban development rather than on the shift from one stable solution to an updated version. Each of the five elements in the 5 Cs model is presented in more detail in Table 1.

Table 1: The 5 Cs Model (based on Worthington, 2012)

5 Cs elements	Content
Changing	Change is often a rather slowly evolving phenomenon, which consists of different phases and sequences. The main question is how to manage the speed, disruption, and the uncertainty of change, such as the unpredictable changes in politics, economics, and

	technologies. For example involving people in early phases of the development process decreases the unwillingness to change, while flexibility and resilience are capabilities that aid in recovering from change.
Connecting	In order to connect people, places and every day practices and businesses, we need to understand physical and perceptual connection. Connectivity is the capability to connect the physical environment as well as the connection between different communities with the help of for example social media and urban networks. Connectivity is noticed as a flow of interactional networks, transportation networks (e.g. roads, streets pipes, aqueducts, power lines) and nearly any structure, which permits either vehicular movement or flow of some commodity or people.
Communicating	Communication is the capability to interact with different people for which a city offers a platform. Communication is about sending a message and interacting with others. Communication can raise awareness and change perceptions to support cultural, behavioral and physical change. The city can and should strive to offer a platform that enables and facilitates communication.
Collaborating	Collaboration is the capability to collaborate informally and formally. The partnerships in regional development projects are in public and/ or private sectors, which for instance helps in sharing resources. Collaboration should not be seen as a restrictive practice; the best way is creatively balancing conflicting interests. Collaboration is all about working across different scales, interests, functions and cultures, which help to build up an urban sense of community.
Controlling	Controlling is a continuous management process, which has a forward-looking attitude. Controlling is a balance between creating and reinforcing the vision and mission and managing the process of change through a combination of regulatory controls and behavior.

In order to assess areal serviceability we need to know the history, the current and future status, and even the vision of the urban development. General urban characteristics, atmosphere and image are relevant when assessing communication. Connecting is physical, social and virtual accessibility, features and use of street and traffic networks and areas. Controlling has a forward-looking attitude and is crucial in transforming processes. The five C's (changing, connecting, communicating, collaborating, and controlling) helps structure the material at hand but it definitely needs support material, such as quantitative facts and figures in order to make more tangible analyses and to allow comparison between different approaches.

Cities are seen as self-regulating systems that are in continuous flux, adapting to the changing environmental, political, economic and social context (Worthington et al. 2012). The five C's fits best in analyzing open-ended projects spread over time, within which defined projects with clear goals, budgets and deadlines could be identified. Nevertheless the approach is also scalable in city and district scales and particularly in observing certain everyday practices.

THEORETICAL FRAMEWORK

Involving the right actors in urban development networks is vital. This study considers the users to have a key role in these networks (Möller and Svahn, 2003; Bovet and Martha, 2000), and see

them as value co-creating actors within a network (Lusch et. al., 2010; Parolini, 1999). The involvement of users and other important actors is crucial to ensure the usability of a good or a service. The importance is especially clear in urban development networks, as the development of an area, however groundbreaking and sustainable, cannot be viewed successful if it is not enjoyed, shared, and used by its users. The users include residents, employees, visitors, guests, service providers, the municipality and all other current and future actors that will frequent the area.

On the basis of the previous discussion concerning network approach, urban planning, and the 5 Cs model we have constructed a framework to introduce how 'engagement' networks can be used to energize the urban planning and development processes. The framework is presented in Figure 1 below.

