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This study describes and evaluates the marketing strategies employed by two telecenters in rural Thailand. Telecenters are facilities that provide information and communication technology services to under-served populations in an effort to close the “digital divide”. Interviews with key players involved in the management of the telecenters were conducted in order to determine the marketing practices in use. Questionnaire surveys of telecenter users and nonusers determined the effect of the marketing efforts on the community. The interviews clarified the challenges that the telecenters face. The survey results indicate that word-of-mouth advertising is the most successful marketing approach in use.

Headings:

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MARKETING THE DIGITAL DIVIDE: CASE STUDIES OF TWO TELECENTERS
IN THAILAND

by
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Introduction

The term “digital divide” is widely used in the fields of international development and information science to describe the economic and social differences between those who have access to technology and those who do not. People in developed nations who can access the internet, television, and cellular phones with ease are said to be on one side of the digital divide. People in developing nations that cannot easily access the same information technology are on the other side of the divide. Over the last decade there have been attempts by policy makers and international non-governmental organizations to close the digital divide by providing access to information technology in all parts of the world, regardless of the economic situation. The assumption of these organizations is that access to information will lead to increased social, political, and economic development for individuals, communities, and nations. Organizations such as the United Nations, the United States Agency for International Development, and the International Development Resource Center have begun major initiatives aimed at closing the digital divide. Researchers in political science, information science, and community informatics are studying the most effective ways to get information technology resources to the developing world. Proposed strategies include providing inexpensive laptops to school children (the One-Laptop-Per-Child Initiative), increasing funding for computer studies in public education, and establishing public telecenters.

A telecenter, sometimes known as a community learning center or a community

technology learning center, is a space where the public can access information technology for educational, personal, social, and economic growth (Gomez and Reilly 2002). Fuchs (1998) defines a telecenter as a place where people can be, “exposed to the tools, skills, attitudes and values of information and network technologies”. Gurstein (2006) claims that telecenters are one of the primary means by which ICT has been introduced into underserved communities. The services offered at telecenters vary but they are generally public spaces where a community can implement social development and educational programs using ICT (Menou 2004). Telecenters provide access to technological services such as the internet at low or no cost, and consequently, to the possibilities offered by them. Telecenters provide access to computer hardware, software, and connectivity in the form of formal courses, individualized instruction, or a space for personal use. They often serve as a community gathering and learning space, much like a library. They are often funded by government agencies, non-governmental organizations, corporations, or universities. Unlike internet cafes, telecenters do not attempt to make a profit by charging user fees.

Thailand is one of many Southeast Asian countries in which telecenters have begun to be established. Thailand lends itself to the development of telecenters because some technological infrastructure exists, although it is not necessarily widespread. According to the World Bank's World Development Indicators, there were 58 personal computers per one thousand people in 2004. Compared to the United States, which had 762 personal computers per one thousand people, the numbers do not seem very high. But compared to other countries in the region such as Vietnam (13 per one thousand) and India (12 per one thousand), Thailand is doing well. The results are similar when

comparing per capita expenditure on information and communication technology; Thailand's \$99.02 USD is well below the United States' \$3,458.32, but it is significantly higher than either of its neighbors, Vietnam (\$76) and India (\$33).

Telecenters began to be developed by governments and NGOs in the 1980s (Fuchs 1998) and are still a relatively new project in the field of international development. The particular telecenters in question were established and are managed by a partnership between the Kenan Institute Asia (K.I. Asia), a Thai non-profit organization based in Bangkok, and Thailand's national community college system (TCC). The first K.I. Asia telecenters were established in 2003 in the provinces of Mae Hong Son and Saekaw. Two more followed in the next two years in Phang Nga and Ranong provinces. Funding for the entire network of telecenters is provided jointly by K.I. Asia, TCC, and Microsoft Corporation's department of corporate social responsibility, called Microsoft Unlimited Potential.

With so many agencies involved in these telecenters, it is useful to clarify the responsibilities of each one. The mission of K.I. Asia is to build the capacity of local organizations so that in the future the local organization can sustain itself without outside financial or managerial support. In conjunction with TCC, K.I. Asia establishes telecenters in rural Thailand in order to bring up the level of information literacy in disadvantaged parts of the country. Microsoft funded the initial set-up of the telecenters and provided hardware and software in some cases. Like similar non-profit organizations involved in telecenter development, K.I. Asia believes that individuals with ICT skills will have better economic prospects and that these individuals will have a positive impact on their community. They hypothesize that telecenters will have a positive economic

impact on the communities in which they are placed. K.I. Asia takes on most of the operational responsibilities of the telecenters with the goal of handing over the responsibilities to the community colleges. That is, K.I. Asia will build the capacity of the community colleges and the telecenters so that eventually K.I. Asia will not be necessary. The financial and operational responsibility of TCC varies among the telecenters, but it has been increasing in all cases recently, as K.I. Asia lessens responsibility.

Because telecenters are such a new project, there are no determined guidelines as to how they are most effectively managed or used. One important aspect of sustaining the telecenter is its ability to draw in users from the community. A telecenter's methods for marketing its services are critical to its success. Multiple strategies are employed for marketing the services to the wider community. The methods are both formal, such as posting advertisements around the community or offering incentives for use, and informal, such as talking among community members about the services or asking teachers to promote the telecenter in the classroom. Successful marketing is critical to the success of any telecenter because without users, there is no reason for its existence. If community members do not know about the telecenter then they cannot be served by it. Therefore, it is important to understand how telecenters are marketed to a community and whether or not the marketing approaches are successful at attracting users. To that end, this research examines and evaluates the marketing strategies of two telecenters in Thailand through a series of interviews with key players involved in the telecenters and surveys with users and non-users. This study addresses the following questions: What marketing strategies are employed by the telecenters? What is the perception of those

strategies' success by staff? Are the marketing strategies employed by the telecenters in Mae Hong Son and Phang Nga, Thailand affective in attracting users? Do non-users know about the telecenters?

Literature Review

In order to understand telecenters, it is important to understand the larger role of technology in international development. It is also critical to understand how networks of telecenters are developed, implemented, managed, and marketed. Telecenters can be powerful tools in bridging the digital divide, and if telecenters are considered useful to an individual, a community, or a country, it is important to know how to attract users to them. This review of the literature of development, technology, and marketing will provide background on these issues and illuminate the connections between them.

In looking for research that encompasses these wide-ranging issues, I searched for three perspectives on telecenters: studies in political science that evaluate the impact of technology on growth and development, studies in information science and Community Informatics that evaluate the efficacy of international telecenters, and marketing research that provides a framework for marketing evaluations. There is very little peer-reviewed literature available that deals directly with issue of telecenters. There is a gap in the literature on telecenters in general and more specifically, on the issue of the marketing of telecenters in developing countries. However, research has been done on marketing library services and nonprofit organizations and it is included here because telecenters are similar to libraries in that they provide information services to the public.

It is noteworthy that the research on technology use and research on telecenters break down along methodological lines. While most of the political science research on technology and development are empirical studies that employ statistical analysis, studies

specifically about telecenters tend to be case studies. The same is true of marketing studies; it is difficult to find relevant empirical research on the issue. There is a dearth of verifiable studies on telecenters from which I can draw when performing my own research.

In this literature review, I discuss the articles that look at the big picture: those from political science that empirically evaluate the role of technology in international development. Then I take a different approach and consider evaluations of telecenters as a means of bringing technology to the developing world. Last, I consider the literature on marketing in order to find any lessons that can be drawn from general marketing texts and applied to telecenters.

Political Science and Sociology

One way to think about the relationship between technology and development is to consider the correlation between technology and political institutions. Corrales and Westhoff (2006) explain the differences in internet usage rates internationally. Using the World Bank's World Development Indicators, they corroborate earlier findings that some economic factors play a role in technology adoption: gross domestic product, income, trade, and infrastructure. Moving beyond the work of previous research, this study looks at two other factors: the type of technology being adopted (a mature technology or an emerging one) and the system that is adopting it (democratic or authoritarian). Several factors could have an impact on the adoption of technology. These include education level, literacy, income, existing technological infrastructure, trade, and market politics. While these factors have some impact on whether technologies will be adopted, the strongest relationship is between the type of government and the type of technology. The

WDI data shows that while authoritarian regimes have historically been willing to adopt and disseminate television, a mature technology, they are reluctant to do the same with the internet. Authoritarian regimes will adopt technologies that they can control fully. (Television requires no input from the viewer, whereas the internet is interactive and allows user participation.) The impact of political liberties on technology adoption varies, depending on the technology's controllability.

Milner (2006) analyzed the consequences of the digital divide on a macro level. In studying the potential causes of the digital divide, Milner, like Corrales & Westhoff (2006), determines that type of government is a significant factor in access to the internet. Unlike Corrales & Westhoff's conclusion that type of technology is as important as type of government in whether or not technologies are accepted and diffused, Milner concludes that government type is the sole significant variable in measuring internet acceptance. The WDI data from a decade period (1991-2001) for almost two hundred countries shows that the regime type matters greatly. Controlling for other economic, technological, and social factors, regime type is the clearest indicator of whether or not the internet will be widely adopted. Kiiski & Pohjola (2002) also found that type of government is the most statistically significant indicator of internet adoption in all countries. Thus there is a clear relationship between democracy and internet adoption. Although there is variation between democracies in terms of internet adoption, there is still a clear preference for democracies over autocracies because autocracies limit internet use, increase the digital divide, and fail to integrate with connected nations. Further, Milner concludes that this is a sign of their failure to promote their own political and economic development.

There are, however, problems with these studies. As noted above, Corrales & Westhoff's (2006) and Milner's (2006) studies look at developing countries and measures variables with WDI data, which gathers data from every country possible. However, data on authoritarian regimes is notoriously difficult to come by because it is often not provided by those nations and this leads to glaring holes in data sets. Part of the study by Kiiski & Pohjola (2002) employs a more reliable data from OECD nations. However, while this study uses reliable data, it is for a brief period: five years from 1995 to 2000. This time span is short enough to cast doubt on the reliability of the study, since technologies have changed frequently since 2000.

Critics of telecenters (e.g., James, 2005) advocate for the concept of "blending" in information technology development. This means combining the use of older technologies (telephone and radio) with new ones (the internet) in underdeveloped areas. This idea contrasts with the concept that the developing world should have all the same technological benefits as the developed world. According to James, it is not useful to "leapfrog" directly onto the new technologies bandwagon when most developing nations have an infrastructure better suited for older technologies such as radio and television. Other critics question the cost-effectiveness of internet dissemination and the telecenter model. At least one study (Grace & Kenny, 2003) shows that the internet is not a cost-effective technology in schools in LDCs, especially compared to televisions and radios. These findings fly in the face of development agencies and governments that develop telecenters with the assumption that the internet enhances education, not inhibits it. Of telecenters, James writes: "...the ratio of costs to benefits cannot but be alarmingly high" (p. 288).

Telecenters

Many advocates for telecenters come from the emerging field of Community Informatics. Community Informatics is the study of the characteristics and policies of the use of ICT for the development of communities. It is an interdisciplinary research area that straddles information science, political science, sociology, and planning. It is a practice of developing and supporting ICT systems for underserved populations (Gurstein 2000). Community Informatics moves away from the dominant focus of information science research that focuses on individual interactions with technology; it focuses instead on how ICT can be used for the good of a community. In contrast to research in political science, Community Informatics research sees an inherent good in the concept of a community-based learning as embodied by a telecenter. In advocating for telecenters, Gurstein (2006) argues for universal access to technology. Telecenters are a small part of Community Informatics; the broader interest is first to enable access to technology, locate the organization that provides access within a community (for example, a telecenter), and then connect the new technological access to non-technical aspects of a community. Gurstein claims that all communities must have the same economic opportunity and capacity for innovation and participation in ICT. These opportunities only become available through widespread public access, such as with telecenters.

