



User motivation for broadband: A rural Danish study

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ABSTRACT

The diffusion of broadband has gained much research attention, in particular in relation to the urban–rural divide. However, research has focused primarily on the supply side of broadband roll-out, while the demand side has been somewhat neglected. This article illustrates the complexity of broadband adoption and argues that a rural adoption approach needs to draw on existing social meaning systems. By focusing on the user motivation for broadband, this article presents findings from a qualitative study of rural residents. Means-end theory was used as a framework for understanding these motives. Furthermore, the article adapts the FCB grid as a tool for both public and private providers of broadband to examine effective rural promotion strategy.

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1. Introduction

Broadband is a promising technology for rural areas. Extensive research documents various benefits of broadband, including remote access to health care and education (Jenkins, 2003) as well as expanding the market potential for rural businesses (LaRose, Strover, Straubhaar, & Gregg, 2007). Other studies have shown both social and, in particular, economic benefits of a broadband infrastructure (Ford & Koutsk, 2005; Lee & Yongwoon, 2005; Varian, Litan, Elder, & Schultze, 2002), which provides the necessary backbone for the network of society (Castells, 2000). Furthermore, research in broadband adoption shows that those who benefit the most from broadband are not limited to previously heavy users but include those in the lowest quintile of usage (Hitt & Tambe, 2007). Despite the obvious benefits and increasing availability in rural areas, adoption among rural residents is still lagging behind that in urban areas (Dijk & Hacker, 2003; Parker, 2000; Peronard & Just, 2008a; Warren, 2007). Therefore, many national and international institutions are actively involved in the problem and have launched various programs to promote the inclusion of broadband in the countryside.

Studies have attempted to identify the reasons for the delay in bringing broadband to rural areas and found that it was caused by a number of factors, including not knowing that it can be accessed (Horriggan & Murray, 2006), the cost of switching from narrowband to broadband (Geroski, 2000), and the lack of relevant content (Wilhelm, 2003). In the latter case, encouraging innovative content services has long been argued to be the method for supporting the diffusion of broadband technology (Firth & Mellor, 2005; Papacharissi & Zaks, 2006; Preston, Cawley, & Metykova, 2007).

While many studies have dealt with the infrastructure of broadband in society, placing emphasis on either availability and policy matters or the supply-side issues of broadband (Gorp, Maitland, & Hanekop, 2006; Preston et al., 2007; Strover,

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Chapman, & Waters, 2004), fewer have taken a user approach to the demand-side of broadband (Firth & Mellor, 2005; Gurstein, 2003; Peronard & Just, 2008b; Ramírez, 2001). Exceptions are the linking of broadband with demand-side determinants such as income, population density, and educational level (Frieden, 2005; Grubestic, 2008). However, such a generalized and instrumental perspective on demand-side issues, with its lack of emphasis on people's needs and wants, provides little knowledge of the motivations behind broadband adoption. As such, more attention should be paid to the use and significance of broadband diffusion, particularly in rural areas (LaRose et al., 2007; Tookey, Whalley, & Howick, 2006).

Arguably, the classical diffusion approach is too simple to account for all of the complexity that surrounds an innovation such as broadband (e.g., Leeuwis, 2004). In fact, research suggests that the penetration and diffusion of broadband is not a consequence of a single action or factor but of the interplay between different factors and approaches (Mahler & Rogers, 1999; Trkman, Jerman Blazic, & Turk, 2008). Thus, rather than seeing broadband as an instrument for accomplishing specific tasks, more focus should be given to the institutionalized meaning system that surrounds it (Castoriadis, 1984; Ramírez & Richardson, 2005). Such research needs to customize itself to the qualitative aspect of adoption. Only a few studies have taken a qualitative approach to understanding broadband adoption. For instance, Lawrence Wood studied deployment patterns among telecommunication providers and found that different types of broadband providers are influenced by unique regulations, competitiveness concerns, resource levels, and existing infrastructure conditions (Wood, 2008). In a seminal study of Netville, Berry Wellman researched high-speed connection among residents in a local U.S. community and found that broadband internet supports a variety of social ties (e.g., emotional). Furthermore, they found that local relationships are often sustained through a combination of on- and off-line interaction and that much of the online activity takes place between people who live or work near each other (Hampton & Wellman, 1999). In their comparative case study between South Korea and the United States, Lee and Chan-Olmsted (2004) found the main differences to be grounded in policy supporting technology and consumer demand. However, Wood's (2008) study is supply-side oriented, and the study of Netville involves observing techniques on civic involvement, internet use, and attitudes of residents in order to develop research questions for their survey (Hampton & Wellman, 1999, p. 484). Finally, in the case study, only desk materials of governmental publications, press reports, and online documents were examined (Lee & Chan-Olmsted, 2004).