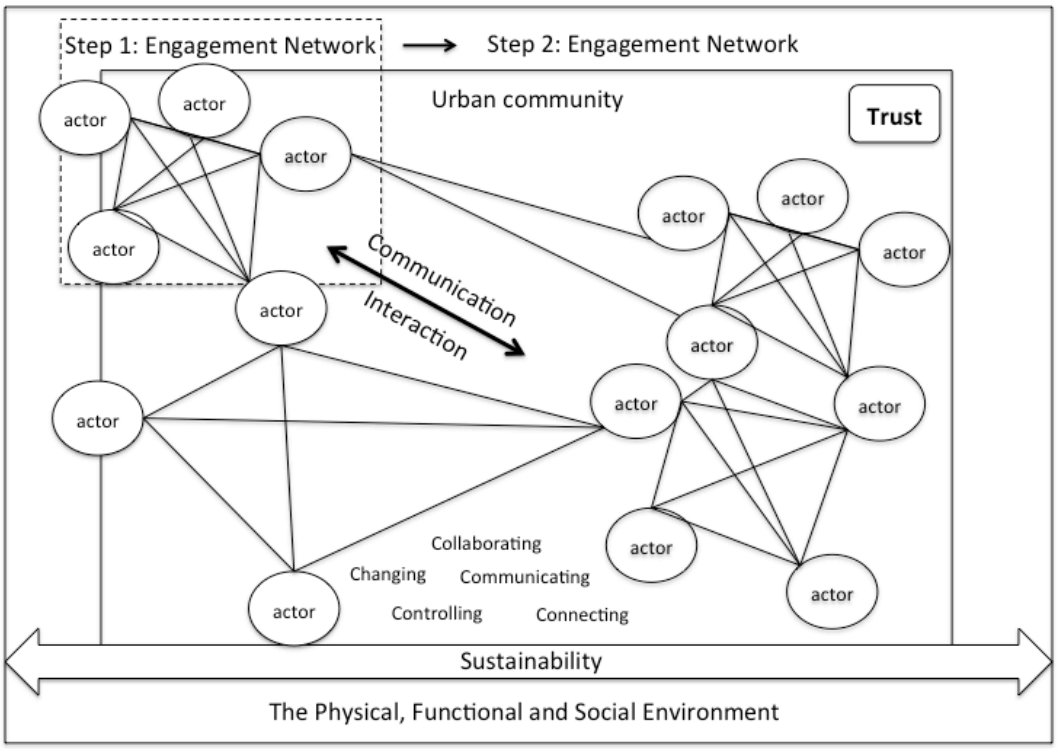

Figure 1: Theoretical Framework: Engagement Networks in an Urban Surrounding

Figure 1 depicts the importance of all types of networks in urban development and urban communities, in addition to acknowledging that any intentionally formed network only can function as a facilitator of the emergence of an urban sense of community. The facilitating network functions as an engagement network that strives to engage and inspire different actors to take part in the urban development process (step 1). The aim is, that the role of the engagement network ultimately will include not only the facilitating network, but all involved actors and networks, as they keep engaging and including new actors in the constant development of the urban setting.

Involving the necessary actors, and developing a sustainable, sense of community enhancing urban area, can be facilitated by considering the 5 Cs as part of the urban development process.

Serviceability is an essential part of a vital neighborhood that invites to spend time in the form of both work and leisure. Thus, high serviceability needs to be considered as one of the main drivers for successful urban planning. Consequently, this vibrant feel in addition to the availability of open space is a major facilitator of the emergence and strengthening of an urban sense of community.

METHODOLOGY

Our empirical study is conducted as an embedded single case study, where several cases within the main case are analyzed, as it is seen to enhance the insights of the main case (Yin, 2009: 11,19, 46-53). We follow the thoughts of Dyer and Wilkins (1991), who state that the essence of case studies is the careful study of a single case, and Yin (2009: 146-147), who supports the use of single-case design when focusing on a unique case, such as that of Keilaniemi area.

Case study research can use a wide range of methods for collecting data (Gummesson, 1991: 73), or a combination of different methods (Yin, 2009: 11). Our study uses triangulation, i.e. a combination of different methods and data sets (Saunders et al., 2007:139), as it commonly is thought to raise the quality of the research (Patton, 2002: 247; Silverman, 2006: 18-20; Yin, 2009: 2, 114-116) as well as the reliability of the results (Gummesson, 1991: 22). The study will mainly use qualitative methods of data collection, as they often are seen to provide a deeper understanding of complex interrelationships of the case at hand (Stake, 1995: 37). In our study the empirical data comprise:

- Open-ended interviews with both focus groups and one-on-one interviews (Patton, 2002: 342-347: 385-386),
- Casual observation (Yin, 2009: 109), where the respondents are observed in their daily activities during short interviews,
- Map based surveys using Soft-GIS (see e.g. Kyttä and Kahila, 2011),
- User journey-questionnaires (Rasila, Nenonen and Kärnä, 2013) that mainly consist of open questions, and
- The use of existing data.

All respondents will be chosen through purposeful sampling, where the respondents are chosen based on their knowledge of the subject or their involvement in the case (Patton, 2002: 230-243). The primary data will mainly be collected between June-September 2013.

CASE KEILANIEMI

This chapter presents our empirical case and its context. The presentation of the case is two-parted. First a short summary of the background of the case (Keilaniemi) will be given, after which the network characteristics of the case will be presented by using the ARA model (Håkansson and Ford, 2002). Unfortunately, we are not yet able to present results of the case study since the data collection is still going on when writing this work-in-progress paper.

Background

The present study is part of a larger research program called Energizing Urban Ecosystems (EUE). The program focuses on collaborative and multidisciplinary research with actors from

very different fields, as well as urban development through strong, active public-private-people-partnerships. The focus lies on developing combinations of urban working and living, with the aim to make the urban ecosystem more energetic, active and lively as well as more responsive to change. The program is financed by Tekes (the Finnish Funding Agency for Innovation and Technology), Aalto University, and ten companies and organizations involved in the development of the T3 area.

