CASE STUDIES OF E-COMMERCE ACTIVITY IN RURAL AND SMALL TOWN BUSINESSES

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UCED Working Paper10-2007-04
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INTRODUCTION

The technological revolution, defined here as increased access to and use of the Internet, has transformed the way many companies do business. U.S. businesses are finding that they are no longer constrained by geographic location. Through e-commerce, they are afforded access to a full range of market opportunities—from local to international—never before achieved. For rural entrepreneurs and small business owners, however, this Internet revolution represents a double-edged sword. While rural businesses can access new markets and serve new customers through the effective use of e-commerce, doing so will thrust them into a whole new marketplace where they will experience increased competition from firms and well-established giants, like Amazon.com, that come from well outside of their normal market reach. In this new competitive e-environment, rural entrepreneurs will need to adopt innovative and informed e-marketing strategies to remain distinct and profitable.

As entrepreneurs consider how to use e-commerce as a business development strategy, an effective learning tool can be the experiences of other business owners. Case studies of entrepreneurs who implemented e-commerce strategies can provide insights into the opportunities, challenges and potential impacts on the business that e-commerce may provide. In addition, since many business owners seek assistance from service providers who offer counseling and classes, these case studies may be used by such intermediaries to help illustrate both the promise and the reality of e-commerce strategies.

The purpose of this project was to provide case studies of rural businesses that have increased sales, profits, and/or employment, as well as those who have expanded markets and customer relationships by using e-commerce. The case studies focus on locally-owned rural businesses as opposed to branch plants or franchises. The selected businesses include rural firms of different sizes and in different stages of business development; bricks-and-mortar stores and virtual businesses; firms focusing e-commerce activity on businesses and those focused on consumers; and firms from different types of rural communities.

To identify potential case study subjects, the research team relied on the collaborative relationships that the RUPRI Center for Rural Entrepreneurship and Clemson University's EDA University Center for Economic Development have developed with organizations that work directly and indirectly in entrepreneurship and small business development. Through these networks, the research team sent out a request for case study candidates that might be classified as:

- traditional, store-front businesses serving local markets that increased their market ranges and sales through e-commerce.

- virtual businesses that conduct all of their marketing and sales through e-commerce.
- rural businesses that adopted e-commerce primarily to reduce marketing inputs and costs.
- rural businesses that use e-commerce primarily for business-to-business (B2B) markets.
- rural businesses that use e-commerce primarily for business-to-consumer (B2C) markets.

From the list of potential case study candidates developed through this process, the research team completed case studies of 25 firms, representing various regions of the country and various industry sectors (e.g., manufacturing, services, and trade). In addition, the team conducted interviews with three service providers who helped some of the case study businesses adopt and use e-commerce. While the case studies represent great diversity and geographic dispersion, they should not be presumed to reflect the e-commerce experience of rural entrepreneurs generally. The lessons learned and the stories they have to tell are meant to be illustrative and informative – to help service providers and entrepreneurs better understand the opportunities and challenges of e-commerce through the real world examples of these business owners. Table 1 below identifies the businesses and service providers interviewed and their location, provides a brief description of the business operation, and indicates the type of e-commerce activity they represent – business to business operations (B2B), business to consumer operations (B2C), or some combination of both activities.

CASE STUDY PROTOCOL

Each of the case study interviews was conducted by a member of the research team who visited with the owner or manager at the business location. The case studies were completed between September 2006 and August 2007. The interviews focused on the history of the business; history of the firm's e-commerce activity; implications of e-commerce for the firm's sales, costs, and profits; firm's needs or requirements with respect to hardware, software, skilled labor, and supportive institutions and services; and programs/services available locally to facilitate the adoption of e-commerce. Each case study firm was asked to comment on: (1) the problems or costs associated with adopting an e-commerce strategy and (2) anything that they would do differently with respect to e-commerce if they had the opportunity to start the process over. Of special interest were the lessons learned from the positive and negative experiences of the selected rural business. Appendix A (page 100) includes the protocol used as a guide to the interviews with case study firms.

In addition to research on the selected firms, the interviewers visited with local businesses and institutions in three locations that were identified as supportive of the case study firms' e-commerce activity. Few small, rural businesses have all the expertise and resources necessary to fully implement an e-commerce strategy. Thus, the firm's external environment may be critical to the success of the venture. Interviews with these local

support providers presented an alternative perspective and insights into the benefits and shortcomings of e-commerce activity in rural areas. Appendix B (p. 103) includes the protocol used as a guide to the interviews with service providers.

CASE STUDIES

This publication includes all of the case studies completed for this study, in alphabetical order. Readers can use Table 1 as a guide to determining which of the case studies might be most useful in a particular educational or instructional program, or which cases might resonate best with individual entrepreneurs. For example, an entrepreneur operating a recreational tourism business who is considering the adoption of e-commerce might want to focus on the case studies of Voyageur Outfitters and Songer Whitewater. The owner of a business service company might gain the most insight from the case studies of Brush Art or Mid West eServices.

Each case study is organized to include a brief profile of the business, some history of the business operation, a brief description of its rural location, the role of e-commerce, and the challenges and lessons for other rural entrepreneurs that each particular case study identifies. A Table of Contents for the case studies is included on the following page to make it easier to go directly to an individual case study.

OTHER REPORTS IN THIS SERIES

This report is one of four produced as part of this project. Others in the series include:

- David L. Barkley, R. David Lamie and Deborah M. Markley, *CASE STUDIES OF E-COMMERCE IN SMALL AND MEDIUM-SIZED ENTERPRISES: A REVIEW OF THE LITERATURE*, October 2007.
- David L. Barkley, Deborah M. Markley, and R. David Lamie, *E-COMMERCE AS A BUSINESS STRATEGY: LESSONS LEARNED FROM CASE STUDIES OF RURAL AND SMALL TOWN BUSINESSES*, October 2007.
- R. David Lamie, Deborah M. Markley and David L. Barkley, *E-COMMERCE CASE STUDIES GUIDEBOOK AND PROGRAM DELIVERY MANUAL*, October 2007.

Table 1. E-Commerce Case Studies for Rural Areas and Small Towns

Business Name	Location	Product or Service	Class of E Commerce
Black Magic Kennels	Grand Marais, MN	provides sled dog adventure weekends	Primarily B2C
Blue Smoke Salsa	Ansted, WV	manufactures and markets salsa	B2B and B2C
Boreal Access	Grand Marais, MN	Internet service provider	Service Provider
Brush Art	Downs, KS	full-service advertising agency	Primarily B2B
Columbia Falls Pottery	Columbia Falls, ME	manufactures and markets pottery and tiles	Primarily B2C
Dessin Fournir	Plainville, KS	designs and manufactures home furnishings	Primarily B2B
Eolian Farms	Newcastle, ME	produces and sells fibers from llamas and Shetland sheep	Primarily B2C
Farmchem	Floyd, IA	equipment and service provider for crop input dealers	Primarily B2B
Gail Golden Jewelry	Arroyo Seco, NM	handmade silver, gold, and gem jewelry	B2B and B2C
Grown Locally	Northeast, IA	markets and distributes locally grown farm products	Primarily B2C
Lakeland Enterprises	Seneca, SC	designs and markets car top carriers and vacation gear	Primarily B2C
Louis Williams & Sons	Henderson, NC	multi-purpose home improvement store	B2B and B2C
Mainely Metals	Gardiner, ME	manufactures metal mailboxes plus metal fabrication	B2B and B2C
Mid West eServices	Salina, KS	Internet real estate advertising and sales	Primarily B2B
Mountain One	Leland, IA	manufactures and distributes supplies for making dolls and bears	B2B and B2C
Nautical Antiques	Jonesport, ME	retailer of nautical antiques and gifts	Primarily B2C
Sivertson Gallery	Grand Marais, MN	retailer of regional and Inuit art work	Primarily B2C
Songer Whitewater	Fayetteville, WV	whitewater rafting and adventure trip outfitter	Primarily B2C
Stained Glass Express	Waterville, ME	stained glass products, supplies, and repairs	Primarily B2C
Sterling Biotech	Sterling, CO	manufactures bio-based skin care products	Primarily B2B
Taos Architectural Copper	Taos, NM	manufactures copper sinks and lighting fixtures	B2B and B2C
The Missoula Artists' Shop	Missoula, MT	retail gallery for local artists' cooperative	Primarily B2C
Vann's, Inc.	Missoula, MT	retailer of appliances and home electronics	Primarily B2C
Villages of Van Buren	Keosauqua, IA	nonprofit regional economic development organization	B2B and B2C
Voyageur Outfitters	Gun Flint Trail, MN	full-service outfitter for Boundary Waters Canoe Area	Primarily B2C
WESST Corp	Albuquerque, NM	service provider for start-up and existing businesses	Service Provider
Wintergreen Herbs and Vegetables	Winslow, ME	sells herbs and vegetables, community supported agriculture initiative	Primarily B2C
Women's Business Center, CEI	Wiscasset, ME	service provider for start-up businesses, targeted at use of Internet	Service Provider

CASE STUDY TABLE OF CONTENTS

Black Magic Kennels
Outside Grand Marais, Minnesota
Mary and Mark Black, Owners
www.blackmagickennels.com

Black Magic Kennels' mission is to "competitively run sled dogs while maintaining the highest standard of dog care possible." While the focus of owners Mark and Mary Black has been on sled dog training and competition, they have recently begun to promote Mushing 101 weekends and Off the Beaten Path Sled Dog rides through their website.

Profile
Black Magic Kennels is home to the sled dog teams of Mark and Mary Black. In addition to racing sled dogs professionally, Mark and Mary are building a business offering customers an opportunity to experience mushing as part of both day and weekend packages. This start-up business is focused on sharing their "off the beaten path" lifestyle with visitors while allowing them to experience the excitement and work involved in managing and running teams of sled dogs.

History
Getting to Black Magic Kennels is not easy. Drive east from Grand Marais, Minnesota and then head north on a gravel county road. When the road ends, ride six more miles on an ATV (or a snowmobile in the winter). As you round the final bend, you hear a symphony of voices – canine voices – that marks your arrival at Black Magic Kennels. There, you will find Mark and Mary Black living, caring for their sled dogs, and running a fledgling business "off the grid".

Mark Black has been racing sled dogs competitively for more than 25 years; his wife, Mary has been racing for 10 years. Together they built Black Magic Kennels and are training and lovingly caring for three teams of dogs. In the fall of 2004, they decided to expand their business to provide mushing experiences. They are selling not only the experience of running a sled dog team but also the "off the beaten path" lifestyle that they have chosen to pursue. During the Mushing 101 weekends, visitors are met at the end of the county road and transported the six miles to the homestead in a snowmobile (or visitors can drive in on their own snowmobile). They help care for the dogs, experience the joy of mushing, and stay in a rustic cabin. In this region, with its annual John Beargrease Sled Dog Marathon, there are others who raise sled dogs but few who are offering the type of experience that Black Magic Kennels is promoting.

While Mark and Mary are committed to the kennel operation, both have other employment. Mark's work with a construction company provides him with time off in the winter for training and racing, while Mary's job as assistant assessor for the county provides them with the health insurance benefits they need. Mary has also been able to take advantage of her daily trips into Grand Marais to access the Internet and other services needed to build the e-commerce aspects of the business.

The Blacks would like to grow their business so that the dogs are self-sustaining, i.e., bringing in enough income to cover the costs of caring for the dogs. In order to do this, they would likely need to hire another person or two to handle the dogs so that they would have time to focus on the business. In addition, they need to develop a more efficient transport system to get customers to the homestead for either daily rides or Mushing 101 weekends. Currently these modest growth plans are constrained by a lack of time and money.

Business Location

Grand Marais's economy, like much of northern Minnesota, was historically tied to the timber and mining industries. The population, which peaked around 1899, declined to 200 in 1915 as the timber companies moved away. Slowly, with the development of better transportation infrastructure and the creation of a marina and a national recreation area, the region has become a second home and tourist destination. The 2000 population rebounded to 1,353. Grand Marais is the county seat of Cook County, a nonmetropolitan county with a 2000 population of 5,168. The county is the tip of the Arrowhead Region of northern Minnesota, located 110 miles from Duluth and 265 miles from Minneapolis.

Role of E-Commerce

The Black Magic Kennels website was created in 2000-2001. While the first site was designed by outside help, Mary taught herself HTML, and with a friend, redesigned the site. As the business diversified, a contractor was hired to revamp and maintain their electronic location. The site provides information about Black Magic Kennels, including background on Mark and Mary, the dogs, and a photo gallery. It also features a blog written by Mary, which helps the business connect with customers and others interested in their way of life, and builds relationships with them and potential customers.

Customers can also find information about the Mushing 101 weekends and day-long sled dog rides on the website. Since the site is not yet fully e-commerce capable, they continue to phone in for reservations for these options.

The biggest challenges the Blacks face in growing their business through e-commerce are Internet access and time. Currently, there is no way to access the Internet from the homestead. The Blacks would need to invest in satellite Internet which is prohibitively expensive at this point in time. Without Internet access in their cabin, it is difficult to update the website and taking reservations and payment online is not yet possible. To handle the blog and updates now, Mary travels to Grand Marais early each morning to use the Internet access provided in certain hot spots in town by another company, Boreal Access, before her work day begins. The other challenge they face is the lack of time to devote to the business side of the kennel. Between other employment and caring for the dogs and training, finding the time to devote to building the Mushing 101 business is difficult.

In spite of these challenges, customers are beginning to find Black Magic Kennels through the website. Although the verdict is still out on the ultimate success of Mushing 101, given enough snow each winter and an expanded web presence, the Blacks remain

optimistic about their ability to grow the business. If there was a way to access affordable health care, Mary would devote herself full time to building the business.

Challenges and Lessons for Rural Entrepreneurs

The start up experience of Black Magic Kennels offers some insight into the challenges faced by other rural entrepreneurs:

- The remoteness of Black Magic Kennels contributes to the allure of the business (and helps these lifestyle entrepreneurs meet their personal goals), but makes it more difficult to use the Internet as a business development strategy. Even with the support of Boreal Access, the cooperatively-owned local ISP, it is unlikely that Internet access will be available to the Blacks in any form other than satellite for some time. This reality suggests that the cost of accessing the Internet will continue to be high and must be factored into their strategy for expanding the business via e-commerce – an important lesson for rural entrepreneurs operating in similarly isolated places.
- For a niche business like Black Magic, an Internet marketing strategy may be the only efficient way to reach customers who are looking for the kind of outdoor, "off the beaten path" experience that the Blacks have to offer. Through blogging and photos, the Blacks are using the Internet to do more than sell a product; they are using it to build relationships with customers so that they return for the experience and tell others about it. Their ability to expand their access to the Internet and build additional e-commerce capacity that meets the needs of their customers may be key to the future success and growth of the business.

Blue Smoke Salsa
Ansted, West Virginia
Robin Hildebrand, Proprietor
www.bluesmokesalsa.com

This case study demonstrates the use of e-commerce to tap broader geographic markets as part of the growth strategy for this homegrown business. E-commerce is providing a means to reach a larger market while maintaining high product quality and personal connections to the customer that the entrepreneur feels are the keys to her success.

Profile

Blue Smoke Salsa is the creation of Robin Hildebrand, a spirited, energetic entrepreneur, who nurtured the company from hobby to startup to a very successful small business operating in the coal mining town of Ansted, West Virginia. Blue Smoke Salsa began as a home-canning hobby with salsa doled out in one-pint canning jars sporting hand-printed labels. The Blue Smoke brand has evolved over time with the addition of new Blue Smoke products, the development of new marketing and promotion materials, and with the decision to carry complementary products from other producers both in-store and online. Blue Smoke's line of products is expanding regularly to include a peach salsa and the recent introduction of a line of products, under the JusKiddin'© brand, that are void of hot spices and chunks, to appeal to younger salsa gourmands.

At Blue Smoke's retail store in Ansted one can find a wide variety of primarily West Virginia-produced products that serve to increase the market appeal of the *bricks and mortar* store. Many of these products are available on their website but only in gourmet food gift baskets alongside Blue Smoke products. One of the ideas being considered is to expand the online catalog to allow customers to peruse and order the entire inventory that is available in the bricks-and-mortar store, increasing online customer traffic to the Blue Salsa website.

History

Ms. Hildebrand was on maternity leave from her position with a large energy utility, tending her sizable vegetable garden, canning much of her produce and sharing it with friends and family. She had the idea then to turn her hobby into a business that would allow her to work from home and continue to serve as the primary caregiver for her children until they were old enough to begin school. Robin decided early on that she wanted to produce a high-quality specialty product that would appeal to high-end consumers. Given her remote location in the New River Gorge area of West Virginia, where the consumer base for such products is limited within the indigenous population and seasonal in the tourist population, she knew that she would have to develop channels to move her product to where it would attract the kind of customers she desired.

In order to break into national markets, she attended international specialty food shows in Chicago and New York City where the quality of her product apparently met with the approval of the critics. More recently she has developed distribution agreements with

several large grocery store chains including Kroger and Harris Teeter. She indicated that, though she has been encouraged to do so, she will not allow the largest grocery retail chain in the world (Wal-Mart) to carry her products fearing they would possibly sell her products at prices that would undercut existing retailers' prices and erode her image of quality.

Blue Smoke Salsa was first produced for three years in the only state-approved commercial kitchen located in a residential basement, in her home. The company grew, her children entered school, and she relocated production to a vacant facility in downtown Ansted. Prior to her purchase and refurbishment of this facility, the entire downtown business district was completely boarded up. Memories of downtown Ansted as a vibrant commercial district were held by only the oldest residents. As often happens in stories of downtown or neighborhood revitalization, the Blue Smoke Salsa "spark" apparently lit a fire and other nearby buildings have been restored and contain active businesses. Blue Smoke stayed in this first downtown building for about five years before moving to yet another formerly vacant building across the street in downtown Ansted. The City Hall and a regional museum took up residence in the former Blue Smoke building as the little salsa-producing company contributed to a revival of the business district of this tiny little hamlet in the Appalachian Mountains of West Virginia.

Business Location
Ansted, West Virginia was established in 1891 because of the rich coal seams running through this Appalachian mountain town. While the coal companies that built the town have come and gone, tourism is now its economic driver. Both Hawk's Nest State Park and Ansted's location along the New River Gorge serve as major draws for the recreational tourism industry. Located in nonmetropolitan Fayette County (2000 population 47,579), Ansted is located 49 miles from Charleston, WV, 140 miles from Roanoke, VA, and 210 miles from Columbus, Ohio.

Role of E-Commerce
Blue Smoke, former hobby business, now makes production runs four days/week during the peak summer months and two days/week in winter, seasonally employing three part-time and seven full-time workers.[1] The raw ingredients it uses (primarily tomatoes, peppers, and onions) are locally sourced, augmenting again the regional impact of this entrepreneur's achievement.

As the enterprise grew from a hobby to a legitimate profit-seeking business capable of providing not only for its proprietor but for the material needs of a small workforce, the drive to reach a larger geographic specialty food market guided Hildebrand's next steps. In order to reach this market, traditional distribution channels (i.e., middlemen) were used. Although the profit margins on these sales were slimmer than those of the direct sales through the retail shop in downtown Ansted, Blue Smoke Salsa gained exposure from this arrangement and sales volume steadily increased.

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[1] A short video is available on their website that tours both their store and their in-store production facilities.

In 2005, Ms. Hildebrand developed her first e-commerce-enabled website complete with a shopping cart feature. She has overhauled the website once since then. Recognizing both her need for such a site and her own (and her staff's) lack of advanced computer skills, she chose not to develop the website herself or with Blue Smoke staff. Instead, she contracted with a regional service provider to design and host her site. She pays between $3,000 and $3,500 per year for website development, hosting, and domain names. Since her website is hosted on the service provider's server, located where better bandwidth is available, she is able to easily overcome the need for typically expensive high bandwidth connectivity in her rural setting. She is now able to receive orders through this website and have them processed and in transit within two business days.

A savvy businessperson will quickly recognize that this efficient processing of orders saves time and money. But a businessperson that also recognizes and values the opportunity to truly connect with their customers will want to find other ways to reach out and communicate, fulfilling both personal needs to be connected while simultaneously discovering opportunities to boost profits. Thus, orders that are received via the e-commerce website are typically followed up by a phone call to insure the accuracy of the orders, to answer questions, and to subtly develop a repeat customer base. Ms. Hildebrand considers this focus on quality over quantity an essential ingredient to the success of small business operations.

According to the proprietor, approximately five percent of overall sales come from Blue Smoke's e-commerce strategy. However, due to the higher profit margins of this direct-to-consumer strategy, it produces about ten percent of overall profits. In order to boost profits in the future, she plans to focus business strategies on increasing the volume of sales through this lucrative marketing channel.

Challenges and Lessons for Rural Entrepreneurs

The primary e-commerce challenge facing Blue Smoke is to develop ways to drive traffic to their website. Those who first sample and enjoy the product are the customers most likely to seek out and order from the site. Thus, a multi-tiered strategy of pushing the product out to where it can be sampled using traditional approaches of middlemen distributors, providing incentives for customers to visit the website as repeat customers, and making this transaction preferable to what the consumer can rely upon elsewhere has been identified.

Ms. Hildebrand's advice for other small businesses considering e-commerce business strategies is rather straight-forward. She recommends that all small businesses, whether they are B2C, B2B, or some combination, need to develop a robust web presence, e-commerce enabled or not. Those that do not figure out how to do this and do this well will be missing out on huge opportunities and will likely find it difficult to survive in today's marketplace. Beyond good web presence, the enhanced profit margins and the possibility of developing a repeat customer base should serve as the primary motivators for getting small and medium-sized businesses to adopt e-commerce strategies.