Apparently, little is known about rural people's experience with and understanding of broadband. Consequently, research should examine more closely the qualitative aspects of decisions to adopt broadband to provide new knowledge because "good social marketing begins and ends with the target consumer—the person whose behavior is being influenced" (Andreasen, 1995, p. xii). This article will make people's decision to adopt broadband the primary concern of the study. The research question is as follows: What are the reasons or motivations for people in rural areas to adopt broadband? Because no research currently exists in the field, there is a need for an enriched theoretical approach aimed at empirically examining the relationship between broadband adoption and the interpretation of causes and effects. Furthermore, the attention to the significance of broadband – motivation and needs – is extremely relevant for providers and to some extent policy makers in rural development. Such an understanding provides valuable knowledge for planning how and with what means broadband adoption should be supported at the local level. A second research question is the following: How can knowledge about motivation and needs be utilized in an effort to promote rural broadband?

This article extends the existing knowledge by offering a systematic analysis of the user motivation behind the choice of broadband in rural areas. In contrast to previous research, this research aims to provide qualitative insight into peoples' choices through the use of personal interviews. By using this method, it is possible for the informants to articulate more detailed reasons for their choices. In the next section, the theoretical approach called means-end theory is outlined, and the methodological technique known as laddering is described.

2. Methodology and techniques

To understand how people think about broadband as a product and its consequences, the research approach is based on the means-end theory (Reynolds & Gutman, 1988). Because this theory focuses on meanings people associate with a given product or service, it is possible to explore user motivation for broadband beyond the mere functional aspects and look into the psychological aspect of consuming (Gutman, 1982). The basic principle behind the theory is that people buy products (and services) as means to reach some desired benefits or consequences, which in turn are determined by their personal values (ends). The means-end theory relates three levels of meaning abstraction: product-attributes, consequences of consumption, and personal values. Product attributes are relatively concrete aspects of the physical or observable characteristics of a product or service. For instance, broadband may be associated with price or access to e-commerce. Consequences exist on a higher abstraction level than attributes and can be both functional (e.g., ease of use) and more psychological (e.g., status) in nature. For instance, broadband is faster than traditional internet access and thus is a time-saver for conducting e-commerce. Personal values provide general guidance to our lives and are on the highest abstraction level. Personal values can be divided into both instrumental and terminal values. The latter are the ultimate goals we seek in life, and the former are the ways of behaving that lead to terminal values. For example, faster shopping on the Internet provides extra time to spend with the family. Altogether, the string of association from product attributes to consequences to personal values is called the means-end chain (Gutman, 1982).

To assess the means-end chain of meaning structure in relation to broadband, the laddering technique is applied (Reynolds & Gutman, 1988). Laddering is a data gathering method that contains procedures to be followed during in-depth interviews, which resemble the probing of a psychologist (Wansink, 2000). Typically, the first step of the interviewing process is to get the respondent to identify key choice criteria, and the second step involves understanding why these criteria are important to the respondent. Laddering is thus a semistructured interview that gives the respondent the opportunity to explain in his or her own words why and how something is of importance to him or her. It follows that a vital part of the interviewing process is probing, which leads the respondent to articulate with ever greater abstraction the mental conception of a product or service under study, which in this case is broadband adoption. This approach is in accordance with grounded theory (Glaser & Strauss, 1967) and is characterized by having a hermeneutic rather than a standardized and fixed research design.

In concrete terms, a ladder begins at the attribute-level (A) with the respondent explaining the basic distinction of the product. Then by probing with questions such as “why is that important to you?”, the respondent begins to think and talk critically about the product elements – both its benefits and disadvantages – that is, the consequences (C). At the final stage (following the means-end theory), the respondents link the consequences with personal values (V) as the line of questioning forces the respondents to give even deeper explanations for his or her beliefs and attitudes. As pointed out by Wansink (2000), laddering is a method that places great importance on interviewing skills because the interviewer must interpret and ask questions simultaneously during the interview session in order to probe efficiently. Consequently, there has been some overlapping criticism of the means-end theory and laddering related to the questioning format being rather exhausting (Woodruff & Gardial, 1996), informant resistance (Reynolds & Gutman, 1988), and finally, artificial levels of abstraction among informants (Botschen, Thelen, & Pieters, 1999).

2.1. Research setting

The parish of Lydum – a small village with 325 inhabitants – was chosen as research site because it shares many of the characteristics typical of an average parish village in rural Denmark: a decline in population (approximately 10% within the last decade) and twice as many self-employed and half as many salaried (white-collar) employees as in the country in general.² In recent years, many of the local institutions have disappeared, including the dairy, school, grocery, and blacksmith. The distance to the county's rural center, the city of Esbjerg, is 43 km; to the municipal center, 24 km; and to the nearest larger village, 6 km.