According to Schuler (1996) community networks such as telecenters begin at the point where ICTs converge with the “core values” of the community: education, culture, economic opportunity, and social opportunity. This point of intersection is often the telecenter.

Champions of telecenters see this particular model as a way to create lifelong learners in “back of the market” communities—the largely poor communities that lack economic and ICT infrastructure. Fuchs (1998), an early advocate for telecenters, argues that these underserved communities have benefited from the diffusion effect of telecenters in which ICT skills and capabilities of individuals increase because of the effect that telecenters have on a community. Fuchs argues that the establishment of telecenters allowed people in these communities the opportunity to access some of the same resources that those in the mainstream economy can access easily. Using case studies from Labrador, Senegal, Wales, and South Africa, Fuchs describes success stories of telecenters bringing new opportunities to rural areas. Although these early telecenters suffered from problems with funding, sustainability, finding usable space and finding qualified human resources to staff the centers, Fuchs considers them to be successful based on individual users' experiences. Unfortunately, in most of those cases, the telecenters did not find a stable financial resource that allowed them to survive more than a few years.

Sustainability is a recurring issue in the telecenter-related literature in community informatics. Because most telecenters are established with temporary government or NGO funding, one of the primary goals of telecenters tends to be to achieve financial sustainability. Mayanja (2006) describes three management approaches that telecenters can take in attempting to become sustainable and not have to rely on outside funding and management: the community approach, the enterprise approach, and the social enterprise approach. Mayanja's approaches provide a way that telecenters can conceptualize their management, but the issue of attracting users into the centers is left out. Marketing and

advertising could be part of a telecenter's sustainability attempts because attracting users into the centers is a crucial aspect of their success.

Other research on telecenters focuses on the issue of evaluation. The process of evaluation is critical to the success of telecenters because the usefulness of a telecenter often has to be justified to funding agencies. But what are the indicators of success for a telecenter? What is the best way to evaluate them: individual success stories (Fuchs 1998), larger economic impact, community diffusion (Kumar & Best 2006)? Many case studies use a form of evaluation criteria developed by the International Development Research Center (IDRC), a Canadian development agency that supports telecenters around the world. These criteria are articulated by Gomez & Reilly's (2002) meta-evaluation of telecenters. The criteria established by the IDRC require telecenter evaluations to be participatory, socially inclusive, locally grounded, public and transparent, methodologically appropriate, sustainable, capacity building, reflective of shared visions, strategically oriented, and gender sensitive. Gomez & Reilly question whether two evaluation processes meet these criteria. In the case of the Pan Asian Telecenter Learning and Evaluation Group, the telecenters were evaluated by collecting stories and conducting interviews with workers and users. The group noted several success stories of users but in terms of the IDRC evaluation criteria, they were only successful for about half of the benchmarks. Evaluations of telecenters by a Latin American group, TELELAC, had similar results. The IDRC criteria prove overly theoretical and challenging for the evaluation groups to meet, despite their best efforts.

Two case studies of telecenters both make some use of the IDRC criteria. These case studies are of the Sao Paulo, Brazil and Kapiti, New Zealand telecenter networks.

Reinhard & Macadar (2006) performed a case study of the governance and management of a large telecenter network in Sao Paulo, Brazil. They follow the evolution of the network from its inception in 2000 until 2006, describing the various players involved in the financing, governance, and management of the network including the federal government, non-governmental organizations, local government agencies, and individuals. Although the telecenter network started off strong with enthusiasm at the local and federal levels, there were significant problems with sustainability including misunderstandings between organizations, lack of local ownership of the sites, and ineffective alliances. The results show that telecenter networks require local commitment, financial stability, and centralized governance.

In another case study, Abbott & Yoong (2005) performed interviews with key players in one telecenter with the goal of determining a series of generalizable stages in the development of telecenters. Interviewing board members of the telecenter and then coding the transcribed interviews to assign meanings to words, the authors were able to define a set of stages that the telecenter went through in its development: germinating, seedling, sampling, and maturing. This telecenter is unique in that it was developed with a significant amount of collaboration between community organizations and businesses and so the resulting stages may only be generalizable for similarly collaborative situations.

Surprisingly, none of the efforts at sustainability and evaluation emphasize an effort to attract users. Telecenters face many challenges such as making content relevant to local needs, political leadership and effective public policy, governmental and non-governmental partnerships, clustering telecenters to share resources, and financial

sustainability (Colle & Roman 2003; Fuchs 1998). A sustainable telecenter will likely require some method of attracting patrons to the service. An evaluation of a telecenter could consider whether or not telecenters are successful in attracting enough patrons.

There is no research that addresses this area.

Marketing

There are no empirical studies on the marketing of telecenters. However, there is some research available on marketing similar types of information services, for example, a library or community center, and nonprofit organizations. A review of this literature provides a methodological framework for my research, but little else in terms of generalizing from one system to another. Again, the literature tends to be case studies and advice columns for professionals that do not necessarily provide generalizable details that enlighten the research on telecenters.

Varaprasad, Paul, & Kua's (2005) case study of the National Library Board in Singapore is one such example. A case is presented where the National Library Board was responsible for remaking the image of libraries and librarians in order to gain a stronger hold on the public interest. The Board saw their "mindshare and timeshare" decline in the 1990s as citizens spent increasing amounts of time on television and computers. The goal of the Library 2000 initiative was to enhance the role of the library in the minds of citizens. The plan apparently when a 2000 study citizens ranked the public library as the third most important place to spend time, after home and work. The libraries succeeded in enacting a marketing strategy that defined users by their "value segments" (or what is known in business terms as the market segment). The value segments in this case were labeled as follows: career-minded, active info-seeker, self-

supplier, casual reader, narrow-focused learner, low motivator, and facilitator. Instead of marketing to the entire population of users and non-users the library marketed to each segment. The libraries also rebranded themselves, with the help of the media, and rebuilt the facilities. This case study does little to enhance my understanding of marketing strategies because the scale of the marketing strategy for Singapore's libraries is so far removed from the situation in Thailand that it is difficult to draw lessons from it.

Schmidt (2006) on the other hand, provides useful instruction on how libraries and information service centers can use marketing to their advantage. Schmidt writes that marketing is essential to the smooth operations of a library and should not be separated from other aspects of library management. This could be a valuable lesson for a service provider, such as a telecenter, that may be tempted to think of marketing as separate from other aspects of the center's management. Techniques are identified that libraries can use to attract patrons as well as secure funds from granting agencies, for example, focus groups, user surveys, and analyses of patron suggestions. Libraries can also use these methods to identify needs and ways to improve services. Drawing on the literature of marketing, Schmidt lists four principles of marketing that can be applied to libraries or other centers: product, price, place, promotion. Applying this to the K.I. Asia telecenters means that the product has to be one that is in demand by the community members, the price has to be low and fair (or free), the location of the center has to be accessible and the facility has to be properly appointed, and the center has to be promoted well within the community. I believe that the latter is the biggest challenge for the telecenters.

Kotler's (1979) dated but influential article advocated marketing by nonprofit organizations. The article provides examples of cases in which nonprofit organizations such as colleges and hospitals were helped by employing marketing techniques. Some of these techniques could be employed by a telecenter although some might be out of financial and logistical reach of K.I. Asia's telecenters. These include: appointing a marketing committee or a task force to perform an institutional audit; hiring a marketing specialist, director of marketing, or vice president of marketing. The last three tasks in particular seem more likely to be taken up by a for-profit organization, or at least by an organization not funded entirely on limited grants.

A review of the literature from several fields provides useful background on the issues related to telecenter development and marketing. Political science research illuminates the complex relationship between technology, economics, and politics. Studies in information science and Community Informatics show mixed results as to the actual usefulness of telecenters. Marketing research about libraries lays out a framework that can be used in applying marketing decisions to telecenters. However, it is clear from the lack of empirical studies in these areas that there is a need for continued research about telecenters and about the relationship between marketing and telecenters. The research also suggests that a case study approach is the most appropriate for studying such organizations.

Methodology

This research employed case studies of the marketing strategies employed at two telecenters. Two primary research methods were used to collect data: face-to-face interviews and paper surveys. Interviews were conducted with key players from the telecenters at Mae Hong Son and Phang Nga to provide an understanding of the marketing strategies. Surveys of telecenter users and non-users provide data on the effectiveness of the strategies. This research was conducted in Thailand from February 29th through March 16th, 2008. The trip was funded by the Dean's Office of the School of Information and Library Science at the University of North Carolina at Chapel Hill and by K.I. Asia through a grant by Microsoft Unlimited Potential.

Interviews

Interviews with individuals working at or with the telecenters were conducted based on Patton's (1990) standardized open-ended approach. These individuals are hereafter referred to as "key players". The goal of the interviews was to understand the organizational structure of the telecenters, determine actions that the telecenter staff take to market the services, the process for making marketing decisions, what justifications exist for said decisions, and what the perception of success is among staff members. Participants were asked to describe the marketing strategies and methods in place and to discuss the success or failure of those strategies.

Most of the individuals spoke English, but when the English level was not sufficient, a translator was present. All interviewees were given an implied consent fact sheet in Thai to read prior to being interviewed. Prior to beginning the research, this document had been back-translated into English to ensure its appropriateness. The interviews consisted of twenty open-ended questions and lasted thirty to forty-five minutes. Notes were taken during the interviews, but they were not audio recorded. In total, five individuals were interviewed: four from the Mae Hong Son telecenter; one from the Phang Nga telecenter. Two individuals at the Phang Nga telecenter declined to be interviewed. Two individuals from the TCC declined to be interviewed. No compensation was provided to participants.

Surveys

The surveys used in this study were self-administered questionnaires composed of open- and closed-ended questions. There were two components to the survey collection: the user and non-user. In both cases, the individuals were identified by non-probability convenience sampling.

The user surveys were self-administered paper questionnaires consisting of thirty-eight open- and closed-ended questions about the users' perception of the telecenter's services and advertising. Each user who arrived at the telecenter between the applicable dates was asked by a staff member to complete the survey. Those who agreed were shown an implied consent fact sheet that had been translated into Thai and also back-translated into English, prior to completing the survey. The surveys took approximately ten minutes to complete. Eighteen people completed a survey at each telecenter. During the time that the surveys were available, twenty-five users attended the Mae Hong Son

telecenter and twenty-two users attended the Phang Nga telecenter. Therefore, the response rates for the user survey at each telecenter were 72.0% and 81.8% respectively.

The non-user surveys were self-administered paper questionnaires consisting of twenty-one open-and closed-ended questions. Surveys of non-users asked if these community members were aware of the centers in order to determine if the marketing strategies are successful in reaching the community and what would induce people to attend the centers. The participants were found by convenience sampling. I traveled to community locations near the telecenters in Mae Hong Son and Phang Nga. In Mae Hong Son, I went to local shops in the downtown area to ask shop owners and customers to complete the survey. In Phang Nga the telecenter is located outside of town, so I traveled to the nearest community to ask local shopkeepers and other community members to complete the survey. Using a translator, participants were provided with the implied consent fact sheet and asked to complete the survey. The survey took approximately five minutes to complete. In Mae Hong Son, sixteen people were asked to participate and eleven completed the survey. Three people said that they had used the telecenter in the past, which disqualified them from completing the non-user survey. One person said he was too busy to complete the survey and one person said he had no interest. At the Phang Nga site, sixteen people were asked to participate and fourteen completed the survey. Two people said they were too busy to complete the survey. The response rates for the non-user survey were 68.9% in Mae Hong Son and 87.5% in Phang Nga.

