
THE EVOLUTION OF KNOWLEDGE NETWORKS: AN EXAMPLE FOR RURAL DEVELOPMENT

By Julie Fesenmaier and Noshir Contractor

ABSTRACT

Knowledge management practices have had a huge impact on the private sector, and no doubt the principles grounded in knowledge management will benefit communities as they build social and organizational networks to further their community development goals. This paper explores the role of knowledge management within community development practice and describes how a knowledge network support tool was implemented in a professional community of rural development practitioners in Illinois. Communityware software, IKNOW RURAL DEVELOPMENT, presented a dynamic online environment for documenting and evaluating the evolution of a knowledge network within the *community of interest*. The software was used to survey rural development practitioners and policy-makers about the scope of their professional relationships (with other members of the network), their individual skill sets, and their areas of expertise. More than 140 individuals participated in this activity, exposing a broad network with little shared knowledge. This paper provides insight to the value of knowledge management tools and their role in policy creation for rural issues.

INTRODUCTION

Traditionally, rural development practitioners have focused on building comparative advantage based on exploiting local natural resources. In the 21st century, these strategies will have limited success. Today, comparative advantage is not based on the location of natural resources, capital, or labor, but on the ability of rural people to apply knowledge and technology to create competitive advantage. The success of rural economies in the 21st century then will depend

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on the ability of people to exchange information about local, nearby, regional, national, and global markets. Maximizing local human and social capital to generate real competitive advantage will become the *new* economic development strategy. The global economy is increasingly based on information-intensive businesses, thereby creating an environment driven by a different economic model (Thurow, 1999). More than at any other time in human history, advances in the 21st century will be based on knowledge networks with a stronger emphasis on expanding human capital. This paper explores the theoretical foundations behind knowledge networks, as well as focusing on the evolution of a knowledge network within a unique community of practice—rural development practitioners.

During the industrial revolution of the 19th and early 20th centuries, knowledge was safeguarded within the bounds of two dominant organizational forms, bureaucracy (Weber, 1947, 1978) and its elaboration, and the multidivisional form (Chandler, 1977). Spawned by developments such as telephony, telegraphy, and typesetting (Beniger, 1986; Yates, 1989), the dominant organizational framework was built on vertical communication networks to facilitate the downward flow of orders and the upward flow of information. Rural communities, like the corporate world, adopted this organizational culture. Communication and civic participation comply with a top-down focus as funding decisions continue to drive development initiatives.

The postindustrial era (Bell, 1973) and information age (Arrow, 1973; de Sola Pool, 1990) that emerged in the late 20th century focused on knowledge and information as primary productive processes. Again, remarkable developments in computing and telecommunications have engendered new organizational forms. These new network organizational forms are likely to dominate organizational life well into the 21st century (Miles & Snow, 1995; Monge & Fulk, 1999). Network forms of organization are neither vertically organized hierarchies like their bureaucratic predecessors nor unorganized marketplaces governed by supply and demand (Powell, 1990; Williamson, 1975, 1985, 1991, 1996). Rather, the network organizational framework is built on generalized network structures that link people and knowledge in all parts of the organization to each other, while simultaneously tying them to multiple external contacts (Contractor et al., 2000). These new forms are knowledge intensive (Badaracco, 1991), agile, and constantly adapting as new knowledge links are added and dysfunctional ones are dropped. Thus, the hierarchical structure gives way as the evolving network form begins to define the organization. The structure of this networked organization is fluid, changing shape as relationships within the network play a lesser or more dominant role.

As networks have transformed the private sector, the potential to transform how communities, including rural communities, interact with stakeholder groups is undeniable. The network form is an effective means of structuring community development and managing knowledge. Managing knowledge becomes a critical activity for community leaders to effectively pursue development. Flora and

Christenson (1991) explored how the underutilization of human capital and the deterioration of the social infrastructure are pervasive in rural America in the past few decades. To counter these trends and help rural communities reinvest in the local social infrastructure, knowledge management (with its focus on building human resources and community capacity) becomes one of the 21st-century tools to combat 20th-century decline in rural areas.