2.2. Data collection

The study consists partly of 15 telephone interviews, 9 in-depth interviews with key broadband adopters in local areas of Lydum in Jutland, and 9 interviews with non-users in a small neighboring parish. The actual number of respondents included was determined based on assessment about the marginal knowledge an additional interview would produce.

The selection of informants was conducted using snowballing,³ that is, selecting key informants possessing important knowledge (e.g., Glaser & Strauss, 1967), involving identifying one or more people from the population under study who in turn can identify other relevant informants of the population. This process allows for a systematic identification of people who are otherwise difficult to reach. It was critical for the selection of informants that they (i) had obtained broadband, (ii) were able to express themselves on the topic of broadband, and (iii) were interested in sharing their views on the subject; in total, informants had to be able to express views on issues concerning broadband adoption. Furthermore, (iv) the composition of the group of informants was made more diverse by interviewing people from different professional backgrounds, genders, ages, and number of years spent in the parish, so that they were more likely to have different and maybe even opposing views on the subject (e.g., Enderud, 1984). Finally, the selection of non-users was based on the yellow pages and on referrals from other interviewees in the same manner as described by the selection of users.

An interview report is published as a scientific report (Peronard & Just, 2008b). Based on input from the telephone interview report, a more extensive and in-depth examination of the motivations to choose broadband was subsequently launched (see Table 1 for informant characteristics). The fact that informants were all above the age of 37 is not considered to influence the results because research has been unable to demonstrate that innovation readiness increases or decreases as a result of aging (Rogers, 1995).

The 9 in-depth interviews with users took place from April to May 2009. After the in-depth interviews were transcribed, informants were contacted once more by telephone to clarify various vague statements. Overall, the interviews, including the subsequent telephone contact, took on average 1.5 h. Then, in January and February 2010, further personal interviews were conducted with non-users in the parish of Bølling, the main characteristics of which were similar to those of Lydum. The reason for studying non-users was to examine whether the influencing factors on broadband adoption are the same for users and non-users. Each interview was recorded and took approximately an hour and was afterwards transcribed.

² Based on www.statistikbanken.dk, the free website from Statistics Denmark.

³ On snowballing, see for instance Salganik and Heckathorn (2004).

Table 1
Characteristics of the user informants.

Informant no.	Sex	Age	Time working from home (%)	Education/profession	Years in the parish (years)	Involvement in broadband
1	F	49	50	Priest	Live outside	Interested
2	M	41	< 10	Transportation	20	Very interested
3	M	55	100	Farming	11–20	Interested
4	F	41	20	Service assistant	5–10	Very interested
5	M	39	20	Small business	20	Very interested
6	M	62	100	Retired	5–10	Very interested
7	F	37	0	Gravedigger	11–20	Interested
8	F	37	50	Tailor	20	Interested
9	F	54	100	Wife of farmer	20	Very interested

The characteristics of the users and non-users were compared, and only a few minor differences were found. There were no significant differences for any variable relating to the perceived benefits of broadband adoption. Four main reasons for not adopting broadband were identified:

(1) Broadband is going to be outdated (i.e., prefer to wait for wireless, until its worth has been proven). (2) Lack of broadband availability (both roll-out and computer access). (3) Lack of broadband knowledge (i.e., never heard of local broadband). (4) Lack of financial means (i.e., broadband is too expensive). However, these main reasons for not adopting broadband generally stem from contingencies external to the individual and, therefore, are too inconclusive to suggest that there are no major differences between users and non-users in their motivational approach for broadband adoption.

2.3. Analysis

The analysis of laddering data involves several steps, including breaking the raw material into usable data, content analysis, summation of association, and construction of a knowledge network diagram (Gengler & Reynolds, 1995; Reynolds & Gutman, 1988). In this process, the analysis of laddering data makes use of conventional content analysis techniques to interpret coding. First, a researcher developed a comprehensive list of codes by screening the collected and transcribed data. The process of coding the data is built on an iterative interpretation of the text, which means that statements from the interviews are associated with relevant codes that relate to attributes, consequences, and values. Thereby, pieces of data are structured in a more inclusive and meaningful way (Miles & Huberman, 1994), which makes it possible to identify patterns that may not be visible in the raw data (Gengler, Klenosky, & Mulvey, 1995).

The software program called LadderMap was used to analyze the data from the 9 in-depth interviews. The software was developed by Gengler and Reynolds (1995) and makes it possible to write all statements relevant to the analysis verbatim into LadderMap and then to link these statements to the categories A (attribute), C (impact), and V (value). This is a process that leads to the construction of ladders separately for each informant, with the possibility of making a cross-analysis at a later stage.