To facilitate the development of web presence and e-commerce know-how for small businesses like hers, Ms. Hildebrand suggests that access to capital, programs to subsidize the start-up costs associated with the development of web presence and e-commerce, identification of good web designers and hosting services, and the availability of high quality photography and marketing assistance are of paramount importance.

Service Provider Case Study
Boreal Access
Grand Marais, Minnesota
Danna Asche, Cook County Information Systems Director
www.boreal.org

Boreal Access is a cooperatively-owned, non-profit Internet Service Provider established in northeast Minnesota in response to a lack of Internet access in the region. Boreal provides community residents and businesses with access to the Internet as well as a "community commons" for sharing information about events and issues in the region. Boreal also offers services to businesses that allow them to become e-commerce capable.

History and Profile

In 1994, there was no local dial up service in Grand Marais (2000 population, 1,353), located on the north shore of Lake Superior in northeast Minnesota. Anyone connecting to the Internet incurred long distance charges, making it expensive for businesses in particular to get connected. Beginning in 1995-1996, partners in the region began to discuss the idea of creating a local Internet service provider (ISP) to bring affordable access to the region. Since this was still early in the history of the Internet, proponents faced an uphill battle in "selling" the concept in the community. After many presentations about what local access might mean for the business community, a decision was made to create a cooperatively-owned, non-profit ISP, Boreal Access. The organizers had a captive audience in the community, but still had to prove the value of a service that would require upfront membership fees from potential resident and business members before the ISP infrastructure was in place.

And, building the ISP infrastructure was not an easy task. The first computer for the system was built by hand, at a cost of about $40,000 obtained from a county revolving loan fund and Iron Range Resources. They selected a central location for the ISP at the clinic in Grand Marais, established a $100 membership fee and required members to sign up in advance for a number of months. The organizers focused the initial membership drive on the tourism-related businesses located along the Gunflint Trail. These businesses were organized into the Gunflint Trail Association and could readily see the benefits of Internet access (described below). Getting downtown merchants and other business owners to join Boreal was a much harder sell.

At the time of the case study in spring 2007, Boreal Access served 2500 households, many of which were seasonal, and had 1200 members. Organized as a 501(c)12 (cooperative), Boreal is guided by a board of members/owners. To receive service, residents and businesses become members, paying a one-time $25 membership fee. The ISP provides a range of service packages to its members, including dial up and email access that can meet the needs of everyone from a community member who only wants email access to a business that requires up to 300 hours of online access (or more) per month. Members can use the Boreal website to obtain community information, access the community email list, pay bills online, and learn about other services offered by the ISP.

The community has seen some important benefits from the cooperative ISP. Distance learning opportunities are now available in Grand Marais so that residents do not have to make the more than four hour roundtrip drive to Duluth to attend classes or business workshops. Twenty to thirty people in the region are actively pursuing advanced degrees, including single and working mothers who are striving to build better lives for their families. Tourism-related businesses have quickly seen the benefits of using the Internet to take reservations and connect with their visitors. According to Danna Asche, Cook County Information Systems Director, within two months of putting reservations online, one business found that about 70% of reservations were being made this way. And, the health care community has seen the benefits of efficient Internet access – online medical records have allowed the clinic to participate in a regional network and to begin offering tele-mental health services that would not otherwise be available.

Boreal is not content to rest on its laurels. The ISP is already figuring out how to bring the latest technology to the region. There is now high-speed wireless Internet access available to most residents in Grand Marais. Several downtown areas are WI-FI hot spots, allowing residents who cannot access wireless to bring laptops to the beach or the park, the café or the coffee shop, the community or the senior center to access high-speed service. With member support, the ISP would like to expand wireless access up the Gunflint Trail (where many businesses rely on satellite Internet access) and explore bringing bundled T1 lines into the community.

Boreal has grown from a volunteer staff in the beginning to five paid employees today. The community has gone from one where the value of accessing the Internet had to be sold to residents to one where the ISP and Internet access are taken for granted and are viewed as part of the fabric of the community. A long term goal, however, is to use technology as a strategy for encouraging economic development in the region – attracting IT companies to the region and creating job opportunities for local people. Part of achieving this goal is providing businesses with the services they need to expand their use of e-commerce tools as a way of growing their businesses.

Role of E-Commerce

Many of the existing businesses in Grand Marais and along the Gunflint Trail are seasonal. In the past, they have relied on the "boom" months to carry them through the down time when visitors and second home owners are not attracted to the region. However, often now these seasonal businesses must find ways of "patching" – filling the gap in seasonal income with other income generating opportunities. For some, e-commerce offers an opportunity to expand sales beyond the "boom" months and provide a steadier income stream throughout the year.

Boreal Access provides a way for these businesses to easily acquire the skills and tools they need to develop e-commerce. Business members of Boreal can use the services of the ISP to create and host a basic website. As the needs of the business change, Boreal provides access to dynamic websites, where the user can add such features as an online guestbook or shopping cart. Once an entrepreneur decides that the business needs to be

able to sell online, Boreal provides access to a shopping cart that can be customized to meet the business's needs. These services are particularly important to the rural entrepreneurs in this region because there are few alternative service providers in the local area who could meet their needs.

While some businesses may need the full range of e-commerce services offered by Boreal, Danna Asche pointed out that, for many of the tourism-related and seasonal businesses in the region, maintaining customer relationships is really key. Using the Internet to sell a product or service is secondary to using this resource to build and maintain relationships with customers long after they have left the region. A number of businesses are using their websites to create blogs, informing past customers about conditions in the Boundary Waters Canoe area, for example. Other businesses are using email or newsletters to keep customers informed about new products or services, such as a new shipment of Inuit art. Easy access to the Internet has made it possible for these northern Minnesota entrepreneurs to maintain, and even improve, relationships with visitors and customers that in the past may have gone dormant between visits. This relationship building helps regional entrepreneurs keep and grow their customer base from year to year (particularly important for tourism-related businesses) and expand their sales outside the tourism "boom" months (particularly important for artisan businesses).

Challenges and Lessons for Rural Entrepreneurs

Boreal's experience in northern Minnesota offered useful insights for other service providers who are interested in helping rural entrepreneurs in their regions gain access to the Internet and build the skills needed to effectively use the Internet in their businesses:

- In some regions, an alternative ISP model may be the only way to bring Internet access to rural entrepreneurs and community residents. According to Asche, it was unlikely that private investors, specifically the large phone and cable companies, would extend Internet access to this isolated rural region. Even with growth in second homes in the region, these providers had taken no steps to bring service to Grand Marais or other parts of the region. The wait for other smaller providers may have been longer still. Boreal's experience suggests that rural residents and businesses are willing to support a local ISP and that the cooperative model can work.

- The traditional notion of e-commerce as using the Internet to sell products and services online should be expanded for many rural entrepreneurs. The case studies from northern Minnesota suggest that the relationship building that the Internet allows is as important for building the business as the presence of an efficient shopping cart. For service providers, this reality means that workshops in blogging, creating effective newsletters, and building websites that reflect the unique character of the business may be as important as those designed to teach search engine optimization skills to entrepreneurs.

- Getting and keeping community support for continued innovation in providing access to technology is an ongoing challenge. Service providers must continue to make the value case to residents and entrepreneurs about the benefits of improved

technology, showing how technology can improve the life of the community and help entrepreneurs achieve their business goals.

Brush Art Corporation
Downs, Kansas
Doug Brush, Owner/Founder
Tim Brush, President/CEO
www.brushart.com

Brush Art Corporation demonstrates the benefits of e-commerce and the Internet in diversifying and expanding the activities of a small advertising agency. The use of e-commerce enabled the company to reduce time required to complete a project from four months to two weeks; significantly reduce expenses associated with travel, communication, and shipping; and free resources to investigate new areas of business.

Profile

Brush Art Corporation is a full-service advertising agency that focuses on businesses serving the construction, general consumer and agricultural industries. Services provided by the company include marketing campaign strategies and budgeting, and the development of promotional materials and subsequent direct marketing and sales promotions. The company also designs clients' online catalogs and websites as well as radio and television spots. In addition to traditional advertising, marketing, and promotional materials, Brush Art provides assistance with demographic and geographic targeting and technical translation services that permit multi-language sales promotions. In a typical situation, a manufacturing company seeks assistance from Brush Art in media selection, development of marketing materials, and identification of market areas. The company specializes in advertising and marketing services for goods and services targeted at the construction, general consumer and construction clientele. Clients' products include farm implements and construction equipment, hydraulic services, fencing, GPS systems, and financial services. Approximately fifty percent of Brush Arts' sales are media related (TV, radio, and industry trade magazines) with the remaining sales divided between printed marketing materials (for example, sales brochures for trade shows) and custom direct marketing programs for dealers (such as ads in regional publications). The company currently employs thirty-two individuals in graphic design, photography, web programming, image manipulation, media buying, project scheduling, account coordination, sales, and management.

History

Brush Art was founded in Lawrence, Kansas by Doug Brush in 1962, while Doug was a commercial art student at the University of Kansas. The company was moved to Mr. Brush's hometown (Downs, Kansas) in 1963 after he graduated from the university. Initial business activity focused on print advertising, and all clients were in Kansas and Nebraska. By the late 1960s, Brush Art had five employees and business was conducted through phone, fax, and significant travel by sales personnel (40,000 to 50,000 miles per year per salesman). In 1988, Brush Art was selected as a pilot site for desk top publishing by Apple Corporation. The second generation of the Brush family (sons Tim and Tom and daughter Heidi) became involved in the company in the early 1990s after graduating from college, and by 1995 firm employment had increased to nine full-time

employees. Brush Art moved to a new facility in Downs, Kansas in 1995, and space for the company's local server was provided in the building. The Internet and e-commerce became an integral part of Brush Art's business strategy and process in the late 1990s. The company has experienced rapid growth in business and employment in the last ten years. Company projects increased from 2250 in 1997 to more than 5200 in 2006, and the company's workforce expanded to thirty-two employees over the same period. The 10,000 square foot facility built in 1995 was expanded to 15,000 square feet in 2000, and Brush Art is considering an additional expansion of the facility in the near future.

Business Location

Downs, Kansas was founded in 1879 as junction and roundhouse for the Central Branch of the Missouri Pacific Railroad. Today, Downs is a service and retail center for the surrounding agricultural economy (wheat, milo, sorghum, alfalfa, and corn). Downs is in Osborne County, a nonmetropolitan county located approximately 175 miles north of Wichita and 200 miles west of Topeka (the two closest metropolitan areas). The 2000 population for Downs was 1100 residents.

Role of E-Commerce

Brush Art was an early adapter of computer technologies, the Internet, and electronic commerce. The media department led the company's transition to e-commerce, and all of the department's activities are conducted through the Internet. For example, e-mail is used to issue preliminary contracts, negotiate rates, submit final contracts, submit ads for approval with the client, submit approved ads to selected media source (television, magazines, and newspapers), and provide invoices for payments. In sum, almost all of Brush Arts' communications with clients occur over e-mails and most proofs are sent electronically from the company to clients and media sources. The use of e-commerce for the agency's traditional marketing activities has provided three principal benefits to the company. First, e-commerce reduced the average "cycle time" required to bring a marketing project to completion from four months to two weeks. This acceleration of project completions enabled Brush Art to almost triple annual project completions in the last ten years. Second, the use of e-commerce generated significant cost savings in terms of reductions in expenses associated with travel, phone, fax, and shipping. For example, Brush Art contracts with a network of printers and distributes its print marketing products directly to the printers through FTP Internet sites. As a result, UPS shipping dropped from 30 or 40 packages a day in 2000, to two - three packages a day in 2006. Third, the time savings resulting for e-commerce applications enabled Brush Art to free resources to investigate new areas of business (products and clients). A new product offered by Brush Art is secured marketing website development for its clients. These interactive websites are designed so that the dealer network for a company (e.g. lawn tractors) can download company approved marketing information yet customize the marketing materials for the needs of an individual dealer. The dealer may select from a menu on the site to tailor the ad to provide information specific to the dealer. Thus each dealer's marketing materials will have a professional appearance and provide specifics pertaining to the local dealer (e.g. store hours and location, dates and times of a sale or product promotion). The use of the interactive company website by a dealer is treated as an order from Brush Art.

Brush Art made a significant investment of money and personnel to convert to e-commerce. Initial investments in hardware and software were approximately $2.4 million, a relatively large expenditure because the software used was very specific to the advertising industry. Brush Art maintains a server at the Downs facility, and the company also contracts with a firm in Colorado Springs, Colorado to provide an external server and monitor all servers and systems. Most IT hardware and software problems are handled internally by Brush Art employees; however, Tim Brush estimated annual expenses of $40,000 to $50,000 for external IT services. Two high speed Internet providers (Sprint and NCKCN) are used to ensure that back-up service is available. Finally, Brush Art noted that EDI (Electronic Data Interchange) is not a problem because the company's products are custom designed and the agency will deliver the products on whatever platform the client selects.

Brush Art intends to increase the role of e-commerce in all of its marketing campaigns with the goals of increasing the number of its clients and the growth of each client. Brush Art is investigating the application of analytics to client websites that will permit their clients to: (1) identify specific customers and information requested, and (2) conduct e-mail campaigns of customers that selected specific information. Brush Art also is developing "micro" web sites that address the varied interests of readers of different magazines. Thus, for example, the readers of home landscaping magazines and professional farming magazines would be directed to different parts of a web site for a farm implement company. As such, the implement company could better differentiate its markets and target its advertising campaigns. Finally, Brush Art hopes to expand its client base to include larger corporations and state and local governments. The company's anticipated rapid growth in the future has created concerns regarding the availability of space, the optimal company size, and maintaining a focus to the firm's products and services.

Challenges and Lessons for Rural Entrepreneurs

The Downs, Kansas location presents two principal challenges for Brush Art. First, the company relies on experienced graphic artists, marketing professionals, and IT specialists. Such individuals are not easily attracted to rural Kansas. Telecommuting, which is used by a small number of Brush Arts' employees, may provide a partial solution to the problem of attracting skilled workers. Second, it is difficult to convince potential clients (e.g., farm implement manufacturers) and media representatives (e.g. editors of farm and garden magazines) that a Downs, Kansas company can deliver on their project or that it is worth the travel time and cost to conduct due diligence on the central Kansas company. Larger corporations are especially skeptical that Brush Art has the skill set and resources to handle their marketing projects. Brush Art attempts to overcome its locational disadvantages by owning a company plane that speeds travel and purchasing, and renovating a local motel that ensures quality accommodations for clients.

Columbia Falls Pottery's experience with e-commerce shows the potential that exists for rural artisans to extend their markets beyond regional borders and to become less dependent on seasonal tourism for success. The artist is choosing to move the business from one that generated some seasonal employment opportunities to a successful self-employment enterprise that will rely on e-commerce as essential to her long-term goals for the business. She plans to grow the online component while reducing her dependence on retail sales. Her effective use of e-commerce will keep Columbia Falls Pottery in rural coastal Maine well into the future and allow this lifestyle entrepreneur to pursue both her business and her artistic dreams.

Profile

Columbia Falls Pottery, owned by potter April Adams, is located in Columbia Falls, Maine. April Adams produces and sells pottery in several distinctive patterns, along with tiles and tile murals, and clocks. Currently, she produces all of her products; in the past, she has sold at volumes that required sub-contracting with other potters in the region who would produce "blanks" that she finished with her unique decorations and glazes. In addition to her standard patterns and designs, April does custom design work.

Columbia Falls Pottery has a retail presence in Columbia Falls, located in an historic building on the main street. The store is open during the tourist season and by appointment during the spring. Production occurs in the back of the retail space. In the past, the retail operation required full-time sales help in July and August, and part-time production assistance during the same period. At the height of her business volume, 2000, the business had a full-time sales person, production assistance and two sub-contractors. Current plans are to relocate the retail operation after this season to a shared retail space on the main street, reducing the time and operating costs associated with operating a retail storefront, while expanding the e-commerce side of the business.

History

April Adams, a Maine native, has been a full-time potter since graduating from the Portland School of Art, practicing her craft for 37 years. She began doing craft shows and wholesaling her work but recognized that potters who had done well with their business in Maine had access to the retail and tourism markets. In 1990, she moved to Columbia Falls and opened her retail business on the main street in town. As a result, 95% of her business became generated by the retail market while 5% was received from the wholesale market.

A turning point for the business came following 9/11. Most of her business had been walk-in retail sales but that activity declined after 9/11. The tourist trade that made up the majority of her sales – 60% of her sales occurred between May and October –

declined significantly. From 9/11 until last year, sales continued to decline, associated with the decline in tourism that April does not see returning to earlier levels. At the same time, operating the retail space was becoming an increasing burden on April. At the height of her business in 2000, she was spending more time managing the business than she was spending on the artistic aspects of production. And, the historic retail storefront, renovated when she started the business in 1990, was in need of additional renovation and maintenance – an unwelcome prospect for April at this point in her life.

These factors came together to suggest the need for a refocusing of the business in a new direction. What the business needed was a way to have more off-season sales and to bring in out-of-region sales. While Columbia Falls Pottery has had a website since 1998, it served primarily as an online informational brochure about the artist and her pottery. Any sales generated by the website came the old fashioned way – through a follow up visit or call to the store to place an order. In 2000, April began the process of expanding her e-commerce capability as a way of changing the direction of the business and helping her refocus her energies on her role as the creative talent behind the business.

Business Location
Columbia Falls, Maine was established in the late 1700s as a shipbuilding and lumber town. Like many small Maine coastal communities, these industries are now part of community history, replaced by tourism and, to a lesser extent, agriculture, specifically blueberries and seafood. While many of the town's businesses rely on the seasonal tourist trade, most residents commute out of the town to work. In 2000, the town's population was 599. Located in nonmetropolitan Washington County (2000 population, 33,941), Columbia Falls is 143 miles north of Maine's largest metropolitan area, Portland.

Role of E-Commerce
The e-commerce capability of the Columbia Falls Pottery website developed over time. Online ordering began in 2000 using a system where customers submitted an order and payment information online, which went to the webmaster. The webmaster, in turn, would fax this information to the retail store where it was processed just like any phone order that was received. Over time, the sales associated with online ordering increased but there was no active management of the e-commerce component of the site. In fact, April did not get a computer until 2003.

A turning point occurred in 2003 when the webmaster abruptly left, taking the technical knowledge of the website with him. Fortunately, April owned the domain name but she still had to start over with web development. This misfortune, however, had a silver lining in terms of her engagement in the web development and e-commerce side of the business. April identified a local webmaster and began to build her skill set regarding e-commerce. She took part in workshops on e-commerce sponsored by the Maine Women's Business Center at Coastal Enterprises, Inc. and made a commitment to building the e-commerce side of her business. As April stated, she is committed to the success of e-commerce because it is the only way to market to a wider audience and to allow her to get back to being an artist again.

The process of building the e-commerce site took planning and time. Between 2003 and 2005, the new website was developed. In 2005, her tiles and her custom commissions increased and the website was revamped in 2006 to feature the tiles. The final step in the e-commerce process was implementing a shopping cart to handle the online ordering and payment processing. The decision about which shopping cart to use required more research and decision making. April did not want to use Pay Pal and she wanted to have some control over the design of the shopping cart. As a result, Columbia Falls Pottery purchased a shopping cart that provides calculation of real time shipping and does instant ordering and payment processing. The shopping cart was installed in early 2007, completing the transition to a full e-commerce site.

Actual out-of-pocket costs to start up the e-commerce site were about $6,400 for web development and the purchase and installation of the shopping cart. That figure does not include the time spent by April to create the photos for the site, write the text, and develop policies and procedures for online sales, such as shipping and returns. However, monthly operating costs for e-commerce are very low since the shopping cart is owned by the credit card processing company that charges a low $15 per month. Web hosting is $95 a year. These costs are projected to be covered by additional sales within the next year.

Challenges and Lessons for Rural Entrepreneurs

The experience of April Adams and Columbia Falls Pottery highlights some challenges and provides a number of lessons for other rural businesses considering e-commerce.

- One of the biggest challenges to the successful implementation of e-commerce involves managing the website to increase the business's visibility on search engines, e.g., getting on the "first page" of a Google search. Enhancing visibility to search engines requires constant management of keywords, links and consideration of services that promise to increase exposure to search engines. For an artisan, it also means that quality pictures alone are not enough to optimize web presence – it is the text and keywords that are picked up by search engines. Site optimization is a challenge that April continues to face.
- The adoption of e-commerce capability requires time and planning. It took April more than two years to fully implement e-commerce as she struggled to fit its development into her already full schedule of running the business. The actual launch of the shopping cart occurred during the winter months – the business's slow season – when April could devote her full attention to the details of the website transition to e-commerce. An alternative for other rural businesses is to hire professional services to do the work or to hire additional staff to manage the e-commerce function. In the case of Columbia Falls Pottery, assuming these additional costs was not feasible so existing capacity had to be used to build e-commerce capability.
- Businesses should do their homework about e-commerce before they start. The workshops offered by the Maine Women's Business Center were very valuable in terms of providing information and raising issues that April had not considered. In addition, she did her own research – viewing other pottery websites to see what features she liked, looking at the features of different shopping carts, etc.

- There was nothing about the rural location of the business in Columbia Falls that made her e-commerce endeavor more difficult. Up until early 2007, Internet service was provided through dial up but there is now broadband access. She was able to find a web developer locally and support resources were also available in the state.
- Undertaking e-commerce requires a real commitment to the process and perseverance when roadblocks are encountered. But, for this business, the transition to e-commerce represented a way to move more completely from retail to online sales and, as April states, it does not matter how long it takes, "it has to work."

