

### **3 THE SPATIAL EMBEDDEDNESS OF NETWORKS FOR WOMEN ENTREPRENEURS**

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#### **1. Introduction**

Unlike well established firms, new businesses have to build up their resource base and gain legitimacy in the market. Here, networks provide access to opportunities and resources such as local contacts to customers and suppliers, information on potential business partners as well as advice and mentoring from established entrepreneurs. Some research has shown an association between successful entrepreneurship and involvement in networking activity (e.g. Birley et al., 1991; Brüderl and Preisendörfer, 1998; Chell and Baines 1998; Jenssen, 2001). With respect to women entrepreneurship, social capital can take on additional importance, since it can contribute to entrepreneurial confidence, thus assisting women entrepreneurs in overcoming resource barriers.

So far, most entrepreneurship research has studied networks and their role in fostering (female) entrepreneurship and firm growth from the perspective of the entrepreneur and/or from a cultural viewpoint (e.g., Havnes and Senneeth, 2001; Dodd and Patra, 2002; Lechner and Dowling, 2003), while research from regional sciences mainly focused on success factors for regional innovative milieus. There still seems to be 'less concern with networking between institutions that form the infrastructure and support environment that is crucial to successful development', as already noted by Deakins and Philpott in 1995 (p. 47). Only a few studies concentrate on the links between entrepreneurs' networks and the local and regional institutional support structure for the creation of new firms (e.g., Nilsson, 1997), although one might assume that this is to be one of the ingredients in developing 'entrepreneurial' regions.

In this context, the paper investigates the spatial embeddedness of networks for and of women entrepreneurs, with a particular emphasis on the emergence of networks and cooperation between networks. The paper concentrates on the institutional 'formal' network structure of a region, which includes public, semi-public and private support networks, voluntary (women) entrepreneurs' networks as well as professional associations and networks generally aimed at women. In particular, we are interested in the development of networks over

time, relationships, and interactions between different types of networks and support structures, the spatial characteristics of different types of networks, and, finally, possible implications for developing regional milieus which foster entrepreneurship. More specific research questions include: Which local/regional actors are involved in fostering (women) entrepreneurship? Which role do they play? How did networks and network cooperation evolve over time? Which relations exist between women (entrepreneurs) networks and (semi-)public or private support networks in terms of formality and intensity? Which factors influence inter-organizational cooperation? What are the lessons for fostering an entrepreneurial local climate in different urban settings?

This chapter consists of four parts. The first part contains a conceptual review, followed by a short description of the methodology and the two sample areas. The empirical results will be presented in part three, while part four discusses conclusions and implications.

## **2. Conceptual Review: Networks and (Women) Entrepreneurship in Different Regional Settings**

### **2.1 Overview of Current Research on Networks, Networking and (Women) Entrepreneurship**

Most current network research focuses on networks and networking from an individual perspective. Networks can be understood as ‘a configuration of firms, owner-managers, support agencies, voluntary associations, and other bodies through which small firms connect to the wider economy’ (Curran et al., 1995). With regard to women entrepreneurs, gender differences in network structure and networking behavior may influence both the decision to start and to develop a business as well as business survival and success (Carter et al., 2001). Some research indicates gender-specific deficits in networking contacts of female entrepreneurs. For example, Allen (2000) reports women networks as including fewer entrepreneurs, which might restrict their outreach and usefulness for a female entrepreneur. Other studies report women entrepreneurs’ networks as more homogeneous (e.g., Renzulli et al., 1999) and less outreaching, less frequent network activities of women entrepreneurs (e.g., Carter et al. 2001, Caputo and Dolinsky, 1998; Schutjens and Stam, 2003) and a tendency for women entrepreneurs to concentrate on strong ties (e.g., Döbler, 1998).

Yet another strand of research emphasizes the quality of informal networking ties, including marriage and the extended family, as the decisive factor in facilitating or constraining female entrepreneurship. Renzulli et al. (1999) indicate that gender does not matter, but a greater proportion of kin in female networks which could create a disadvantage to entering entrepreneurship. In

addition, Brüderl/Preisendörfer (1998) found support from strong tie networks, especially family support, as a decisive factor on business success. On the whole, results are sparse. While gender differences in network structures appear to be an accepted empirical result contributing to differences in women entrepreneurship, the results on network contents and network frequency are not conclusive, leading McManus (2001) to raise the point that research still has to prove empirically the facilitating effect of networks and networking towards entrepreneurship.

Overall, many research studies have demonstrated that networks and network contacts are important during the establishment, development and growth of business (e.g. Birley et al., 1991, Brüderl/Preisendörfer 1998, Chell and Baines 1998). Social networks play a role in mobilizing complementary resources, getting support and help, and establishing viable business relations. For example, Jenssen (2001) analyzes the impact of social networks on start-up success, demonstrating that social networks have both a direct and an indirect effect on the degree of start-up success. This especially applies to the number of initial weak ties and emerging strong ties. Here, micro enterprises might experience disadvantages due to limited time resources of their owners, as indicated by low participation rates in social networking (Katz and Williams, 1997, 195, Curran and Blackburn, 1994, 171).

Although most empirical studies confirm a link between networking and positive business development, the evidence is not conclusive whether strong ties or weak ties matter the most. In their review on network studies, Hoang and Antoncic (2003) conclude that the respective outcome seems to depend on the operationalization of network variables to a large extent.

## 2.2 Network Emergence and Network Actors

Why do networks emerge? Transaction cost theory provides one answer. In the case of entrepreneur's networks, the individual (nascent) entrepreneur seeks to reduce risks, uncertainties, and information costs connected with business formation and development through the interaction with like-minded people. Networks emerge in situations where the costs of participating in a network are lower compared to the benefits of the membership. Moreover, entrepreneurship research indicates that it is not only transactions costs which matter for network emergence but also properties inherent in social capital (Anderson and Jack, 2003), such as affinities, communalities and joint interests.

Only a few studies so far have researched the *emergence of networks* (e.g., Human and Provan, 2000; Neergaard, 1998; Sarasvathy and Dew, 2003), mainly focusing on network relations between entrepreneurs. With regard to how new networks may be initiated, Sarasvathy and Dew (2003) suggest a simple typology: Networks either emerge spontaneously and through random

chance (also Neergaard, 1998); they may form in “some path dependent fashion” (Sarasvathy and Dew, 2003, 13), or they result from deliberate actions of an existing network.