Case 1: Mae Hong Son

The Mae Hong Son telecenter is located in the capital of the Mae Hong Son province. Mae Hong Son is a small but lively city with a consistent tourist population. The telecenter is situated on the main thoroughfare in town. Residents and tourists pass it on the way to the local market and shops. There are signs in Thai and English alerting locals and foreign tourists to the availability of internet access.

The staff at the telecenter are employees of the Mae Hong Son Community College and there is a close relationship between the school and the telecenter. The staff of the telecenter frequently consult the management of the Community College on issues of budget and finances as well as other decisions.

This telecenter has 48 computers spread throughout several rooms. There are fifteen computers available for general internet access. The other computers are used by students at the Mae Hong Son Community College for projects. It costs 10THB (about .32USD) per hour for public school students to use the computer and internet services. The cost for the general public is 20THB (.65USD) and the cost for foreigners is 30THB (.97 USD).

Users come to the center for internet access, individual tutoring, and to take short-courses. Game-playing is not permitted at the telecenter. Courses are offered once per month. These courses include: basic computer skills, basic internet skills, Microsoft Power Point, and Microsoft Excel, and web development. Students from local public

schools can sign up for classes for free. English courses are also offered for children through the public schools.

Interviews

The interviews conducted with key players at the telecenter in Mae Hong Son yielded background information about the telecenter, details about the marketing plan, lists of the challenges faced at the site, and thoughts about the future direction of marketing in the telecenter. The names of the interview participants have been changed to protect their identity.

Participant 1: Teacher

An interview with Ms. Panyavaranant, an employee of the Mae Hong Son Telecenter, yielded significant information about the marketing plans of the telecenter. Ms. Panyavaranant's job responsibilities are to create and teach short courses for telecenter users (community members and community college students); to manage the multi-media room and computer lab; to work with the Mae Hong Son Community College on budgeting and financial issues for the telecenter; to provide individual instruction to users when necessary; and to create and implement marketing strategies.

The primary services offered at this site are computer and internet access. Ms. Panyavaranant emphasized that game-playing is not permitted at the telecenter. Ms. Panyavaranant or another staff member teaches classes once per month. These courses include basic computer skills, basic internet skills, word processing, Microsoft Power Point, and Microsoft Excel, and web development. English courses are also offered for children in conjunction with the local public schools and held at the telecenter.

The prices to use the services at the telecenter are low. It costs 10THB (about .32USD) per hour for public school students to use the computer and internet. The cost for the general public is 20THB (.65USD) and the cost for foreigners is 30THB (.97 USD). Students from local public schools can sign up for classes for free. Ms. Panyavaranant said that they want to keep the prices low for locals and students “because we want to help poor people in the community.”

The staff at the Phang Nga telecenter have created the following marketing materials to advertise the services: brochures that are placed at local businesses; a large banner that is placed outside the building; a website (www.chankalay.com); and a radio advertisement. Ms. Panyavaranant believes that the radio advertisement and the location are the most effective ways that the telecenter has been marketed so far. The telecenter is located on a main thoroughfare in the center of Mae Hong Son, where many people walk by on the way to the town’s main attractions. There is a heavy tourist presence in Mae Hong Son due to the many natural attractions, and tourists sometimes go to the telecenter to use the internet. There is a sign in Thai and in English in order to attract both local community members and tourists. Ms. Panyavaranant believes that most users come to the telecenter because they initially join a class and then return for the low-cost internet services. She also mentioned that word-of-mouth is a powerful advertising tool. Ms. Panyavaranant was asked if the telecenter works with other organization to promote the services and she said that the Community College advertises the telecenter to the students because they can use it for free.

Ms. Panyavaranant believes that the paper brochure is the least effective marketing method, although she mentioned that a new brochure has been created and the

staff wants to place it in local hotels and restaurants in order to attract tourists. Ms. Panyavarant was asked how well she thinks the telecenter is promoted and she said that they “need to do more to promote the telecenter to nonstudents.” One way that they are considering doing this is shifting to a new marketing strategy; she called it the “approach strategy.” This means that the staff of the telecenter will begin to approach other local businesses and organizations and offer their services. For example, the telecenter could approach a local business and offer courses specially geared for that business. However, Ms. Panyavarant also said that because of the large amount of work that the small staff is expected to do, “Marketing is not a priority.”

According to the interview with Ms. Panyavarant, the biggest challenge facing the telecenter is the limited amount of funding available. She said that the telecenter should advertise more in order to attract customers and generate income. However, she believes that the staff is overworked and does not have time to perform tasks related to marketing. Because there is insufficient funding, extra staff cannot be hired to perform these tasks or to free up current staff to market the telecenter. Community members have told Ms. Panyavarant that they are not interested in courses that are taught by telecenter staff members. They would prefer courses to be taught by faculty from the local university. Ms. Panyavarant said that the telecenter instructors “do not have enough cache in the community. If the teachers are advertised as being from a university with a degree then people are more interested in taking these courses. But those teachers have to be paid and we do not have the money.”

Participant 2: Board Member

Mr. Smuthkochorn is a board member of the Mae Hong Son Community College

and was involved in the establishment of the telecenter in Mae Hong Son six years ago. He began his interview by discussing the role of the telecenter in the community. He said, “The center focuses on service to the community. The center is an arm of the Community College that works with grassroots people.”

Mr. Smuthkochorn said that one of the main attractions of the telecenter is that it was established by and managed by community members. Even though the telecenter is run by the Community College, and thus by the government, “it doesn’t look like a government office. People feel like they are going to the library.” Mr. Smuthkochorn believes that the telecenter should be marketed as a community-based institution. For example, he would like there to be space inside the facility to sell local products. He also mentioned that the telecenter could become more of a “community center, with tourist information and information about the local area.”

He also said he would like to reach out aggressively to local organizations. He said: “Marketing has to be done in two parts: you have to work with the community to get success stories [from their experiences at the telecenter] and you have to work with the government office to get more money.” Mr. Smuthkochorn wants the telecenter to attract working professionals, government workers, and local administrative workers. He said, “Now they are all using computers in their offices instead of writing by hand. They should come here to learn computer skills.”

Participant 3: Director of the Mae Hong Son Community College

Mr. Watkok is the director of the Mae Hong Son Community College. He discussed the impact of the telecenter on the local community. He said, “The people of Mae Hong Son are very poor and can’t afford computers. The English language

programs and IT programs have a positive impact on the community.”

Mr. Watkok said that the telecenter should be more active in recruiting users. He called this “the approach strategy.” He said that the staff should approach government offices (such as the post office, hospital, and school) and local businesses (such as banks) and offer classes designed especially for them. He also mentioned plans for advertising and expanding the telecenter: he would like to expand the website and make it an active e-commerce site, “in order to sell local products all over the world”; he would also like to be able to open a café within the facility and advertise food and drink sales; and he would like to sell local products in front of the facility during the peak tourist season.

User Surveys

The user surveys sought to determine the impact of the marketing efforts on users. Respondents in the user surveys reported their genders as 53 percent male and 41 percent female. 81 percent (or 13 respondents) reported their occupation as student, 13 percent (2 respondents) self-employed, and 6 percent (1 respondent) government employees. None reported being teachers, business workers, or retirees. Of those who answered the question, “Where do you live?” (14 of 18 total respondents) all reported living in a village in Mae Hong Son called Amphoe Muang.

In order to determine the initial method through which a user learned about the telecenter and success rates of different marketing methods, respondents were asked how they first heard about the telecenter. Results show that users overwhelmingly heard about the telecenter through word-of-mouth advertising (16 respondents total from a friend, family member, or teacher or school official), followed by from a radio advertisement (4 respondents), from a written advertisement (1 respondent), from a sign or billboard (1

respondent percent), from seeing the building (1 respondent), and from other means (0 respondents). Figure 1 illustrates the frequency with which users heard about the telecenters from a particular source.

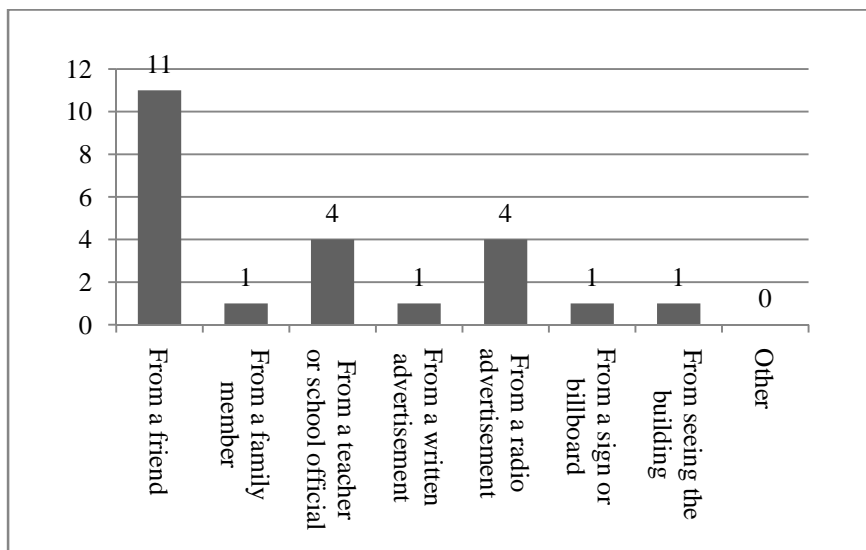


Figure 1. How did you first hear about the telecenter? (Mae Hong Son) n=23

Because so many users claimed to have heard about the telecenter from a friend, it is logical that many users also say they have recommended the telecenter to another person. 83 percent of users have recommended the telecenter to another person. Figure 2 shows the results.

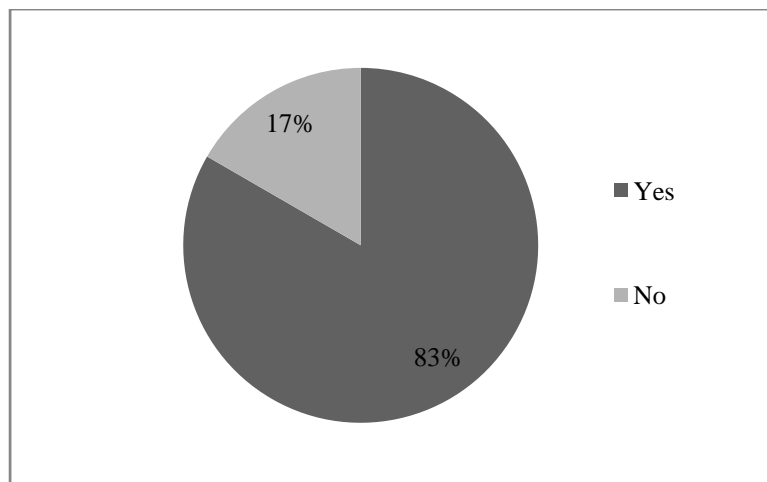


Figure 2. Have you ever recommended the telecenter to another person?

(Mae Hong Son) n=18

Users who answered that they had told other people about the telecenter were asked how many people they told. Answers to this question, which was open-ended, varied from “Two” to “10-20”. Again, these responses emphasize the significance of word-of-mouth advertising as a mechanism for advertising the telecenters. See Figure 3 for a description of the results.