Telecommunications innovation spreading through rural communities can bring about similar organizational and social change. Information and communications technologies greatly contribute to the erosion of hierarchical organizational structures and have begun to dramatically change the traditional lines of communications. Interactive communications blur the lines of authority represented by organizational hierarchies and geographic borders. No longer will there be a top-down organizational/communication structure, but rather a dynamic set of interrelated groups communicating with one another (Fesenmaier & van Es, 1999). More than at any other time, rural people have greater access to community development resources—greater access to the political network; to the educational infrastructure; and to the private sector and its financial resources. The factors shaping the evolution of this new organizational and social capital need more intense attention.

This paper explores a dynamic online environment designed to enumerate or inventory the knowledge of members within a network; map or visualize the social and knowledge links among members; and evaluate the organization of a knowledge network in a *community of interest* tied to rural development. The focus is on understanding the importance of the dynamics involved in building knowledge networks as well as an application of how a knowledge network support tool was implemented in a professional community of rural development practitioners in Illinois.

CONCEPTUAL FRAMEWORK FOR KNOWLEDGE NETWORKS

Defining Knowledge

A number of definitions exist for the concepts of knowledge and intelligence, each reflecting the disciplinary context in which they are used. Traditionally, two epistemological arguments in western philosophy have defined knowledge. Beginning with Plato, the empirical argument follows that knowledge can only be gained from experience; rationalism offers a counter definition, one that supports the existence of a priori knowledge gained from deductive reasoning rather than experience.

A common hierarchy used in organization management flows from data to information to knowledge. Whereas data are numbers that, by themselves, yield no meaning, information brings meaning to the value of the data.

Knowledge is derived from the information but is bound by beliefs and commitment leading to action (Nonaka & Takeuchi, 1995). Within the context of the information economy, the data are the basic building blocks—they are the numbers, words, sounds, and images that, when processed into meaningful patterns, become information. Knowledge then conveys the meaningful application of the information, thereby enhancing decision-making (Davis & Botkin, 1998).

Defining Communities

Communities are social systems that enable actors (individuals, groups, and organizations) to communicate, share resources, and participate in efforts to address their needs collectively (Contractor & Bishop, 2000; Contractor, Zink, & Chan, 1998). Moreover, Cohen and Axelrod (1998) noted that a community cannot be described simply by identifying membership in a logical category representing individuals comprising a single profession, a demographic sub-grouping, or geographic place. Members in a community must also share common commitments. These commitments may be based on shared interests (e.g., those interested in economic revitalization), diverse but complementary interests (e.g., health care, childcare, education), or constructively antagonistic interests (providers and consumers of goods and services). The community of practice is held together by commitment and identification with the group's knowledge base and is maintained as long as there is interest in the group (Wenger & Snyder, 2000).

Castells (1996) extended the argument in his vision of a network society. The actors in these networks may be individuals, groups, associations, and/or organizations. The relationships among these actors include the flow of symbolic resources (such as communication, advice, social support, expertise), material resources (products and goods), or monetary resources (Monge & Contractor, 2001). The network metaphor also dovetails well with the underlying technological infrastructure of community computing networks, though Agre (1999) pointed to the inherent tension between the concepts of “community” and “network” in this context.

Defining Knowledge Networks

The conceptualizations of knowledge networks can be represented and analyzed exceptionally well using techniques developed within the field of social network analysis (Wasserman & Faust, 1994). Network analysis consists of applying a set of relations to an identified set of entities. The growing interest in social network analysis can be attributed to its focus on relationships among