Similar to new businesses, networks also need to acquire legitimacy. In a ‘pre-phase’ of network development, those interested in creating a network start developing common interests and objectives, thus, legitimating their need for networking (Human and Provan, 2000). In this phase, individual interests and objectives dominate, determining who may join the network and the network’s internal identity (Sarasvathy and Dew, 2003). Human and Provan (2000) found that during the formation phase networks mainly rely on two strategies, namely an internal-external oriented strategy and vice versa. The former appears to be more successful in early stages of network emergence, as it focuses on creating internal legitimacy and functioning organization structures without neglecting external stakeholders. In comparison, an external-internal oriented strategy concentrates on external stakeholders in searching for legitimacy, and it neglects building up the network’s identity and functioning working structures.

Networks are initiated and driven by persons; and recent research studies emphasize the role(s) *network promoters play in network emergence and development* (Axelsson and Larsson, 2002; Koch 2003, Koch et al., 2003). In a study on network structures in Gnosjö, a Swedish industrial district, Axelsson and Larsson (2002) identified typical forms of networks, all of which are based on the different roles network actors play: The ‘locomotive-driven network’ is one which is initiated and dominated by one actor, while a ‘joint umbrella’ describes a network structure which is driven by members and their joint interests. Referring to research by Miles et al. (1992), the authors emphasize three key actors for networks to be successful: the ‘architect’ brings in a vision for the network and is capable of structuring the network along these lines; the ‘lead operator’ fulfils a bonding function within the network; and the ‘caretaker’ focuses on developing and improving the network (Axelsson and Larsson, 2002, 98).

Applying the concept of innovation promoters, Koch et al. (2003) showed that actors within networks often act as process and relationship promoters, which implicitly refers back to the ideas presented by Miles et al. (1992, cited in Axelsson and Larsson, 2002) and Axelsson and Larsson (2002). The authors, furthermore, demonstrate that different promoter roles and network positions go hand in hand. For example, relationship promoters often had a full time job and a central position within the network. In this context, the works on the creative milieu suggest that high communicators play an important role for network development. High communicators are individuals at the decision making level in several public and private organizations. They play a central role in transmitting information, speeding up decision-making, and fostering inter-organizational linkages (Fromhold-Eisebith, 1995, 38). Such key individuals contribute to the development of ‘institutional thickness’ by bringing

in local knowledge and the ability to access and link local capacity at different levels (Malecki, 1997, 91 with reference to Amin and Thrift, 1994).

With regard to our empirical study, we, therefore, propose that personal factors play an important role for the emergence and later development of networks, while an internal-external strategy favors network survival.

### 2.3 Spatial Success Factors for Network Development

Studies analyzing spatial success factors for the development of entrepreneurship networks are rare. Therefore, we draw on theoretical approaches from the wider field of economic geography, namely the concepts of *Creative Milieus*, *Localized Learning*, and *Endogenous Regional Development*. These concepts mainly focus on spatial factors supporting innovation, but they also provide clues for our topic.

Ideally, a regional support system for entrepreneurship promotion would be characterized by a clear division of labor between different actors. For example, (semi-)public institutions could offer support for new enterprises, entrepreneur's networks could focus on later stages of business formation while both groups would be actively involved in public relations (Schmude, 2001; Große et al., 2002). In this context, some authors emphasize the necessity to integrate the different fields of regional entrepreneurship promotion better (Butler and Hansen, 1991, Nilsson, 1997). With regard to *regional actors and their role in fostering entrepreneurship* Camagni (1991, 1995) and Malecki (1997) point out the broad range of actors which is needed to form an institutional net in the region aimed at fostering entrepreneurship. This includes government on different levels, universities and other (higher) educational institutions, chambers of commerce and business associations, (local) banks, incubators, and private support groups such as firms' or entrepreneurs' networks. In this context, networks serve as a platform where different actors involved in regional enterprise support can exchange information and pool know-how on those spatial factors, which influence entrepreneurship. This further stimulates learning processes, which generate region-specific tacit knowledge, thus creating competitive advantages in supra-regional competition (Camagni, 1991, Maskell et al., 1998). In this regard, large incubators like universities, which assemble widely acknowledged and engaged scientists, may contribute in particular to the development of an 'entrepreneurial social infrastructure' (Backes-Gellner et al., 2002, 80). They can provide services which support the emergence of high-quality networks aimed at the stimulation of collective learning processes. Based on such university linked networks of young entrepreneurs, a self-reinforcing process might be initiated, leading to regional new firm cluster (Sternberg, 2003, 10).

The types of *networks and interrelationships* that evolve in a particular territory depend on the historical, cultural, social, and political settings as well as

on the economic conditions (Malecki, 1997, 92). Densely urbanized areas favor the development of entrepreneurs' networks and thick inter-organizational relations, since they regularly contain a large number of (nascent) entrepreneurs, support organizations, network promoters, and high communicators. However, in remote and less urbanized territories with only a few entrepreneurs and potential 'key individuals' present, municipal officers who are not normally involved in fostering entrepreneurship may initiate the respective activities. Examples include school headmasters (Malecki, 1997, 91). Therefore, network emergence and development strongly depends on regional settings (Price, 2004, 470).

Which factors influence *inter-organizational cooperation* aimed at *fostering a local climate which is conducive for entrepreneurship*? For (semi-)public institutions as well as for network organizations, Bathelt (1998) and Porter (2000) pointed out the need to systematically use the competencies of local entrepreneurs in order to design policies, which are aiming at fostering regional economic development. It depends on local circumstances whether entrepreneurs are involved through public-private-partnerships or even a private sector leadership. Fürst (2001) emphasizes that local governments should support different forms of collective learning in their territory through fostering interrelations between local universities, adult education centers and entrepreneurs organizations. This should include linkages across regions (Camagni, 1995), as inter-regional cooperation can help in preventing regional 'lock-ins' and inertia because regional actors may learn from each other's experiences in fostering entrepreneurship (Grabher, 1993).