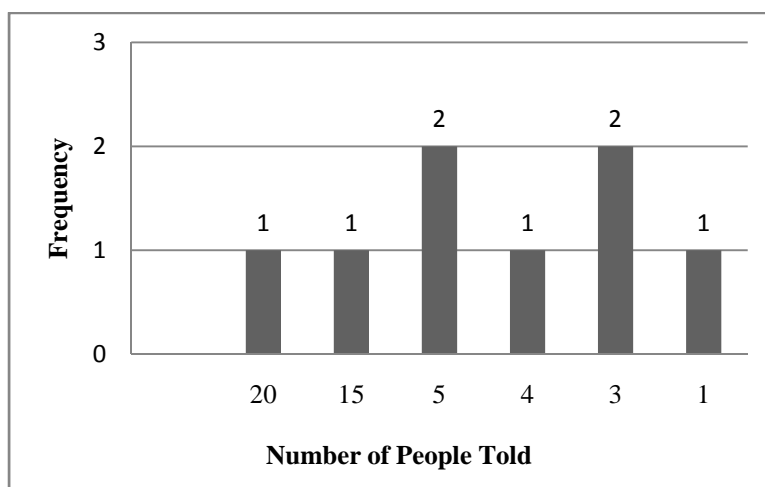


Figure 3. How many people have you told about the telecenter? (Mae Hong Son) n=6

The user survey asked, “Did any of the people that you told come to the telecenter?” 10, or 59 percent, of respondents answered, “Yes.” See Figure 4 for a description of this data.

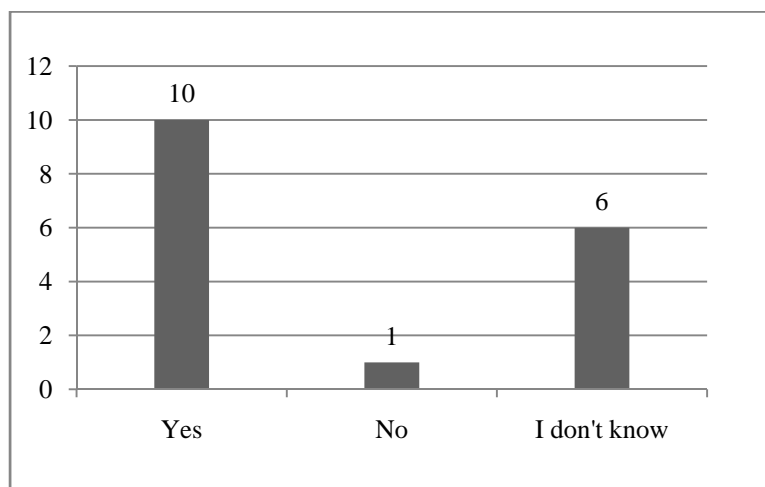


Figure 4. Did any of the people that you told come to the telecenter
(Mae Hong Son) n=17

Users were asked about their satisfaction with the services at the telecenter and the majority of users (59 percent) responded that they were very satisfied. When considered with the question above, “How did you first hear about the telecenter?” these results indicate that the information being discussed within the community is positive. Most users learn about the telecenter via word-of-mouth advertising, most users have recommended the telecenter to other individuals, and most users are satisfied with the services. Figure 5 describes the rates of satisfaction. Interestingly, 35 percent reported being not satisfied, but since no follow-up questions were asked, it is difficult to interpret this result.

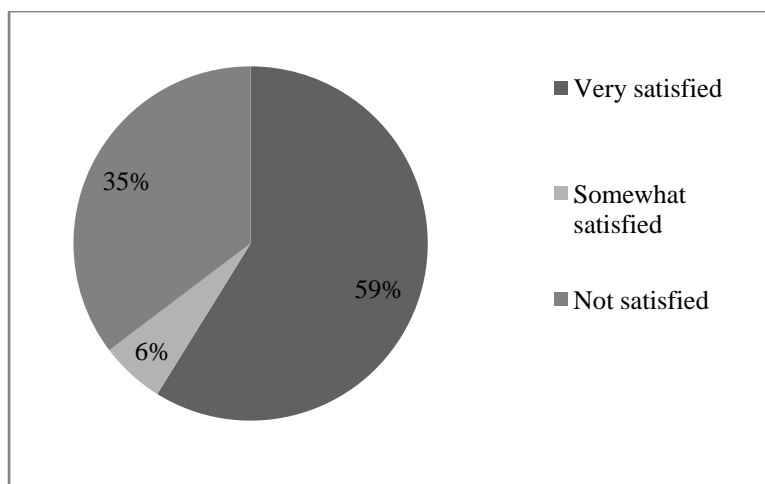


Figure 5. User Satisfaction (Mae Hong Son) n=18

The telecenter advertises the services using multiple mediums: radio advertisements, brochures, and signs. In order to learn whether or not users had seen any of the advertising that has been produced by the telecenters, respondents were asked, “Have you seen or heard an advertisement for the telecenter?” This question attempted to gauge the success rate of the advertising methods. A majority of respondents (61 percent) had seen or heard an advertisement for the telecenter. 39 percent of respondents had never heard of the telecenter.

Users who responded that they had seen or heard an advertisement for the telecenter were then asked where they had seen or heard the advertisement. Responses to this question included: on the radio (4 respondents) and on a sign (2 respondents). Responses to this question in Phang Nga included: on the radio (6 respondents), on a sign (1 respondent), on a brochure (2 respondents), and could not remember (2 respondents).

Because there are a variety of options for using internet services in each town, users were asked why they chose to use the telecenter instead of using one of the many

local internet cafes. The majority (13 respondents) report using the telecenter because of the low cost. Convenience of location is the second ranked reason that users attend (4 respondents), followed by satisfaction with teachers or lessons (3 respondents). Figure 6 describes users' reasoning for attending the telecenter instead of an internet café.

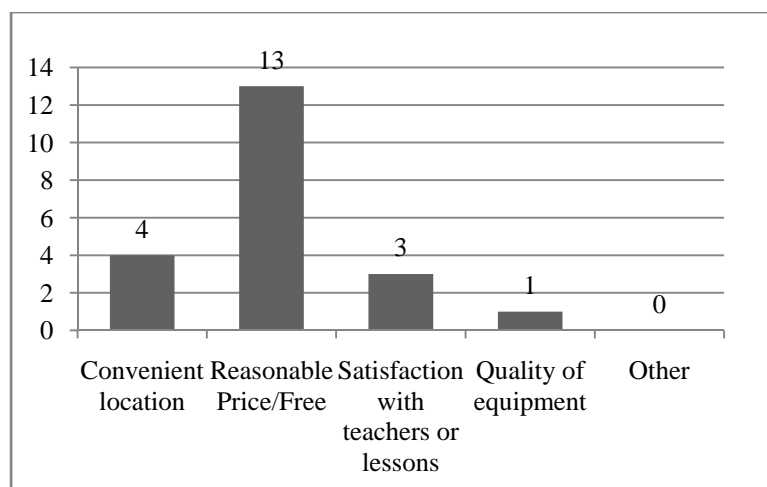


Figure 6. Why do you use the telecenter instead of an internet cafe? (Mae Hong Son)

n=21

In order to further understand the reasoning behind use of the telecenters, respondents were asked to indicate the activities that they perform while at the telecenter. Respondents were provided with several choices and asked to choose as many as were applicable to their situation. The choices were: to learn new technology skills, to practice and improve technology skills, to perform tasks related to business or work, to complete homework or study for school, or to complete personal work. Out of 18 users, 16 indicated that they wanted to learn new technology skills or practice technology skills; 14 indicated that they use the telecenter for homework or studying; 9 indicated that they perform tasks related to work; 9 indicated that they complete personal work. See Figure 7 for the results to this question.

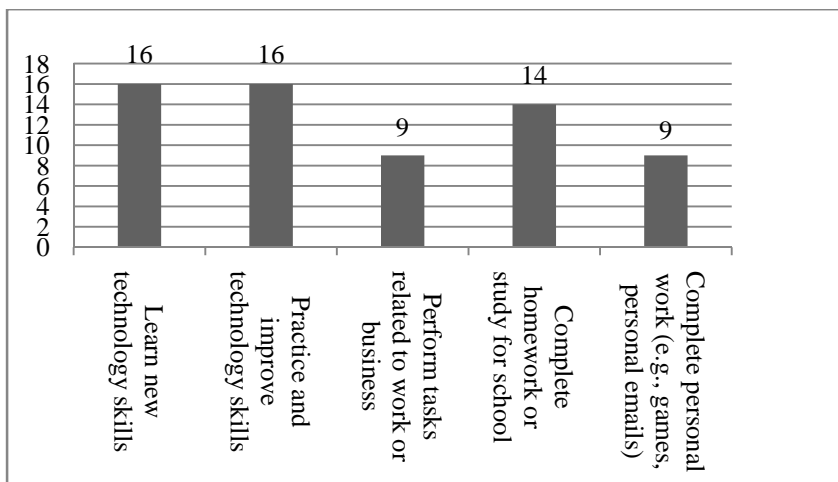


Figure 7. Uses of the telecenter ranked as “very important” (Mae Hong Son) n=18

In order to determine which computer functions (e.g., using the internet, writing e-mail, Microsoft Word, etc.) are used by respondents, they were asked to rank how often they use certain tools. Knowing which computer applications, are the most popular could inform marketing strategies. The telecenters could target advertising towards the use of these applications. Using the World Wide Web is by far the most popular activity. Playing computer games is the least popular activity (playing games is not allowed at this telecenter). Receiving individual tutoring and attending a class are also unpopular. See Figure 8 for the results of this question.

	Always	Often	Sometimes	Rarely	Never
Using the World Wide Web	10	5	1	1	1
Writing & sending e-mail	2	4	6	0	6
Word processing/typing (e.g., Microsoft Word)	3	5	3	4	3
Creating or editing spreadsheets (e.g., Microsoft Excel)	1	5	4	5	3
Creating or editing presentations (e.g., Microsoft Power Point)	1	5	6	0	6
Playing computer games	2	0	3	3	9
Attending classes	3	2	4	3	6
Receiving individual tutoring	1	0	5	4	8

Figure 8. How often do you perform each activity at the telecenter (Mae Hong Son)

Nonuser surveys

In order to gauge the effectiveness of the telecenter's marketing strategies, community members who had never used the telecenters were surveyed about their knowledge of the telecenter and their computer use. Respondents were 45 percent male and 55 percent female. All respondents in Mae Hong Son reside in the town of Mae Hong Son. The majority of respondents in Mae Hong Son reported being government employees (55 percent, or 6 respondents). 2 respondents reported being students, 2 respondents reported being business employees, and 1 respondent reported being a teacher.

Perhaps the most important question with regard to the success or failure of telecenter marketing strategies is whether nonusers know about the existence of the telecenter. When asked, "Have you ever heard of the telecenter?" respondents reported overwhelmingly "Yes" (73 percent).

Respondents were asked if they use a computer. The purpose of this question was

to gauge the likely information literacy level of community members and to gauge their interest in information technology. It is possible that an individual who reports using a computer will be interested in becoming a telecenter user because they have a demonstrated interest in technology. Results show that 73 percent of respondents do use a computer. See Figure 9 for a description of the results.