For this particular analysis, a researcher with an understanding of broadband in rural areas first developed a set of codes (see Table 2). Then, a second and more experienced researcher performed a similar process to test if there was consistency between the two researchers' codes. The process proved a match between the codes of 75%. Subsequently, the disagreements were discussed and resolved jointly.

After all informants' ladders were entered, they were assembled across all informants for further quantitative analysis. Using LadderMap, it was possible to identify relationships between the identified concepts. Then, a comprehensive implication matrix (Table 3) was designed to determine the strength of association between concepts. The present analysis used both direct and indirect relationships, as recommended by Reynolds and Gutman (1988).

The matrix provides the basis for the design of a ladder-map. Before mapping out the interrelated concepts, a cut-off value was selected to determine which concepts and relations should be represented on the map. The rationale for the selection is based on the notion that this value should capture the most dominant associations in the matrix (Olson & Reynolds, 1983). According to Peffers and Gengler (2005, p. 20), the selected cut-off point must balance quantitative validity and the esthetics of the map and should represent a minimum of 70% of the links. The cut-off value was set to 2, which means that 87% of all direct links are represented in the matrix.

The final step in building the ladder-map involves the declaration of the number of informants who mentioned each concept and the relative strength of relationships across concepts. The number of informants who mentioned a concept is represented on the graph by the size of the node (or circle) ranges, while the relative strength of the link between the concepts is illustrated with the thickness of the lines connecting the concepts, as recommended by Gengler et al. (1995).

3. Findings on motivation for broadband

Fig. 1 illustrates the ladder-map of the motives that exist for rural people when choosing broadband. Attributes are signified by the white circles, consequences by the dotted circles, and values by the filled circles. Five different patterns of

Table 2

Code content/reasons for broadband up-take and use.

Codes	Content
Values	
Good work-life	Easy and better organizing
Family life	More energy and activity devoted to family life
Belonging	Reciprocity and sense of community
Economical	Better or worse financial situation
Self-realization	Effective daily life and room for actualizing oneself in various types of interest
Equality	Open access to what is going on in other places in society
Innovation	Both tangible (e.g. new functions) and intangible (e.g. new social meaning) developments in rural living
Consequences	
Ties	Personal relations to old and new friends and loose connections
Information exchange	Creation of new electronic communication activities
Transparency	New source of knowledge concerning activities and information in local community and its surroundings
Convenient	Making daily life easier with more consumption choices
Financial	Changed attitude to money used via Internet and all together
Stability	More stable net-connection
Activity	More social activities, both locally and outside the parish
Save time	Less waiting time while using the net
Attributes	
Channel	The means of communicating as an alternative to TV, newspapers, phones, snail mail, etc.
Connection type	The actual physical type of connection e.g. broadband, fiber, Wi-Fi, etc.
Provider	Conditions associated with the Internet service/access providers
E-commerce	A venue for shopping
Price	Various types of price levels
Software	Software supply/homepages

meanings can be inferred from the ladder-map in Fig. 1. There is no discontinuity between the motivational patterns because they may exist alongside each other simultaneously. The patterns are explained in the following analysis.

The first motivational pattern to be identified is clustered around the social ties and community and involves the argument that broadband has improved information exchange with other people, whether privately and work-associated or locally and globally. Testimonials from the interviews highlight the consequences of a better exchange of information, for example, “I’ve had contact with someone that I normally would not have” and “communication has become better”. Better information exchange has consequences for social ties, either in terms of forming new relationships, maintaining old relations despite long distances, or even strengthening some relationships, as indicated by the following statements: “Keeping the same social structure as before”, “You get to know people”, or “Contact with people you were together with before”. These consequences are perceived to be important for rural people who value belonging to a group or community.

The second motivational pattern relates to activity, family life, and innovation and has the following rationale: broadband connection means a higher and better level of local activity. It has provided spin-off in terms of more people showing up for local events and meetings, which also has consequences for the development of social ties. Some of the local activities that are a result of the rollout of broadband require more education in IT-related subjects. As one informant put it, “It creates the need for education and other activities”. However, in addition, websites, which were some of the first media to be established in connection with the rollout, have generated more local activities and provided people with something in common to talk about, as expressed in this statement: “Without the website, there would have been less activity”. The informants associate the various activities with development. That is, something is happening, and they feel they are a part of the process. For instance, broadband was the cause of a concrete local initiative to reestablish the local mill as a center for local education on IT.