With regard to remote, less urbanized areas Spannowsky et al. (2002) stress the need for a systematic long-term support of so-called 'connecting institutions' (Buhmann et al., 2002, 158) by regional development agencies. They should provide decentralized counseling services for entrepreneurs, support the formation of entrepreneurs' organizations and help to establish links between them and local authorities in order to sustain the bottom-up initiatives of local entrepreneurs. However, public actions of local and regional development authorities and support for inter-organizational cooperation also require adequate funding in order to provide for sustainable support structures (Sternberg, 1995).

Finally, on an individual level, informal face-to-face contacts are considered essential for creating a regional network of institutions involved in fostering innovation and entrepreneurship (Fromhold-Eisebith, 1995, 37). This underlines the importance of high communicators and network promoters also from a spatial perspective; and it indicates trust as the 'lubricant' for network activities.

With regard to our explorative empirical study, we propose that the existence of an entrepreneurial infrastructure, which would consist of several anchor points in (semi-)public institutions, social and educational organizations provides a good basis for the 'bottom-up' emergence and spatial embedded-

ness of entrepreneurs' networks. In less urbanized regions, the existence of 'connecting institutions', which also would need sustainable funding, is of particular importance.

### 3. Empirical Design

#### 3.1 Methodology

Empirically, the paper draws on two regional case studies conducted within a larger research project on the importance of networks supporting women start-ups, which was commissioned by the Federal Ministry of Economic Affairs. The project was carried out jointly by the Rhine-Westphalia Institute of Economic Research Essen (RWI) and the sfs Dortmund (that is the Federal State Institute of Labor Research, project manager: Ursula Ammon) from 2003 to 2004 (cf. Welter et al., 2004). The study analyzed the emergence, development, organization, management, and regional embeddedness of selected networks for and of women entrepreneurs, in order to identify structural and spatial strengths and weaknesses. Methodologically, the project employed a multi dimensional approach, combining qualitative elements (document analysis, in-depth interviews) on the supply side (i.e., the networks) with a standardized online survey of female network users<sup>1</sup> and regional case studies. This paper reports results from two of our three regional case study regions, where we mapped network structures in different regional settings, namely the City of Munich, selected urban centers in the State of Mecklenburg-Western Pomerania and the Eastern part of the Ruhr Area. Here, we concentrate on the first two regions.

In order to select regional interview partners, we employed the following steps. Firstly, for the 'supply-side' study, typical networks for women entrepreneurs were selected. We used the following criteria to identify typical network forms:

- Organization structures: Are networks operating as 'real' structures? Or are they virtual, i.e., Internet-based structures?
- Outreach: Do the networks operate on a national level with regional or local subgroups? Or do they mainly operate locally?
- Target group: Are networks solely focused on entrepreneurs? Or are they targeting employees and managers, i.e., potential entrepreneurs?
- Gender: Is membership restricted to women? Or are both women and men members?

Secondly, for our regional case studies we identified regional branches of national associations and networks. Furthermore we searched the Internet in

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<sup>1</sup> For further information on the methodology of the online survey and problems involved in identifying network users cf. Welter et al. (2004).

order to identify the overall support structures within the case study regions. Besides regional branches of national networks, this includes local networks of women (entrepreneurs) and business associations, (semi-)public organizations involved in entrepreneurship promotion as well as other support networks fostering women entrepreneurs such as university initiatives, business incubators and advisory centers. Thirdly, twenty three semi-structured in-depth interviews were carried out in both regions from March to May 2004, supplemented by document analysis and, where necessary, telephone calls to clarify open points.

### 3.2 Sample Areas

Before we report the results from our explorative regional study, this section gives some background information on the sample areas. The *East German State of Mecklenburg-Western Pomerania* (MWP) is characterized by a very low population density (1.76 Mio inhabitants, 76 pers./sqkm) and a settlement structure which reflects the traditional rural character. Around one third of the population lives in villages, one quarter in small towns with up to 20,000 inhabitants, and around 20 percent in medium-sized cities and in the two big cities Rostock and Schwerin, respectively (Weiss, 1996). The state had to undergo a tremendous socio-economic transition process for the past 15 years, characterized by a thorough restructuring of the industrial and agrarian base. Since the early 1990s, ten thousand employees were released from the ship-building industry, food industries, large agricultural cooperatives, the military, and even the tourism sector.

*Table 3.1:* Unemployment rates in comparison, 1998 -2002 (annual average rate, in %)

	1998	1999	2000	2001	2002
Germany	11.1	10.5	9.7	9.4	9.8
State of Mecklenburg-Western Pomerania	20.1	19.2	18.9	19.5	20.1
Rostock (city)	19.5	17.8	16.2	17.0	18.3
Munich (region)	6.4	5.8	4.8	6.7	5.6
Munich (city)	7.3	6.6	5.5	5.2	6.6

Federal Employment Service's (2003).

At present, the state of MWP is characterized by one of the highest unemployment rates in Germany (approx. 20 percent) and low private disposable incomes (tables 3.1, 3.2). Moreover the demographical structure changed drastically due to the ongoing emigration of young and well qualified persons who are in search of job opportunities. Entrepreneurship, measured as self-employment, grew from 40,000 to nearly 60,000 from 1990 and 2001, although this by far could not substitute for the job loss in former state owned companies. On the whole, the self-employment rate of MWP is still lower

compared to East Germany and Germany as a whole (in 2002: 8.2 percent versus 8.6 percent and 10.3 percent). Self-employed persons are mainly engaged in service businesses such as retail trade, catering and tourism, health services, education, and enterprise related consultancy, but they are also to be found in the IT/New Media sector (FGB MWP, 2000).

Table 3.2: Private disposable income in comparison, 1996 - 2001 (per person in €)

	1996	1997	1998	1999	2000	2001
Germany	14,290	14,580	14,959	15,461	15,930	16,485
State of Mecklenburg-Western Pomerania	11,655	11,928	12,175	12,802	13,197	13,560
Rostock (city)	12,134	12,477	12,771	13,597	13,915	14,244
Munich (region)	17,937	18,502	19,266	19,639	19,881	20,555
Munich (city)	18,507	19,158	19,956	20,326	20,566	21,230

Federal Statistical Office (2003).