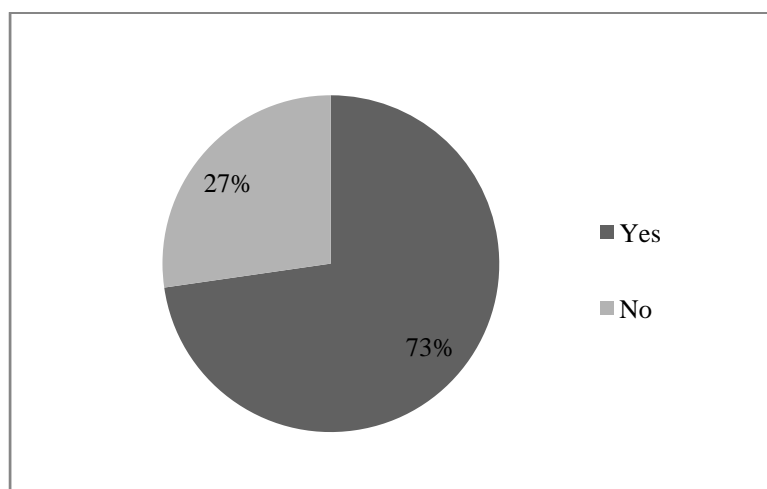


Figure 9. Do you use a computer? (Mae Hong Son) n=11

Nonusers who answered that they do use a computer were asked to report where they use a computer. The choices provided were: home, work, school, internet café, library, and other. The majority reported using a computer at their place of work, followed by using a computer at home. Nonusers also reported using a computer at school or an internet café. No nonusers reported using a computer at a library or other location. Figure 10 illustrates these results.

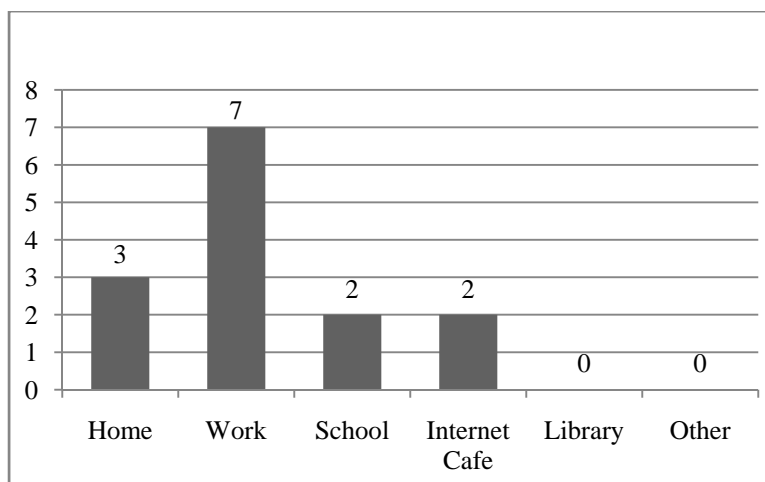


Figure 10. Where do you use a computer? (Mae Hong Son) n=14

Nonusers were asked which entertainment media they are regularly exposed to in order to determine the best mediums for telecenters to advertise in: magazines and newspapers, radio, or television. Results show that television is the most popular media to view in both communities, followed by reading magazines and newspapers, which is followed by listening to the radio. See Figure 11 below.

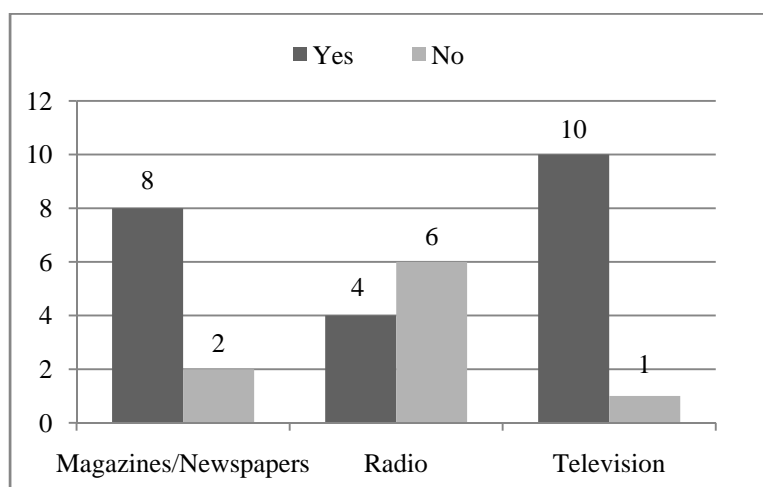


Figure 11. Regular exposure to various media (Mae Hong Son) n=11

Discussion of Results

The case study of the Mae Hong Son Telecenter provided an understanding of the marketing processes from the point of view of key players within the telecenter. The surveys of users provided valuable quantitative data on the perception of the telecenter by those who use the services. The surveys of nonusers provided valuable quantitative data on the perceptions of the telecenter by community members. The interviews conducted in the study found that the staff members of the Mae Hong Son Telecenter experience many challenges in the daily operations and marketing of the site. General trends were found among the three key players interviewed from the telecenter. They all indicated a desire to have more users, be able to actively recruit more users, and offer more and varied services at the sites. In an effort to combat what they saw as a shortage of users, two of the interviewees mentioned the new "approach strategy" that they would like to implement. They believe that this strategy will allow them to be actively engaged with the community by encouraging local offices or organizations to use the telecenter services.

All three interviewees reported frustration at the lack of funding and resources available to the telecenter. More funding would allow them to not only offer more extensive services, but also to advertise those services. They all mentioned some variation of funding or resource shortages hampering these efforts. The lack of funding feeds into another problem that was mentioned repeatedly by the interviewees: human resources. Staffing shortages seemed to be the biggest inhibitor to making further decisions about marketing because the current staff do not have time to do work beyond what they currently do. That is, hiring more personnel would either allow the new

personnel to actively recruit new users or it would free up the current personnel to take an active role in marketing. Marketing and advertising were not mentioned by any of the respondents as the biggest challenges that they face.

According to the interview with Ms. Panyavaranant, the prices at the Mae Hong Son telecenter are low and competitive with the local for-profit businesses. This is borne out by the user surveys, which show that cost is the most common reason for choosing to use the telecenter over a local internet café. These results could have important implications for the marketing of the telecenter. Cost and affordability are one way that the telecenter could be marketed to attract new customers. However, there is a risk to this approach. All of the local internet cafes are small businesses owned by Mae Hong Son residents. If they are all competing with each other based on cost alone, then the businesses will have to continue to lower the prices in order to provide the cheapest service. This could have a negative financial impact of each of the businesses. Since the telecenter was founded on a community-based model, according to Mr. Smuthkochorn, it might not want to be seen as a competitor to local businesses. Therefore, advertising the low cost of the services might not serve the mission of the telecenter.

According to the user surveys, the most common reasons for using the telecenter are to learn new skills and practice technology skills. The most popular use of the telecenter is using the internet, followed by word processing and creating presentations. Internet cafes likely already offer these services, so the telecenter could advertise the unique services which are also popular, such as individual tutoring and taking courses.

Perhaps the most significant results that came out of the user surveys were the answers to the questions about how users initially learned about the telecenter. The

results of the user surveys showed that word-of-mouth advertising was by far the most significant contributor to knowledge of the telecenter. Furthermore, most users had told multiple people about the telecenter, and a majority responded that the people to whom they had recommended the telecenter did attend. Word-of-mouth advertising relies on user satisfaction and in Mae Hong Son, most users were very satisfied or somewhat satisfied with the services. If a user is pleased with the services, they will be more likely to recommend the telecenter to a friend. Because of the lack of funding, the telecenter relies heavily on word-of-mouth advertising, and thus, on having a population of satisfied users who can spread the word about the telecenter to the community.

The results of the nonuser surveys showed that a majority of nonusers had heard of the telecenter. This is important because it means that the in advertising, the telecenter staff do not have to teach community members what the telecenter is because they already know. It also means that some aspect of the marketing efforts are working although it is difficult to determine which. It is noteworthy that most nonusers report using a computer, and those that do use a computer, use it primarily at work. The interviews indicated an interest in increasing the amount of involvement with local businesses and government offices. The fact that nonusers tend to use computers at work is significant because of the telecenter's demonstrated interest in approaching offices about offering courses tailored to their needs.

Nonusers were asked about their exposure to various types of media in order to gauge the best mediums for telecenters to advertise in. The results were the same at both sites: people chose television first, followed by newspapers and magazines, followed by radio. These results have implications for where a telecenter would chose to advertise.

For example, knowing that most viewers in Mae Hong Son do not listen to the radio, resources could be spent elsewhere. However, several users reported that they heard advertisements on the radio, which has positive implications for radio as a medium in which the telecenters should advertise. Still, while radio advertisements could be the most cost-effective medium for the telecenter to advertise in, it is the media with the least exposure by nonusers.

Case 2: Phang Nga Results

The Phang Nga Telecenter is located near the village of Thapput in the province of Phang Nga. Thapput is a very rural village situated between the capital city of Phang Nga and the favored tourist location, the Andaman Coast. Few tourists come to Thapput. The telecenter is located outside of Thapput in a building shared with the Phang Nga Community College campus. It is located within walking distance of the high school. The building is situated off of the main road and is not easy to see from a car. The telecenter is basically one room consisting of twenty five computers. There is a small library of English language textbooks in the same room as the computers. The staff members work in a small room to the side of the computer lab. The staff at the telecenter are employees of the Phang Nga Community College.

Interviews

Only a single interview was conducted at this telecenter, with Ms. Keyuravong, an employee of the Phang Nga Telecenter. This interview yielded significant information about the daily workings of the telecenter and provided an understanding of the larger goals and challenges. Ms. Keyuravong provided background information on the organization of the telecenter and its relationship to the Community College. The telecenter was originally funded by K.I. Asia, with hardware provided by Microsoft Unlimited Potential. K.I. Asia continues to provide financial support, although she said that this funding is scheduled to end within one year. The Community College also

provides some funding, although she was unsure of exactly how much. Ms. Keyuravong labeled her job title, “college English teacher.” She is officially a staff member of the Phang Nga Community College. Her responsibilities at work are varied and multiple. She teaches English and basic computer classes; she manages the telecenter and the staff of two other individuals (one teacher of Information Technology and one office worker). She oversees the daily operations of the center including assisting users, providing individual English assistance for users (most of whom are high school students), she teaches courses, she is responsible for coming up with strategies for marketing and encouraging users to return, and she creates policies for most aspects of the center.

The services offered at the Phang Nga telecenter include computer and Internet access. Game-playing is allowed, and is one of the most popular uses of the computers. Short courses in basic computer applications are offered irregularly. For example, classes in word processing, Microsoft Power Point, and web development have been offered in the past. The telecenter facility is available to be rented out by local businesses and government offices that use the space for seminars and meetings.

The prices to use the services at the telecenter are low. It costs 20THB (about .65USD) per hour to use the computer and internet services. Users can become members of the telecenter and pay 10THB (about .32USD) per hour. Membership fees vary; the set fee is 200THB (6.44USD) per year, although the interviewee said that the telecenter often offers promotions where users can become members without paying a fee. The fee for high school students to join is usually 100THB (3.22USD). Primary school students attend the telecenters for free. (There is no middle school in the Thai education system.) The courses offered by the telecenter are of similar low cost. One 30 hour course costs

5THB (16USD) per hour plus a 10 THB application fee. These prices make the telecenter highly competitive with the local internet cafes, which cost approximately 30 THB per hour.

Ms. Keyuravong detailed the telecenter's marketing activities. They pay for advertisements on the local radio station. The advertisements are usually for the upcoming courses, but also include general advertisements for the telecenters. They announce special offers on the radio as well, such as discounts and specials. A brochure was designed and distributed at the high school and high school students were asked to give their friends a copy of the brochure. Representatives from the telecenter (usually Ms. Keyuravong) attend monthly meetings at the local villages and give brochures to people at the meeting. There is a small sign at the front of the telecenter. Ms. Keyuravong said that her colleague made a brochure for a class that she taught called "Basic Computer Course," which introduced users to Microsoft Word and Power Point and the Internet. She went to the local high school and private school to announce the course and hand out the brochure. She said that last year there was a Red Cross fair in the community and the Community College was invited to have displays there. The telecenter set up computers to publicize the services.