Dessin Fournir Companies
Plainville, Kansas
Charles Comeau, Co-Owner/Founder
www.dessinfournir.com

The Dessin Fournir case study demonstrates the usefulness of e-commerce to enhance business-to-business marketing, communications, and transactions. Dessin Fournir sells fine home furnishings only through interior designers and architects. E-commerce provided significant cost savings to the firm in terms of reduced marketing costs, more efficient monitoring of the production and distribution processes, and reduced need for travel. The Internet has been very beneficial to Dessin Fournir in helping to overcome the disadvantages associated with a geographically isolated location.

Profile

Dessin Fournir Companies design, manufacture, market, and distribute home furnishings targeted at the high-end residential and contract markets. Dessin Fournir includes three furniture companies (Dessin Fournir, Kerry Joyce, and Gérard), the textile company - Classic Cloth, the fabric and wallpaper company - Rose Cumming, and the lighting fixtures firm - Palmer Hargrave. All products are custom ordered and sold to interior designers and architects through fifteen designer showrooms throughout the United States and Canada. The company has approximately 600 models in its furniture division and fifty to sixty new models are added each year. All furniture is designed by the Dessin Fournir Company founders Charles Comeau and Len Larson. The lighting fixtures and fabrics are designed by Charles Comeau and staff. The furniture is manufactured at the company's Azusa, California facility, and the company's 1800 fabrics are custom woven by mills in Europe and, to a lesser extent, Thailand and India. The Plainville, Kansas facility is responsible for designing new lines of furniture and fabrics; designing and custom manufacturing lighting fixtures; warehousing and distributing fabrics; monitoring production; product marketing, customer service, billing, accounting, and management. Dessin Fournir employed 147 people in 2006, with ninety-four of these employees located in Plainville, Kansas. The company currently occupies three renovated buildings in Plainville's historic downtown. An additional main street building is under restoration and a new downtown building is in the planning stages to accommodate anticipated future business. The Dessin Fournir Companies also own C.S. Post & Co., a retail store in Hays, Kansas that offers gifts, jewelry, furniture, and gourmet kitchen accessories. C. S. Post and Co. (www.cspost.com) is Dessin Fournir's only "bricks and mortar" retail entity, yet Internet sales account for approximately fifteen percent of total sales for C.S. Post and Co.

History

The co-founder of Dessin Fournir, Charles Comeau, is a native of Plainville, Kansas. Mr. Comeau is a graduate of Fort Hays State University (Hays, Kansas) with a degree in Petroleum Geology. Mr. Comeau initially worked in the family oil exploration business and later owned a bank in Plainville. Mr. Comeau sold the bank after four years and decided to pursue a line of business that coincided with his interests in art, textiles,

antiques, and fine furniture. In 1993, Mr. Comeau became acquainted with Len Larson, another furniture connoisseur in the Los Angeles area. Mr. Comeau and Mr. Larson became business partners and co-founded Dessin Fournir. Production was initiated in Baldwin Park, California, and a small office was maintained in Plainville because Charles Comeau and his family wished to reside in his hometown. Furniture production continues in California in the company's 88,000 square foot facility, but the remaining operations of the business are located in Plainville. Federal Express is used to ship fabrics and lighting fixtures from Plainville. Mr. Comeau also is very active in historic preservation and downtown renovation in Plainville and Hays, Kansas.

Business Location

Plainville, Kansas, is a rural community of 2029 residents located in nonmetropolitan Rooks County. Plainville is located in northwestern Kansas, approximately thirty miles north of I-70 and Hays, Kansas, and 200 miles from the nearest metropolitan area of Wichita. Plainville is a service center for the surrounding farms and ranches and a bedroom community for Hays. High speed Internet service in Plainville is provided by Nex-Tech.

Role of E-Commerce

Dessin Fournir has made significant investments in computer hardware, software, and IT personnel to incorporate e-commerce into their business strategy. Mr. Comeau estimates that the company invested between $200,000 and $300,000 in IT hardware since 1998. The company incurs annual expenses of approximately $50,000 for hardware upgrades and $100,000 for software development and the salaries of two full-time IT specialists. All website design and maintenance and computer aided design (CAD) work are provided through internal resources.

Dessin Fournir's e-commerce activities would be classified as primarily B2B (business to business). The company designs and maintains a website for its products; however, orders may not be made over the website. Interior designers must go through showrooms to place orders and purchase the company's products. The orders may be phoned in or e-mailed to Dessin Fournir. The interior designers generally prefer direct contact with the company in order to discuss specifics regarding styles, fabrics, and woods to be used in the furniture. As such, Mr. Comeau noted that the website did not result in a significant increase in sales. The investment in e-commerce did provide, however, five types of cost savings to the company. First, interior designers may download photo quality pictures of products available at Dessin Fournir. This feature reduces the firm's marketing costs because the company catalog requires less frequent updating. Dessin Fournir spends approximately $250,000 a year on catalogs (many designers continue to prefer hard copies), thus a conversion to an e-catalog offers the potential for significant savings. Second, customer services are improved with e-commerce. Representatives of the showrooms use e-mail to communicate with Dessin Fournir regarding the availability of upholstery and drapery fabrics in inventory. In addition, a customer service representative is assigned to each order, and these individuals are in contact with the designers, showrooms, and factory regarding the status of the order. Thus, e-mail permits a more efficient monitoring of the production process. The tracking of orders provides

improved customer relationships and significant savings in management costs. Third, e-commerce increases product exposure to interior designers that do not have easy access to showrooms. The company's website (available to 30,000 qualified architects and interior designers) provides the designers and their clients with a preview of available products without having to visit a showroom. These product previews, in turn, attract more interior designers and clients to the showrooms to place orders for Dessin Fournir's products. Fourth, the Internet enables Dessin Fournir to communicate directly with its thirteen fabric mills in nine countries, thus reducing its reliance and expenditures on external agents. Fabric patterns are designed in Plainville and e-mailed to the fabric mills. Finally, tele-conferencing over the Internet significantly reduces the need for travel to the California factory and the fifteen showrooms.

Dessin Fournir's goal is to have the market's best functioning, most user friendly web site for designers and showrooms. The company is developing a web site that permits interior designers to quickly and easily browse the company's catalog. In addition, Dessin Fournir is developing large screens for select showrooms that will enable the designers to observe alternative fabrics and woods on the company's custom designed upholstered furniture. These screens will be controlled by individuals located in Plainville. Mr. Comeau notes that the screens must be user friendly because many interior designers have limited interest in developing extensive expertise in new computer programs.

Challenges and Lessons for Rural Entrepreneurs

Charles Comeau notes that the Plainville location presents no problems with respect to information/communication infrastructure and services or the transport of goods. The high speed Internet provider (Nex-Tech) is very accommodating and all shipping is done by Federal Express. Mr. Comeau states, however, that the key to his firm's transition to e-commerce is an excellent internal information technology staff. Dessin Fournir's IT staff is responsible for web site design and maintenance as well as facilitating a smooth flow of information between the company and its customers, suppliers, and external production sites.

In spite of the effective use of e-commerce, the Plainville location does present problems that may not exist in a more urban location. First, it is difficult to attract design talent (for example, graphic and industrial designers) because individuals with such skills generally prefer employment opportunities in large metropolitan areas. Other types of skilled workers employed by the company (electricians, machinists, metal workers) are available in the region. Second, it is difficult to acquire bank financing for new buildings because there is a limited resale market for the buildings. Thus banks require a significantly larger equity-to-loan ratio for a commercial building in a rural area than in an urban location. Third, property insurance rates are higher in a rural community like Plainville because the fire department is voluntary. Mr. Comeau concluded that the State of Kansas needs to investigate alternatives for overcoming the inherent disadvantages of rural locations for entrepreneurs and small businesses. He proposed that a state focus on making rural areas more attractive locations for small businesses may provide greater

economic development returns to rural Kansas than recruiting branch plants of manufacturing firms.

Eolian Farms Llamas and Shetlands
Newcastle, Maine
Jenni Johnson, Farmer and Artisan
www.eolianfarm.com

This case study of Eolian Farms demonstrates how a lifestyle entrepreneur can use the Internet to expand the sales of her value-added agricultural products – fine fiber, egg-yolk soap, wooden tools, and kits. It also shows the importance of experimenting with different means of collecting payment in order to find the method that works best for a particular business.

Profile

Eolian Farms Llamas and Shetlands is located "on top of a windblown hill in Newcastle, Maine". Jenni Johnson, farmer and artisan, maintains a herd of llamas and Shetland sheep for their fiber. The fiber is sheared and washed at the farm and then the clean fiber is processed at local mills into wool yarn and roving (twisted wool that is ready for spinning). Eolian sells 100% llama yarn, 100% Shetland yarn, and a blend that combines the warmth and softness of llama fiber with the elasticity of Shetland wool.

Eolian Farms' website has evolved over time from an informational site to one that offers several different modes of e-commerce. The website features Eolian's fiber products, along with related farm and fiber products.

History

Jenni Johnson started the farm in 1998 when she purchased llamas as an outlet for her love of large animals and creating things from their wool. As a lifestyle entrepreneur, she discovered an unanticipated opportunity, or perhaps challenge, in finding an outlet for the fiber produced by these animals. There is a growing fiber industry in Maine, including other llama herds, and Jenni was able to develop her expertise by drawing on these resources. She added Shetland sheep to her herd and has been selling pure and blended fiber ever since.

Just as her herd has evolved over time, the business side of Eolian Farms has evolved as well. Initially, fiber and other product sales were associated with Jenni's trips to state, local and regional fairs to show the animals. Over time, however, the opportunity presented by the Internet to reach more customers and to sell products without spending the time and money to attend fairs became appealing to her.

In addition to using the Internet to expand product sales, the business of Eolian Farms is also expanding to provide opportunities to educate both tourists and local residents about farm life. Jenni hosts an Open Farm Day where visitors can come to the farm, meet the animals, and learn about the farm experience. She also provides information on her site about upcoming local fairs, including the annual Maine Fiber Frolic event designed to celebrate "fiber, fiber animals, and fiber arts".

As a lifestyle entrepreneur, Jenni must deal with the question of growing her business. She feels that there is a market for her products and that she could grow the business if she chose to do so. Right now, however, caring for her animals, producing fiber, and running the business at its current scale (in addition to running her bookkeeping business) takes all of the time she wants to devote to these pursuits. Should her business goals change, however, Jenni has developed the skills and the knowledge to expand her e-commerce capability to support her growing business.

Business Location

Newcastle, Maine lies between two rivers, the Sheepscot and the Damariscotta, in eastern Maine. Historically, the town relied on boat building and mills to sustain its economy. Located in nonmetropolitan Lincoln County (2000 population, 33,616), Newcastle is located 52 miles from Portland, the state's major metropolitan area.

Role of E-Commerce

Although Eolian Farms did not start as an Internet business, Jenni Johnson noted that the business would not be here without it. Over the last year, her participation in fairs, once the sole marketing outlet for the business, generated very little in sales. Now she relies predominantly on the Internet for sales of her fiber, tools, and soaps. These sales are sufficient to cover the costs of web hosting. She noted that fiber sales pay for themselves, but not for the upkeep and care of the animals.

In 1996, Jenni Johnson started using computers for a bookkeeping business that she was running. With these rudimentary skills as a base, Jenni developed the more advanced skills needed to create her own website and to research various options for doing e-commerce. She took advantage of classes offered by Coastal Enterprises as well as the online seminars that provided an opportunity to share websites and receive feedback. In addition to helping her learn how to build her site, these classes provided an excellent opportunity to network with other business owners.

In terms of website development, Jenni began by working with the website template that was developed by her web hosting company. However, she found the site too restrictive for her product line, which features different colors and blends of fiber, along with other products. Initially, she designed her site as an informational resource, sharing information about the animals, the farm and the fiber they produced. Over time, she decided to research ways to sell her products over the web. Eolian Farms' experience with e-commerce began with PayPal. However, because the scale of production is relatively small, Jenni found that customers were purchasing products that were no longer available and, as a result, she was processing many refunds. She then tried creating an online order form for her products. Customers could complete the form and send it to her via email. She would invoice the customer and then use a merchant account to process credit card payments. However, this method did not take full advantage of the efficiency of online ordering and payment.

The next avenue for selling online that Jenni pursued was eBay. She had used eBay auctions in the past, with some success, and so she decided to try eBay Store, a free

resource.[2] eBay Store provides an online payment gateway, allowing her to drop her merchant account (saving the $15/month charge). The eBay Store appears as a clickable icon on Eolian Farms' website and, once clicked, provides a list of only currently available products that can be purchased through eBay. This method also provides feedback ratings from past customers, a plus for an entrepreneur trying to build a reputation for high quality service. Jenni maintains a shopping cart on the site for purchases of egg-yolk soap that links to both PayPal and Google shopping carts.

Jenni is constantly researching other methods of selling online, trying to find the most efficient way of getting her products to her customers. These other options include Google Merchant, a payment gateway that has no monthly fee but does have a 2% commission fee on sales, and E Junkie, a resource that provides a shopping cart for up to 10 items for $5/month including buttons that deactivate when products are no longer available.

Challenges and Lessons for Rural Entrepreneurs

Jenni's experience as a lifestyle entrepreneur using the Internet to build her business offers lessons for other entrepreneurs:

- There is no substitute for doing the research needed to understand e-commerce and the options available for your business. Jenni's experience using a number of different methods for purchasing products online suggests that there exist multiple paths to building e-commerce capability. It is not necessary to add a shopping cart to a fledgling website; other tools are available to build your market and your customer base before you embark on the more expensive and difficult option of building your own shopping cart. In fact, using multiple methods of accepting payment may help increase sales by offering options to customers. For example, some customers shy away from using PayPal. For Eolian Farms, this reluctance presents less of a problem since the eBay Store provides an alternative way to purchase products.
- It is important to understand that websites can evolve over time. Jenni's advice to an entrepreneur considering website development is to "start with a little and just do it." Her path of beginning with an informational website and then developing the capacity over time to sell products online is one that other entrepreneurs, particularly small lifestyle entrepreneurs, might want to consider.
- Making a decision to market and sell products using e-commerce requires a thorough understanding of the true costs associated with the business's current marketing/sales strategy. For Eolian Farms, marketing products by going to fairs proved to be a costly (in terms of time and money) strategy as compared with the time and expense of developing the website and its e-commerce capabilities. For another entrepreneur, this calculation might appear very different. Understanding marketing costs is important to the decision making regarding both website and e-commerce development.

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[2] Since this case study was completed, eBay Store began charging for its services and, as a result, Eolian Farm has stopped using the eBay Store.

Farmchem Corporation
Floyd, Iowa
Justin Peterson, Vice-President
www.farmchem.com

This case demonstrates the usefulness of the Internet in developing new products and markets for an agricultural input and service provider. Farmchem developed a wireless tank inventory monitoring system and information on tanks' inventory levels may be sent by wireless Internet to the customer or Farmchem representatives. The tank monitoring system provides Farmchem with the option of expanding into non-agricultural markets such as businesses in the petroleum and water treatment industries.

Profile

Farmchem manufactures, distributes, and services equipment for crop input manufacturers and retailers. Products and services provided include tank monitoring systems; weigh systems; bulk herbicide and fertilizer equipment; pumps, meters, motors, and accessories; tanks and accessories; sprayer equipment, controls and accessories; safety equipment; and custom application equipment. Farmchem has available more than 9500 products/parts from more than 180 different suppliers. Farmchem, through its subsidiary Xcelerated Integrations, Inc., also is an industry leader with its vendor managed inventory (VMI) system. The VMI consists of a custom designed wireless tank monitoring system of sensors, monitors, and telemetry options to measure tank inventory, convey information to the customer, and integrate this information into the customer's business. The bulk system inventory management program currently is in use in more than 15,000 tanks across 45 states.

Farmchem employment in 2007 was 27 full-time workers: eight workers in Floyd, 12 workers at the Mason City customer service center, and 12 nationwide field service technicians. Approximately 16 of the 27 employees are associated with the Xcelerated Integrations, Inc. Additional information on the products and services of Farmchem and Xcelerated Integrations Inc. is available at www.farmchem.com and www.x-i.cc.

History

Farmchem was founded in 1974 by Ray Murray of Floyd, Iowa. The company's initial business focus was the design, manufacture, and distribution of innovative products to crop input dealers. Much of the manufacturing consisted of the custom assembling of components produced by other parts suppliers. Farmchem filled a market niche because many parts manufacturers were not interested in custom designing the final product nor marketing to customers. Farmchem's products were marketed at trade shows to regional and national companies serving extensive markets. The company initiated sales over the Internet in 1998. Orders for Farmchem products and services may be made by phone, fax, or online, and Internet sales now constitute approximately 50 percent of traditional product sales.

In the late 1990s, Farmchem developed an electronic monitoring system for liquid levels in the bulk tanks of dealers and suppliers. The system consists of four principal components: a sensor appropriate for the particular liquid to be measured, a monitor that converts the information from the sensor into tank level data, Internet telemetry that transfers the data to a central server, and an Internet based data management system that provides the data in the desired form and format to the appropriate parties. The tank monitoring system was later modified to include bulk seed monitoring capabilities. Xcelerated Integrations (XI) was formed as a subsidiary of Farmchem to focus on the tank monitoring side of Farmchem's business. The XI operation was started in Floyd, Iowa then moved to Kansas City to work with other IT businesses, and next moved to Mason City, Iowa. Xcelerated Integrations developed into an industry leader in tank monitoring and the company currently controls approximately 98 percent of agricultural market.

Business Location

Farmchem's operations are located in Floyd, Iowa and the Xcelerated Integrations customer service center is located 25 miles west of Floyd in Mason City, Iowa. The 2000 populations for Floyd and Mason City were 425 and 29,172 respectively. Mason City and Floyd are located near Interstate 35, approximately 110 miles north of Des Moines.

Role of E-Commerce

Farmchem was a relatively early adopter of IT software and hardware. The catalog for Farmchem's products was incorporated into the company's website, and orders may be placed and paid for on line. Farmchem's initial e-commerce strategy was focused on marketing the core product lines and providing better service for their traditional customers. Mr. Peterson noted, however, that the availability of online ordering had relatively little impact on Farmchem's traditional markets. The company already had nationwide distribution, thus few new markets became available. In addition, the company continued its paper marketing strategies (catalogs and sales flyers) so e-commerce provided no savings on printing and mailing costs for catalogs. Mr. Peterson stated that much of the contact with clients (and sales) still occurs face-to-face, thus electronic marketing has to be carefully chosen to be effective. No major changes in staffing or employees' responsibilities resulted from the use of e-commerce, and the investment in infrastructure and software for the online catalog (less than $50,000) was relatively small. Technical expertise for Farmchem's website and online catalog were provided internally by Farmchem's information technology staff. The server for Farmchem's website is hosted by the Mason City location and high speed Internet services are provided by ATT and Quest.

A potentially significant role for e-commerce exists in the activities of Farmchem's subsidiary Xcelerated Integrations. XI's bulk inventory management system is custom designed, manufactured, installed, and serviced for each customer (e.g. chemical manufacturers with products stored in tanks at numerous retail locations or retail stores with tanks at multiple branch locations). The XI system measures, records, and transfers information regarding tank inventory to a central location. The collected data may be transferred by cable to a data logger or sent by e-mail to an address designated by the

business that purchased the system. In addition, the inventory records may be sent by wireless Internet to the XI customer service center in Mason City. The XI customer service representatives review the data to ensure that the information is collected correctly and then transfers the data to a password-protected web page. XI also offers alert paging services whereby clients are notified by text message to their cell phone or directly to their e-mail account.

XI's tank monitoring system is a significant part of Farmchem's business and offers much potential for future growth. Mr. Peterson estimates that hardware and software expenditures for XI's information technology system were about $10 million. Local economic development agencies and the Papajohn Center for Entrepreneurship at Northern Iowa Community College assisted Farmchem with training programs and other start-up needs for XI.

Farmchem hopes to market its XI tank monitoring system to businesses outside of the agricultural sector. Potential customers for web-based inventory monitoring management systems include businesses in the petroleum, food products, and water treatment industries. According to Mr. Peterson, any business that stores inventory in bulk containers could improve their inventory management and delivery scheduling with timely and accurate data on inventory conditions.

Challenges and Lessons for Rural Entrepreneurs

Mr. Peterson stated that Farmchem's Floyd and Mason City locations did not present any major problems relating to firm competitiveness. He noted only two potential drawbacks: (1) air travel to visit customers or to bring clients to the Iowa headquarters is not simple since the nearest commercial airports are Des Moines and Minneapolis, and (2) it takes a little longer to find skilled labor in rural areas than it would in an urban location.

Gail Golden Jewelry
Arroyo Seco, New Mexico
Gail Golden, Artist and Owner
www.wesstartisans.com

This case study shows the value of a collective website for marketing the products of rural artisans. It also demonstrates the importance of evolving a website over time and developing a web presence that serves the needs of a self-employed artisan.

Profile
Gail Golden produces high quality, handmade silver, gold, and gem jewelry for the retail and custom sales markets. A smaller part of her business is mass produced, again by Gail, for the wholesale market, specifically through the Sundance catalog. Gail has been making jewelry since 2002 on a part-time basis and, since 2004, full time. Gail's jewelry is featured in five galleries, only two of which are in the Taos area. Sales of her jewelry via the galleries in New Mexico are very seasonal, with about three months of strong sales per year. The gallery in Boulder that features her work has generated the best sales and they are more evenly spaced throughout the year. Most galleries take her jewelry on consignment which creates a challenge for an artisan – she must produce thousands of dollars of jewelry that are displayed in galleries without a commensurate flow of cash coming in to the business.