A third motivational pattern is connectional stability in relation to the value of innovation. The line of reasoning is that a more stable connection provides opportunities that would not have been possible if people regularly loose their connection. This is especially the case when large portions of data are transferred. Thus, one informant stated that, “If we had a connection that kept breaking down, it would be tiresome”. In this sense, innovation is to be understood as something tangible, such as streaming high-definition video, Internet gaming, or the transfer of large files. People that value these possibilities want more than those who only require downloading emails or browsing news sites, as expressed, for instance, by an informant as follows: “We could not do that before (i.e., broadband), downloading stuff like that”. However, the stability of being connected also provides something more intangible, namely, the social meaning of being at the forefront of things. As one respondent has said, “It has given us an advantage in a number of years”.

A fourth motivational pattern is clustered around the perception of transparency, convenience, and saving time. The logic behind these consequences is based on the notion that a faster connection will provide rural residents with knowledge of what goes on in terms of local activity and where to buy what products or services. In the latter, transparency is closely associated with e-commerce and the opportunity to compare prices. Using broadband is also a convenient way of acquiring market knowledge and information because it both saves time and, to a certain degree, has

Table 3

Implication matrix.

	Channel Connection Software E-commerce	Provider Price Information Transparent Save time	Convenient Financial Activity Ties Stability Belonging Innovation Self-realizationty	Equality Family life	Economical Good work										
Channel Connection Software E-commerce	1.1	8.8	6.6	3.7	4.4	2.2	1.2	1.4	.7	.6	.6	.4	.2	.1	.1
Provider Price		4.4	4.4	6.9	6.6	1.1	4.4	1.5	3.4	.6	.6	.3	.2	.1	.1
Information Transparent		2.2	2.2	.1	1.2	4.4	1.1			.3	.4	.2	.2		
Save time			3.3	2.2	2.2	.3		1.1		.1	.2	.2	.1	.1	.1
Convenient Financial					2.2	1.1	.1		1.1	.1	.1	.1	.1	.1	
Activity Ties stability		1.1			3.3				.1	.1	.1	.1	.1		
Belonging Innovation			1.1	3.3		1.1	4.5			5.7	4.6	.1	.2		1.1
Self-realization				2.2		1.1				5.5	3.4	3.3	.1	1.1	
Equality			1.1			2.2	1.1	1.1		2.3	1.1	6.6	2.2	2.3	.1
Family life				4.4		1.1	1.1	.1	1.1	1.1	2.4	4.7	2.2	1.2	.1
Economical			1.1	1.1						1.1	3.4	2.2		2.2	2.3
Good work	.1							2.2		1.5	4.4	1.1	1.1	2.2	
	.1									4.4	1.1			1.1	
	1.1									5.5					1.1
													1.1		
												1.1	2.2		
											1.1	1.1			
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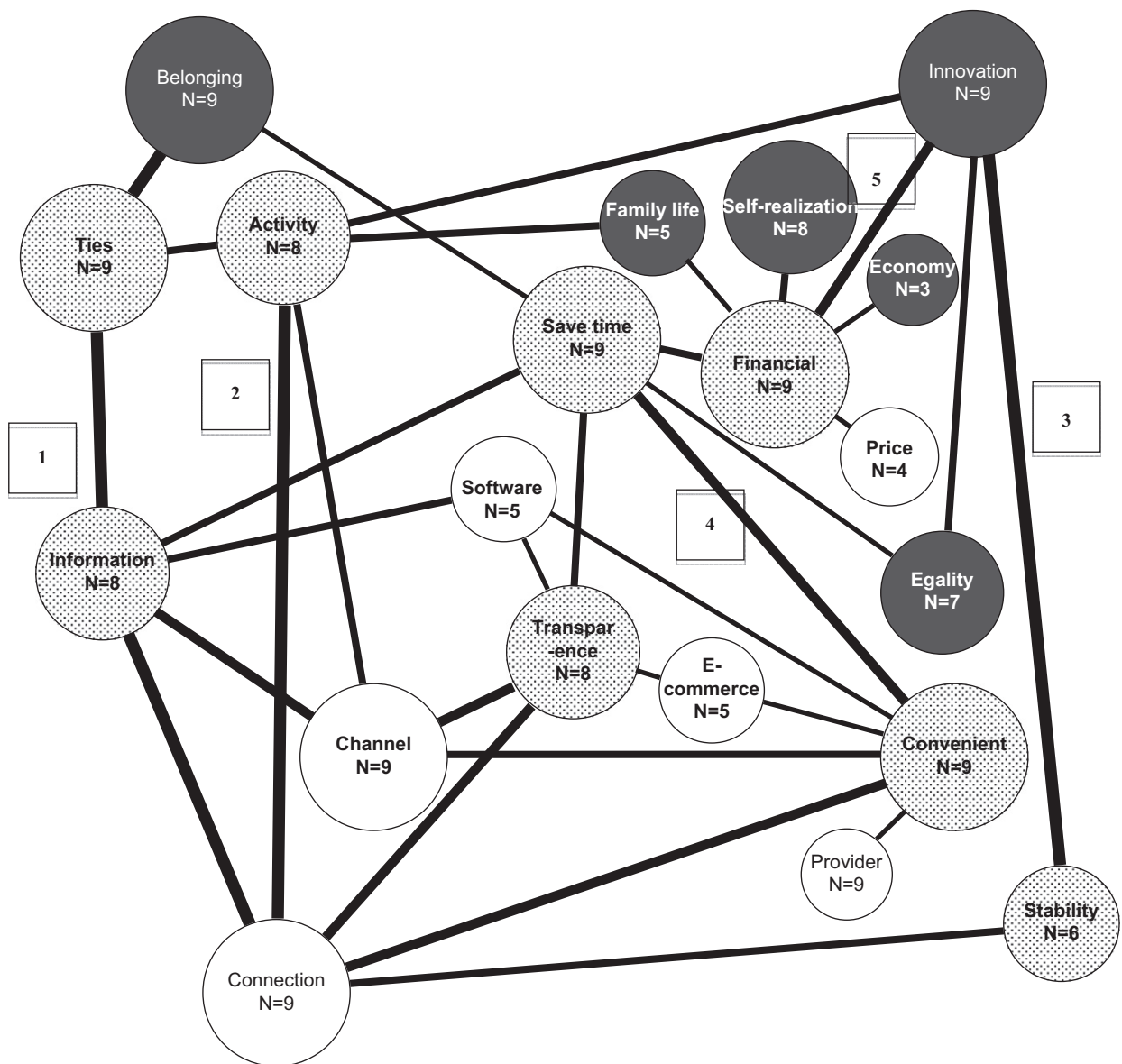