Ms. Keyuravong said that she is not sure if the radio advertisements are effective because no users have mentioned them to her. However, several users have mentioned the brochures to her. When asked what she thought that the most effective marketing strategy was that is employed by the telecenter, she said: "When people come here I will treat them as nicely as I can and then they will be impressed and tell their friends."

Ms. Keyuravong estimated that 100 unique users attend the telecenter every

month. She did not have statistics on the exact number of users or the number of repeat users versus new users. She mentioned that April and May are the slowest months for user attendance because Thai students are on vacation at that time. She had initially assumed that those would be months with the heaviest attendance because students did not have to be in school, but in fact, they are often required by their family to stay home and help their parents at that time. She believes that the end of the school term is the period with the heaviest attendance because students are rushing to complete homework. Ms. Keyuravong believes that most users are high school students, some are from the college in Phang Nga, a few are “people who just pass by and see it” and a few are community members.

The telecenter faces many challenges. Ms. Keyuravong mentioned that the Internet connection sometimes does not work properly. Another challenge she mentioned is that she is in charge of the management of the telecenter but she has no business or management background. However, the Community College plans to hire a manager with a background in business. According to Ms. Keyuravong, “The biggest challenge is attracting villagers to come here. Villagers know that it is here; they know that it is publicly available.” It is clear from the discussion with Ms. Keyuravong that, while there are significant efforts to draw users into the telecenter, there is not a marketing strategy as such. Ms. Keyuravong and the other staff members spend most of their time at work focusing on the necessary management of the telecenter (e.g., teaching classes, providing individual instruction, ensuring that students behave, maintaining the hardware). They have little time to focus on attracting new users. Advertising does not seem to be a priority for the staff members. With regard to the finances of the telecenter, Ms.

Keyuravong said, “The center is kind of its own business, so we have to work hard to earn our income.”

User Surveys

Respondents in the Phang Nga user surveys were 72 percent male and 28 percent female. 94 percent of the users reported being students and 6 percent reported being government employees. A variety of answers were provided for the question, “Where do you live?”, including Thapput (60 percent), Phang Nga (20 percent), Krabi (6 percent), Bang Sai (6 percent), and other (6 percent).

Respondents were asked how they first heard about the telecenter in order to determine the initial method through which a user learned about the telecenter and in order to determine success rates of different marketing methods. Results show that the majority of users heard about the telecenter from word-of-mouth advertising (34 percent from a teacher or school official and 29 percent from a friend), from a written advertisement (21 percent), from a radio advertisement (8 percent), from seeing the building (4 percent) and from other means (4 percent). Figure 12 illustrates the frequency with which users heard about the telecenters from a particular source.

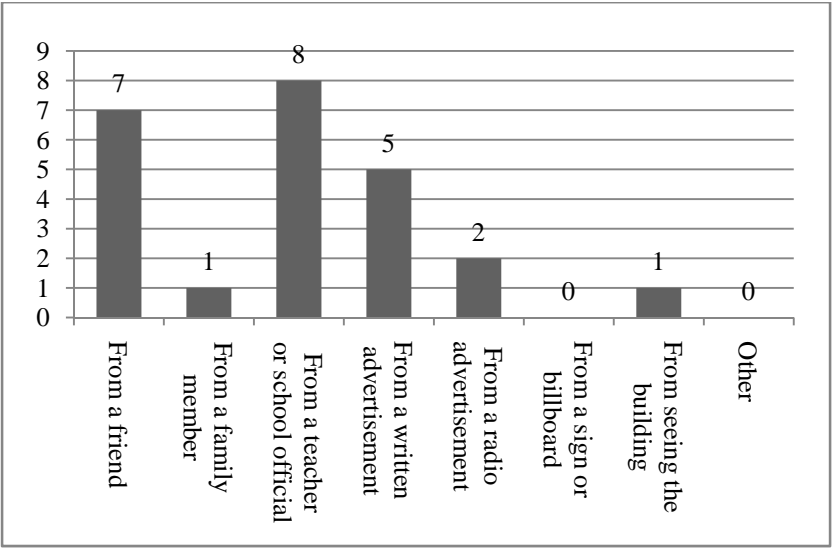


Figure 12. How did you first hear about the telecenter? (Phang Nga) n=24

Because so many users claimed to have heard about the telecenter from a friend, it is logical that many users also say they have recommended the telecenter to another person. 83 percent of users have recommended the telecenter to another person. Figure 13 shows the results.

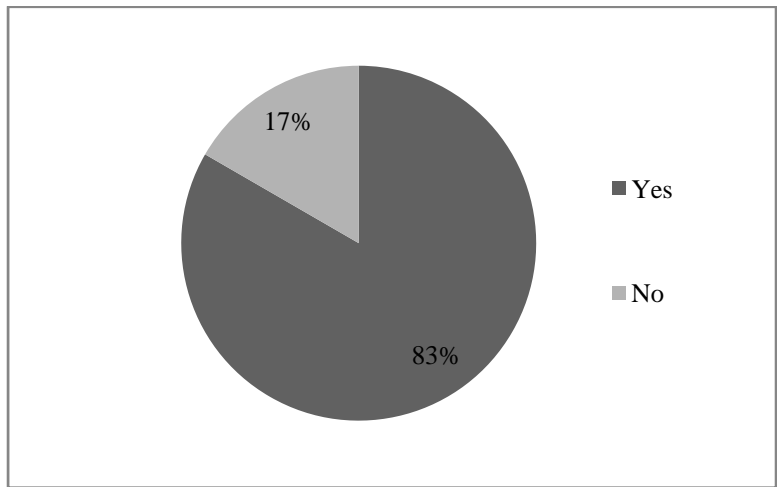


Figure 13. Have you ever recommended the telecenter to another person?

(Phang Nga) n=18

Users who answered that they had told other people about the telecenter were asked how many people they told. Answers to this question, which was open-ended, varied from “One” to “Six”. Several respondents wrote “many” in the answer line. See Figure 14 for a description of the results.

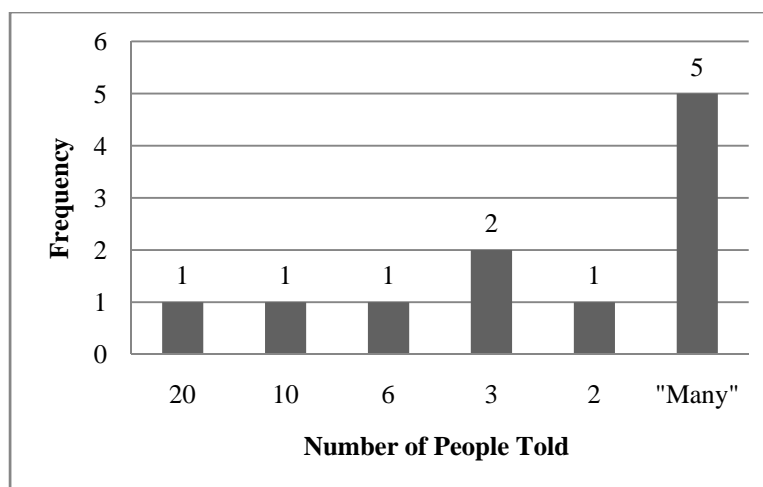


Figure 14. How many people have you told about the telecenter? (Phang Nga) n=6

In order to gauge the success or failure of word-or-mouth advertising in getting new users to come to the telecenter, respondents were asked, “Did any of the people that you told come to the telecenter?” In Phang Nga, 76 percent of respondents answered, “Yes”. No respondents answered “No” to this question, although 24 percent responded, “I don’t know.”

User satisfaction is closely linked to a users’ likelihood of recommending the telecenter to another person. If a user is not satisfied with the services, they will not be likely to recommend the telecenter. Therefore, like in Mae Hong Son, users in Phang Nga were asked about their satisfaction with the services of the telecenter. 13 respondents (72 percent) reported being “very satisfied” with the services; 5 respondents

(28 percent) reported being “somewhat satisfied”; no users reported being “not satisfied” or having no opinion about the services. See Figure 15 for the rates of satisfaction.

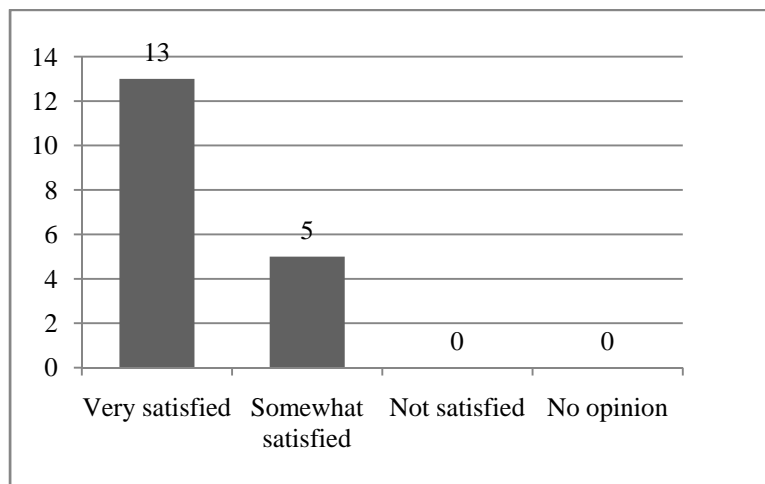


Figure 15. User Satisfaction (Phang Nga) n=18

Respondents were asked, “Have you seen or heard an advertisement for the telecenter?”. The purpose of this question was to gauge the success rate of any advertising methods. In Phang Nga, 67 percent had seen or heard an advertisement for the telecenter. Figure 25 illustrates the rates with which users have seen or heard an advertisement. Users who responded that they had seen or heard an advertisement for the telecenter were then asked where they had seen or heard the advertisement. Responses to this question included: on the radio (6 respondents), on a sign (1 respondent), on a brochure (2 respondents), and could not remember (2 respondents).

Because there are multiple options for internet services in Phang Nga, users were asked why they chose to use the telecenter instead of using one of the many local internet cafes. The most common answer was that they use the telecenter because of the cost (38 percent or 13 respondents). Satisfaction with teachers or lessons is the second ranked

reason that users in Phang Nga attend (26 percent or 9 respondents), followed by convenient location (24 percent or 8 respondents). See Figure 16 below.

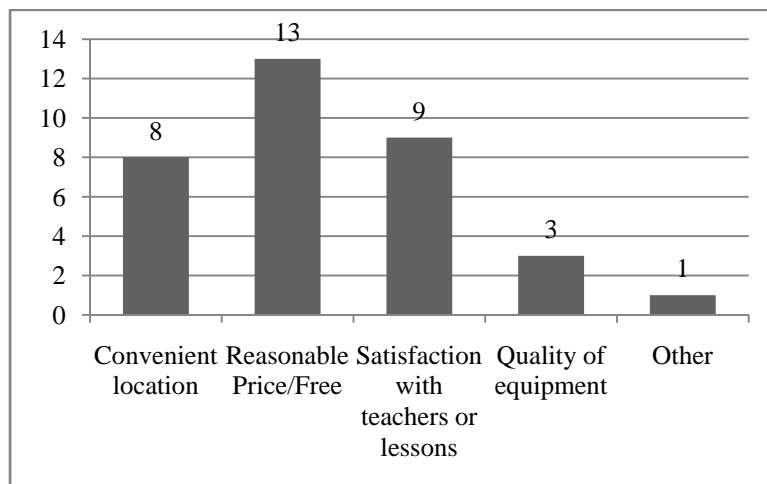


Figure 16. Why do you use the telecenter instead of an internet cafe? (Phang Nga) n=34

Respondents were also asked to indicate the activities that they perform while at the telecenter. They were provided with several choices and asked to choose as many as were applicable to their situation. The choices were: to learn new technology skills, to practice and improve technology skills, to perform tasks related to business or work, to complete homework or study for school, or to complete personal work. Results to this question were as follows: out of 18 users, 14 indicated that they wanted to learn new technology skills, practice and improve technology skills, and complete homework or study of school. 8 users indicated that they use the telecenter to perform work-related tasks; 5 indicated that they use the telecenter to complete personal work. See Figure 17 below.