Gail is one of the artists featured on www.wesstartisans.com, a collective website managed by WESST Corporation that provides an easy way for artisans, particularly rural artisans, to establish a web presence and market their products. About 25% of Gail's sales, which were $24,000 last year, come through the marketing on the website, mainly from galleries that have contacted Gail after seeing her products on the website. This online marketing reduces the time Gail needs to spend visiting galleries to show her jewelry.

History
In 1986, Gail Golden moved to the Taos, New Mexico area for a job in the ski industry. In 2000, Gail, who had majored in Fine Arts, took a jewelry class and discovered a passion, and skill, for making fine jewelry. She was encouraged to pursue this passion and, with the help of a mentor, began to practice her art, first part-time and now full-time. About the time she was moving to a full-time operation, Gail took the Market Link class offered by WESST Corp. This 45 hour program is designed to help small business owners develop a "perfect pitch" for their products or services. One of the focus target groups for the Market Link program was artisans and, through a Kellogg Foundation grant, WESST Corp was able to develop a collective website artists who participated in the Market Link program could join.

Gail took advantage of the opportunity offered by WESST Corp and created her first website as part of the WESST Artisans site. She provided text for the site and WESST Corp provided the web structure and maintains the site. Each artist featured on the site

pays an annual fee ($200) and WESST Corp earns a 25% commission on online sales. The opportunity to get online via the Wesstartisans.com site was important to Gail who had a working knowledge of computer graphics and only limited familiarity with the Internet and e-commerce. By joining a collective site, Gail could take advantage of the e-commerce capabilities of the site while still having her own personal web space to feature her products and her story.

Gail has a strong interest in growing her business, particularly in terms of eliminating consignment sales and expanding her retail and custom sales. She showed a small profit last year and, in the first quarter of 2007, sales were double those in 2006.

Business Location

Taos, New Mexico is located on a high desert mesa at the foot of the Sangre de Cristo Mountains. Its beautiful and varied environment has attracted artists since the 1920s. Tourism remains a primary driver of the local economy, with both recreational (skiing and hiking) and historical (Taos Pueblo) attractions. The town's resident population of 4,700 in 2000 grows dramatically during peak tourism months. Located in nonmetropolitan Taos County (2000 population 29,979), Taos is 70 miles north of Santa Fe and 132 miles from Albuquerque, the state's major metropolitan area.

Role of E-Commerce

For Gail, who has participated for three years on Wesstartisans.com, the site is primarily a marketing tool, not a direct sales tool. The site currently features 16 artists whose products range from personal care to fine jewelry to punched tin sconces. Her jewelry is among the most expensive items on the site. However, if you Google "Gail Golden", her site on Wesstartisans.com comes up first, demonstrating its marketing power. About 25% of Gail's sales have been generated online. Some of these sales come from galleries that find her products online but then directly retail them to their customers. The website has not produced custom sales orders; most of these sales come through word of mouth. As a marketing tool, Gail contends that she "has gotten her money's worth." And, for now, it remains her only web presence. Indeed, Gail indicated that she would be "floundering" without the stream of sales and sales leads that are generated by her participation on the site.

In spite of the benefits from Wesstartisans.com, Gail is in the process of developing her own website. While she believes she has outgrown the Wesstartisans website, she has not outgrown the services and support provided by WESST Corp. Initially, the new site will be created as a marketing tool and will not have full e-commerce capabilities such as a shopping cart. She is going to focus on site optimization, working on this with WESST Corp as part of another grant program. Gail had several reasons for creating her own website:

- The website will be designed to more clearly reflect her art – it will be more creative and professional than the collective site.
- The site will reflect both the high quality that goes into the art and the natural influences that inspire the work.

- The website will feature more information on Gail Golden, the artist, and what new creative work she is doing.

All of these features could not be added to the current Wesstartisans.com site since it provides a package program that the artists use, whether they are producing natural soaps or fine custom jewelry.

Challenges and Lessons for Rural Entrepreneurs

Gail's experience as a self-employed artist and a member of the Wesstartisans.com collective site offers a number of important lessons for other business owners in rural places:

- Lack of capital specifically to invest in marketing her artwork online has put the brakes on Gail's ability to build the business. Gail is using a friend to develop the new website and is being trained so that she can administer the site over time. The cost of development is estimated to be $1,200 and the monthly cost, primarily for high speed access, is $40-50/month. However, these costs do not include expenses associated with site optimization – purchasing ad words and other ways to improve visibility on search engines. For a start up business where cash flow is a constant concern, covering these additional costs is difficult.
- For an artist, the success of e-commerce on a website is highly dependent on having quality photographs of your products. Although WESST Corp provided a photographer to prepare images of her jewelry for the website, Gail was not satisfied with the quality of the photos. Now she uses a professional photographer, at a cost of $150/hour. Without these quality images, however, the marketing and sales potential of the website would be limited.
- Gail drew heavily on the services and support of others as she was getting started – her mentor, the WESST Corp staff, her suppliers and her network of fellow artists. Gail suggests that others who are interested in using e-commerce work closely with service providers and other community resources, and that you do your homework before working with any service providers. Being able to trust your assistance providers, whether that is your web developer or your suppliers, is critical.
- While Gail has been able to find the support she needs locally, particularly in terms of web development, high speed Internet access and services through WESST Corp, she does suggest that her rural location makes growing her business difficult. Whether because of the difficulty gaining access to supplies or finding resources locally (the WESST Corp office in Taos has closed), Gail has considered moving her business in the past. And, if she is successful in growing the business to the point where she needs to hire production workers, a move may be necessary.

Grown Locally
Northeast Iowa
Michael Nash, Sunflower Fields Farm
www.grownlocally.com

Grown locally demonstrates the usefulness of the Internet to market and manage a regional food cooperative. Customers may place orders on the cooperative's website, and the website is time dependent so that product availability changes with each order. Members of the cooperative (farmers) check the website daily for information on orders. The cooperative's website greatly reduced the time needed to coordinate the farmers' production with the consumers' demands.

Profile

Grown Locally is a limited membership farming cooperative in northeast Iowa. Members of the cooperative are family farms that sell fresh, locally raised meats and produce to area households and institutions (e.g., schools, hospitals, restaurants, and nursing homes). Farm products available during the season include more than 40 fruits and vegetables plus eggs, honey, meats, cheeses, and prepared foods. Noninstitutional customers (generally households) and Grown Locally have a business relationship based on the model of Community Supported Agriculture (CSA). Households may make their purchases in terms of "shares" that are commitments for a weekly assortment of in-season produce. These share commitments are made prior to the growing season and the orders provide a baseline estimate for the cooperative's seasonal production. In addition, "by-the-piece" orders may be made online or by phone after checking product availability on the cooperative's website (www.grownlocally.com). Access to the order page of the website is password restricted to approved parties, and customers are billed monthly for their orders. The members of the cooperative ensure an adequate supply of farm products for the shares and "by-the-piece" orders by carefully estimating anticipated demand and obtaining pledges from the farmers for portions of the predicted amounts. The pledges are published, and the cooperative's coordinator provides reminders to members at planting and harvest times.

The farms in the cooperative are responsible for growing and harvesting their produce and transporting the products to the packing facility. The final washing and packing of the produce occur at the cooperative's processing facility located on Sunflower Fields Farm. Grown Locally operates two order-delivery cycles a week with all deliveries on Tuesdays or Fridays to the customers' businesses or homes or to a designated drop site. The cooperative's goal is to get the product from the field to the customer in 24 hours or less. All customers are located within 40 miles of the processing facility to permit rapid, low-cost delivery. In 2006, Grown Locally had 12 institutional and 225 family customers. The cooperative retains part of the revenues from sales for capital improvements such as a delivery van and equipment for the packing and cleaning facility.

History

In 1999, a small group of northeast Iowa farmers met at a field day to discuss opportunities to enhance the success of individual farms by increasing the variety of crops produced on each farm and diversifying the markets for their outputs. The farmers were interested in selling to local institutions, and they needed an organization that used the production of multiple farms (order sizes exceeded the production of individual farms) plus ensured consistency in product quality. The farmers met with Michael Nash of Sunflower Fields Farms to discuss the appropriateness of the Community Supported Agriculture (CSA) model for their goals. Mr. Nash operated a CSA project (Sunflower Fields Farm Shares) that marketed local produce to area families. The farmers requested to participate in Sunflower Fields Farm Shares to sell to area families, and they organized a limited membership cooperative (Grown Locally) to focus on marketing farm produce to local institutions. The operation of Grown Locally was patterned after that of Sunflower Fields Farm Shares. There was much overlap in the individuals that participated in Grown Locally and Sunflower Fields Farm Shares, and the two organizations shared the goal of developing local markets for local producers. Michael Nash of Sunflower Fields Farm provided assistance to the two organizations in terms of website design, newsletters, product delivery, and overall coordination.

In 2000, Grown Locally acquired an $8,000 grant from USDA's Sustainable Agriculture Research and Education Program (SARE) for the initial development of a website. The first Grown Locally website was developed by Michael Nash and a professional website designer from Missouri who Mr. Nash met at a Small Farm Conference. The website was housed at Sunflower Fields Farm. A second grant from the Iowa Department of Agriculture in 2002 enabled the acquisition of equipment for on-site processing and packing, and a third grant ($14,000) permitted the upgrading of the Grown Locally website to accommodate orders from families as well as institutions. At this time, Sunflower Fields Farm Shares were sold through Grown Locally. Website upgrades were provided by an individual from Des Moines, and the new website was hosted by Hostway. The website is maintained by the coordinator (Solveig Hanson), and the data base is time dependent so that product availability is adjusted after every order. The coordinator downloads requests from customers and e-mails producers with updates on orders. All members of the cooperative are encouraged to have a computer and high speed Internet so that they can check order information daily. In addition, producer members are requested to update their inventories twice a week.

The evolution of Grown Locally required that participating farmers change their production and marketing methods to meet the requirements of institutional buyers. The institutions wanted a specific contact for orders, all products in an order delivered in one delivery, and one bill a month for that month's deliveries. In addition, the cooperative was not completely embraced by the local producers and consumers because their activities were outside the traditional model for marketing farm produce in rural Iowa. Thus, Grown Locally continues educating local farmers and households regarding the potential benefits of the cooperative. The members of Grown Locally are a diverse and well educated group of individuals, and those characteristics enable the group to design a business strategy that is flexible and evolving.

Coop Location
The member farms in Grown Locally are located primarily in three rural Iowa counties: Winneshiek, Allamakee, and Clayton. The largest city in the region is Decorah, Iowa with a 2000 population of 8,172. The northeast Iowa area is approximately 150 miles south of Minneapolis, Minnesota.

Role of E-Commerce
The availability of the Internet is critical for the efficient operation of Grown Locally. Initially, many orders for food deliveries were placed by phone and fax, and much communication between the cooperative's coordinator and farm members was conducted by phone. However, reliance on the phone was a time intensive means of undertaking business. Mr. Nash estimated that the Grown Locally website saves the cooperative eight hours a day in administration time. The time savings for the coordinator will be even greater as more customers switch to the Internet for ordering. Currently, approximately 75 percent of the customers order online while the remaining customers continue to use the phone and fax. Internet use is not widespread in the cooperative's market area because of the relatively high age and low incomes of area residents and many families lack access to reasonably priced, fast internet service. A large number of Internet service providers are in northeast Iowa, but much of the local population considers Internet access a luxury.

The website also is a useful tool for recruiting new customers and growers to the cooperative. The site provides detailed information on the benefits of participating and guidelines for joining. This information is critical because many local farmers are not aware of Grown Locally, and some of those that are aware do not believe it is relevant to their sphere of operation. Thus the website provides an educational role as well as a marketing function.

Finally, Grown Locally can be an important source of income for member farms. Farm producers in Grown Locally supplement their incomes based on their commitments and participation in the cooperative. Mr. Nash estimated that Grown Locally's contribution to 2006 farm income ranged from 10 percent to 60 percent for its 15 members.

Grown Locally is undertaking a number of initiatives to increase the size, efficiency, and profitability of the operation, and as a result, the benefits to member growers. First, the cooperative is trying to attract more household customers through promotions and by being more user friendly. Plans under consideration include providing greater flexibility in product orders, keeping the online store open for longer periods, and permitting the use of PayPal or credit cards for online orders. Second, the cooperative will hire a full-time coordinator for each growing/harvest season to oversee operations, and new investments in vehicles and processing equipment are anticipated. The acquisition of a blast freezer would enable the cooperative to serve new institutional markets (e.g., schools, casinos on the Mississippi River) and lengthen the sales period for produce to traditional customers. Third, Grown Locally is updating its website to be a state-of-the-art example for growers' cooperatives focusing on marketing local products to area institutions and households. The Leopold Center for Sustainable Agriculture at Iowa State University provided

$15,000 in funding to develop a template for organizations providing web-based local food sales. According to the Leopold Center website, the goal of this project is "to create and test a functional, versatile, online sales tool that addresses the needs of farmer networks marketing products to institutional and household markets." The website will provide a stand alone, database driven store front that accommodates variable product availability. Modules will be included in the store structure that provide for security, online purchases, and flexibility for different types of organizations and producers. The template will be designed, hosted, and maintained by a firm in Des Moines. The template will be available at no cost from the Leopold Center; however, Mr. Nash estimated that Grown Locally will need an additional $10,000 to custom design the template for the cooperative's needs.

Challenges and Lessons for Rural Entrepreneurs

The principal challenge facing Grown Locally is the limited regional market. Mr. Nash noted that northeast Iowa is relatively sparsely populated and household incomes are not high. In addition, many of the farmers and households in the region are very traditional and reluctant to try something "new" like online produce sales. The limited market translates into lower prices for foods offered and relatively high costs for food deliveries. Grown Locally will attempt to overcome its market disadvantages by more aggressively recruiting growers and customers, adding freezer capacity to better serve the institutional markets, and hiring a full-time coordinator to enhance the efficiency and visibility of the operation. The winter (2007-2008) organizational meetings will focus on business strategy and promotional planning. Grown Locally wants to be a more visible entity, and its members will investigate means to become better known among area farmers and families.

<h1 style="text-align:center">Lakeland Enterprises, Inc.
Seneca, South Carolina
David Schaefer, Owner/Founder
www.lakelandgear.com</h1>

Lakeland Enterprises is an example of an online business started and run by a "lone eagle" entrepreneur. The company designs and sells vehicle luggage carriers that are manufactured in China. Almost all of Lakeland's marketing and sales occur on the Internet, and the use of e-commerce enabled the owner to locate in rural South Carolina as a lifestyle choice. This case demonstrates how rural communities can compete for and support small Internet businesses.

Profile

Lakeland Enterprises designs and sells top quality vehicle luggage carriers and vacation gear. Principal company products are car top carriers, cargo bags for the back of an SUV; and truck, van and SUV tents. Lakeland contracts with manufacturers in China and Korea for the production of the carriers and tents, with the designs and materials provided by Lakeland. In addition, the Lakeland website offers a variety of outdoor gear from other firms (e.g. bike racks, cargo hitch mounts, sleeping bags, packs) that will be "drop shipped" to customers from these associated businesses. The products of other firms are offered primarily as a means of attracting customers for the Lakeland website.

Lakeland Enterprises has two employees (the founder and his wife), and periodically they hire temporary workers when business activity peaks. Almost all of Lakeland's sales (95%) are to Internet customers, and product shipping from South Carolina is primarily with UPS. The company maintains two websites: www.piggypack.com and www.lakelandgear.com.

History

The founder of Lakeland Enterprises, David Schaefer, is a native of Indiana and a graduate of Indiana University. Schaefer moved to California in 1984 and worked in computer sales at Wolf Computers in Los Gatos for eight years. He retired from Wolf Computers as Vice President of Sales to attend culinary school and open and manage a bakery. In 1995, while on a camping trip with friends, Schaefer observed the need for a fabric bag that fit the luggage racks of cars and SUVs. Mr. Schaefer designed a car-top-bag for his SUV, and had the bag made by a local custom manufacturer of backpacks. The bag received much attention from friends and clients, thus Schaefer had fifty more bags made by a local upholsterer. These bags, named "Piggy Packs," were sold to family and friends, at local auto dealers, and through newspaper ads.

In 1996, Schaefer sold the bakery and dedicated himself to growing the business. Initial production occurred at various California upholstery and backpack manufacturing companies, and the products were shipped to customers from the post office. Schaefer had a company website constructed with the help of a friend and he formed a corporation,

acquired patents for designs, and arranged for SBA financing. All remaining financing for the new company came from personal savings or company profits. By 2000, sales had reached a high of $80,000 a year. In 2001 the website was completely upgraded by a professional and bolted to Yahoo Stores, and sales increased to the point where business required the full time attention of Schaefer. At this time Schaefer added new product lines of carrier bags and truck tents, further developed the website, and began offering outdoor gear from other companies on his website.

Lakeland offers four types of car top carrier bags and ten styles of truck and SUV tents. The production of tents and carrier bags was moved to Korea and China to reduce product costs. Products are shipped once a year in a container from China to South Carolina, and inventory is stored in the garage of Schaefer's home. Product sales also are made to three to four retailers (including Bass Pro Shops) but these sales are limited to about 5 percent of total sales. Schaefer does not plan to aggressively market to retail outlets (e.g. Wal-Mart and Bass Pro Shop) because sales to retailers require additional expenses in terms of EDI system service, warehouse space, and insurance, and bring less revenue because retailers pay only the wholesale price.

In 2002, the business was relocated from California to Seneca, South Carolina. South Carolina was selected primarily for personal reasons – Schaefer wanted to live on a lake and family members of Schaefer and his wife lived in neighboring states. Seneca, South Carolina was a lower cost location than California, and services required by the business, such as patent attorneys and graphic artists, were available.

Business Location

Lakeland Enterprises is located in Seneca, South Carolina. Seneca is a medium-sized city (population 7,652; 2000 Census) located in the micropolitan county of Oconee, South Carolina (population 65,215; 2000 Census). Seneca is located in the northwest corner of the state, approximately forty miles from the metropolitan central city of Greenville, South Carolina. Historically, Seneca was a manufacturing center with significant employment in textiles and apparel. Seneca currently is transitioning to a trade center serving retirees attracted to area lakes and residents that commute to the Greenville or Anderson MSA. High-speed Internet service is available in Seneca through Bell South, EarthLink, and Northland Cable TV.

Role of E-Commerce

Internet sales are critical to the success of Lakeland Enterprises. Internet sales comprise 95 percent of total company sales. In addition, sales over the Internet increase revenues by retail prices while sales through retailers increase company revenues by only the wholesale price. Thus direct sales over the Internet increase company profits much more than sales to retailers. Lakeland Enterprise's e-commerce activities also include an affiliate relationship with Amazon and the provision of its own Lakeland.com Affiliate Program. Lakeland affiliates will earn ten percent of product price on all carriers, tents, and accessories sold through the program. Schaefer noted that he preferred not to sell his products on eBay or Amazon because of the relatively high expenses for monthly fees

and sales commission (15%), the process is labor intensive because of the need for frequent relistings, and the services are slow in returning money from sales.

The Lakeland Enterprises' website also provides customers with information on how to select the appropriate carrier or tent, how to set up truck or SUV tents, and how to pack car top carriers. The customer may use the website for tracking the shipping and requesting return of items purchased. Schaefer noted, however, that he continues to receive frequent calls to his toll free information hot line from customers requesting information on how to use his tents and carriers.

Lakeland Enterprises also relies extensively on e-mail for selecting and communicating with vendors and for communications with a quality inspection person in China. For example, product drawings, photographs, and specifications are sent by e-mail to the selected Chinese manufacturers.

All web site design and maintenance services were provided by non-local sources.   Web hosting is with a New Hampshire firm, site construction is provided by a Pennsylvania company, and site maintenance is contracted to North Carolina, Pennsylvania, and Illinois businesses. The initial website development (including security precautions) cost approximately $20,000, and operating and maintenance costs are about $1,500 a year. A local computer company provides for hardware service needs, and DSL is provided through Bell South.

Schaefer noted that he has reached the maximum size given the current staff of two. To expand further, Schaefer will need to add a partner who has experience in web businesses and who can help him make the next step to a more extensive product line. In addition, Schaefer is considering providing an information service for travelers to attract potential customers to his site, and expanding his drop ship business.

Challenges and Lessons for Rural Entrepreneurs

Schaefer noted that his insights into running an e-commerce business came primarily from trial and error. He recommended that interested entrepreneurs should find a role model or guide to introduce them to "proven principles and technologies" and help them adapt these principals and technologies to their e-business ideas. An e-commerce entrepreneur also needs to identify professionals who can provide (at a reasonable price) Internet expertise, hosting services, and expertise in AutoCAD, Photoshop, and technical drawings. Schaefer noted that these services and expertise are available online, but the availability of local sources would be beneficial in reducing start-up time. Schaefer also would like to see more networking among area businesses engaged in e-commerce. A local organization of e-commerce businesses could share resources, technical expertise, and ideas for expanding markets. Finally, Schaefer proposed that the State of South Carolina could play a more active role in promoting new e-commerce business by protecting Internet businesses from unscrupulous customers. Specifically, a customer may return an item that the customer damaged and arrange a refund from the credit card company. Schaefer noted that he has little legal recourse against this action if the customer is located out of state.