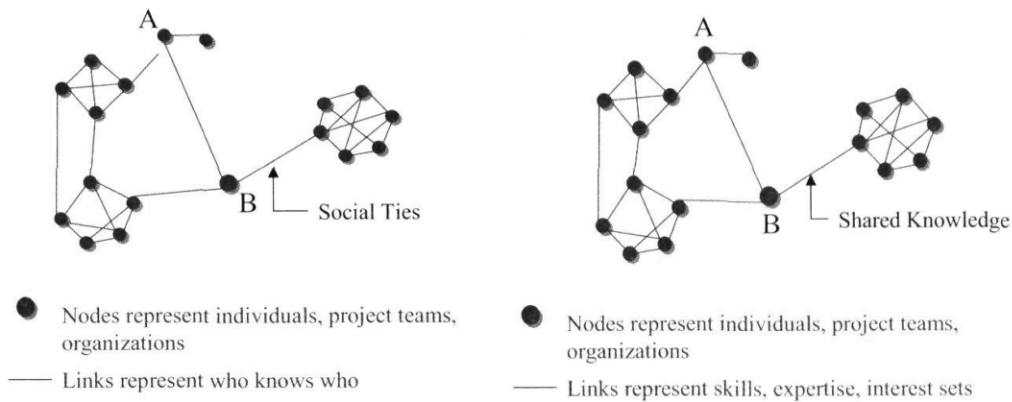


Figure 1. Social and Knowledge Capital

social entities, and on the patterns and implications of these relationships. It is based on an assumption of the importance of relationship among interacting units (Wasserman & Faust, 1994). This focus stands in sharp contrast to other areas of the social sciences that have tended to study “attributes,” the characteristics of people, groups, and organizations rather than the relations between them (Monge & Contractor, 2001).

Knowledge networks build on the existence of social networks in a community. Social networks link actors within the community, creating a network among individuals based on only a single attribute—individuals who know each other. The basic premise of social networks is that *it's not what you know, but whom you know*. In contrast, within the framework of a knowledge network, nodes are individuals with various attributes (including the knowledge items each individual reports possessing) and the links between the nodes represent knowledge items shared by individuals. Within this context, the knowledge networks represent *who knows what* in a community (Contractor, Zink, & Chan, 1998).

The graphic representation of the social and knowledge network (Figure 1) may be similar, yet meaning for the nodes and linkages varies substantially. Within Figure 1, the schematic under the social network heading illustrates a collective of actors (e.g., individuals, project teams, organizations) and maps each actor's link to everyone else in the network. The social network has a focus on the individual and their place among the many relationships present in the network at a given point in time. With the knowledge network, the nodes represent the knowledge held by the actors and the linkages represent shared knowledge between nodes in the system. Although schematically the same, the flows among the nodes represent fundamentally different attributes. This schematic places value on the knowledge attributes of the nodes. It presents an

evaluation of the breadth and scope of this attribute—in this case knowledge. Social and knowledge networks are linked, yet whether a causal relationship exists is not clear. Although initially it was assumed that social networks drive the formation of knowledge capital, the reverse has also been shown to be true (Nahapiet & Ghoshal, 2000).

The location of knowledge within a network can vary along a continuum from centralized, where knowledge resides with only one or a few individuals, to distributed, where knowledge exists among many (Farace, Monge, & Russell, 1977). Further, distributed knowledge may refer to the flow or diffusion of knowledge, which increases the level of knowledge among all in the network. Alternatively, it may refer to the parts of a larger knowledge base, each possessed by separate individuals within the network. In this form of distributed knowledge, each individual brings relatively unique, non-redundant knowledge that enables a collective to accomplish complex tasks (Gore, 1996). Distributed knowledge occurs at many levels in the empirical world, including work groups, large-scale project teams, and professional organizations, to name but a few.

In addition to these characteristics of the observable knowledge networks, Contractor et al. (2000) noted that members of the network have their own “cognitive” perceptions of the knowledge network—that is, their perceptions of the knowledge possessed by each actor in the network. In reality an actor’s perception of *who knows what* may be incomplete and/or inaccurate. Hence, all members within an observable knowledge network have their own cognitive knowledge networks describing their (potentially incomplete and/or inaccurate) perceptions of the overall observable knowledge network. The set of cognitive knowledge networks among members collectively constitute a transactive memory system. A transactive memory system begins when members of the network learn something about one another’s domains of knowledge (Hollingshead, 1998; Wegner, 1987). Through self-disclosure and shared experiences, individuals in the network learn who the expert is across knowledge domains.