The second region, the *City of Munich and its (proximate) hinterland* are considered the number one High Tech Region in Germany, with around 15 percent of all industrial R&D-employees in Germany in the late 1990s. This development was initiated shortly after the Second World War by the move of the electronic and IT giant Siemens from Berlin to Munich, accompanied by strong state support fostering public science and R&D-infrastructure (Sternberg and Tamásy, 1999; Sternberg, 2000). Moreover, the region, with its 2.5 million inhabitants, is characterized by a large and prosperous service and public sector. All this is reflected in a comparatively low unemployment rate and high private disposable incomes (tables 3.1, 3.2), while the self-employment rate is remarkably higher than the German rate (in 2001, 11.3 percent in Munich compared to 10.3 percent in Germany).

## 4. Empirical Results: Networks in the Region

### 4.1 Network Development in Mecklenburg-Western Pomerania

In the early 1990s, all East German states faced a major challenge because they had to establish and rebuild institutional and government structures at state, regional, and local level. Therefore, during the early stages of the transformation process, state authorities and semi-governmental institutions did not immediately focus on providing comprehensive support for (women) entrepreneurs, while women entrepreneurs initially concentrated on setting up their own ventures before they turned to initiating network organizations. Nevertheless, in MWP some support measures for women entrepreneurship were set up in the early 1990s, and gradually more and more regional and local actors became involved in fostering women entrepreneurship. At the pre-

sent time, in urban centers such as Rostock and Stralsund, local women networks offer a broad range of activities from ad hoc counseling to long-term training programs (table 3.3), while regional groups of national networks such as ‘Schöne Aussichten’, which aims at women entrepreneurs in the free professions, concentrate on public relations and coaching. Additionally and partly in collaboration with the women networks, university initiatives provide comprehensive services for university graduates interested in setting up their own business.

Table 3.3: Interactions between organizations promoting women entrepreneurship in the State of Mecklenburg Western Pomerania

Collaboration amongst different types of actors	Topics of cooperation
Women networks with (semi-)public organizations (equality opportunity officers, entrepreneurship and regional development agencies)	Individual support for women entrepreneurs (informal, ad hoc) Public events and network meetings
Women networks amongst each other and with RC's*	(sponsored) programs for training, coaching, counseling
Women network, RC's, (semi-)public organizations with (women) entrepreneurship initiatives at universities (of applied science)	Developing infrastructure to support women entrepreneurship exchanging new trends in entrepreneurship development**

Source: Welter et al. 2004. \* Regional Resource Centers; \*\* cross-border collaboration, initiatives at/with universities.

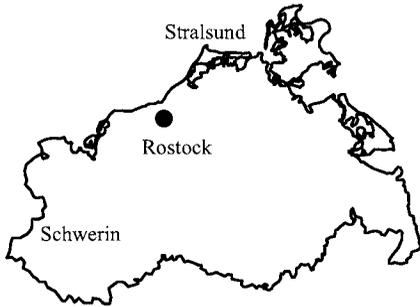
This changes when leaving the urban centers. In most medium-sized and small towns women (entrepreneurs) networks do not exist, and where they exist they operate on a small-scale basis. There are some small towns that are notable exceptions, where equal opportunity commissioners offer counseling for women (nascent) entrepreneurs. In order to extend support for women entrepreneurs to remote areas of MWP, five Regional Resource Centers (RC) have been established from 2002 onwards.

With regard to the emergence of women (entrepreneurs) networks and inter-organizational relationships within the region, we can distinguish four phases, which partly overlap (figure 3.1):

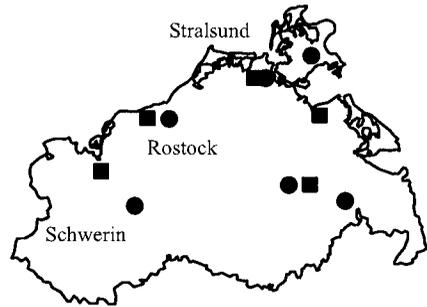
During the *first phase*, the women network FIW (‘Frauen in die Wirtschaft’ – ‘Women into Business’) was set up in the City of Rostock in 1994, which marked the starting point for the emergence of an institutional ‘formal’ network structure in MWP (figure 3.1, map I). Women entrepreneurs, who had set up their businesses shortly after the transition to a market economy started in 1990, initiated FIW, drawing on contacts to local authorities, development agencies, and chambers of commerce. Interestingly, these relations partly originated from the socialist period, indicating at the importance of ‘trusted’ and known linkages in setting up a network. Major sources of such linkages

were the Faculty of Educational Science at the Rostock University as well as the College of Education in Güstrow, a town close to the City of Rostock.

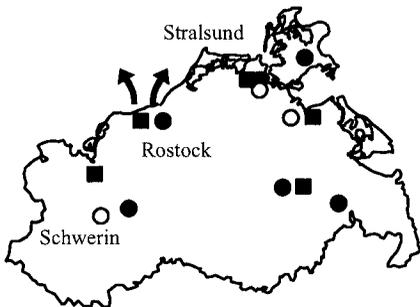
I Starting point in 1994: Creation of the first formal network



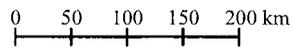
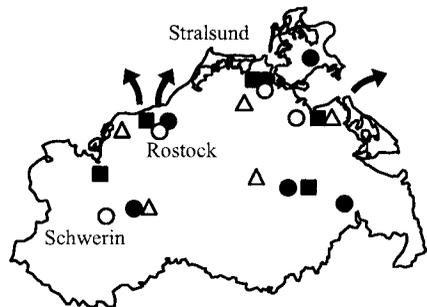
II Development of sister organizations and initiatives at universities, 1995 to 2002



III Formalization and internationalization of relationships, since 1996



IV Set-up of Regional Resource Centers in remote areas, since 2002



- Women Entrepreneur Network
- State Branches (National Women Association)
- ▲ Regional Resource Center
- Universities (Entrepreneur initiatives)
- ↑ International partner organizations of women networks

Figure 3.1: Mecklenburg-Western Pomerania: emergence of spatial inter-organizational cooperation

The *second phase*, which lasted from 1995 until 2002, is characterized by two features (figure 3.1, map II). Firstly, promoters from the Rostock FIW network initiated a *systematic spatial extension of network activities* to foster further women entrepreneurship throughout the whole state. FIW-members used their personal contacts to women entrepreneurs in medium-sized and small towns in order to assist them in developing sister organizations. Again, long lasting contacts to local authorities played an important role in getting these organizations off the ground. Moreover, local equal opportunity commissioners became involved as well, indicating a step forward in the quality of network linkages. They either supported the newly originating women net-

works in their area, or they initiated themselves similar networks in their own district, supplementing the overall bottom-up approach of network emergence by a top-down element (one such example is to be found on the Island of Rügen, see figure 3.1, map II).