Louis Williams & Sons, Inc.
Hendersonville, North Carolina
Dan Williams, President/CEO
www.makita-direct.com

The case of Louis Williams and Sons (a hardware and home improvement business) demonstrates how e-commerce can sustain a local retail business in the face of competition from big box retailers. Louis Williams & Sons' market niche on the Internet is the sale of Makita power tools, accessories, and parts. The North Carolina company targets construction contractors and promotes after the sale service to avoid direct competition with big box stores and Internet retailers.

Profile
Louis Williams & Sons, Inc.(LW&S) is a multi-purpose home improvement business offering hardware, keys, plumbing supplies, mobile home supplies, fasteners (screws, nuts, bolts, and washers), and power tools. The company focuses its product lines on niche markets to avoid direct competition with the mass-market home centers (e.g., Lowes and Home Depot) and the big box general merchandise stores (e.g., Wal-Mart and K-Mart). Historically, employment at LW&S ranged from eight to thirteen, depending on seasonal construction activity.

Louis Williams and Son's e-commerce business is limited to the sale of Makita power tools, accessories, and parts (www.Makita-direct.com). The company offers approximately 1,500 different Makita power tools and accessories and more than 15,000 parts. LW&S also is an authorized Makita service center, and technicians are available in Hendersonville to assist customers with parts requests and tool repair. Approximately sixty percent of the customers for Makita tools and parts are individuals and forty percent are businesses (primarily construction and rental companies), yet revenues generated from tool and parts sales to businesses exceed those generated from sales to individuals. Louis Williams and Sons currently is among the top ten distributors of Makita tools and parts in the Southeast.

History
Louis Williams and Sons was started in 1928 by Dan Williams' grandfather as a scrap metal and used auto parts business. During World War II, the business expanded its product lines to include used plumbing supplies, and later, new car parts, new plumbing fixtures and supplies, and western wear clothing. LW&S evolved into a full service hardware and building supplies business in the 1950s and the scrap metal business was sold in the 1980s.

Dan Williams assumed control of the business in 1981 upon the retirement of his father. Dan is a native of Hendersonville, North Carolina and he attended North Carolina State University. His leadership of the business started at the same time that the big box home centers were moving into the area. Dan realized early on that LW&S could not compete with Lowes and Home Depot on the basis of variety or hours, thus, he investigated niche

market opportunities in which the company could maintain a long run competitive advantage. Makita power tools were selected for one of the niche markets because Makita was the preferred brand of the contractors' market. LW&S carried a small line of Makita tools, and this line was expanded to approximately thirty different tools after the decision to specialize. Initially, tools were purchased directly from the factory in Japan and kept in inventory in the company's warehouse.

In 1991, on the advice of a friend, Dan had a web page developed (www.Makita-direct.com) that provided only a tool catalog and a toll free phone number. However, individuals purchasing tools also were interested in acquiring parts and accessories, and the toll free number was swamped with requests for information on parts, accessories, and service. In the mid 1990s, the web page was expanded to include a parts catalog and online ordering (shopping cart). LW&S was a pioneer in e-commerce and much of the company's web site was custom designed by Dan with the aid of a local graphic artist and a local programmer. The sales and service of Makita tools and parts now account for approximately twenty percent of the company's total revenues.

Business Location
Hendersonville, North Carolina is a popular retirement community located in the foothills of the Blue Ridge Mountains in the southwest corner of the state. The city is located on Interstate 26, approximately 22 miles south of Asheville, North Carolina and 39 miles north of Greenville, South Carolina (the two closest metropolitan areas). The 2000 population for the city was 10,420, and the 2000 population for metropolitan Henderson County was 89,173.

Role of E-Commerce
According to Dan Williams, the use of e-commerce was critical to the survival of the business in the face of competition from the home improvement centers. LW&S sold and serviced Makita tools before the arrival of the Internet, and they had a strong local and regional market. Internet marketing enabled the company to significantly expand the sales of Makita tools and parts (online sales now account for sixty percent of tool and parts revenues) while holding costs nearly constant. Company salespersons changed their operating procedures from responding to on-site and phone orders and inquiries (especially issues regarding parts and repairs) to expediting the sales and shipping of online orders. LW&S (through Makita-direct.com) was an early adopter of an e-commerce business strategy, and the longevity of their e-commerce activity provides the company with the advantage of a top five listings on most search engines for Makita tools, parts, and service.

Dan noted that the competition for customers became intense as mail order companies (e.g. Amazon) and big tool companies (e.g. ToolBarn) entered the Internet market. In addition, price search services now make it easy for consumers to identify the lowest price source. A result of the increased competition and lower search costs is the reduction of profit margins, especially on mass market tools such as cordless drills and circular saws. LW&S elected not to address the increased competition through the use of sponsored links or banner ads because of the high cost ($50,000 to $100,000 per year).

Dan also stated that Makita-direct.com does not attempt to compete on the basis of being the low price source. Instead, LW&S elected to focus on the parts and accessories markets and repair services for Makita tools. The company remains competitive in the higher-profit-margin B2B markets because service, parts availability, and on-time delivery are of crucial importance to businesses.

LW&S's e-commerce business (Makita-direct.com) is primarily the result of the individual efforts of Dan Williams. Dan designed the site's marketing materials and online catalogs, and he took or scanned thousands of pictures of tools and parts from Makita catalogs because this information was not available in digital format. Dan received assistance in web page design from a local graphic designer, and a friend and local businessman shared insights into e-commerce opportunities and services. Dan hired a local programmer to develop a secure online shopping cart for the company, and Adobe Acrobat was acquired to facilitate the downloading of tools and parts pictures by customers. A custom shopping cart was needed so that UPS shipping costs were automatically included for each of the thousands of tool parts and accessories the company offered. The start-up investment for LW&S e-commerce activity consisted of approximately $6,000 for two desk top computers, $1,000 for software, $400 for a digital camera, consulting fees for programming and graphic design, and hundreds of personal man hours. Makita provided limited financial support for the development of the web page. LW&S initially shared a server with another local company, however they changed servers to an Ashville, NC provider after service was interrupted for a day. Current server fees are approximately $1,200 a year.

Dan remains the technology guru for Makita-direct.com, and he continuously upgrades his IT skills through seminars at the local chamber of commerce, Small Business Development Center, Blue Ridge Community College, and national tool conventions. These classes focus on training, development of business plans, and identification of mentors and IT resources (e.g. attorneys, accountants, IT specialists). Dan does not use external support for his e-commerce activities with the exception of the services of a local programmer and graphic designer. In addition, the company does not use analytics to collect information on customers, and sophisticated protocols (e.g. Electronic Data Interchange or EDI) are not required for data transfers between the company and its suppliers. Dan noted, however, that he is aware that such services are readily available in Atlanta and Charlotte, and representatives for IT service providers promote their products and services at national sales meetings.

The company's online sales of Makita tools remained relatively flat for the last five to six years because of market saturation from the home improvement chains and online tool stores. In addition, profit margins on power tools declined significantly over time, and profit from the online business comes primarily from repair services and the sale of tool parts and accessories. The changing tool market encouraged LW&S to focus their sales efforts on the contractor and rental agency markets because these businesses are interested in the availability of parts and service for tools purchased. At present, the competition for selling Makita parts and accessories is significantly less than that for selling tools. Future sales growth is anticipated at eight to ten percent per year, but the

realization of this growth likely will require an upgrade of the website and the use of analytics to better target the market. The company has avoided the use of analytics to date because of their relatively high cost.

Challenges and Lessons for Rural Entrepreneurs

Dan Williams was responsible for most of the development of the company's online business, and many of the challenges that he faced are the result of starting the business before the evolution of network service providers. As a result, much of the software written for his online business was firm specific and not compatible with later mass-marketed software. The custom software limits the company's ability to switch external servers to save costs, and the company's online business (Makita-direct.com) is not linked to the server for the bricks-and mortar side of the business. LW&S recently invested $53,000 in a UNIX-based server for the home improvement store, but this server is not available as a back-up to Makita-direct. Finally, Dan stated that it was not easy to find sales people who know both tools and Internet sales. The sales people must be attuned to the needs of the customer and be able to suggest the correct tool for the customer's situation. Even with these difficulties, LW&S has demonstrated that the identification of a market niche and good customer service can generate customer loyalty and sustainable profits even if located in a small town like Hendersonville, North Carolina.

MainelyMetals
Gardiner, Maine
Carol and Tim Gay, Owner
www.mainelymetals.com

This case study of MainelyMetals demonstrates how e-commerce can help to expand the sales and reach of a small rural manufacturer. The Gays have taken a homegrown product, a swing arm mailbox, and expanded what had been primarily in-state sales to include other states, particularly those in the Midwest.

Profile

MainelyMetals, owned and operated by Carol and Tim Gay, is located along the banks of the scenic Kennebec River in Gardiner, Maine. The company does metal fabrication and produces MailSwing, a swing arm mailbox designed to rotate when hit by a snow plow and then reset after impact. The MainelyMetal website features a demonstration video about MailSwing along with information about other products the company offers, including metal flagpoles and clotheslines. The site is fully e-commerce capable, including a shopping cart to order products.

History

The MailSwing was invented and patented by Tim Gay's father and grandfather about 30 years ago. This innovative mailbox design was the product of snowy Maine winters and mailboxes that were frequent snowplow casualties. A traditional mailbox is fixed to the MailSwing, a galvanized steel arm that can swing 360°, returning to its upright position. The MailSwing reduces the need to shovel under a mailbox by allowing snowplows to plow under the rotating arm. For more than 25 years, the MailSwing was produced by the metal fabrication company owned by Tim's father and sold primarily within the state of Maine.

In 2003, the business was handed down to Tim Gay, an experienced machinist and metal fabricator (who continues to be employed in addition to running MainelyMetals), and Carol Gay, who runs her own office service business in addition to her work with MainelyMetals. The MailSwing is produced in the metal fabrication shop beside the Gay's home. Tim can manufacture 200 units at a time, and makes most of the parts for the product. Currently, they do not employ anyone else to help with production of the MailSwing. While Tim concentrates on manufacturing the product, Carol's skills have been used to develop the website and its e-commerce capabilities.

Business Location

Located along the Kennebec River, the economy of the town of Gardiner, Maine was dominated by the ship building industry in the early part of the 19th century. Paper mills and shoe and leather companies contributed to the economy beginning in the late 1800s. Today, as the mills have closed, Gardiner serves as a service and retail center in the region. With a 2000 population of 6,198, this small community's central location between the mountains and the coast is a major attraction for residents. Nonmetropolitan

Kennebec County, home to Gardiner, has a population of 117,114 (2000 Census) and includes Augusta, the capital of the state.

Role of E-Commerce

From the beginning, the Gays employed e-commerce tools to expand sales of the MailSwing. Currently, 40-50 percent of their sales occur through the Internet. Sales tend to be seasonal and have gradually increased over time. The website provides information to potential customers, including a video demonstration of how the swing away arm actually works. Customers can email to get more information about the product. And, for customers who want to order without contacting anyone at the business, the online shopping cart allows them to easily place an order. The Gays credit e-commerce with helping them extend their sales to other parts of the country.

Carol Gay worked with the Coastal Enterprises Women's Business Center to develop the MainelyMetals website, taking classes and working one-on-one with a business counselor. Carol had worked with them before when she started her office services business and returned for help moving MainelyMetals into e-commerce. In addition, Carol used her web hosting company, classes at the university, and friends to help her develop this new part of the business. While the Gays have talked about hiring someone to handle the website and e-commerce, they are uncertain about their ability to find a person with the right skill set in the local area.

Carol asserts that learning website development was not difficult, but it was harder to acquire the skills and information needed to engage in e-commerce, i.e., adding the shopping cart. Carol estimates that it took 2-3 months, working part time, to build the e-commerce capacity of the site. The ongoing cost for the site averages about $60/month, which is being covered by additional sales. The Gays are experimenting with the addition of other products to the site, such as garden ornaments, decorative plaques, and weathervanes, as a way of spreading the cost of the shopping cart over a wider range of products.

The Gays are actively seeking to expand sales of the MailSwing. They have distributed over 200 press releases in five states, used direct mailings, and aired television commercials in Maine and upstate New York. They send both mail and email to public works departments and rely on word of mouth. One of the biggest challenges they face is optimizing their e-commerce capability by appearing higher on the search page.

Challenges and Lessons for Rural Entrepreneurs

Like all rural entrepreneurs, the Gays have faced a few challenges in using e-commerce that offer lessons for others:

- As with many entrepreneurs, developing the online ordering capacity of the MainelyMetals website was a big challenge. Getting the shopping cart up and running was difficult; optimizing the site to increase its visibility on search engines remains a challenge. The Gays are working to link their site to other sites as a way of drawing more potential customers to MainelyMetals. Carol

recommends taking advantage of any assistance available to develop e-commerce capacity, including classes and one-on-one assistance from service providers like Coastal Enterprises.

- It is important to explore the website development tools available and choose one that is right for the business. If they were starting their website over again, Carol would use a website template program offered by their web hosting company. For MainelyMetals, with a relatively small number of products, such a "canned" program would have been easy to use and would have been more than adequate for their website needs. She has also learned about other shopping cart options that would have made the development of their e-commerce capability much easier. For other entrepreneurs, the experience of MainelyMetals suggests the need to research both template and customized website development options to determine what might work best for their unique business needs.

- Website development must be consistent with plans for growing the business. Right now, if the Gays want to tap into larger markets, it will require a major investment of time and money, both in terms of developing their website and their production capability. Currently, these entrepreneurs are not prepared to make that commitment to growth and will continue to focus on the niche market they have developed. If their goals for the business change, the website can be further developed to meet the emerging needs of their growth business.

Mid West eServices, Inc.
Salina, Kansas
Dave Rose, Owner/Founder
www.mweservices.com

Mid West eServices, Inc. demonstrates the usefulness of the Internet for selling rural real estate (primarily commercial and public buildings in the Midwest) to buyers across the country. The company's strategy for success in the Internet real estate market is to focus on underserved markets (rural areas) and provide services and quality of information not available elsewhere. Mid West e-Services also shows how to develop a successful e-commerce business with a modest initial investment.

Profile

Mid West eServices, Inc. (MWeServices) is an Internet based real estate advertising and marketing company. The company headquarters are in Salina, Kansas, and real estate agents are located in Kansas and Colorado. The company's agents are licensed to sell real estate in Kansas, Oklahoma, and Colorado. MWeServices specializes in marketing commercial and public buildings (e.g., schools, hospitals, churches) located in rural communities in Kansas and surrounding states. Approximately seventy percent of MWeServices listings are commercial and public properties and thirty percent are residential. MWeServices markets its properties and listings for other real estate firms over the Internet on eBay, LoopNet, and Cityfeet. The company provides a web page for each property that includes a large number of high quality photos, a lengthy description of the property and surrounding area, and links to websites that provide information on local demographics, services, and amenities. The elaborate and informative web pages for each property distinguish MWeServices from their competitors on the Internet. Currently, MWeServices does not promote its services to local real estate brokers or multiple listing services (MLS). Leads for new listings come primarily from referrals of prior customers. The company averages thirty Internet listings a month for its agents and one to five listings for other real estate firms.

MWeServices has thirteen associates: four salaried, one hourly, and eight straight commission independent contractors. Nine of the staff are licensed real estate agents. The management team for the firm is four members of the Rose family. Dave Rose is Founder and President, Susan Rose is Secretary-Treasurer, Brian Rose is Vice President of Real Estate Sales and Web Design, and Chris Rose is Vice President of Information Technology. MWeServices anticipates an increase in its sales force to develop leads and respond to information requests from potential buyers.

History

MWeServices was founded by Dave Rose in 2003. Mr. Rose worked from 1979 to 2003 as an insurance claims adjustor and regional claims manager for Farm Bureau Mutual Insurance Company. In 2000, Mr. Rose suggested that Farm Bureau market their salvaged vehicles (cars, trailers, boats, farm implements) through eBay. The eBay auctions doubled the Bureau's salvage recovery rate over other disposal methods. Dave

Rose retired from the Farm Bureau in 2003 and he started a business selling salvage and repossessions on eBay for area banks and insurance companies. He charged a flat fee per item sold, but the storage of vehicles became a problem. In 2004, Dave branched into real estate advertising on eBay when he was approached by the City of Gaylord, Kansas about assisting them in selling an abandoned school building. Dave acted in the capacity of an advertiser and he referred all leads to the City of Gaylord. Dave designed and built a web page for the school that contained more than 20 pictures of the property and surrounding area and links to county and community web sites. The school was purchased by a couple from Seattle, Washington who are using the building as both home and location for their business (TAB-Funkenwerk) restoring sound equipment.

Word of the successful sale spread, and Dave started receiving requests from other communities to market their vacant schools and public buildings. MWeServices changed their business strategy to focus on Internet-based real estate marketing and sales. Since 2004, MWeServices has sold eighteen schools and numerous commercial buildings, churches, and private residences. All of the properties are in the Midwest (Kansas, Nebraska, Oklahoma, and Missouri), but buyers are from across the nation (e.g. California, Florida, Oregon, Georgia, Wisconsin, Nevada). Real estate sales for 2006 are anticipated to be over 200 percent greater than for 2005. MWeServices continues to add employees at its Salina office and agents in rural areas to handle the increase in business. In 2007, MWeServices will move into a vacant public school purchased from the local school board. The additional space will permit the expansion of MWeServices staff plus make available space for businesses with related services (e.g., mortgage, title, and insurance companies).

Business Location

MWeServices is located in Salina, Kansas (population 46,000 in 2000) in the Salina Micropolitan Statistical area (population 59,760). Salina is a regional trade center with a significant manufacturing base. The city is located at the intersection of Interstates 70 and 135, 180 miles west of Kansas City and 95 miles north of Wichita. High speed Internet services in the Salina area are provided by twenty-eight companies.

Role of E-Commerce

MWeServices is an Internet-based business. MWeServices creates a web page for each property listing using HTML. The design of each page generally requires three to four days for taking pictures, identifying links to local websites, and preparing the relevant marketing information. Website design is provided internally by Dave Rose and his sons Chris and Brian. The web page for each property listing is an advertisement and not an auction. An individual interested in buying a property submits a request for information to MWeServices, and MWeServices refers the leads to the company's listing realtor. MWeServices charges a fixed fee for each advertisement that includes the costs associated with listing online with eBay, LoopNet, and/or Cityfeet. Currently, almost all online listings are for realtors associated with MWeServices, thus the company receives a brokerage fee in addition to the marketing fee for property sold. Leads that are referred to other real estate companies result in a referral fee (e.g. two percent) from the listing

company. Other real estate companies contract with MWeServices for marketing assistance primarily for properties that are unusual structures or difficult to sell.

E-commerce related start-up and operating costs for MWeServices are relatively modest. Dave Rose estimates that investments in computer hardware (seven computers, digital cameras, office equipment) are approximately $10,000 and software packages are an additional $2,000. Annual operating costs include fees for eBay, LoopNet, and Cityfeet ($40,000); server costs with a Canadian provider ($600); cell phones and long distance telephone service ($3,300); and high-speed Internet service with Cox Cable ($910). All information technology work is done internally by Chris Rose, and web page design is provided by Brian, Chris, and Susan Rose.

MWeServices acknowledges the potential for competition because of the relatively low entry barriers and start-up costs for their services. The company's strategies for remaining competitive in e-commerce are: offer services and quality of information that are not available on other sites, provide a low-cost product based on the reasonable production costs and excellent IT/IC infrastructure available in Kansas, and become recognized as the preferred provider for online advertising of rural properties.

MWeServices strategy for future growth is focused on increasing activity in traditional real estate sales targeted at residential, agricultural, public, and commercial properties in Kansas. The growth of online marketing services is anticipated to come from the recruitment of agents licensed in Kansas and association with United Country Real Estate, a national real estate brokerage firm that provides 600 offices nationwide and a network of agents in other states. The identification of high-value properties is very time consuming, thus MWeServices is relying on repeat customers (individuals, businesses, and real estate firms) and associations with organizations (e.g. Kansas Association of School Boards) to identify leads.

MWeServices also will attempt to expand their non e-commerce business to provide alternative sources of income. The company plans to increase listings of public and commercial buildings in Kansas with sales targeted at out-of-state buyers. In addition, MWeServices will become more active in buying and reselling property themselves. In summary, prospects for rapid growth depend on the company's ability to generate quality leads for rural properties and attract technology-savvy agents to respond to online requests for information on the listings. Thus, current business plans address developing a network of agents in Kansas and providing training programs for new agents through the United Country headquarters in Kansas City, Missouri.

Challenges and Lessons for Rural Entrepreneurs

The principal challenge in growing the business is training new real estate agents in using computers and e-commerce. More agents are needed who have experience with digital photography, web site development, and Internet sales. Dave Rose noted that most potential buyers shop from their computers until they have narrowed their options to a small number of properties. The business needs agents with computer knowledge and experience who can market the properties online and respond to customers' inquiries.

Mountain One demonstrates the evolution of a business from catalog and mail order sales to website and Internet sales. E-commerce was credited with keeping the company profitable in spite of operating in a declining industry. The move to e-commerce resulted in reaching new markets, reducing printing costs for catalogs, and increasing the efficiency of warehousing and distribution operations.