The accuracy of cognitive knowledge networks (i.e., the extent to which perceptions accurately reflect the observable knowledge network) reduces the amount of knowledge for which each unit in the network is responsible while providing each unit with access to a larger pool of knowledge across domains. For instance, consider a work community as a knowledge network. The cognitive knowledge networks of individual participants within this knowledge network may be incomplete or inaccurate. That is, individual participants may not know about their colleagues’ areas of expertise. However, the cognitive knowledge network of a manager may be more accurate. That is, the manager is more likely to have a better understanding of the various areas of expertise represented within the work community. In responding to new information received by the group, the accuracy of the manager’s cognitive knowledge network provides the ability to identify participants who could lead to new projects and/or offer

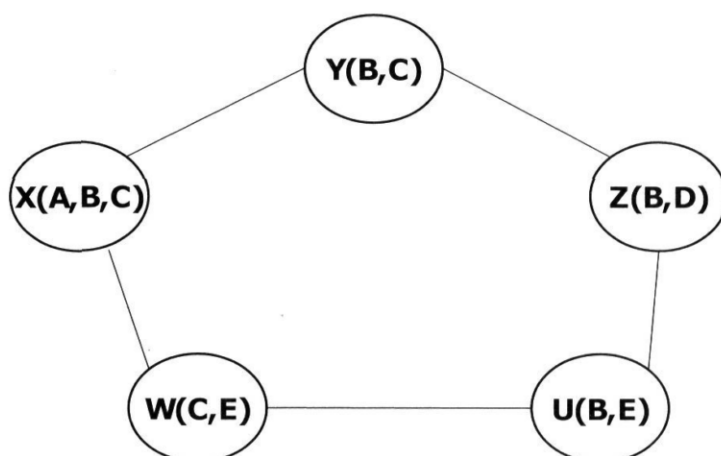


Figure 2. Knowledge Network Among Members in a Work Community

expert analysis of ongoing projects. Figure 2 (described in Contractor, Zink, & Chan, 1998) represents Individual X's cognitive knowledge network. The nodes in this network are individuals; included (in parentheses) within the node are the knowledge items that X perceives as being possessed by each of the individuals in the network. The links between the nodes represent X's perceptions of common knowledge items shared by individuals. According to the knowledge network defined in Figure 2, individuals Z, U, and Y share knowledge item B. However, X is unaware of this shared knowledge; hence, X's cognitive knowledge network has no link between individuals Z and U.

Mapping Knowledge Networks

To help define and understand the organization of knowledge networks, "communityware," a new generation of interactive, Internet-based tools is being developed to help these advances in organizational and social capital to occur. Communityware facilitates the visualizations of potential collaboration partners by community members by graphically mapping linkages in the network. The network graphs allow research to quickly identify patterns among relationships. It can be used to answer questions about a community's knowledge network, such as, "Who knows what?" and equally important, "Who knows who knows what?" within the community. Specifically, INQUIRING KNOWLEDGE NETWORKS ON THE WEB (IKNOW) was developed to explore the evolution of knowledge networks. IKNOW software can be used to research, compile, extend, test, and refine current understanding of how best to characterize a *community of interest*—in this case the community of rural development practitioners. A pilot project was developed to study the evolution of the knowledge network within this

community. The intent of the project was to discover “*who knows whom*” in rural community development, who knows what in rural community development, and *who knows who knows what* in rural community development.

COMMUNITY OF PRACTICE: THE ILLINOIS RURAL DEVELOPMENT PRACTITIONERS

Rural community development presents a special challenge to the economic development efforts in Illinois as well as in other states with a tradition founded in agriculture. Many rural communities are struggling with issues related to sustainability and are pursuing programs (outside of traditional agriculture) that will help them accomplish their goals. Rural development practitioners have shifted their focus away from pursuing the development of primary industries such as mining and agriculture toward a more multi-faceted approach connecting primary industries (mining, agriculture) to secondary industries (manufacturing), tertiary (services), and the quaternary (financial) sector. The integration of these functions becomes a primary impetus of economic development efforts. The rural development community of practice, then, must become substantially more dependent on human or knowledge resources as it becomes necessary to network the four economic sectors. Understanding the evolution of a knowledge network enables community development practitioners to exploit more effectively the multidisciplinary perspectives that will shape the dynamic knowledge networks in the 21st-century communities.