A second characteristic of this phase concerns the development of entrepreneurship initiatives at the universities, which resulted from an overall growing interest on federal and state level in fostering graduate entrepreneurship. Universities set up special courses to address female students, and they included modules on entrepreneurship into mainstream topics. Examples include the state-wide initiative ‘Women in Science and Technology’ (initiated on the federal level) or a special course for women in industrial engineering and management. This development served as basis for further collaboration between universities, FIW, and its sister organizations throughout the state.

The *third stage* of network development was again characterized by two processes (figure 3.1, map III). Firstly, three *national (women) entrepreneurs’ associations* established branches in the state. The organizations were the Verband Deutscher Unternehmerinnen (VdU – Association of German Women Entrepreneurs), a federal business association of women entrepreneurs in the free professions (‘Schöne Aussichten’), and the Association of German Young Entrepreneurs (BJU), which is a mixed-gender network for entrepreneurs under the age of 40.

Moreover, national and local women networks started to cooperate. In the City of Stralsund the regional VDU-group and the local FIW regularly participate in public events about women entrepreneurship at the University of Applied Science. In the state capital Schwerin, the regional group of ‘Schöne Aussichten’ cooperates with the sister organization of FIW Rostock. This includes organizing public events and network(ing) meetings for business women of the region.

The second process throughout this third stage of network development concerns the *formalization and internationalization of inter-organizational relations*. Inter-organizational relationships went beyond personal and friendly relations, and networks formalized their connections with various public and semi-public authorities in the state. Local women networks began to collaborate with the equal opportunity commissioner of the state MWP and the State Ministry of Labor and Social Affairs. Examples refer to applications for financial support in order to conduct training courses for nascent entrepreneurs and the joint organization of several widely recognized Women Fairs in the state. Moreover, local networks set out to exchange information and knowledge with similar organizations abroad, mainly in the Baltic Sea region, e.g., in Sweden.

This trend led to the *fourth stage* of network development, from 2002 onwards. Modeled on a Swedish example, public and private actors established the above mentioned Regional Resource Centers, with the aim to *foster women entrepreneurship in remote areas* of MWP (figure 3.1, map IV). This

project was designed jointly by FIW Rostock and officers of the state government. FIW Rostock is also responsible for coordinating the RC's activities. The RC's provide services and information for (nascent) women entrepreneurs. They aim at bundling capacities and competencies of different institutions in order to broaden the support offered for women start-ups in peripheral areas. Moreover, their regional managers also try to support new women entrepreneur networks through linking these networks with different public authorities and other local initiatives such as start-up incubators and job centers.

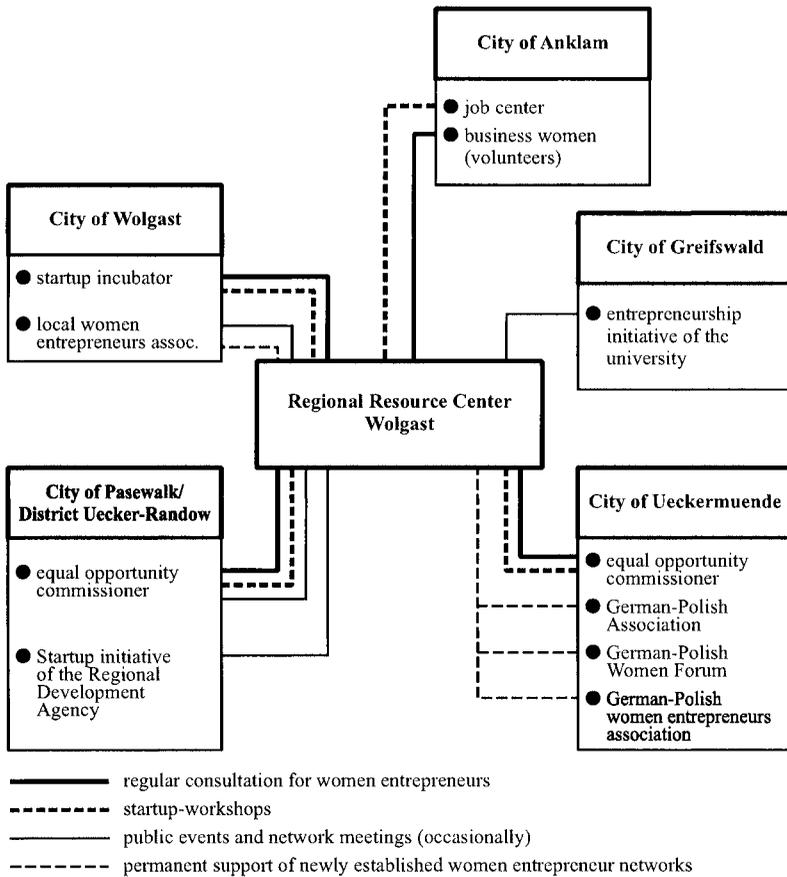


Figure 3.2: Network of Regional Resource Centers in Mecklenburg-Western Pomerania: the example of the rural district Uecker-Randow/Western Pomerania

Figure 3.2 illustrates the range of activities RC's offer and their local embeddedness, based on the example of a RC situated in the Eastern part of MWP, namely in the districts of Uecker-Randow and Western Pomerania. The RC manager regularly visits several small towns in the area, providing consultancy services for women entrepreneurs in cooperation with local pub-

lic and private partners and initiating local round tables. In this regard, RC managers act as high communicators fostering entrepreneurship in remote areas through initiating inter-organizational linkages.

With regard to our conceptual review, the four stages of network development clearly reflect the importance of relationship promoters (Axelsson and Larsson, 2002; Koch et al., 2003) and high communicators (Fromhold-Eisebith, 1995) for the emergence of networks and the development of inter-organizational relationships. Initially, women entrepreneurs played a central role, acting as relationship promoters and using informal contacts to public authorities both to set up their business and to initiate first networks. High communicators appeared in different forms. First of all, this includes equal opportunity commissioners, followed by a later stage also dedicated single municipal officers and the above mentioned RC managers.