Profile

Mountain One is the parent company of CR's Crafts and JustDollHats.com (www.crscrafts.com/Hats/Lobby.asp). CR's Crafts is the nation's largest supplier of doll and teddy bear making supplies. Available supplies include doll parts, wigs, shoes, hats, fabrics, clothing, accessories, teddy bear furs, books, and patterns with instructions for doll and bear making. The company also provides an extensive selection of porcelain and vinyl dolls. In total, CR's Crafts has available 7000 items for making and accessorizing dolls and bears. Most of the company's hats are manufactured in Leland, Iowa. The remaining doll and bear supplies are acquired from approximately 100 distributors located primarily in the U.S., Japan, Taiwan, Germany, and Switzerland. The principal markets for the doll and bear supplies are: (1) the home hobby market where the doll/bear makers will sell the finished products at crafts fairs, (2) parents and grandparents making keepsakes for their children and grandchildren, and (3) doll collectors. CR's Crafts sells worldwide with sales revenues split approximately evenly between Internet sales and catalog sales. The company employs five full-time employees at their mail order facility in Leland.

History

CR's Crafts was started in 1983 by Clarice Brown, Michael Brown's mother. The first products offered were patterns for a Christmas Tree, a Santa, and two bears (Sitting Bear and Softie Bear). The initial sale of patterns was through advertisements in magazines and newspapers and flyers at crafts fairs. Customers for the doll and bear patterns had difficulty finding parts and supplies for the patterns, thus the company expanded its product line to include kits and supplies to go with their patterns. In 1991, the business was moved from Clarice Brown's home to a building in Leland to accommodate the expanding product line. The company developed a catalog (initially 16 pages) and sales were made through phone and mail orders. Michael Brown joined the company in 1994 and he developed the first website for CR's Crafts in 1997. Mr. Brown was a college teacher in Canada prior to returning to Iowa to take over the family business. In 2005, the company diversified its operations to include the manufacturing of doll hats. Mountain One purchased the doll hat making company Crescent Hill that included molds for 750 different hats. The company plans to use the Internet to sell hats in bulk to doll manufacturers, crafts retailers, and hobbyists.

Business Location

Leland, Iowa is a small community of approximately 300 residents located in agriculturally rich north central Iowa. Leland is four miles north of Forest City, Iowa (population 4,500), the home of Winnebago Industries and Waldorf College. Leland is in Winnebago County, a nonmetropolitan county located approximately two hours north of Des Moines and two hours south of Minneapolis. The 2000 population for Winnebago County, Iowa was 11,500 residents.

Role of E-Commerce

The doll and bear making supplies industry is a declining industry and many of CR's Crafts' competitors failed over the last ten years. Mr. Brown credits the move to e-commerce with keeping his company profitable by reaching new customers while advances in software improved the efficiency of the company's warehousing and distribution operations. Before e-commerce, CR's Crafts mailed 15,000 to 20,000 catalogs each year at a cost of $30,000 to $35,000 a year. Catalog mailings have been reduced to every other year with an advertising flyer mailed in the off years. Additional cost reductions resulting from e-commerce include: (1) less travel to trade shows due to the ability to contact vendors and parts manufacturers through the Internet, and (2) greater efficiencies in the mail order business as a result of more specific information on product sales. These increases in operational efficiencies reduced the company's employment requirements from 15 to 5 full-time employees.

CR's Crafts original website was designed by Michael Brown using WH Solutions. The website incorporates Response by Colinear Systems, Inc. software (www.colinear.com), designed specifically for mail order and Internet businesses. This integrated software system enables the company to collect information on orders and customers, trace sales of specific items, send e-mail acknowledgements, track packages, and manage the inventory and warehouse. In addition, product descriptions and images for more than 2800 of the company's items are exported to eBay stores using software from Marketworks (www.marketworks.com).

Company sales in 2006 were led by Internet sales with 51 percent of sales from the CR's Crafts' website, 28 percent from phone orders, 16 percent from mail orders, four percent from eBay stores, and one percent from fax orders. Michael Brown noted that the company wants to increase the share of sales from website orders yet the "grandmother market" is reluctant to order from websites. This market component either lacks Internet access, is not comfortable with using the Internet relative to ordering by phone or mail, or does not wish to use their credit cards on an Internet site (CR's Crafts does not take PayPal for website orders).

The company also is attempting to encourage customers from eBay stores to switch to the CR's Crafts' website for orders. The profit margin on eBay sales is lower than for website or catalog orders because the average size of eBay orders is relatively small and there are additional fees associated with using eBay. In addition, Mr. Brown offered that eBay customers require greater time and attention allocated to their orders. First, eBay customers expect a very rapid response to their orders, and the eBay customer becomes

worried if the order is late. Mr. Brown attributes this urgency among eBay customers to the individual's underlying presumption that the seller using eBay may be incompetent or not honest. Second, CR's Crafts often has difficulty communicating with eBay customers because only an e-mail contact is provided and this address may be incorrect or responses to correct addresses may be stopped by spam or virus filters. CR's Crafts prices its products higher on eBay stores than on its own web site to cover the eBay fees ($4,000/year) and the higher costs associated with handling an eBay order. eBay stores' customers are provided a catalog and discount coupon for their next order as an inducement to use the company website; however, this strategy has not changed the shopping patterns of many eBay customers.

CR's Crafts' move to e-commerce required an initial investment of approximately $30,000 for software and an additional $30,000 for seven PCs on site. Two servers are maintained at the Leland facility for the website and e-mail. Annual expenditures include $17,000 for website maintenance by the Portland, Oregon programmer; $4,000 for support of software packages (Colinear and Marketworks); and $4,000 for eBay stores. High speed Internet service is provided by the local telephone company (WTCA), which is the only Internet provider for Leland, Iowa.

Michael Brown anticipates significant changes in operations and product offerings in the future. First, the Colinear software package (specialized for mail order businesses) will be offered over the Internet with updates automatically provided by Colinear. Once the online version of Colinear is available, CR's Crafts will eliminate the on-site servers dedicated to website customers. Second, Mountain One is investigating alternatives to expand and diversify the company's product offerings. The doll hat business represents a new venture that is currently operating at about 40 percent of full production (500,000 hats were made in last two years). Mr. Brown also noted that he has three additional ideas for new Internet businesses outside of the doll/bear markets, but these business plans were not ready for public disclosure. He stated that the Internet provided an inexpensive way to test the market for his new businesses.

Challenges and Lessons for Rural Entrepreneurs
Michael Brown stated that the company's rural location presented no problems with the exception of the availability of only one phone company and one power company that results in a loss of redundancy needed for uninterrupted service. Mr. Brown noted, however, that an Internet business required a different frame of mind and concept of time than a traditional catalog-based mail order business. Internet customers expect a rapid response to their questions and orders. In addition, nonpaying customers and product returns can be a problem for an Internet company like CR's Crafts. Mr. Brown suggests that products should be shipped only upon receipt of payment, and product returns should be dealt with quickly and treated as a cost of doing business.

Nautical Antiques
Jonesport, Maine
Bernard Sund, Owner
www.nauticalantiques.com

This case study of Nautical Antiques demonstrates the potential of e-commerce to serve as the primary marketing vehicle for a rural business. It also shows how this business, in turn, provides a way for a lifestyle entrepreneur to live and grow his business in rural coastal Maine. While Bernie Sund has been able to grow his online antiques business by identifying a niche market, nautical antiques, and working to keep his site high on the search engine rankings, he is now facing increased online competition that will require taking his website, and his e-commerce capability, to the next level.

Profile

Nautical Antiques is owned and operated by Bernard Sund, who moved to rural Maine, a place that had been a vacation destination for his family in the past. Nautical Antiques has a small retail space in Jonesport, Maine, Bernie's home and a coastal community in Downeast Maine. Nautical Antiques sells nautical antiques and other gifts purchased from Denmark, South Korea, India and other countries. Bernie buys products from major distributors and sells throughout the U.S. and internationally. Online sales account for 95 percent of his business, with the other five percent coming from seasonal sales at his small retail space – opened to give his Internet business more legitimacy through an actual physical location.

History

Bernie Sund started an online antiques business in 1996 in Massachusetts. He had no business training prior to creating the business, having been an employee most of his career, and his computer knowledge came from coursework in college. He had to develop a new set of skills to build this business. He did, however, have a passion for sailing that continues to the present. Facing competition in the online antiques market, he identified a niche for nautical antiques and focused the business in this direction. In 1999, he and his business moved to Jonesport, Maine. This relocation was predominantly a lifestyle choice and not a business decision.

The initial website was set up with the help of his daughter, a computer engineer. In Maine, Bernie took e-commerce classes offered by Maine's Women's Business Center at Coastal Enterprises, Inc. and participated in the Incubator Without Walls (now Coastal Business Institute) programs offered initially by the Eastern Maine Development Corporation. These classes were very useful in terms of providing information and giving him an opportunity to overcome his isolation and interact with other business owners.

Business Location

In the past, Jonesport, Maine was the bustling location for a number of sardine factories. Those factories are now a thing of the past and Jonesport remains highly dependent on tourists who populate coastal Maine from May through October. However, the number of

tourists is relatively small, creating a situation where many in Jonesport must work several jobs in order to make a living. This small community of 1,408 residents (2000 Census) is located in nonmetropolitan Washington County (2000 population, 33,941), referred to as the "sunrise county" since it is the easternmost county in the U.S. It might also be called the "blueberry county" since 25 percent of all blueberries in the U.S. are grown in Washington County. Jonesport's character has been shaped by its isolation, being located 160 miles from the state capitol of Augusta and 211 miles from the major metropolitan area of Portland.

Role of E-Commerce

Nautical Antiques is a business that is fully dependent on Internet sales for its success. It is not a business that could be operated in rural Jonesport, Maine relying solely on retail sales through its store. Retail sales are limited by the tourist trade in the region, generally concentrated in July through early October. At present, the Nautical Antiques website serves several functions. It provides information about the antiques sold by Nautical Antiques, including pictures and detailed information about each product. The site also has e-commerce services, allowing online ordering and payment processing through a secure order form. Visitors to the website are also given the option of ordering through a toll free phone number or via email.

While Bernie has been successful in growing his business through the website – about a 20 percent increase in receipts per year – he is now facing more competition on the Internet and his sales did not increase as much last year. To meet this challenge, the business is at a point where major changes need to be made to the website to upgrade and fully automate the website. These changes will require a major investment of time and resources but are needed to keep ahead of the competition.

Challenges and Lessons for Rural Entrepreneurs

Nautical Antiques has faced a number of challenges associated with the relatively isolated location of Jonesport and increased competition from other online businesses:

- One of the biggest challenges that Bernie has faced in developing his e-commerce business has been finding qualified service providers in the local area – website developers and designers, IT specialists, photographers. His experience has been that people do not have the appropriate skills or that the cost of the service is too high. For example, his website is hosted by a company located in North Carolina rather than in Maine. Bernie remarked that it is important to have someone who is not trying to sell services or otherwise make money (from the business) help new businesses with e-commerce related issues. The classes offered through CEI and the incubator program provided some of those services.
- Another challenge created by the isolation of his community is the lack of opportunities to network with other business owners. One reason for taking classes offered by the Women's Business Center and others was to have an opportunity to network with others in the class, and to share ideas and challenges.
- While Bernie states that he could not operate his business without the Internet, he also recognizes that having a website does not eliminate the need for marketing.

To continue to be competitive on the web, he has to work to keep up his Google rankings and to use the right keywords to position the business prominently on other search engines. Having the skills to do this search engine optimization is very important to the success of an online business.

- One final lesson was offered for other rural entrepreneurs who are seeking to use e-commerce to start and grow their business – find an online business owner who will coach you during the development process. Effectively using e-commerce is so much more than simply having a website. A coach, someone who has "been there, done that" could guide an entrepreneur who is new to e-commerce and perhaps reduce the time and frustration associated with becoming an e-commerce business.

Sivertson Gallery
Grand Marais, Minnesota
C.J. Heithoff, Manager
www.sivertson.com

This case study demonstrates how a retail art gallery can expand both out of season and out of region sales through e-commerce. It also shows the power of the Internet to provide tailored direct marketing to customers of niche artwork.

Profile

Sivertson is a retail art gallery featuring regional artists like Howard Sivertson, as well as an expansive collection of Alaskan and Canadian Inuit art, a niche that the gallery has actively developed. In addition to artwork, the gallery offers framing services. Most of their customers are from out of town – tourists visiting the area and second home owners. Although it is open year round, the gallery's primary season begins at the end of June and extends through October. The winter season is highly variable, since tourism during the winter months is dependent upon snowfall. The gallery also benefits from an Inuit Festival held in March, although the festival would benefit from greater community support to attract more visitors.

History

Sivertson Gallery was established in Grand Marais, Minnesota by Howard Sivertson and his daughter, Jan, as a home-based business in 1980. Both Howard and Jan are artists, and Howard realized early in the business endeavor that his love of painting was greater than his interest in running a business. Jan, however, had an interest in the business and, in 1982, moved the gallery to a space in downtown Grand Marais. The gallery gradually outgrew its original location and, in 1995, moved into its current larger and more prominent main street location. The gallery was renovated in the early 2000s into a space that complements the quality artwork it contains. Currently, the gallery has five full time employees in the Grand Marais site and four in its Duluth location.

CJ has served as manager of the gallery since 2002. When she arrived, the gallery had a website that was informational only and was not generating much in terms of sales. Since there are no plans to expand the physical space that the gallery operates, the only means of expanding the business is through the Internet. The key need for the gallery is to expand its sales throughout the year, not just during the limited tourist season in the region. According to CJ, nothing else can expand their season as much as the website does. With that as a goal, CJ has worked to expand the e-commerce capability of the site over time.

Business Location

Grand Marais's economy, like much of northern Minnesota, was historically tied to the timber and mining industries. The population, which peaked around 1899, declined to 200 in 1915 as the timber companies moved away. Slowly, with the development of better transportation infrastructure and the creation of a marina and a national recreation

area, the region has become a second home and tourist destination. The 2000 population rebounded to 1,353. Grand Marais is the county seat of Cook County, a nonmetropolitan county with a 2000 population of 5,168. The county is the tip of the Arrowhead Region of northern Minnesota, located 110 miles from Duluth and 265 miles from Minneapolis.

Role of E-Commerce

In 2004-2005, CJ and staff revamped the website to feature a shopping cart to take full advantage of e-commerce. They worked with Boreal Access, the cooperatively-owned local ISP, to do the web development. She had a vision for the site and was able to take that vision to Boreal and they helped make it a reality. CJ has also built her own skills over time, by taking classes on the web and learning from anyone who can help her. As she has gotten more comfortable with website development, the gallery has wanted more control over the site so that it truly reflects the vision for the business. However, CJ continues to work with Boreal, which hosts the site and serves as ISP, and describes the cooperative as "a great community resource". They have the IT skills the gallery needs to implement e-commerce so that it benefits the business.

At present, the website generates about three percent of the gallery's sales. CJ's personal goal is to have the website function as another store, generating 25-30 percent of the gallery's total sales. However, the gallery owner, Jan Sivertson, is cautious about making investments in e-commerce. She needs to see that the investment will affect the bottom-line in a positive way. Although sales from the site are covering the costs of web development currently, more investment will require a greater impact on revenues. However, higher energy costs and a slow down in second home development mean fewer visitors to the region and, for the gallery, fewer potential customers. If additional investments are made in the gallery, it will most likely be in the e-commerce side of the business rather than bricks and mortar.

The gallery's website currently serves several functions. Customers who have visited the gallery in Grand Marais (or the one in Duluth) can use the website to order additional artwork, or purchase a piece that they admired but did not purchase earlier. The website allows gallery staff to communicate quickly with customers, facilitating customer service. Customers interested in Sivertson's niche market, Alaskan and Canadian Inuit art, find the gallery through Internet search engines and can expand their own collections through purchases from the gallery. Sivertson's staff maintains an email list that can be used, through point of sales information, to identify customers of a particular type of art or artist, and send targeted emails when new artwork comes into the gallery. The gallery can send the customer information about the artwork and a link to a high quality photograph of the piece. This resource is particularly useful for collectors of both Inuit art and specific regional artists that the gallery features. In general, the website has helped keep customers connected with the gallery and allowed them to learn about new pieces and make purchases even if they had no plans to visit the region.

Challenges and Lessons for Rural Entrepreneurs

The positive experience that Sivertson Gallery has had using e-commerce to extend its sales throughout the year is not without some challenges and lessons for other rural entrepreneurs:

- Internet access was a particular challenge as the gallery sought to develop a website that reflected the high quality of its artwork and offered e-commerce capabilities. Speed of connection was very important to the gallery as the site was developed. Dial up service only would have made it impossible for them to connect with the Duluth store and also would have made it too slow for the photo-heavy site that Sivertson needs to effectively reflect their artwork. The presence of Boreal and the cooperative's ability to extend high-speed Internet access into downtown Grand Marais was a major benefit to the gallery.
- As with other rural entrepreneurs, building an e-commerce website was not the end of the challenge for Sivertson. CJ is now working on developing the meta text that will help to elevate the site on search engines. This search engine optimization is an issue that challenges the gallery and assistance through classes and other local resources would be of great benefit to them.
- The other important challenge for Sivertson is finding the time to devote to developing the website. Right now, the website is not generating the volume of sales that would justify having a full-time position devoted to web development. The responsibility falls primarily on CJ and other staff who must carve out the time for web development in addition to their other responsibilities at the gallery. This situation is a catch 22 for many rural entrepreneurs – growing the website requires growing the business first. But, for Sivertson, growing the business may well depend on further developing the e-commerce capabilities of the website.
- One recommendation that CJ would have for rural entrepreneurs who are building their web capacity is to be sure that the business is on solid footing before expanding into the Internet. She noted that it is important to be able to do the business well before a website will bring benefits to the entrepreneur. In the case of Sivertson, the gallery had developed a niche and a reputation for featuring high quality regional and Inuit artwork. The bricks and mortar gallery was well established and successful. The website built on that solid footing to bring in additional sales, maintain and build customer relationships, and augment the success of the business. According to CJ, building the bricks and mortar business and then the online business, in this order, is important.

Songer Whitewater
Fayetteville, West Virginia
Susan Hoffstetter, President/CEO
www.songerwhitewater.com

Profile

Songer Whitewater is an adventure trip outfitter that offers rafting excursions on the New and Gauley Rivers in the Appalachian Mountains of southern West Virginia.   They also provide all-inclusive and custom-designed vacation packages that might include add-on adventures, monthly specials, contests, and custom adventure vacation packages. Add-on adventures include rock climbing, horseback riding, ATV trailing, motorcycle cruising, and fishing trips.

Songer Whitewater is one of about fifteen whitewater rafting outfitters plying their trade in the New River Gorge area of West Virginia. With so many outfitters concentrated in such a small geographic space, competition is keen, meaning that customers must be king. Songer Whitewater is currently the fourth largest outfitter in the immediate area and also fourth statewide, up from ninth regionally and 12th statewide just a few years back. They attribute much of this improvement in their ability to market themselves effectively over the Internet.

History

Songer Whitewater started in 1978 and has been under the same ownership since 1982 when Len Hanger and Susan Hoffstetter decided to build their business around their mutual interest in water-based recreation.   The business has steadily grown through the years reaching approximately $1.5 million in gross sales in 2006.

Songer Whitewater was an early adopter of information technology, starting at the very beginning of the Internet in the early 1990s when they used a text-based bulletin board system to advertise their company. In about 1995 they developed their first web presence, a simple 2-for-1 coupon, allowing them to know who learned about Songer directly or indirectly from the Internet. This first test of the effectiveness of the Internet convinced them to invest in the development of their website using in-state vendors. In the late 1980s their website evolved to include more graphics with Susan creating content but hiring external website programmers. They introduced "doorway" pages in 2000, allowing them to consolidate information in a way that provided Songer with a competitive advantage.   Also around 2000, they decided to hire an in-house programmer, but still contracted with external vendors to provide website market positioning.

Business Location

Fayetteville, West Virginia is considered the "gateway to the New River Gorge." This small town, population 2,754 (2000 Census) was the legal center for surrounding coal fields. Now the town is capitalizing on its natural beauty and proximity to the New River Gorge National River and serving as a tourism and second home destination. Located in

nonmetropolitan Fayette County (2000 population 47,579), Fayetteville is close to the metropolitan area of Charleston, West Virginia and Roanoke, Virginia.

Role of E-Commerce

Susan readily attributes much of their success on being early adopters of Internet marketing and e-commerce strategies and continuously investing in improving their approach along the way. In fact, just prior to her interview for this case study, they publicly launched yet another set of major website improvements. As Susan saw an increase in Internet use for planning vacations, she jumped on the band wagon by hiring a web designer who was very familiar with the rafting industry.   He has been the driving force behind Songer's increase in Internet sales.

Songer uses their website for providing basic information about scheduling and reserving trips and packages, including trip features and rates. They provide an online printable brochure and waivers allowing parents and guardians to provide necessary formal permission for their children to participate, saving time for everyone. Their ancillary, subcontracted trips (e.g., fishing and horseback riding) are advertised exclusively through their web page. However, they still produce a 28-page hard-copy brochure for marketing their core business of whitewater rafting. In order to help drive traffic to their website, they place their URL virtually everywhere, including on printed brochures, on company vehicles, and on their rafts.

Songer has been using e-commerce for the past eight years, relying on a proprietary, BookItNow system called ROAM (Reservation Outdoor Adventure Manager), developed and maintained by a firm from Nova Scotia. Even though not necessary, Songer still typically follows up their online reservations with a telephone call, in order to clear up any misunderstandings and to help solidify their relationships with customers. ROAM operates on a legacy operating system (Theos) that allows for networking of one computer with multiple dummy terminals. This arrangement made a lot of economic sense when it was first conceived due to the high cost of fully-operational PCs at the time. Along with about twenty firms spread across North America, Songer initially paid approximately $20,000 for site development and now pays $250 per month to this firm and receives periodic system upgrades, training, and trouble-shooting. Even though this might seem expensive, Susan seems to be very satisfied with the reliability and consistency of this approach. The current version of this system allows for secure credit card transactions, e-mail invoicing, reservation confirmations, and directions to their location.