The Implementation of a Knowledge Network: IKNOW RURAL DEVELOPMENT

Members of the rural development *community of practice* were asked to outline their social and knowledge networks within the framework of the IKNOW RURAL DEVELOPMENT software. Individuals involved in rural development practice and research in Illinois were invited to visit the IKNOW RURAL DEVELOPMENT web site where they completed an online questionnaire that then mapped the social and knowledge network of this community of practice. The process of mapping these networks can be summarized in a four-stage methodology.

Stage 1: Determining Indicators of Social and Knowledge Networks (Designing the IKNOW RURAL DEVELOPMENT Survey)

To elicit *who knows whom* and *who knows what* in this community, a survey was designed to explore members' social and knowledge networks. This online questionnaire is an integral part of the IKNOW RURAL DEVELOPMENT

software. The survey captures three types of network data: (1) a social or communication network of community members—*who knows whom* in a community; (2) a knowledge network based on community members providing an inventory of their skills and expertise—*who knows what* in a community; and (3) a knowledge network based on similarity in content (vocabulary) among members' web sites. The data from these networks are automatically captured and are expressed graphically to demonstrate how (through which contacts) community members are linked to each other and to external sources. Members of the IKNOW RURAL DEVELOPMENT can search the database for individuals with specific knowledge or skills, and for individuals with whom they are in contact and who know others with particular knowledge and skills—*who knows who knows what*.

The survey is comprised of eight questions. Question 1 asks the member to identify and evaluate their level of contact with other community members. For each person listed, the community member enters a score that reflects the amount of contact with that person. The scale, from 0 (no interaction with that member) to 6 (communication with that member several times a day), provides insight into the strength of the social/communication network. In Question 2, the community member identifies the rural development program topics with which they are currently involved. Members are able to add a new topic if their specialty area was not already included in the list. Question 3 elicits information about future content areas of network members. To better understand the issues on which rural development practitioners will focus within the next five years, they were asked to list future research and practice interests related to rural community development. Assuming that research and practice are closely tied to the research and practice journals that members read or in which they publish, questions 4 and 5 queried members about journals and publications. Question 6 asked members to inventory the technical skills they felt most comfortable sharing with the network. Questions 7 and 8 focused on professional and organizational affiliations. Question 7 asked members to identify the formal organizations to which they belong, and question 8 asked them to identify the institution in which they were employed.

Stage 2: Identifying Members of the Rural Development Community of Practice

The first consideration for studying a network is understanding the population that will comprise the nodes in the network. For this application—studying the rural development community of interest—two options were feasible. One option requires the research to identify all possible members of that community of interest and enter their names into the IKNOW software. This list would have to be complete and new members would not be able to join the community. When the individual would complete the IKNOW survey, their name would already be present and they would begin with Question 1 to document

the extent to which they know each member in the predetermined network. The second option allows individuals to voluntarily identify themselves as part of the community. In this way, as they entered the IKNOW and contributed their information their name was added to the list. Because it would be impossible to create a complete and inclusive list of all possible rural development researchers and practitioners in Illinois, the latter option was selected. To eliminate confusion as the first few participants submitted information to the IKNOW, staff from the Laboratory for Community and Economic Development seeded the network. Subsequently, as new members joined the IKNOW RURAL DEVELOPMENT entering their information was inherently easier since they were not the first in the network and could identify linkages to other members immediately.

Once this early network was established, other community development practitioners not directly linked to the names initially used to seed the network were invited to participate in the community. The software was featured at a regional rural development conference where those attending were asked to log in to IKNOW RURAL DEVELOPMENT and submit their information to the network. These *new* members represented various community sectors that did not always show a direct linkage to the University of Illinois. Although it is inevitable that some community development practitioners were not aware of how to join this community network and were perhaps inadvertently excluded. The project team made many attempts (via direct mail and publicizing at local conferences) to invite the various community development practitioners representing diverse interests. The members of the early network were then asked to revisit the web site and update their information to reflect their level of interaction with the recently added members of the network. Over a period of six months 140 individuals joined the network; of that number 72 belonged to a group of Illinois community development practitioners.