This case study focuses on the development of Keilaniemi district in the city of Espoo, Finland, as part of the T3 area, where the three different districts all have different images and different focuses; science, art and economy (fin. tiede, taide, talous). The areas are *Otaniemi* (science), where among others VTT Technical Research Centre of Finland, the main campus of Aalto University and Laurea University of Applied Sciences are situated, *Tapiola* (art), which is seen as the main cultural center of Espoo, and *Keilaniemi* (economy), which at the moment is a business district with the headquarters of internationally well-known Finnish corporations such as Nokia, Kone, Fortum and Rovio.

Keilaniemi area is at the moment a pure office district, where residential buildings as well as a wide set of services are being planned, with the goal of facilitating the district in becoming a lively, vibrant part of the City of Espoo (and Helsinki metropolitan area). The current situation of the area is often described as being a 9 to 5 kind of area, where people come to work, but leave directly after the workday is over. The aim is to develop the area into a neighborhood, where people choose to spend time outside of office hours. The area will change radically over the next years as residential high-rises are being built in the area, the western extension of Helsinki metro line will reach the area, the main road Karhusaarentie is developed and decked, and the pool of users changes.

Networks and relationships

The case will be presented through three elements that are seen to tie a relationship together: *activities, resources* and *actors*. These elements form the ARA-model. Recurring interactions between *actors* develop a relationship that is beneficial and mutually committing for all involved actors. This relationship leads to shared knowledge and learning from each other. The relationship also influences the used resources as well as how the resources are used. These resources can include human capital, financial means, property, image or even other relationships. Relationships between actors facilitate the access to and sharing, developing and acquisition of the resources. The constantly transforming and evolving activities involve transactions between actors in a relationship that strengthen the links between the actors. (Ford et al., 2003: 39-40; Håkansson and Snehota, 1995; 25-32) The three elements are linked to and dependent on each other.

A relationship is developed when the actors share a mutual interest in the development (Håkansson and Snehota, 1995; 25-27). Our case consists of a network of relationships that includes very different actors. The network is constantly changing and evolving. At the moment the EUE network that is focused on the development of the area consists of a very diverse set of actors, including several actors from private sector, the University and the local municipality, the City of Espoo. The actors from the private sector include consultants (e.g. Rambol), construction companies (e.g. SRV), industrial companies (Nokia, Kone, Fortum etc.). The

university members include researchers and students from Aalto University. Therefore, the actors include practitioners and researchers, individuals with fresh, new ideas and others with solid experience. All actors have their interests and roles within the network, and have both close and more distant relationships with the other actors.

The actors that at the moment are part of the network all bring their core knowledge and their means to the project with the intent to develop a new type of urban living and through that a competitive edge in cooperation with the other actors. The resources are combined to develop new, innovative activities in the area that is seen as a Living Lab, where urban innovations will be demonstrated and tested to reach the best possible solution. A practical example of how the interaction, participation, cooperation and co-creation between the actors of the network, as well as potential new actors that might be interested in the joining the network, is facilitated is the open collaboration platform Urban Mill. Situated in an old mill, the building is open for everyone, and the work of the network is on display for anyone to see and use.

The ultimate purpose of our empirical study is to uncover the role of different actors in the engagement networks as well as the activities and the resources needed to develop an energizing urban environment that creates new scalable and sustainable urban innovations with a high level of serviceability. This includes finding ways of engaging the actors and facilitating the emergence of a strong sense of urban community.

DISCUSSION

This study will continue researching the emergence and evolving of partnerships and networks in urban development and the urban sense of community in a long-term research program (EUE). In the near future, our case, the urban area of Keilaniemi, is expected to develop into a vibrant, innovative and heterogeneous metropolitan neighborhood. This discussion is based on our very preliminary empirical results and expected findings.

Although our research project only has been going on for one year, some actors have already left and new actors have joined the development network. A particular actor that until now has had a very marginal role in the network, the user, has a key role in networks (Möller and Svahn, 2003; Bovet and Martha, 2000; Parolini, 1999), and is seen as a key player in the development of Keilaniemi. Involving the end-user in the process has, however, at the moment only partly succeeded and ways to facilitate the involvement is constantly searched, as one of the goals is to facilitate the emergence of a strong urban community through the engagement network.

We expect, that the engagement network that is developing the district only can facilitate the development of the different networks in the region. Building a platform on which the lively and diverse area can grow, change and become unique can facilitate this. Whether or not the development will be successful is up to the engagement network that includes all networks that are active in the area (see figure 1 explaining the theoretical framework). What the platform should look like and how the emergence of networks can be facilitated will be studied as the project progresses and the district begins to form. For example, the very first weak signals from our empirical study indicate that a concrete concept for service architecture needs to be developed in order to enhance the serviceability of the urban area under study.

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