E-commerce has evolved to be a very important success factor for Songer Whitewater with a reported twenty-five to thirty percent of new business coming from leads developed through their website. Many of these business leads came from people who were not new to whitewater rafting but who were new to Songer, having found their website more appealing and easier to use than many competitors' sites.

Songer sees future business opportunities in several niche markets. For instance, they developed strategies to encourage motorcycle riders (Harley-Davidson primarily) to

cruise through the beautiful surroundings, do some whitewater rafting and/or other outdoor activities, and generally enjoy themselves while using Songer as a base of operations for their adventure trip. Another interesting niche might be built around Songer's current provision of outdoor adventure experiences for incoming West Virginia University freshmen students. This program is being supported by the WVU Provost as a student retention strategy. Songer also has a similar long-standing relationship with a middle school group from a private school in Detroit that could be expanded to other schools looking for similar experiences for their students.

Challenges and Lessons for Rural Entrepreneurs

Susan's advice to other small and medium-sized rural businesses is that the development of a web presence is nearly essential in today's competitive marketplace. Further, their website needs to be informative, easy-to-navigate, and it should facilitate easy retrieval of the kind of information most customers are seeking. In addition, she suggests that business owners learn as much as they can, but find a reliable service provider whose philosophy "syncs" with their own. She felt quite strongly that the service provider needs to have a good understanding of the core business they are serving and a willingness to provide for the IT service needs of the business on their terms, not on the providers' terms.

Susan felt that many small rural businesses do not realize that creating good web presence can put them on even footing with larger competitors and that they don't have to be technology wizards to achieve good web presence given that there are more and better web designers in the marketplace than in the past.

Susan thought that a couple of improvements in the regional availability of support would benefit small and medium-sized businesses. One, affordably-priced high-speed Internet service is an essential ingredient for businesses that plan to host their websites in the region or who plan to interact with their customers using the Internet or e-mail. Two, educational seminars to help small businesses develop web presence and e-commerce strategies should be supported by local groups like chambers of commerce, convention and visitors bureaus, and other local tourism agencies. University outreach and Extension organizations and/or technical colleges are likely best candidates for providing this local training since they would be less likely to have the vested interests of local service providers.

When asked what Songer might do differently if given the chance to start all over, Susan indicated that they would have gotten involved in e-commerce in a bigger way sooner had they realized its potential.

Stained Glass Express
Waterville, Maine
Janet Parkhurst, Owner
www.stainedglassexpress.com

Stained Glass Express demonstrates the use of e-commerce to grow one niche product line of an existing business enterprise and to more effectively utilize the time and capacity of employees in a retail location. The website serves as a complement to the current retail store and, since it is still in a developmental stage, the long term impact on sales is yet to be determined. The website provides information, and may eventually replace the paper catalog, as well as full e-commerce services.

Profile

Oakes and Parkhurst Glass is a full service glass company, providing auto, residential, commercial and stained glass for the past 30 years. Beginning as a single store, Oakes and Parkhurst has grown to three locations, including Stained Glass Express, located in Waterville, Maine. Stained Glass Express has three primary business activities – selling glass and supplies to hobbyists, selling finished stained glass gift items, and fabricating and repairing stained glass, particularly church windows. The retail store in Waterville is engaged in all three business activities while the website focuses primarily on selling glass and supplies. An online gift line will be added in the near future.

The business has identified a niche market online by featuring "Pattern of the Month" – a unique stained glass pattern that is highlighted for a month, including a list of all the materials needed to replicate the pattern. It is then archived on the site for future access. In addition, the business features kits that can be purchased online. Staff is working to develop a marketing connection in China so that they can offer lower price, quality glass to gain a competitive edge for their online business relative to competitors.

The owner, Janet Parkhurst, considers the e-commerce portion of their site to be still under development. However, they are experiencing online sales and began to market the website more heavily at the end of 2006.

History

Oaks and Parkhurst Glass has been a fixture in the Waterville, Maine region for 30 years. The business provided glass services, e.g., residential, auto, replacement and repair, etc., throughout the region and operated several stores. During that time, they did have a web presence but did not engage in e-commerce activities. Janet Parkhurst began to offer a small supply of stained glass products in each store but made a decision to consolidate the offerings into the Waterville store and create a retail space focused on the three business activities described above. The retail store has display space for gift items and space to offer classes, in addition to storing glass and supplies for both retail and online customers.

The store's popularity in Maine has led to a loyal customer base of hobbyists who will travel some distance to visit the store. In addition, the business has found a new customer base of designers and cabinet makers who are looking for stained glass insets for cabinets. The volume of business made it important to have two employees at the store at all times to serve the walk-in retail trade and to meet other orders and demands. Expanding the online component of the business offered a way to more effectively utilize the time and talent of employees in the retail location, and to expand the size of the market for the business.

Business Location
Waterville, Maine was built on the mills and shipping industry that dominated so much of Maine in the 1800s until the mid-1900s. The town, population 15,605 (2000 Census), is also home to Colby College, a small liberal arts college consistently ranked as one of the best private colleges in the country. Located in nonmetropolitan Kennebec County, with 117,114 residents in 2000, Waterville is 23 miles from Augusta, the capitol of Maine, and 75 miles from the city of Portland.

Role of E-Commerce
In 2005, Janet bought the domain name, stainedglassexpress.com, developed a new logo, and began to build the online component of the business. The approach has been to move slowly so that they could work out any issues before going live with the website. And, they relied on existing staff capacity to build e-commerce capability. For support, Janet turned to Maine Hosting, an in-state web hosting and development service, and they worked on the business's initial website. This first site was very "image heavy" – they used pictures rather than words to describe products. However, they discovered that images are not picked up by search engines and so they had to revamp the site to include keywords and other text that they observed on their competitors' sites.

Once the website was developed, the next step was to add a shopping cart to become a full e-commerce site. Again, Janet turned to her existing staff to investigate, identify and install this new feature. However, after several false starts, this job was turned over to Janet's son who has the web development skills to enhance the e-commerce features of the site. One year after initiating the website development, Janet bought a license for a shopping cart and she had been actively marketing the site for about 4-5 months at the time of the case study interview.

Orders placed online are sent directly to the retail store in Waterville. One of the two employees who are at the store at all times checks and then fills the online orders. One of the unique challenges presented by online as compared to retail sales relates to out-of-stock items. If a particular color glass is not in stock when an online order is placed, and the website does not reflect the lack of inventory, then it becomes necessary to contact the customer to determine whether a substitution can be made. These substitutions are made easily in the store, face to face with the customer, but can be more difficult online or on the phone. It has been something of a challenge in the retail store to add the new responsibility of online order processing. As a relatively new activity, they are still in the process of developing a system for effectively handling online orders in a timely manner.

One of the important resources Janet used in building e-commerce capability was the Women's Business Center and particularly the e-commerce courses offered by that organization. Both Janet and her son participated in workshops. For Janet, the classes were useful in helping her understand the language of e-commerce so that she was better able to communicate with her son once he took over this aspect of the business. Her son was able to get ideas for further developing the site, including critique and feedback on improvements he had made to the site from other business owners and the counselors at the center.

In spite of the start up challenges faced by Stained Glass Express, they are seeing orders online and expect to have the website paying for itself in another year. Until that time, the existing glass business is helping to subsidize the operation and development of the online component of the stained glass business.

Challenges and Lessons for Rural Entrepreneurs

Janet's experience expanding the stained glass niche market of Oakes and Parkhurst Glass through the Internet offers some important lessons for other rural entrepreneurs:

- Entrepreneurs need to make a plan for expanding the online component of the business just as though they were creating a new business enterprise. Janet suggests developing a marketing budget and implementation plan, and making sure that the company has acquired the capacity to build this new online business. If existing staff do not have the expertise to do this important work, then Janet suggests hiring a web development person to help avoid some of the false starts they faced. In spite of taking classes, Janet wishes she had known more about e-commerce at the beginning of the process. A lesson for other entrepreneurs is to conduct the due diligence and gather as much information about this new "enterprise" before you get started on the path to e-commerce.
- Having a website does not eliminate the need for marketing. Janet hoped that the website would allow them to discontinue their paper catalog and to reduce the time and expense of home and other trade shows. However, until they are successful in optimizing the website – getting higher on search engine pages – these traditional marketing activities will still be needed to keep up with their competition.
- The business of managing the website, in terms of updating it and working to improve their position on search sites, should not be underestimated. The biggest challenges Stained Glass Express faces are (1) keeping stock, pricing and products current on the website and (2) expanding their links, improving keywords and investing in "pay for click" needed for search engine optimization. The web updating is at least a monthly investment, while the optimization issue is a constant challenge involving a break even analysis to decide how much they can afford to pay to try to get the business on the "first page" of a search.
- While it has been easier to expand Stained Glass Express online because it is part of a successful existing business, it also creates a challenge. E-commerce sales must continue to grow and become a more important component of the overall

business in order to justify continued investment. Oakes and Parkhurst Glass is a company with an interest in growth since there are three children with an interest in being involved in the family business.

Sterling Bio-Technologies Corporation
Sterling, Colorado
Laurie Jones, President and Co-Founder
www.sterlingbiotech.com

This case study demonstrates the importance of e-commerce as a way for a rural entrepreneurial venture to find a market niche in the highly competitive consumer products market. It also shows the importance of continually improving and upgrading the e-commerce potential of a business website over time to accommodate the emerging needs and goals of the business.

Profile

Sterling Bio-Technologies Corporation (Sterling BioTech) was established in Sterling, Colorado in 2003. Sterling BioTech creates and manufactures bio-based skin care products (lip balm, cuticle cream and foot cream, among other products) as treatments for dry skin associated with diabetes and aging. The first products were brought to market in December 2004. The company sells products under its own brand, WÜRX™, and does private label manufacturing as well. Indeed, the private label manufacturing accounts for about 60 percent of Sterling's products sold. The company maintains an e-commerce website for direct sales of its own brand and uses the site as a marketing tool for its private label business.

The startup and management team includes Carol Werner, Co-founder, Laurie Jones, President and Co-Founder, John Collar, Chief Operating Officer, Michael Lauer, Treasurer, Chief Financial Officer and Co-Founder, and Loren T. Cass, Consulting Chemical Engineer. The company has 10 outside investors, nine of whom are local. Sterling BioTech has 10 people on its payroll, including local science teachers who are on call for assisting with R&D, and product manufacturing, as needed.

History

Sterling BioTech founder, Laurie Jones, moved to Sterling Colorado from Los Angeles in the late 1980s. She and her husband started Jones Technology in 1990 offering rural outsourcing services (hardware and software tech support) to Silicon Valley firms. While the concept was sound, they found themselves early in the business cycle for this new service and had difficulty finding outside investors. The company was eventually sold to John Sykes, who created Sykes Enterprises. With the original owners on board, Sykes Enterprises further developed the rural call center model and the business grew to employ over 300 people in Sterling and to operate rural call centers in several states. Laurie Jones remained with the company until 2000.

Sterling BioTech was incorporated in 2003 to produce and market canola seed-based engine oil, Sterling Grade. The company licensed technology from a product development firm and, in 2004, won an award for their business design and marketing plan for the as yet untested product. However, the company encountered problems during the technology transfer process – an inability to scale up and produce the oil outside the

laboratory – and some struggles between the management team and product developers. The logical decision at the time would have been to shut down the business. Yet Jones and others on the management team saw another product niche – skincare products made from oilseeds. This new product line would allow the business to develop and provide a market opportunity for producers in rural communities, dual goals that are very important to serial entrepreneur Laurie Jones.

Over the next year and a half, Sterling BioTech focused on shifting the business from a focus on "a brand and marketing plan for a product that didn't work [bio-based engine oil]" to developing both of these things for products that did work – bio-based skin care products. The company had limited marketing dollars to get this new product into the market. Trying to enter the retail market was deemed too expensive. Working through stores such as Whole Foods was a challenge because they did not have the resources to invest in eye-catching packaging. So, a decision was made to develop a simple e-commerce website for the WÜRX™ products. In 2005, www.wurxskincare.com was launched.

Sterling BioTech continues to grow and the founders are working to raise outside capital. However, venture capital investors are conservative about investing in a consumer products company and, until recently, the value-added grants from USDA did not apply to companies producing personal care products.[3] For now, the company is bootstrapped with the founders' own capital.

Business Location

Sterling, Colorado is a rural market center town (2000 population, 11,360) with strong connections to the agricultural sector. However, the economy has diversified with the addition in the 1990s of one of the first rural call centers established by Sykes Enterprises, and based on a concept pioneered by Sterling BioTech co-founder, Laurie Jones. The post-secondary educational institution, Northeast Junior College, also provides the community with a workforce well-trained for 21st century jobs. As a result, the community's unemployment rate is relatively low. Located in nonmetropolitan Logan County (2000 population 20,504), Sterling is the largest town in northeast Colorado and has become the regional shopping hub for northeast Colorado and southwest Nebraska.

Role of E-Commerce

The original website developed in 2005 was designed to market WÜRX™ products directly to consumers. The site features a shopping cart as well as instructions for ordering via fax or through the select retail outlets that feature the products. The website also features general information about the products including ingredients and testimonials from customers. In addition to sales through this website, WÜRX™ products can be purchased via Amazon. These sales have been growing steadily, with new customers every week, and 28 percent of total sales come through Amazon.

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[3] Sterling BioTech used a USDA value-added grant in the development of the brand and marketing for Sterling Grade engine oil.

The information featured on the website provided another benefit to the company. A Japanese company discovered the website and contacted Sterling BioTech about doing private label manufacturing – an initial order of 25,000 units. Currently, more than half of the private label manufacturing business comes to Sterling BioTech through the website. Overall, about 60 percent of Sterling BioTech's business is generated through the website, either directly through e-commerce or through the private label business that comes through the website.

The consumer products market is highly competitive. Sterling BioTech's niche market is people who want to buy a sustainable, "good product that also makes them feel better." However, even within this natural products niche, the competition is stiff. In late 2006, the company began to receive testimonials from diabetics about the restorative qualities of their foot care products. They are now researching the potential to tap this new niche market. In looking at where diabetics purchase their products, they have found that the Internet is a primary outlet. So, Sterling BioTech is planning to raise the funds needed to improve the website and create links to other sites that serve the growing diabetic market. This niche within a niche appears to be a source of competitive advantage for Sterling BioTech if they can identify the resources needed to tap this market.

The company continues to identify new market opportunities and ways to use e-commerce to tap those markets. For example, the non-petroleum based lip balm the company produces can be used in hospitals for respiratory therapy patients who cannot use traditional lip balms. Sterling BioTech is exploring how to use the web to gain access to respiratory therapy hospitals and get their products into the procurement channels. Currently, they are serving two hospitals. They are also included in the database for suppliers of bio-based products as part of the federal procurement program to increase sales of these products.

In terms of website development, the current website was meant to be temporary and has now been in use for three years. Laurie Jones estimates that the start up costs associated with the site were about $5,000-8,000 and the monthly operating costs about $200-300. However, moving to the next stage of development – full functionality and optimization – will require an additional investment of $15,000-20,000 and will create monthly operating costs of about $1,000. This next phase of website development is critical to achieving the long term goal for Sterling BioTech – to grow the consumer side of the business. Right now, e-commerce sales are critically important to the business since they help to smooth out sales between the large private label orders the company receives. As Laurie described the e-commerce orders, they "are the difference between getting bills paid or not."

Challenges and Lessons for Rural Entrepreneurs

Sterling BioTech faces several challenges related to expanding their e-commerce capability that offer important lessons to other rural entrepreneurs:

- It is possible to do much by bootstrapping a business, but it takes more substantial funding to make the type of website improvements that Sterling BioTech needs to

achieve long term goals. One lesson Laurie Jones has learned from the development of the original website is not to try to do things "on the cheap." She would have made more of an investment in web development up front. However, one challenge has been to get investors to consider putting money into an innovative product. Local investors in and around Sterling made their money in ventures such as cattle, oil, and gas that required risk taking. The same risk taking mentality is not being applied to investing in innovative business start ups.

- While Sterling BioTech was able to tap the local market for technical support in building their website, they overestimated the local programmer's abilities and, as a result, have a website that has challenges they need to work around. As they consider further development of the site, they are getting proposals from a number of developers including several in the Sterling area. They are putting emphasis on creating a site that can be easily changed as the business changes. A lesson for other entrepreneurs is to anticipate the complexity associated with developing a site and identify a developer who has skills requisite for the task. Working closely with the developer to get a site that works for the business is also key.

- One lesson from the Sterling BioTech experience is that a website should not be viewed as static, i.e., once you have a website, you are set for e-commerce. Laurie Jones has found that the company needs to continue to improve and upgrade the website to appeal to new niche markets. And, even with site improvements, optimizing the site to increase their exposure on search engine pages is an important and ongoing task.

Taos Architectural Copper
El Prado, Colorado
John Nettles, Owner
www.wesstartisans.com

This case study shows the value of a collective website for marketing the products of rural artisans. It also demonstrates the importance of using search engine optimization tools to increase the business's profile on the Internet.

Profile

John Nettles creates products from architectural sheet metal, particularly copper. His products include copper sinks and sconces, which are sold online and copper canales, gutters, and downspouts used in home construction in the southwest. Most of the latter products are sold regionally to builders and homeowners.

John is one of the artisans featured on www.wesstartisans.com, a collective website managed by WESST Corporation (WESST Corp) that provides an easy way for artisans, particularly rural artisans, to establish a web presence and market their products. Currently, John's online sales are a relatively small part of his overall business.

History

John Nettles came to the Taos area (2000 population, 4,700) in 1994 to help a friend build a house. With a background in mechanical engineering, John started Taos Architectural Copper in neighboring El Prado in 1996, producing a line of roofing products for the builders in the region - copper downspouts, gutters and canales, which are unique to the southwest region. He eventually expanded his product line into copper sinks and wall sconces, more decorative items. John employs one person full time and devotes himself full time to the business.

John took the Market Link class offered by WESST Corp. This 45 hour program is designed to help small business owners develop a "perfect pitch" for their products or services. One of the focus target groups for the Market Link program was artisans and, through a Kellogg Foundation grant, WESST Corp was able to develop a collective website for artists who participated in the Market Link program to join. Unlike self-employed entrepreneurs, John was fortunate to have a full-time employee, making it easier for him to get away from the business to take the Market Link class. He recognized that this was a requirement for joining the website and was willing and able to make the investment of time to complete the course.

John took advantage of the opportunity offered by WESST Corp and joined the WESST Artisans site. He provided text for the site and WESST Corp provided the web structure and maintains the site. Each artist featured on the site pays an annual fee ($200) and WESST Corp earns a 25 percent commission on online sales. John joined wesstartisans.com because it provided a way to get online at minimal cost. He did not need to develop his own expertise in website development or to hire additional staff to

begin using e-commerce through the WESST Corp site. As John notes, "Wesstartisans.com takes care of everything" and he has not had to look to other sources for help in using e-commerce.

Business Location

Taos, New Mexico is located on a high desert mesa at the foot of the Sangre de Cristo Mountains. Its beautiful and varied environment has attracted artists since the 1920s. Tourism remains a primary driver of the local economy, with both recreational (skiing and hiking) and historical (Taos Pueblo) attractions. The town's resident population of 4,700 in 2000 grows dramatically during peak tourism months. Located in nonmetropolitan Taos County (2000 population 29,979), Taos is 70 miles north of Santa Fe and 132 miles from Albuquerque, the state's major metropolitan area.

Role of E-Commerce

The primary purpose for joining WESST Corp's e-commerce site was to expand the market for and sales of John's line of copper sinks, and to a lesser extent, sconces. As soon as he joined the site, John found that his copper sinks appeared on the upper half of the first page of a search. In collaboration with WESST Corp, John experimented with a search optimization tool – the purchase of Google ad words, splitting the monthly cost of about $300 with WESST Corp. For the 1½ years prior to getting online, John's sink sales averaged one per month. During the time that Google ad words were purchased, sink sales jumped to one sink per week. Once the purchase of ad words ceased, sink sales returned to an average of one per month.

This experiment showed the value of investing in search optimization tools. For John, however, the key challenge has been to evaluate whether the increase in sales justifies absorbing the full cost of purchasing Google ad words. When the cost was shared with WESST Corp, the optimization cost John paid was offset by increased sales. Without the subsidy from WESST Corp, it is less clear whether the added cost will be offset by consistent increased sales. The importance of investing in optimization is clear – a Google search of copper sinks now shows John's wesstartisans.com site on the second page rather than the first page.

The sale of copper sinks is a relatively small part of Taos Architectural Copper's business. Most sales come from homeowners and builders who are interested in the roofing and other products. While the website has proven to be useful as a sales tool for the sinks, it has not been as useful as a marketing tool for the majority of John's customers. To a limited extent, John is using the site as a place to direct homeowners who might be interested in using his products in their homes. However, the product line would need to be more fully developed online in order to serve as an effective marketing tool for his main market segment.