Fig. 1. Ladder map for broadband adoption.

financial implications (saving money). These consequences are perceived to be important for rural people who value equality (same opportunity for all), belonging (ability to be informed of social activities), and to a lesser degree economics.

The final motivation for acquiring broadband is related to financial consequences and the value of innovation and self-realization. The rationale for this motivation is that rural broadband, in some instances, cuts costs for both professionals and citizens. In the former, it opens up for the possibility of interaction with suppliers via the Internet instead of “paying them by the hour to drive”. This means that broadband provides a new and cheaper method of doing business, which makes the value of innovation rather tangible in nature. Broadband provides the opportunity to live in rural areas with lower costs, more choices, and more freedom to explore personal interests.

The thematic analysis above provides evidence for the further nuancing of reasons for choosing broadband. As indicated by the personal values, it is clear that the various motives for adopting broadband could be related to either communal or individual motives. The former motive relates to the value of belonging and the latter involves self-interest/realization. This is an important finding and may direct marketers' attention to the fact that broadband technology cannot be understood without taking the individual user as well as his or her context – community and rural living – into account. That is, broadband is an integrated part of the construction of community, and its significance and value is interpreted in the context of local awareness, as supported by Hampton and Wellman's (1999) study.

4. Discussion and implications

As stated above, the main objective of this study is to further the understanding and promotion of broadband adoption in rural areas. Based on the empirical study, it is possible to make an analytical generalization in terms of policy implications. Specifically, establishing causal relationships between ladders of broadband motivation has produced concepts that represent general knowledge about how to conduct the successful diffusion of broadband adoption. Attention should therefore now be directed toward the strategic task of using the results to develop a promotional strategy that will encourage a greater adoption of broadband in rural areas.

The observable attributes of broadband adoption, the consequences of these attributes, and the values it provides rural residents are important because successful communication concerning the relationships between these concepts can have a positive and persuasive impact on adoption (Reynolds, Gengler, & Howard, 1995). Furthermore, because not all users are alike, a flexible strategy of engaging rural consumers with broadband may be significantly more effective than an undifferentiated strategy that takes a whole market focus.

As the results show, some rural users are concerned with adopting broadband insofar as they find it a practical communication tool; others believe it to be a vital investment in the development of rural areas. In addition, some users have given broadband a lot of thought on a personal level, whereas others see in broadband the possibility of generating new experiences via the Internet (see also Table 1). Indeed, the degree of involvement reflects the individual user's interest in a given product or product category (Quester & Lim, 2003). As the results also show, there are various types of approaches for considering rural broadband. Some informants were very calculating in their perception of and thoughts regarding broadband adoption (e.g., "Without this fast connection, we wouldn't have TV over the Internet"); others were more emotional in their approach to rural broadband (e.g., "One doesn't feel alone, even though we are way out in the countryside"). It is useful to adapt Richard Vaughn's (1980, 1986) FCB grid as conceptual framework for further policy discussion on broadband adoption because it construes the level of involvement using utilitarian (thinking) and hedonic (feeling) differentiation (Dickinger & Zorn, 2008). In the former, user interest in products or services is categorized by a continuum from low involvement to high involvement, and the latter concerns whether messages stimulate thinking (rational motives) or feeling (emotional motives). In total, these measures have been proven to be both reliable and valid (Ratchford, 1987), and Table 4 summarizes four combinations of involvement and think/feel motives in which each combination (cell) calls for a unique set of promotional strategies, as suggested by Vaughn (1986).