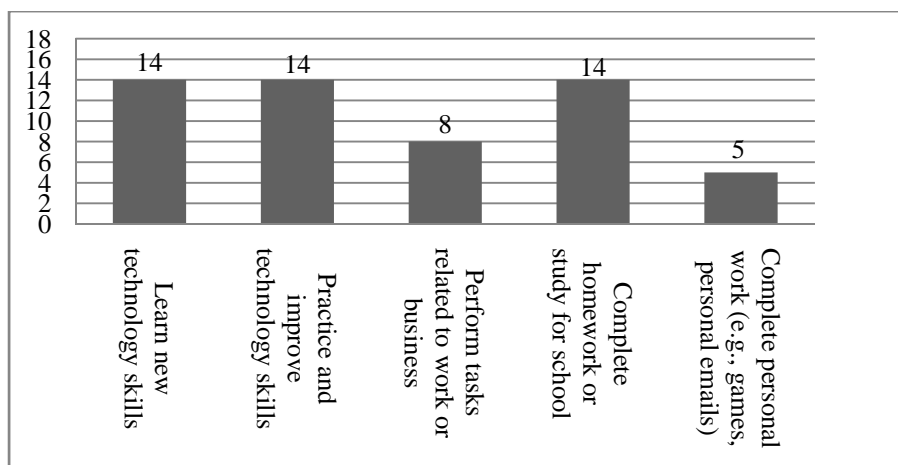


Figure 17. Uses of the telecenter ranked as “very important” (Phang Nga) n=18

Finally, users in Phang Nga were asked which services they use when they attend the telecenter. As is shown in Figure 18, using the World Wide Web was the most popular service offered by the telecenter, followed by writing and sending e-mail and word processing or typing. Neither attending classes nor receiving individual tutoring were popular uses of the telecenter.

	Always	Often	Sometimes	Rarely	Never
Using the World Wide Web	13	5	0	0	0
Writing & sending e-mail	5	3	5	4	1
Word processing/typing (e.g., Microsoft Word)	6	4	5	2	1
Creating or editing spreadsheets (e.g., Microsoft Excel)	2	0	7	6	3
Creating or editing presentations (e.g., Microsoft Power Point)	2	4	4	7	1
Playing computer games	3	3	4	6	2
Attending classes	0	7	4	3	5
Receiving individual tutoring	0	2	2	6	8

Figure 18. How often do you perform each activity at the telecenter (Mae Hong Son)

Nonuser Surveys

In order to gauge the effectiveness of the telecenter's marketing strategies, community members who had never used the telecenters were surveyed about their knowledge of the telecenter and their computer use.

Respondents were 38 percent male and 62 percent female. All respondents to the nonuser surveys reported living in the village of Thapput. The majority of those surveyed reported their occupation as self-employed (54 percent), followed by government employees (38 percent), and followed by student (8 percent). Respondents were asked, "Have you ever heard of the telecenter?" This question was meant to partially gauge the effectiveness of the Phang Nga telecenter's marketing strategy. A majority (62 percent) reported that they had heard of the telecenter. 38 percent had never heard of the telecenter.

In order to gauge the likely information literacy level of community members and to gauge their interest in information technology, respondents were asked if they used a computer. 77 percent of respondents in Phang Nga use a computer. See Figure 19 for a description of results.

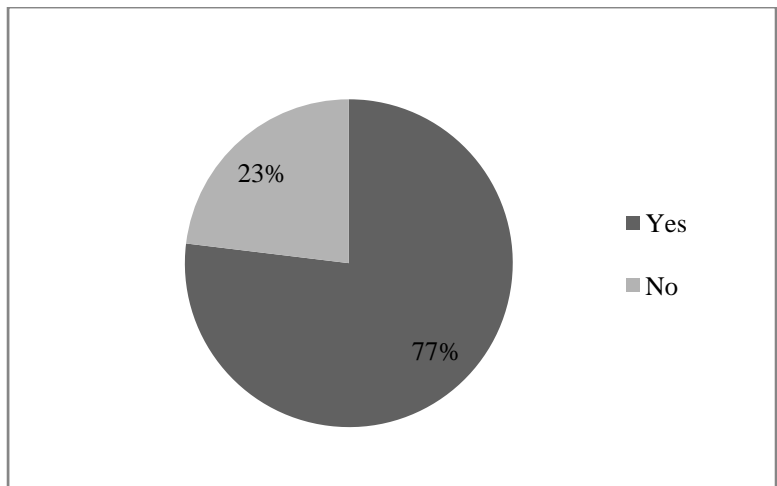


Figure 19. Do you use a computer? (Phang Nga) n=13

Next, nonusers who answered that they do use a computer were asked to report where they use it. The choices were: home, work, school, internet café, library, and other. Nonusers reported using a computer at work or at home, but no nonusers reported using a computer at school, in an internet café, library or other. Figure 20 illustrates these results.

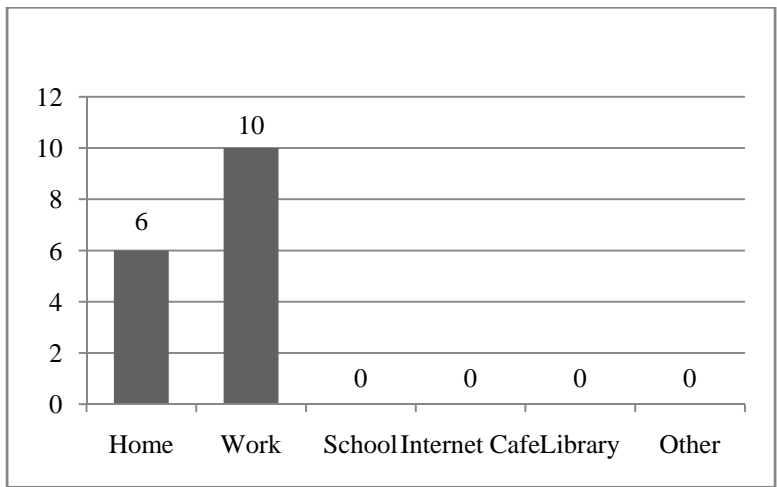


Figure 20. Where do you use a computer? (Phang Nga) n=16

Nonusers were asked which entertainment media they are regularly exposed to in order to determine the best mediums for telecenters to advertise in: magazines and newspapers, radio, or television. Like in Mae Hong Son, results show that television is the most popular media to view in both communities, followed by reading magazines and newspapers, which is followed by listening to the radio. Figure 21 illustrates these results.

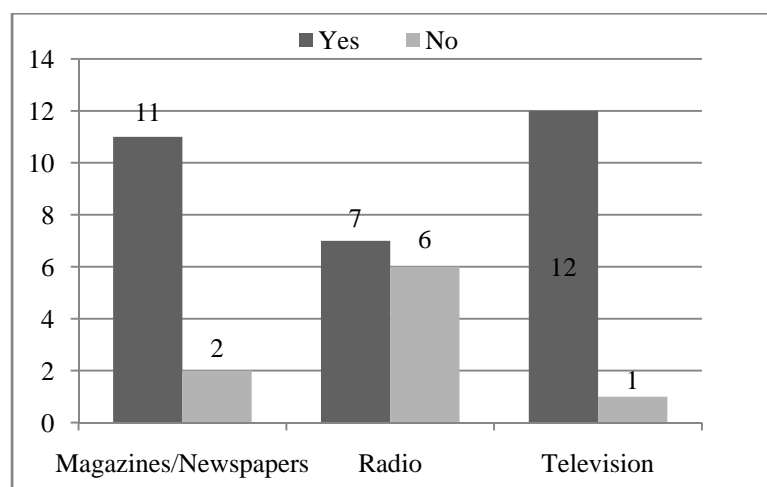


Figure 21. Regular exposure to various media (Phang Nga) n=13

Discussion of Results

The case study of Phang Nga offers a variety of perspectives about the marketing strategies of the telecenters. The information gathered from the interview with Ms. Keyuravong showed that the staff of the telecenter do not have sufficient time or resources to put towards marketing the services. Some efforts, such as a brochure and a radio advertisement have been made to market the telecenter. However, some efforts that seem obvious have not been made. For example, there is no easily-visible sign from the road that indicates that the telecenter is there. This telecenter relies heavily on word-of-

mouth advertising, perhaps at the expense of other types of advertising. Word-of-mouth advertising is a vital way of letting community members know about the telecenter: users can become free advertisements for the community. The significance of word-of-mouth advertising for the Phang Nga telecenter is confirmed by the survey results; a majority of users heard about the telecenter from another person. Also, users responded that they had told other people about the telecenter. Furthermore, nonusers indicated that they had, by and large, heard about the telecenter. This issue was addressed in the interview with Ms. Keyuravong. She said, "When people come here I will treat them as nicely as I can and then they will be impressed and tell their friends." This statement also touches upon the issue of user satisfaction. All users in Phang Nga reported either being very satisfied or somewhat satisfied with the services. The majority also reported recommending the telecenter to another person. The high rates of satisfaction and recommendations indicate that members of the community are hearing positive news about the telecenter. Although it is noteworthy that a large percentage of users recommended the telecenters to other people, the more significant measure of word-of-mouth marketing is whether or not those people actually came to the telecenter based on that recommendation. In the case of Phang Nga, the people who were told about the telecenter did eventually come to the telecenter.

Users in Phang Nga were almost entirely students. This is likely because of the proximity of the Phang Nga telecenter to the local high school (it is next door). Also, from the interviews conducted, it was gathered that the telecenter makes significant efforts at keeping the costs low for students, which would lead to a heavier student population of users in Phang Nga. Because of the high percentage of student users, it is

logical that most of the respondents reported using the telecenter to do homework or school work, to learn new technology skills, and to practice technology skills. With regard to the computer applications that they used most frequently, the most popular was using the internet. This was followed by various Microsoft applications such as Word, Power Point, and Excel. The least common answer was receiving individual tutoring. This is noteworthy because Ms. Keyuravong emphasized providing individual tutoring as a large part of her daily responsibilities. The large percentage of student users indicates that the telecenter has been successful in advertising to students. Therefore, more time and resources could be spent on advertising to community members not associated with the school; for example, to local offices and businesses. As mentioned above, the telecenter is located at the Phang Nga Community College and it is possible that community members think that the telecenter is only available for students. Since this is not true, more efforts could be made to move outside of the educational community.

Ms. Keyuravong said the telecenter has to “work hard to earn our income.” This fact points to the need for the telecenter to actively recruit users who can pay for the services while at the same time providing low-cost services for the community they are meant to serve. The interview indicates that marketing effectively in order to bring users into the telecenter is a challenge for the staff, although survey results indicate that users and nonusers are receptive to advertisements. Nonusers report being exposed to three mediums that carry significant amounts of advertising: television, magazines and newspapers, and radio. Some advertisements are already run on local radio stations.

The results from the case study of the Phang Nga telecenter identify several strengths and challenges in terms of marketing the telecenter. Foremost among these is

the importance of word-of-mouth advertising and user satisfaction, as well as the importance of having adequate financial and human resources available.