Often, the function of relationship promoters and high communicators go hand in hand. In this context, the following example illustrates the important contribution of high communicators and relationship promoters to network development as well as the close interrelation between both functions. In the City of Stralsund, two of the most active women in the local FIW are a woman professor at the local university of applied science, and a municipal officer. The former also supports actively entrepreneurship programs at her university and coordinates state-wide initiatives focusing on female students, while the latter is in charge of business development in the municipal government.

Overall, the strong commitment of high communicators and relationship promoters as well as dense inter-organizational relations can be considered as *strengths* of network development in MWP, all contributing to developing regional conditions, which favor entrepreneurship. *Weaknesses* refer to an overall weak embeddedness of financial institutions into existing networks and supporting structures. Another problem concerns the weak financial basis of the RC's, which rely on temporary funding through EU funds. However, public funding will decline from 2005 onwards, which indicates the challenge for public and private actors to develop strategies for sustaining the RC's and their work in the longer term.

In assessing the process of entrepreneurs' network development in a state similar to MWP, where network development only started once the transition process had begun, one has to account for the short time period private actors had for creating network organizations and inter-organizational linkages.

## **4.2 Network Development in the City of Munich and its Hinterland**

In contrast, women entrepreneurs' networks in West German regions such as the City of Munich could draw on long lasting traditions with regard to fostering gender equality. Similar to the situation in the State of MWP, the support

system for women entrepreneurship in the City of Munich is characterized by a broad range of different actors offering a wide palette of support for women entrepreneurs (table 3.4). Several (semi-)public organizations provide consulting, training, coaching and financing for entrepreneurs, partly with a special emphasis on women in different circumstances (unemployed/after family leave, graduate/non-graduate). Sometimes projects involve actors from different (semi-)public institutions.

Table 3.4: Interactions between organizations promoting women entrepreneurship in Munich

Collaboration amongst different types of actors	Topics of cooperation
(semi-)public organizations amongst each other (incl. support networks)	(sponsored) programs for training, coaching, counseling exchanging new trends in entrepreneurship development*
(semi-)public organizations / support networks and women networks	Regular exchange of information, lobby work; developing gender competences in public authorities; coordinating activities; developing networks in the Munich hinterland
Women networks, partly supported by (semi-)public organizations	Public events, network meetings; counseling and workshops
Women networks amongst each other	Public events, network meetings, lobbying

Source: Welter et al. (2004). \* initiatives at/with universities and adult education centers.

Unlike networks in MWP, which regularly offer training courses and counseling activities, thus compensating for a less developed public infrastructure, in Munich women networks mainly concentrate on their ‘core competencies’, namely the provision of (informal) networking opportunities. Only one network offers additional services such as individual counseling and workshops, which target non-graduate nascent women entrepreneurs. With regard to public relations and lobbying, the respective networks operate jointly, to some extent supported by (semi-)public organizations (table 3.4).

Again, we can distinguish four phases of network evolution and the development of inter-organizational relations (figure 3.3). Contrary to MWP, however, the emergence of networks in Munich and its hinterland is characterized by a different development path. Here, the public support infrastructure and networks emerged (more or less) independent from one another and inter-organizational linkages developed much later.

Moreover, network evolution benefited from a strong tradition with regard to fostering gender equality. Organizations which work for the enforcement of women’s position in professional life have a long history in the City of Munich. In 1894, the Association for Women Interests (VfF – ‘Verein für Fraueninteressen’) was set up as the first center which offered career counseling and a placing service for girls and women. In 1914, together with other

women organizations, most of which had either a catholic, a protestant, or a trade-union background, the VfF created an umbrella organization of Munich women organizations ('Stadtbund Münchner Frauenvereine'). All participating associations aimed at improving the educational and professional opportunities for women in the city.

*Phase 1* of network development started in the late 1980s, when the VfF-board decided to initiate a project called 'Frauenbörse' in order to provide a specific counseling program for nascent women entrepreneurs ('New start with 35', figure 3.3, map I). In this context, VfF played a pioneering role by targeting non-graduates who were looking for opportunities to re-enter professional life after a family leave. Female employees of the Munich Adult Education Center (VHS), who had regular and long-standing personal and professional contacts to the 'Stadtbund' and their member organizations such as the VfF, joined in. They arranged workshops, which complemented the program of the VfF-Frauenbörse by specifically targeting graduates. Moreover, both organizations initiated a mutual informal information exchange.

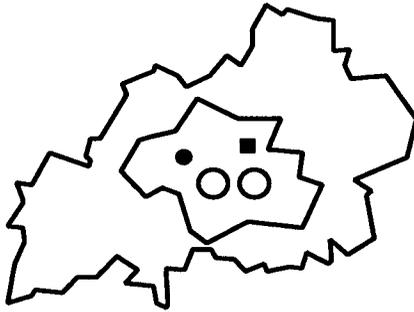
*Phase 2* was characterized by the emergence of *new women network organizations*, all of which focused on business women and women entrepreneurs (figure 3.3, map II). Some of them were set up as local groups of a national organization (e.g., 'Connecta' or the Association of Women in Management - FIM) or of international associations such as the 'Business and Professional Women' (BPW) and the 'European Women Management Development Network' (EWMD). Nowadays, one of them operates on a national level, but emerged in Munich (the virtual net 'webgrrls', [www.webgrrls.de](http://www.webgrrls.de)), while the others started as and remained local associations like the 'Women Business Club' (WBC). This overall network boom gave new impetus to existing organizations as well. For example, the Munich Women Academy (FAM) and the Munich Economic Forum (WMF) were already founded in the mid-1980s, but they gained momentum in their work after 1990.

The emergence of new networks in the 1990s boosted inter-organizational relations, and, thus, contributing to overall institutional thickness in Munich. Networks started to cooperate amongst themselves and with (semi-)public organizations. Beside the VfF-Frauenbörse, four of the new women networks (BPW, FAM, FIM, WMF) became members of the umbrella organization 'Stadtbund Münchner Frauenvereine', using its political connections to foster women's entrepreneurship. According to the regulations of the Munich Municipality, the 'Stadtbund' can send a representative to the Municipal Gender Equality Commission, which consists of women members of the local parliament, women representatives of churches, trade unions, and other important organizations. Although already founded in the mid-1980s, the Commission's work became more important from 1993 onwards, which is partly related to the overall accelerated pace of network development in the early 1990s.