4.1. Cell 1: The informative strategy

The potential users in this category are thinkers who need a large amount of specific information about the product (e.g., on quality and service). They are guided by the classical hierarchy of effect (e.g., Lavidge & Steiner, 1961), in which awareness is built on knowledge-linking concepts, building preference, conviction, and finally purchase (learn-feel-do). Generally, many major purchases such as cars, electronic equipment, and furniture are situated in this quadrant.

An informative strategy is appropriate for targeting rural residents who see broadband as a highly involved consumption choice and who base their decision on rational criteria. In particular, the functional and economic aspect of acquiring broadband is of central importance for the thinkers. Promotional campaigns need to focus on the benefits of broadband in their communication with rural residents and inform them of the many benefits as well as remove any potential risk associated with the adoption. Tactics should therefore concentrate on both positive and negative aspects of broadband adoption. The hypothesis is that even the most reactionary persons will consider broadband when they

Table 4
Promotional planning strategies.

Mental occupation with broadband	
Thinking	Feeling
<p>Concerns for broadband adoption</p> <p>High involvement</p> <p><i>Cell 1</i></p> <p>Informative strategy</p> <p>The <i>thinker</i> has functional and economic thought and needs specific information</p> <p>Shows logic, efficiency and low risk as well as functional demonstration</p>	<p><i>Cell 2</i></p> <p>Affective strategy</p> <p>The <i>feeler</i> has psychological concerns and needs status, style, and self-fulfilment</p> <p>Shows executional and possible emotional impact</p>
<p>Low involvement</p> <p><i>Cell 3</i></p> <p>Habitual strategy</p> <p>The <i>doer</i> is responsive, but needs to be activated</p> <p>Shows ease of adoption and provides reminder and exploratory trail</p>	<p><i>Cell 4</i></p> <p>Satisfaction strategy</p> <p>The <i>reactor</i> has focus on life's pleasures, but needs to be stimulated</p> <p>Arouses attention and creates strong sensory effects</p>

discover what it can do to ease discomfort. A promotional strategy that provides a clear picture of the benefits of broadband is needed. Broadband should be advertised in terms of high information retrieval (e.g., TV and entertainment), stability (e.g., no breakdowns), and performance (e.g., time saving) so that the functional quality of broadband solution becomes obvious for thinking consumers. In this context, personal sales are preferable because demonstration is a creative tactic for this quadrant (Vaughn, 1980). Issues that make broadband adoption uncomfortable or risky should also be considered and addressed where possible. The area that is of greatest concern for the informant is the loneliness and sedentary activities that often result from sitting in front of a computer. For example, a concern such as “many people are a city to themselves, they do not care for each other, do not get out and are not socially together, this is a big downside” suggests worries of being isolated, trapped, and secluded, which is a rather common phenomenon within technology research (e.g., Boorstin, 1978).

4.2. Cell 2: The affective strategy

The specific type of potential user in this category is feelers, who need psychological reassurance on a subconscious level that broadband will fulfill self-esteem. Because users within this quadrant react based on ego-related impulses, they are more susceptible to communication with a high emotional content (feel-learn-do). Decision for broadband in this quadrant is built on high involvement, but requires less specific information because attitude and emotions are more important factors. This is a psychological strategy because the product is connected with people's self-esteem. Promotional strategy should focus on provoking an emotional involvement from potential users so that they become associated on a more subtle level with broadband and then become feelers. An affective promotional strategy of broadband adoption must first awaken emotions (e.g., community and knowing about group activities) and then try to cause the consumer to think about various informational aspects of broadband such as quality cues. This approach may increase the chances of rural broadband adoption. An example of informants expressing this kind of need is captured by the statement that “It has had a positive effect on community”.

Tactics should emphasize what people do when they use broadband, rather than the features of broadband, by focusing on both the executional aspect of broadband use and its impact. Furthermore, tactics should also take into consideration that broadband is evaluated in terms of social worth and less in terms of functional and economic benefits; they should therefore focus on rural broadband consumption as a venue of making, sustaining, and redefining local relationships. An important aspect of the communication process is to provide potential users with visuals, symbolism, and identity.