Stage 3: Evaluating the Social Network of the IKNOW RURAL DEVELOPMENT

Models taken from network analysis were used to measure the breadth and richness of the network. Two metrics were used to evaluate the Illinois IKNOW RURAL DEVELOPMENT membership. A network density metric measures the “connectedness” in the network. Of the 72 Illinois members, there is a potential of 5,183 links ($n*n-1$). In other words, if everyone in the community knew each other and all 5,183 links were active, then the network density would equal 1. For this *community of interest*, the network density equals .2108 which suggests that only 21 percent of all potential links are active, or that 1,093 links exist among the members.

The network cohesion value is the ratio of the number of mutual links with the network to the number of potential mutual links. This metric measures the strength of the relationships in terms of two-way interactions—how many people I report knowing and who also report knowing me. In this case, the

community the network cohesion equals .0323 or 3 percent. This low statistic is most likely a function of community members not updating their information on a regular basis as new members enter the network. For example, if members do not revisit the site after someone they know has visited the site, the nature of their true interaction may be hidden.

The software mapped the social networks using an anneal algorithm to optimize their visual organization. This algorithm minimized the distance (length of link) between members (nodes) who had strong relationships and maximized the distance among members that had weak or no ties to each other. Visually, nodes with strong social network ties were positioned close to each other on the network map—those with weak social ties were more distant from other nodes in the network. Based on the network map, faculty and staff from two different universities in Illinois appeared to be clustered among other faculty from their institution. Members from state and local community and economic development agencies were evenly scattered on the network map, yet with clear ties to individuals at the universities. The subgroups did not exist in isolation and had clear ties linking to members of other subgroups demonstrating collaboration among the universities and individual agencies.

The IKNOW RURAL DEVELOPMENT program calculates these metrics for the network at different points in time. It becomes a very useful tool in calculating a baseline and then benchmarking the effectiveness of the network over time. As the network evolved, this evaluation metric reflected changes in network connectivity. Early in the evolution of this network, the metric was quite high, reflecting the cohesiveness of the members. As new individuals entered the *community of interest*, it was clear that interaction among individuals and everyone else in the network collectively decreased.

Stage 4: Evaluating the Knowledge Network of the IKNOW RURAL DEVELOPMENT

IKNOW RURAL DEVELOPMENT mapped the network density of the knowledge base of the members of the network. Instead of the links representing social ties among members—*who knows whom* in a network, the links for this metric represent shared knowledge among the members—*who knows what* in a network. A low value suggests that the knowledge capital in the network is broad, covering many topics with very little shared knowledge. Conversely, a high value implies much shared knowledge focused on a few areas. The knowledge base of this community mostly revolves around community development as a discipline in general, community leadership, strategic planning, information technology, local government, and land use planning. In total, 39 different subject areas were reported to be important to the members of this network. The knowledge network evaluation metric yielded a value of .026, indicating that only 2 1/2 percent of links join shared knowledge. This low value, however, suggests that this knowledge network is distributed in nature—most members contribute unique knowledge to the community.

CONCLUSION: IKNOW RURAL DEVELOPMENT AS A POLICY TOOL

Using IKNOW RURAL DEVELOPMENT software, rural community development practitioners were invited to participate in an interactive *community of interest* network. Members logged into the web site and identified the volume of interaction with other network members. To understand the knowledge base of the community, they responded to a series of questions related to their content area about their subject specialty. To be successful, community members had to revisit the IKNOW RURAL DEVELOPMENT web site as the network evolved. This proved to be very difficult. Most members did not revisit the site more than two times. Subsequently, they did not post new information reflecting their potential interaction with new network members. Another weakness of using the network approach to measure knowledge is that it is possible to miss blocks of resources that are not networked within the group initially used to seed the database. For example, this application of the software included few links to the faith-based community development network.

The effectiveness of the IKNOW RURAL DEVELOPMENT network is a function of how well the community members of the knowledge network perform as a coordinated group. In this application, the 140 network members were not stakeholders and did not perceive a direct benefit of participating in the network. The output of this software—the map and inventory of the community's knowledge capital—was not enough incentive to promote more active participation by the members. Subsequently, members did not revisit the IKNOW RURAL DEVELOPMENT web site often to update their information in response to new members entering the community. For this reason, it would be unfair to evaluate this *community of interest* based on the metrics calculated by the IKNOW RURAL DEVELOPMENT. The low network density metric would suggest no interaction among members. In fact, this is not the case and is more indicative of community members not updating information on a regular basis. Follow-up should address how to improve participation in the network and how to make this tool valuable to the community of interest.