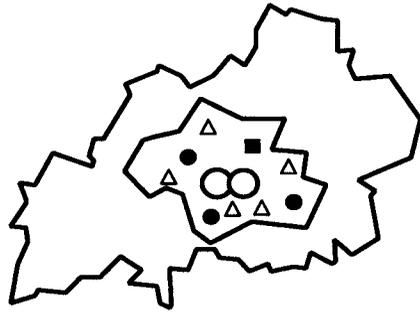
During a *third phase* from 1996 until 1999, (semi-)public organizations started several *initiatives to promote entrepreneurship* in general, picking up

the overall dominating support trend on federal and state level. One example is the ‘Munich Entrepreneurship Office’ (MEB), a joint initiative of the municipal government and the local chamber of commerce, which offers counseling, seminars, training and coaching. Another example is the ‘Office of Entrepreneurship’ (BfE), an initiative of the Munich job center which, aims at supporting unemployed persons to re-enter into professional life as a self-employed person (figure 3.3, map III).

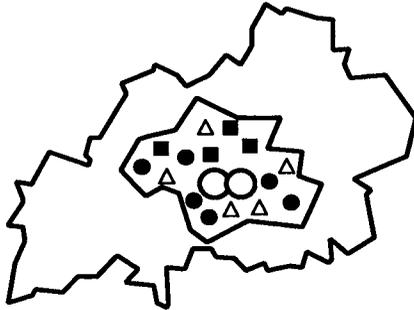
**I** Consulting programmes as a starting point at the end of the 1980s



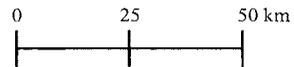
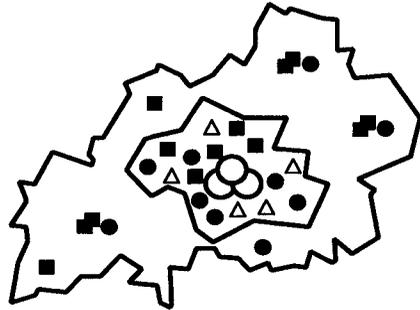
**II** Set-up of new Women networks, 1990 to 1995



**III** Fostering a gender oriented design of public entrepreneurship promotion programmes, 1996 to 1999



**IV** Extension of entrepreneurship promotion activities and network structures into the hinterland, since 2000



- Women (entrepreneur) Network
- Platform of networks
- Semi-public institution
- △ Local Branches (National Women Association)

Figure 3.3: Munich and hinterland: emergence of a network structure to support women entrepreneurship

All this boosted inter-organizational relationships, which now began to focus on a *gender-oriented design* of these programs. In this context, women networks, local woman politicians, and the equal opportunity commissioner closely cooperated with each other. One such example concerns the Municipal Gender Equality Commission, which adopted a recommendation address-

ing the municipal parliament with regard to developing gender competence in all public institutions involved in entrepreneurship promotion and the creation of a women start-up incubator.

The present and *fourth phase* is characterized by two processes. Informal *interactions between actors and organizations in the city have been strengthened* through the introduction of a new informal platform, the so-called 'Network Breakfast'. Here, representatives from 10 to 15 networks, which at least partly focus on women entrepreneurship, exchange news and information on a quarterly basis in order to improve their mutual lobbying and public relation work. They also regularly inform (semi-)public institutions about ongoing activities in the city. This enables those involved in counseling new women entrepreneurs to recommend adequate women networks. Moreover, network evolution now is also initiated top-down. Some of the (semi-)public initiatives have started to stimulate new networks amongst participants of their training courses, attempting to link those networks with the activities of established network organizations.

Secondly, we can observe a *spatial extension of network activities* into the Munich hinterland, mainly initiated by public actors (figure 3.3, map IV). Until recently and contrary to the remote areas in the state MWP, the hinterland lacked both support structures for women nascent entrepreneurs as well as an established network of voluntary women organizations. Only since the late 1990s, the BfE extended its entrepreneurship programs to the hinterland. Since 2003, the 'EFFEKT-Initiative', which is a cooperation between universities in Munich, the adult education centers of the districts around Munich, and other public institutions, has arranged a series of workshops and counseling services for women graduates who wish to re-enter the labor market after a family break. In its next stage, the EFFEKT-program plans to initiate network meetings of the participants. In contrast to MWP, where women entrepreneurs, assisted by equal opportunity officers, were the driving forces for creating networks in rural areas, the spatial extension in the Munich hinterland can be characterized as 'top-down': Network development first of all is initiated by public actors. So far, none of the women networks operating in the City of Munich has created a sister network in the hinterland.

Comparable to the state MWP, temporary public funding by the European Social Fund and the Bavarian state government supports the recent steps to spatially extend network activities into suburbs and less urbanized districts in the wider hinterland of Munich. While temporary funding may become a major problem in developing sustainable networks, the top-down approach used to create new networks in the hinterland of Munich might add to this. This approach resembles the external-internal strategy which Human and Provan (2000) assessed as less successful for network development, as this apparently impedes the creation of a strong voluntary network identity, which however is needed in order to sustain networks over time.

To sum up, the *inter-organizational relationships* in the City of Munich can be characterized as a heterogeneous set of very intensive formal and informal relations. The long lasting tradition of cooperation and self-coordination of Munich women organizations, going back to the 19<sup>th</sup> and early 20<sup>th</sup> century, allowed for a quick embedding of new women (entrepreneur) associations. Again, network development and the development of thick inter-organizational linkages profited from the commitment of individual persons, thus, once more confirming the importance of personal factors in the development of an institutional infrastructure for entrepreneurship. In Munich, women in key public positions, who were both responsible for supporting entrepreneurship, and simultaneously engaged in women organizations, acted as process promoters. For example, at the Munich Local Job Center (BfE) a chief executive responsible for entrepreneurship programs regularly arranges lectures on self employment, and she also initiated a counseling service for women nascent entrepreneurs at the above mentioned Munich Women Academy (FAM). This again illustrates the important role high communicators can play in boosting regional activities to support women entrepreneurs.