4.3. Cell 3: The habitual strategy

The potential users in cell 3 are doers, who see broadband as a routine purchase or as a natural extension of a routine buy. This concept means that the involvement in the product is lower, although thinking is still a part of the buying process. Products or services in this category are often bought out of habit with no greater reflection on their consequences (do-learn-feel). The marketing of products and services in this cell will generally focus on increasing brand awareness, which consequently forms consumer habits. Therefore, this cell is traditionally for products such as household items that are bought out of habit. That is to say, the decision to buy is based on experiments, and the purchase is often made spontaneously while exposed to promotional messages. According to Vaughn (1980), incentives to test a new product could lead to subsequent purchases, which means that broadband consumers should be able to pre-test or have a trial period so that they may buy spontaneously.

Promotional messages should give people reasons to buy primarily by focusing attention on connecting the many benefits of broadband with personal values as well as differentiating them from alternative solutions. In relation to the functional aspect of broadband, promotional messages should remind consumers of broadband's advantages, such as its quick and flexible capacity for accessing various types of Internet content, its practical advantages (saving time), and its cheap price (saving money), in an effort to motivate consumer purchases. Communications with a more symbolic content should emphasize the superior quality of broadband in comparison to alternatives (e.g., TV, downloading, and visual content) as well as enhancing images of prestige and innovation, so that doers may acquire broadband in an effort to avoid lagging behind the latest developments. Examples of informants expressing such a need include the following expressions: “Learn of a place to visit through a video clip” and “Fast work that would otherwise be slow if it wasn't for broadband”.

4.4. Cell 4: The satisfaction strategy

This cell represents people who are low on involvement and high on feeling. Typically, products in this category are not associated with any great risk or with being emotionally exciting for the consumer, although they may provide him or her with some satisfaction. These people have no rational reasons for buying other than being a part of the person's lifestyle and stimulating good feelings as well as stimulating a sense of actualizing the self (do-feel-learn). In relation to broadband, potential users that fall into this category are typically affluent and will likely see broadband as a form of entertainment and as a channel to the wider world. Furthermore, those in this category are typically peer-oriented people, so a social model will have the best impact on the promotional process, as well as on product experience. The focus of promotional effort should be on sensory gratification. In this endeavor, grabbing consumers' attention by showing, for

example, HD-TV/HD IP video and personal outcomes such as relief of boredom, inspiring consumers to do something new (innovation), and changing people's mood may provide the best results. Examples of informants expressing such a need include the following expressions: "Broadband provides visual esthetics and you don't have to wait" and "It's for my own pleasure, and then you get more culture in your life".

5. Conclusion and further research

Within the marketing discipline, it has long been established that people not only buy products and services for what they do but also for what they mean (Levy, 1959). Consumers are not just rational and economical in their behavior but are perhaps more symbolic and emotional. However, studies of broadband adoption have up until now focused primarily on the functional and tangible aspects of this technology. In contrast to the existing research, this study has examined user motivation for broadband in a rural context.

As this study shows, the logic of broadband adoption is visible through at least five interrelated motivation patterns that are not just related to functional and utilitarian values but are also associated with more existential values insofar as broadband provides a means of forming community relations, social transparency, and a sense of belonging. Such an awareness of broadband motives is important because it will enable providers and other agents of change to obtain a better view of the complex situation surrounding broadband adoption. In fact, technology policy and implementation depend heavily on knowledge of such motivations behind the adoption of information technologies among different rural broadband users (Robertson, Soopramanien, & Fildes, 2007). Furthermore, in order to build a strategy for promoting broadband technology, the FCB grid was introduced, and by combining the model's two dimensions, it was possible to suggest four specific promoting strategies. Broadband providers should familiarize themselves with these strategies so that they may promote broadband persuasively.

Although this research has provided new knowledge of broadband adoption in rural areas, there is still need for further research in this area, which is suggested by the following limitations of this study. First, this study is not a statistical test, and therefore the sample does not represent a given rural population. Consequently, it will be interesting to conduct a similar study, but with a sample selected on the principle of simple random sampling in order to be able to generalize the results to a rural target population. Furthermore, the motives described in this article are limited for two primary reasons. First, the motives are derived from a group of individuals belonging to the parish of Lydum, who have adopted broadband. Although the study of non-users from the nearby village of Bølling showed no major motivational differences from those of the users, the sample is nevertheless geographically limited, and further research should explore differences in motivation between different rural areas and between rural and urban areas, possibly taking a quantitative perspective. Second, a detailed description of how the concepts and themes identified in this study are translated into effective communication is needed. There is clearly a knowledge gap concerning the effectiveness of promotional messages for rural broadband adoption. Measurements must therefore be conducted to assess the target clients' reaction to the various promotional strategies.

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