A network approach to measuring the social and knowledge capital within a community of interest can provide many new insights into how information and knowledge flow through the network. The software can help us visualize our own community of interest; it adds contacts (names) to our content and ultimately helps identify potential collaboration partners.

Furthermore, this research has important implications for policy. Indeed, this tool can be used by granting agencies to assess the abundance or lack of knowledge resources, as well as the distribution of knowledge necessary to make better decisions about community development and investment. As a granting foundation or government agency makes funding decisions, this tool can help identify needs and gaps with respect to community capacity to undertake certain development initiatives. For example, as communities apply for technology

infrastructure funding, the granting agency can use the networking software to evaluate whether the community has the necessary local capacity to complete the project and, perhaps more importantly, whether the community has ties to external knowledge resources that will assist it in accomplishing its project goals. The tool can help assure the granting agency that either the community is able to meet the demands of a certain project, or that it has developed the necessary partnerships. Furthermore, a tool such as IKNOW RURAL DEVELOPMENT would be valuable to building regional or national cognitive knowledge networks, creating a system by which funding organizations have a better understanding of *who knows who knows what* in rural development research.

The IKNOW RURAL DEVELOPMENT can also be used successfully by a project team to evaluate and document the evolution of internal knowledge networks and linkages to external resources. As a team of stakeholders participate in a community development project, they and the funding organization would benefit from tracking the growth of the knowledge network with respect to how the project progresses. This would provide an effective way to measure the less tangible outcomes related to community actualization—the building of valuable synergy toward a goal. For example, is the project team working cohesively? Are new individuals or groups brought into the project, thereby enhancing the social and knowledge network of the project team as a whole? Is the project team building new ties to external knowledge resources to help them complete the tasks they may not be able to manage locally?

Along these lines, the IKNOW RURAL DEVELOPMENT could be used to build a knowledge or skills bank that rural communities, community development foundations or funding agencies could access as they work toward community development goals. Unlike a more traditional skills bank documenting the knowledge resources of a single institution, IKNOW would inventory the availability of technical assistance by identifying both individuals with certain knowledge or skill sets (within the broader, non-geographically bound community of interest) and the links describing how to connect to those individuals. Additionally, rather than a listing of individuals and resources, network visualization software allows users to understand how individuals within the community are interconnected with one another. For example, a user who wants technical assistance with survey techniques may not know the individuals who have identified survey research within their skill set. The IKNOW software will highlight which channels the inquirer can use to reach the technical expertise—it will identify individuals both the user and the “expert” know. If there are no interconnections, then the software can be used similarly to the way a “skills bank” is used, where individuals can query IKNOW for contact information (email, telephone, postal address, URL).

Within a geographic community, local leaders can use this knowledge management tool to promote new partnerships and involve individuals who traditionally are not included in local community development efforts. IKNOW

helps define the broader community without an implicit hierarchical power structure. Working within this networked organizational form, one that is not structured vertically (as in past bureaucracies, where individuals had to follow a rigid hierarchy to receive technical assistance) will allow the creation of non-traditional linkages between people and knowledge to pursue community development goals. IKNOW RURAL DEVELOPMENT documents the key players in the community and their connections to other human and knowledge resources, thereby creating a substantially wider-ranging community (where members share not only place, but also interests and commitment). Now when there is a need for action, IKNOW can be used to identify “just the right” mix of community members to create a knowledgeable committee.

Knowledge management is exploding in the private sector, and no doubt the principles grounded in knowledge management will benefit communities as they build social and organizational networks to further their community development goals. IKNOW RURAL DEVELOPMENT presents another set of tools that community development leaders and policy specialists can use to enhance efforts and determine a knowledge-intensive community development agenda within the framework of today’s information-intensive and technology-driven economy.

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