## 5. Conclusions and Implications

In analyzing and comparing networks in two different regional settings, i.e., in the City of Munich and in urban centers of the rural State of Mecklenburg-Western Pomerania, we have set out to analyze the factors influencing the emergence and spatial embeddedness of different kinds of (support) networks. From a spatially based perspective, our paper contributes to the understanding of how a regional institutional infrastructure, which aims at fostering regional enterprise development, evolves and which role the path dependence plays in the formation of network interrelationships. Both regional case studies demonstrate the important contribution of *personal factors* such as high communicators, i.e., actors in central public positions, as well as relationship and process promoters within the networks play for the emergence and development of networks and inter-organizational contacts. With regard to *spatial success factors for network development*, we suggest that in both case study regions women entrepreneurship networks are central for securing a constant exchange of regional information both for their participants and public institutions involved in supporting women entrepreneurs.

Furthermore, we could illustrate that *pathways of network and interrelationship emergence* show several similarities, but also a few interesting differences. In the East German State of Mecklenburg-Western Pomerania networks evolved through a 'bottom-up' approach: Women entrepreneurs were the main driving force for network development. As the transformation process in East Germany also included rebuilding institutions and government structures, public administrations saw this as their main task in the early

1990s. Only in later phases of network development, public actors on local and state level took more and more responsibility for fostering inter-organizational relations in remote mid-sized and small towns.

This bottom-up approach to network development goes hand in hand with an internal-external strategy of network emergence, as outlined by Human and Provan (2000). Networks initially focused on building up internal legitimacy before orientating themselves towards external stakeholders, which Human and Provan (2000) identified as a more successful strategy for network emergence. Moreover, women entrepreneurs and high communicators in public organizations were able to draw on known relationships.

Compared to Munich, network development in MWP happened within a relatively short time period. This apparently was facilitated by the strong commitment of various private and public actors. Moreover, common experiences from the socialist period also played a role, as network initiators and promoters were able to draw on trusted and known persons and 'old' linkages. During our interviews, respondents regularly emphasized their 'socialist background', which helped them in knowing who to contact in order to solve problems, where to get access resources and support for their network etc. While this kind of behavior ('blat', cf. Ledeneva 1998) was a necessary response to the constant shortage of materials and consumer goods in the socialist period, its functioning was extended to the transition period. In MWP, this obviously helped to build a formal network structure in a relatively short period of time, as it facilitated identity creation in networks and amongst women (entrepreneurs) during the transition process.

In the City of Munich, this regional identity and awareness towards women (entrepreneurs) roots back to the 19<sup>th</sup> century, when formal cooperation between women organizations and public institutions began. Therefore, when public institutions started to promote women entrepreneurs, this was institutionally accepted and embedded. Moreover, this helped those networks of women entrepreneurs, which emerged during the 1990s. These network organizations could rely on long-established political mechanisms in order to foster gender-oriented support measures for entrepreneurs in the municipality.

Main differences in network emergence occur with regard to the spatial extension of networks into less urbanized regions. In both case study regions, this spatial extension was a planned activity. While in MWP both entrepreneurs' networks and public administrations worked together in extending their activities into rural areas, this differed in the Munich region. Here, we can observe a 'top-down' approach: (Semi-)public institutions initiated the spatial extension of network activities into the less urbanized Munich hinterland, attempting to create new networks of women entrepreneurs, while most women networks are less interested in extending their activities. In terms of suitable strategies for network development, this questions the longer term survival and sustainability of these new networks. Network legitimacy and network identities, which are important requirements for building a successful net-

work, depend on whether members commit and identify themselves with 'their' network. However, our case evidence for the hinterland of Munich indicates that those networks initiated 'top-down' by public actors appear to have serious difficulties in developing a joint network identity.

Moreover, in the case of both the remote areas in MWP and the Munich hinterland, foreseeable financial difficulties might add to this. Presently, relevant efforts of spatial extension in both case study regions are largely based on temporary project funds from public (sometimes European) sources, which will be decreasing from 2005 onwards. While private sponsoring might be an option, especially in Munich, an increase in private funding conflicts with the oftentimes weak resource base of young and new firms. With regard to implications for policy makers and those involved in fostering regional entrepreneurship development, this indicates a need to develop strategies for setting up and running a network infrastructure outside big urban centers also in a financially sustainable manner.

In both sample areas (semi-)public organizations follow principles that previous studies already identified as key factors for a successful regional milieu for fostering innovation and (women) entrepreneurship: They use competencies and experiences of local entrepreneur organizations in order to design or modify entrepreneurship support measures. They support interrelations between women networks and educational institutions for the purpose of collective learning, and they provide funds for the extension of networking activities into less urbanized regions.

On the whole, dense (formalized and informal) inter-organizational and personal contacts of (entrepreneur) organizations appear essential in order to create a regional milieu, which is favorable for (women) entrepreneurship. However, our study also has its limitations, because we cannot analyze the effects entrepreneurs' network activities have on new venture performance. Studies which analyze new venture creation across different regions of Germany, like the Regional Entrepreneurship Monitor (REM) for Germany, demonstrate huge differences in regional start-up rates (Lückgen and Oberschachtsiek 2004). For example, in 2003 the Munich region had a rate of nascent entrepreneurs twice as high as the one in the City of Rostock and its wider hinterland. Moreover, the current REM study points out remarkable regional differences in venture survival rates. Compared to the Rostock region, urban agglomerations like Munich and Cologne apparently provide a more favorable business environment for new start-ups. Interestingly, the REM report for 2004 reveals that the rate of women nascent entrepreneurs in the Munich region slightly exceeds the rate of men, while in the Rostock region the rate of male nascent is three times the women's rate (Lückgen and Oberschachtsiek, 2004, 17).

Thus, we suggest that there are certain positive impacts of network activities on (women) entrepreneurship, but that these differ across regions. This indicates that an operational network structure is important, but it needs to be

complemented by other elements in order to create an entrepreneurial regional climate. Therefore, we recommend that further research work should focus on the emergence *and* on the effects of the entrepreneurial infrastructure on the development of new ventures in a particular territory. In line with Becker and Dietz (2002, 260) we admit, that the analysis of localized interrelations between the network infrastructure, authorities, and the performance of established firms and young entrepreneurs deserves a comprehensive and longitudinal research design, which combines adequate quantitative and qualitative research methods.

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