Recommendations

The interviews and surveys in Mae Hong Son and Phang Nga were identical and sought to determine the same information. The sites, however, are fairly different in size and scope, and comparative analysis was not appropriate. However, based on the two case studies, a set of general recommendations for the telecenters has been created.

- 1) Integrate marketing into the overall strategic plan of the telecenter. This means making marketing as high of a priority as the day-to-day management of the telecenter.
- 2) Allocate more funds for marketing, even at the expense of other aspects of the budget.
- 3) Allocate further human resources for marketing-related responsibilities. Hire staff with a background in business or advertising to ensure a continued interest in the marketing aspect of the telecenter.
- 4) Create a specific marketing plan with deliverables. The telecenters can create a marketing plan with specific goals and deliverables over a long period of time. Make parts of this plan part of the daily management of the telecenter.
- 5) Determine the strengths of the telecenter and corresponding needs of the community. Advertise those strengths. For example, instead of advertising the low cost internet service, advertise the variety of classes offered.

- 6) Work with local organizations and businesses to make them aware of the services.
Create services specifically tailored to the needs of the local organizations.
- 7) Ensure that community members know about the existence of the telecenter by creating a large sign nearby that indicates the location, services, and mission of the telecenter.
- 8) Place resources that mention the telecenter, such as brochures, in prominent places in the community.
- 9) Ensure that users are satisfied with the services by asking for feedback and conducting regular user-satisfaction surveys. If users are not satisfied, try to understand why and make internal changes if necessary.

Conclusion

Telecenters provide a valuable service to communities all over the world. They are part of an important movement to close the digital divide and allow everyone, regardless of location or income, to have access to the same technology. While a significant amount of research has been conducted on the digital divide and its impact on developing nations, little research has been done on telecenters. Almost no research has been conducted on an essential aspect of telecenter success: marketing. There is a gap in telecenter research about how well they are marketed and how they should be marketed in order to attract users. It is crucial for telecenters to attract users in order to justify their existence. A telecenter can have an important impact on the individuals who it serves by teaching information technology skills that help them succeed in the increasingly technological world. A telecenter with large numbers of users can have a significant impact on an entire community.

Marketing is a fundamental aspect of the management of a telecenter because it can increase the number of users significantly. This study attempted to understand the marketing strategies of two telecenters in Thailand by conducting interviews with key players at the telecenters and surveys with telecenter users and nonusers. The interviews provided an overall picture of the strategies employed at each telecenter. The surveys of users showed the ways in which people find out about the telecenter, their satisfaction with the telecenter, and for what purpose the telecenter is used. The surveys of nonusers

showed whether or not community members had heard of the telecenters and their interest in learning about computers and technology. Based on the interviews and surveys, a set of recommendations was created to improve the amount and quality of marketing.

This study faced several limitations. Most notably, the study results may have limited generalizability. Because this study consisted of two case studies, the results are not meant to be generalized to other situations. Convenience sampling was used to identify potential respondents. This type of sampling was used because it was the most appropriate in the circumstances. However, with convenience sampling, the results are not necessarily representative of the larger community. The results represent only the views of those individuals surveyed only. Even though the response rates of the user and nonuser surveys were high, the actual number of respondents was low. The low number of respondents has a negative impact on the reliability of the sample.

Time constraints put further limitations on this study. The research was conducted on three consecutive days in March at each site. It is possible that the sites would have a different pool of users in a different time of year. For example, when school is out of vacation, there could be more or less students attending the telecenter. Also, there were no classes being offered during the research time at either location. Therefore, no users who took classes were surveyed. Users who were at the telecenter in order to attend a class could have different responses than those who were actually surveyed.

Another limitation is that the interviews were not tape recorded because of a tape-recorder malfunction. Although notes were taken during the interviews, it is possible that

some important information was not recorded. Furthermore, the interviews were partially translated. All of the respondents interviewed spoke some English, but occasional words, phrases, or concepts had to be translated from Thai into English. It is possible that some ideas were lost in translation or possibly even misunderstood. Furthermore, despite the fact that most of the interviewees spoke English well and there was a translator present, they seemed nervous and hesitant about responding in English. Even when the translator offered to assist, they did not necessarily take her up on the offer. It is possible that the ability to communicate and convey ideas fully was inhibited. The difficulty of the interviews was compounded by the fact that the interviews were conducted at the interviewees' places of work. Although interviewees agreed to be interviewed, they were occasionally interrupted by the immediate needs of the telecenter.

Future research is needed to gather a complete picture of the various challenges faced by telecenters around the world. A comprehensive study would look at more than two telecenter sites to understand the general trends of how the telecenters are marketed. An exhaustive study would survey telecenters within an entire country, for example, and thus be able to generalize further about the marketing strategies at the level of the country. Similarly, future research could expand on the amount of time in which the research was conducted. A study that was able to consider the users responses over the course of several months could achieve more comprehensive results. Future research could also establish a set of marketing guidelines for telecenters around the world. These guidelines or standards could take into account the successes and failures of individual telecenters in order to create a set of best-practices that can be emulated by any telecenter.

Though the results of the surveys are not generalizable to other telecenters, these case studies provide valuable insights into the marketing practices of two telecenters in Thailand. The results are useful for these telecenters and potentially instructive for telecenters in similar communities around the world. If they are marketed well, telecenters can achieve a high number of users from the community. If there are significant numbers of users, then telecenters could play a pivotal role in providing access to information technology and eventually closing the digital divide.

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Appendix A: Interview Questions

1. What are your responsibilities at work?
2. What tasks do you perform that are related to marketing the telecenter? (For example, creating advertisements or talking to community members about the telecenter.)
3. Please tell me or show me all marketing materials that you know of that the telecenter uses. This can include any written or oral forms of marketing.
4. Please think about people who come to the telecenter more than once. Why do they return?
5. Please think about people who come to the telecenter only one time. Why do they not return?
6. Please think about the following populations. For each group, how do you think that they know about the services offered by the telecenter?
 - Elementary School Students
 - Middle School Students
 - High School Students
 - Community College Students
 - People not associated with a school
7. What have users told you (or what have you overheard users say) about how they found out about the telecenter?
8. Please tell me how well you think the telecenter is promoted?
9. Please think about how people who currently do not use the telecenter can be encouraged to come to the telecenter. What suggestions do you have?

10. Please think about how people who currently do use the telecenter can be encouraged to return to the telecenter. What suggestions do you have?

Appendix B: User Survey

1. What is your gender:
 - Male

 - Female
2. In what city or town do you live? _____
3. Are you a student?
 - Yes

 - No
4. If you are a student, what is the name of your school?

5. If you are not a student, what is your occupation?
 - Teacher

 - Government official

 - Business Employee

 - Self-employed

 - Retiree
6. Please choose the highest level of education that you have completed.
 - Elementary School

 - Middle School

 - High School

 - College

 - Graduate School

 - None
7. Do you read newspapers or magazines regularly?
 - Yes

 - No (If you answer “No,” skip to question #9)

8. What newspapers or magazines do you read?

9. Do you listen to the radio regularly?

Yes

No (If you answer “No,” skip to question #11)

10. What radio stations do you listen to?

11. Do you watch television regularly?

Yes

No (If you answer “No,” skip to question #13)

12. What television channels do you watch?

13. How often do you come to the telecenter?

Everyday

More than once per week

Once per week

More than once per month

Once per month

More than once per year

14. Are you satisfied with the services that you use at the telecenter? (Check the option that applies to you.)

Very satisfied

Somewhat satisfied

Not satisfied

No opinion

15. How did you first hear about the telecenter?

From a friend

From a family member

- From a teacher or person at school
 - From a written advertisement
 - From a radio advertisement
 - From a billboard. Where was the billboard?
-

- You saw the building and decided to try it
 - Other
-

16. Have you ever used the services of an internet café or computer school?

- Yes
- No (If you answer “No,” please skip to question #18)

17. If you answered “Yes” to the previous question: Why do you use the telecenter instead of internet cafes or computer schools? (Check all that apply)

- Convenient location
 - Reasonable price
 - Satisfaction with teachers or lessons
 - Quality of equipment
 - Other:
-

18. Have you ever recommended the telecenter to another person?

- Yes
- No (If you answer “No,” please skip to #20)

19. If you answered “Yes” to the previous question: How many people have you told?

20. Did any of the people that you told come to the telecenter?

- Yes
- No
- I do not know

21. Have you ever seen or heard an advertisement for the telecenter?

- Yes

No (If you answer “Yes,” please skip to #23)

22. If you answered “Yes” to the previous question, where have you seen or heard the advertisements?

23. Have you ever heard people in your community discuss the telecenter?

Yes

No

I do not know

For questions 24-28, please indicate your reasons for coming to the telecenter and how important each reason is to you.

24. Learn new technology skills

Very important

Somewhat important

Not important

25. Practice and improve technology skills

Very important

Somewhat important

Not important

26. Work for your company or business

Very important

Somewhat important

Not important

27. Complete homework or study for school

Very important

Somewhat important

Not important

28. Complete personal work? (e.g., play games, write personal e-mails)

Very important

Somewhat important

Not important

29. Have you ever taken a class at the telecenter?

Yes

No

30. If you have taken any classes, please list them.

Please indicate how often you perform each of the following activities when you come to the telecenter. Put an X in the box that best describes the frequency with which you perform the activity.

	Always	Often	Sometimes	Rarely	Never
Using the World Wide Web					
Writing & sending e-mail					
Word processing/typing (e.g., Microsoft Word)					
Creating or editing spreadsheets (e.g., Microsoft Excel)					
Creating or editing presentations (e.g., Microsoft Power Point)					
Playing computer games					
Attending classes					
Receiving individual tutoring					

Appendix C: Non-user survey

1. What is your gender:
 - Male

 - Female
2. In what city or town do you live? _____
3. Are you a student?
 - Yes

 - No
4. If you are a student, what is the name of your school?

5. If you are not a student, what is your occupation?
 - Teacher

 - Government official

 - Business Employee

 - Self-employed

 - Retiree

 - Not working
6. Please choose the highest level of education that you have completed.
 - Elementary School

 - Middle School

 - High School

 - College

 - Graduate School

 - None

7. Have you ever heard of the _____ Telecenter?

Yes

No

8. Do you read newspapers or magazines regularly?

Yes

No (If you answer “No,” skip to question #9)

9. What newspapers or magazines do you read?

10. Do you listen to the radio regularly?

Yes

No (If you answer “No,” skip to question #11)

11. What radio stations do you listen to?

12. Do you watch television regularly?

Yes

No (If you answer “No,” skip to question #13)

13. What television channels do you watch?

14. Do you use a computer?

Yes

No (If you answer “No,” skip to question #18)

15. If you use a computer, where do you use it? (check all that apply)

At home

At work / at my office

At school

At an Internet cafe

- At a library
 - Other _____
16. If you use a computer, for what purpose do you use it? (check all that apply)
- School work or studying
 - Personal activities or just for fun
 - Tasks for business or work
 - Other _____
17. If you use a computer, what programs do you use? (check all that apply)
- The World Wide Web
 - E-mail
 - Typing programs (e.g., Microsoft Word)
 - Spreadsheet programs (e.g., Microsoft Excel)
 - Presentation programs (e.g., Microsoft Power Point)
 - Computer games
18. If you use a computer, how often do you use it?
- Everyday
 - More than once per week
 - Once per week
 - More than once per month
 - Once per month
 - More than once per year
19. Please rate your computer proficiency.
- Excellent
 - Good
 - Average
 - Bad
 - Terrible

20. Are you interested in learning more about computers and technology?

Yes

No