Challenges and Lessons for Rural Entrepreneurs

John's experience as an artisan and a member of the wesstartisans.com collective site offers a number of important lessons for other business owners in rural places:

- For entrepreneurs who do not have website development skills, or the budget to hire staff to create and maintain a website, finding a service provider who can help them gain access to the Internet at low cost is important. John has considered creating his own website, but he believes that the benefits and exposure he gets from the WESST Artisans site are greater than what he might achieve with his own site, given the limited resources he could commit. While a resource such as WESST Corp's collective website is not available to all rural entrepreneurs, many regions have business service providers, like the Small Business Development Centers and the Cooperative Extension Service, that provide training or assistance in e-commerce and web development.
- An investment in search optimization tools, such as purchasing Google ad words, can pay off in terms of increased sales. What John learned through his experiment with WESST Corp is that purchasing ad words had a direct and positive impact on sink sales. As noted by Clare Zurawski, Albuquerque Regional Manager for WESST Corp, entrepreneurs should not consider investing in the creation of an e-commerce capable website unless they are also committed to investing the money and time required to learn search engine optimization tools. Entrepreneurs need to assess both the cost and expected return from such an investment.

The Missoula Artists' Shop
Missoula, Montana
Artist and Manager of Website, Mark Bakula
www.missoulaartistsshop.com

The case study of the Missoula Artists' Shop demonstrates that the Internet and e-commerce may have limited potential to increase sales and income for businesses like art galleries that specialize in relatively expensive one-of-a-kind arts and crafts. Mark Bakula noted that artists are reluctant to use the Shop's website for fear of having others copy their work and consumers are reluctant to make purchases from the website because the photographs and information provided on the Internet do not do justice to many of the arts and crafts pieces.

Profile

The Missoula Artists' Shop (The Shop) is a cooperative artist - run gallery showcasing Montana artists. The cooperative consists of 15 members who provide a diverse collection of high quality regional arts and crafts including paintings, photographs, ceramics, woodcrafts, jewelry, glass, leather goods, prints, and clothing. The Artists' Shop is a limited liability partnership in which the members share the rent and utilities and each member is individually responsible for credit card fees charged on their products sold. The cooperative's president and treasurer do not pay rent in return for their services. The Artists' Shop also displays the work of nonmember artists (consignments), and the Shop receives 40 percent of the sale price of all consignment arts and crafts. Income from the sale of consignment art is allocated to the Shop's advertising budget (gallery guide, public radio, newspapers, and television).

All facets of managing and running the Shop are provided by the members of the cooperative. Each member is assigned a role in gallery management -- secretary, webmaster, maintenance, advertising, shipping, window displays, maintaining mailing lists, acquiring supplies (bag, boxes, etc), recruiting consignment artists, providing food for gallery shows, and organizing gallery shows. The president of the cooperative is responsible for ensuring that all members understand their specific roles. In addition, each member of the cooperative donates two and one-half days a month to serve as the Shop's sales clerk.

History

The cooperative was organized in 1990 by seven artists, five of whom continue to be members. At this time, good arts and crafts shows in the Missoula area were rare, thus the cooperative was formed to hold an annual November - December show for the Christmas season. In 1998, the Artists' Shop's season was expanded to a May 1 to December 26 time period. The cooperative rents space from H & R Block, and the gallery is closed (i.e., the artists return to their studios) from January 1 to May 1 when H & R Block resumes occupancy of the building for the busiest part of the tax-preparation season. Membership in the cooperative expanded over time from seven to fifteen, and the average membership turnover rate is one to two artists a year. Mr. Bakula noted that

15 artists is the desired size for the cooperative. The Artists' Shop initiated its Internet presence in 1999 with an "information only" web page, and a shopping cart was added to the website in 2005. The goal of the website is to give out-of-state visitors to the Shop and customers to the artists' booths in arts and crafts shows a place to find the artists' works if the customer elects to "return" for a purchase.

Business Location

The Shop is located in Missoula, Montana, a small metropolitan area (population 57,053 in 2000) in the western part of the state. Missoula is a university town (University of Montana), a regional retail and service center, and a popular tourist destination because of the availability of recreational activities and art galleries and museums.

Role of E-Commerce

The Artists' Shop maintains a very attractive website that includes store information, announcements of forthcoming shows at the gallery, and a catalog of products for sale by the 15 member artists. The website contains a shopping cart that accepts PayPal and credit cards for payment of purchases. The website was developed from templates acquired from Goomzee Commerce, a local software and marketing company. Goomzee provides special templates for different types of business and also houses and maintains the server for the cooperative's website. The Artists' Shop paid Goomzee a $500 set-up fee plus $50 per month for hosting the website, maintenance, and access to PayPal. The cooperative also pays $100 up front and $10 monthly for access to credit cards on its shopping cart. Mark Bakula selects the items to be placed on the website, checks the website daily for orders, and removes out of stock items. Mr. Bakula is responsible for updating the website using photos of items provided by the artists or by himself if the artists so choose. Mr. Bakula noted that he spends a minimum of eight hours a month updating and maintaining the website.

Mark Bakula offered that the cooperative's website has had little impact on artists' sales and income. First, gallery sales generate only about ten percent of artists' revenue, and Internet sales are only a small part of total gallery sales. Three items were sold online during the website's first full year of operation (2006) and only two Internet sales have been made during the first six months of 2007. Mr. Bakula suggested that e-commerce may have limited usefulness for an art gallery because the pictures on the website do not do the art justice and consumers of fine art like to experience the art and meet the artist before making a purchase. In addition, the Internet attracts shoppers looking for low costs and deals, and these generally are not the types of individuals shopping for art. Mr. Bakula noted that e-commerce appeared to be more appropriate for the sale of crafts and relatively inexpensive items (under $50). Such items are more popular among individuals shopping for gifts and wedding presents.

Second, the artists have been reluctant to embrace e-commerce as a means of expanding the markets for their arts and crafts. Some artists do not want to use a website because they fear that other artists will steal their ideas and designs (an especially serious concern among the fabric and jewelry designers). Also, some art galleries do not want artists to sell on the Internet because the galleries do not wish to compete with the Artists' own

website or art cooperatives' websites. Finally, many artists are reluctant to develop their websites or keep them up to date because they would rather spend the time creating more art.

Challenges and Lessons for Small Town Art Galleries

Mr. Bakula stated that the cooperative may drop the shopping cart from its website and develop a strictly informational website because of the lack of online sales. Bakula does not believe the website has been useful in attracting customers to the gallery, and he concluded that 14 of the 15 cooperative's artists are not getting a return on their investment in the website. However, Mr. Bakula offered suggestions for enhancing the usefulness of the website and its potential to improve artists' sales.

First, artists in the cooperative need to better promote the website when they attend arts and crafts shows. Art fairs and shows are a critical source of income (50% to 80%) for many artists and also an important source of personal contacts with potential customers. The patrons of art shows are more willing users of the Internet to follow the artists' works, and hits on artists' websites tend to spike after arts and crafts shows. Thus, Mr. Bakula recommended that artists make available business cards with the website address when they attend these shows.

Second, the artists need to develop their own websites and maintain links between these sites and the gallery site. Better artist websites may help generate more visits to the Artists' Shop's website. Bakula suggested that the artists use a simple template for their personal sites to reduce the time commitment required for website development. The artists also must keep the sites up to date by adding new items, deleting sold items, and providing information on gallery showings and forthcoming arts and crafts shows.

Third, the Shop may be able to increase visits to its website through links to other galleries, cultural centers, and downtown development associations. A website promoting the arts in Montana (www.montana-artists.com) exists but the Missoula Artists' Shop is not listed on or linked to this site. This is just one example of the potential for greater exposure for the Shop through a more aggressive marketing program.

Finally, Mr. Bakula proposed that artists and crafts people in the cooperative may want to consider using the online service www.wholesalecrafts.com to market to retailers. The artist pays a $150.00 start-up fee plus $39.00 a month to display their work on the website, and interested retailers may order the artist's works off the website or contact the artist directly.

Vann's, Inc.
Missoula, Montana
Rod Standley, Director of Multi-Channel Marketing and Merchandising
www.vanns.com

Vann's, Inc. demonstrates the ability to evolve from a regional retailer of appliances and consumer electronics to a major Internet retailer. Vann's formula for success in this highly competitive market is (1) to define its market niche (high-end products and customer service) to avoid direct competition with low-cost providers, and (2) to maintain prominent listings on web searches through website design, strategic bidding for key words, and an active affiliates program. Vann's success in e-commerce encouraged the company to make significant changes in personnel and inventory and warehouse management.

Profile

Vann's, Inc. is Montana's largest independent appliance and consumer electronics retailer. Vann's has six retail locations in Montana (Missoula, Billings, Bozeman, Hamilton, Helena, and Kalispell) and a national distribution facility in Lolo, Montana (a suburb of Missoula). Vann's specializes in high-end consumer electronics including home appliances, computers, audio equipment, video equipment, GPS, gaming systems, and furniture for theater seating. Vann's receives approximately 55 percent of its revenue from online sales and phone orders, and 15 of the company's 200 employees work in multi-channel marketing and merchandising. Mr. Standley attributes the company's e-commerce success in the highly competitive appliance and electronics markets to the promotion of service after the sale. Consumer services provided to Internet customers by the company include multiple shipping options including free ground shipping, real time inventory status, shipping notification with tracking information, and hassle free returns and exchanges. In addition, Vann's offers links to numerous articles that provide information on new products, technologies, brand comparisons, and helpful suggestions for using the appliances. The Consumer Electronics Daily News selected Vann's, Inc. for its 2007 West Coast Dynamic Growth Award for solid mid-term growth, innovative business practices, and community involvement.

History

Vann's was started in 1961 by Pete Vann when Mr. Vann purchased the Missoula, Montana appliance store where he was employed. Vann's expanded in terms of product lines and market areas, adding five new Montana retail outlets by the mid 1990s. In 1996, the employees of Vann's became part owners of the company (Associates), and in 1998 the company initiated an e-commerce component. Online sales now constitute the majority of Vann's sales, and in 2005 a state-of-the-art national distribution center was opened to meet the increased demand created by online customers. Yet, Vann's continues to promote its humble beginnings and small town location because it believes that these characteristics increase consumers' trust in the business.

Business Location

The headquarters for Vann's, Inc is located in Missoula, Montana, a small metropolitan area (population 57,053 in 2000) in the western part of the state. Missoula is a university town (University of Montana), a regional retail and service center, and a popular tourist destination because of the availability of recreational activities and art galleries and museums.

Role of E-Commerce

Marketing and selling over the Internet is a critical component of Vann's business strategy. Vann's was an early adopter of e-commerce and their current model for reaching potential customers, transacting orders, and providing customer service developed through trial and error and learning from previous mistakes. Mr. Standley noted that starting an e-commerce venture today would be much easier than in 1998 because the business could begin the process much higher on the learning curve. In addition, there currently exist many services and service providers to facilitate the development of an e-commerce presence.

Vann's, Inc. has developed an extensive website that includes company history and information, product descriptions, customer testimonials, information on employment opportunities and the company's affiliate program, and product return and service policies. In terms of e-commerce, the most impressive aspect of the website is the detailed information available for each product. Most major items available at Vann's (e.g. appliances, audio and video equipment, computers) have a page on the website dedicated to each of the following: product features, product details and specifications, reviews by Vann's consumers, comparisons to alternative products offered at Vann's, and accessories available for the product.

Vann's website design reflects the company's focus on providing information and customer service as the keys to competing in e-commerce. Mr. Standley admitted that Vann's cannot compete on the Internet as the low-cost provider of appliances and consumer electronics products targeted at the mass market. Vann's faces relatively high shipping costs because of its Montana location and the wholesale purchasing costs of its inventory are relatively high due to Vann's small size. Thus, in order to compete with the big box retailers (e.g. Circuit City, Best Buy) and high volume e-commerce businesses (e.g., Crutchfields, Amazon), Vann's adopted an e-commerce business strategy that has two principal components. First, Vann's is a specialty retailer and tries to carry products that are higher quality than what is offered by the national retailers. To complement this strategy, the Vann's website provides in-depth information and consumer education regarding products offered. Mr. Standley noted that purchasers of higher-end consumer electronics often conduct extensive research on the item of interest, thus the website's product information is appreciated by the potential customer. Second, Vann's philosophy is that consumer service is their base product. The company's goal is to develop an efficient, consumer friendly e-commerce system that gives the consumer the option to talk to a sales representative when needed. The website is designed to anticipate what the consumer wants (e.g., buy online but pick up in one of the stores). Vann's also provides e-mail communications with each customer regarding orders received, orders processed,

shipping date and shipper, and tracking number to follow the shipping. Every customer gets a survey card or e-mail requesting information on what Vann's is doing well and what problems or difficulties the individual experienced with the buying process or service on the product. In summary, Vann's goal is to develop a trust among customers who previously made purchases at one of the company's retail locations or online so that these individuals will be repeat customers even if Vann's is not the lowest cost source for an item. Vann's targets customers that believe that "where you buy" is as important as "what price you pay."

Mr. Standley noted that an informative website and customer service are critical for attracting and keeping customers, but first Vann's website must be highly visible when consumers undertake their product searches. Vann's goal is to be on the first page of a consumer's search for a product that the company offers. Natural search engine optimization (SEO) is used as a marketing strategy for increasing the website's visibility. Vann's designed its website with key words, an index page, bullets of specific information, and product and educational information so as to make the website "search engine friendly." Vann's uses analytics software acquired from Omniture (www.Omniture.com) that identifies key words used by consumers in their searches for specific products. The Omniture software also enables Vann's to identify the pages used by a visitor to the company's website and where in the search process a potential customer leaves the website. This information is used by Vann's marketing team to redesign the website to increase the likelihood that a visitor to the site will complete a purchase. Mr. Standley stated that the Omniture analytics software package for SEO costs $2,000 to $3,000 a month, and this purchase is warranted because the selection of "correct" key words is critical to getting a favorable listing on Yahoo or Google at a reasonable cost. Vann's purchases words from Yahoo and Google, and the more Vann's bids for words, the closer they move to the top of the listing page if those words are used in a consumer's search. Thus, Mr. Standley suggested that a company wants to focus its marketing dollars on words that potential consumers are using when conducting their searches. For smaller businesses, however, the word selection should be such that the business is not bidding against the large, nationwide retailers because even high bids for these words (from the small business' perspective) are not likely to result in first page listings. The smaller Internet businesses likely will get more favorable listings if they bid on words that identify their market niche rather than more generic terms.

An important component of Vann's e-commerce strategy is their Net Profits affiliates program. An affiliate is a business with a website that advertises Vann's products on the affiliate's site (e.g., www.hometheaterinabox.com). The affiliates reach a different Internet market because they target buyers who are conducting a "deeper search" for a particular item in terms of price, information, or buying from a reviewed and trusted vendor. Customers of affiliates know that they are purchasing the product from Vann's, but the affiliate offers the customer ready comparisons to other products and vendors. Vann's provides a three percent commission plus bonus opportunities for members of its Net Profits program. Mr. Standley also noted that Vann's markets some items on eBay and Amazon (eBay currently is used only on "open box" items). Vann's compensation to Amazon for its listings is based on cost per acquisition, that is, Vann's does not pay

unless a sale is made. Alternatively, Vann's pays eBay a fixed cost plus a percentage of the transaction's value. Finally, Vann's products also are reported on shopping engines or price engines (e.g. Shopzilla, Bizrate), and compensations for these listings generally are "cost per click." Mr. Standley stated that payment arrangements with sponsored links may be cost per click (CPC) or cost per acquisition (CPA), and he recommended that any CPC arrangements be closely monitored with analytics programs.

Challenges and Lessons for Rural Entrepreneurs

Mr. Standley noted that Vann's has made a major commitment to e-commerce. The company has invested more than $500,000 in IT capital and services during the last nine years, and annual expenses associated with e-commerce related activities (personnel, software, capital replacement, and the cost of providing free shipping) equal approximately 18 percent of revenues. Mr. Standley stated that future company goals are to increase sales volume, profits, and customer satisfaction with the key for long term growth being enhanced customer satisfaction. Mr. Standley provided three keys or critical components to enhancing customers' satisfaction with their e-commerce transactions: (1) Vann's will provide a superior pre-buying experience, (2) the product will be delivered on time as promised, and (3) Internet customers will have quality service after the sale.

Mr. Standley offered that the company's transition to e-commerce was not without problems. First, Vann's experienced growing pains as Internet sales increased more rapidly than expected. Mr. Standley suggested that a company needs to think a couple of steps ahead in terms of hiring people, available warehouse space, inventory management capabilities, and customer service as it transitions to e-commerce. Second, companies selling on the Internet must take special precautions to reduce the chance for fraudulent transactions. Vann's pays special attention to orders where the "ship to" and "bill to" addresses differ. An alternative method to reduce the cost of fraud is to send the order through a third-party provider who insures payment for a fee.

Villages of Van Buren, Inc.
Van Buren County, Iowa
Stacey Glandon, Executive Director
www.800-tourvbc.com

The Villages of Van Buren, Inc. provide an example of the successful application of e-commerce to promote tourism and local economic development in a sparsely populated rural area. The Villages' e-commerce activities are the result of cooperation and joint efforts among twelve small towns and numerous businesses in Van Buren County, Iowa. The cost of providing this award-winning tourism promotion program is relatively low as a result of volunteer support for website design and maintenance and financial support from the local Internet provider. The Villages of Van Buren tourism promotion efforts resulted in significant tourist visits and revitalization of many of the county's small communities.

Profile
The Villages of Van Buren, Inc. (VVB) is a 501 C4 nonprofit organization established to "coordinate and promote activities directed toward improving economic conditions of all areas of Van Buren County, Iowa" (VVB Mission Statement). Van Buren County consists of 12 historic villages located near or along the Des Moines River in the picturesque rolling hills of Southeast Iowa. The county also is home to numerous Amish and Mennonite communities. Keosauqua, the county seat, is the largest of the villages with an estimated 2003 population of 1084.

The Villages of Van Buren undertakes efforts to facilitate intercommunity cooperation and initiatives in tourism, community, and business development. The VVB promotes area tourism through marketing campaigns and an extensive schedule of events and festivals such as barn tours, canoe trips, bike tours, field days, and arts and crafts fairs. Tourists also are attracted to the county by the opportunities to participate in outdoor recreational activities; to visit arts, crafts, antique shops, and historic sites; and to enjoy charming restaurants, lodges, and bed and breakfasts. The VVB has an annual budget of approximately $120,000 that is provided by an endowment, corporate sponsors, the County of Van Buren, grants, fees from events/tours/promotions, and dues from association members.

History
The Villages of Van Buren is an outgrowth of the Van Buren Development Corporation, an organization of business and community leaders founded in the early 1970s to promote economic development in Keosauqua. The Development Corporation initiated an ad hoc committee for tourism development in Keosauqua. It became evident to the committee that no one village in Van Buren County had sufficient activities to attract tourists, yet a cooperative effort among the 12 villages would provide the critical mass necessary for a tourism destination. The VVB was established in the late 1970s as a "marketing umbrella" for the 12 villages and as a consulting organization to assist community leaders identify sources of grant funding and prepare grant proposals.

The identification of external sources of funding was critical to the success of the tourism program since many of the historical buildings in the county were in a state of disrepair in the 1970s. Initial funding for VVB was provided through an endowment established by a local philanthropist (The Van Buren Foundation) with later financial support from public and business sources. The VVB has employed a full-time director for the last 30 years.

Activities at VVB expanded over time from marketing and grantsmanship to the development of a website (www.800-tourvbc.com) and the planning and hosting of numerous events and tours. The VVB programs resulted in increased tourism expenditures over time, and 2005 expenditures were estimated at $4.16 million by the Iowa Tourism Office.

Business Location

Van Buren County (2000 population, 7,809) is located in the southeastern corner of the state, bordered to the south by Missouri. The county is located 134 miles from the state capitol of Des Moines.

Role of E-Commerce

The website for VVB was developed in 1995 by a retired businessman, Rich Lowe, who resides in Van Buren County. This individual was very supportive of the organization and he designed the original site, provides updates to the site, and maintains the server for the site. Mr. Lowe also assisted area businesses and the 12 villages in the county with the development of their websites so that they would be consistent, attractive, and easy to use. In addition, classes were available at Indian Hills Community College to assist those desiring to upgrade their computer skills. High speed Internet service became available in the county in 1995, and the VVB and numerous local businesses subscribe to this service.

The VVB website includes an extensive travel guide and a calendar of events with links to web pages for many of the festivals or events (e.g. Barn Tour, Bike Van Buren, Canoe Van Buren). In addition, the website provides information on recreational opportunities in the county (e.g. state and local parks, hunting areas, fishing lakes); directories of local businesses and industries; links to the websites of the 12 villages in the county; and information on lodging accommodations in the county (cottages, cabins, inns, B&B's). Preferred or Level A members ($175.00/year) are listed on the VVB website with a link to the businesses website plus the preferred members are included in the printed visitor's guide and membership directory. The VVB website received approximately 150,000 visits in 2006.

The VVB website is the primary marketing tool for the county, and reliance on the website significantly reduces the costs of printing and distributing visitors' guides. Visitors' brochures continue to be printed by the VVB for distribution at state hotels, travel shows, and Iowa visitor's centers, but the number of brochures needed has been reduced significantly. The VVB website and brochure were honored at the 2004 Iowa

Tourism Conference with the awards for the best website and consumer brochure for areas and towns with a population less than 10,000.

The e-commerce activities of VVB (website design, maintenance, and hosting) are provided at no cost to the organization by a community volunteer. In addition, the local phone company (the provider of high speed Internet service) provides an annual contribution to VVB that covers the cost of the service. Thus, the VVB is an example of an award-winning e-commerce effort that is accomplished with limited direct financial support.

Challenges and Lessons for Rural Entrepreneurs

The VVB tourism marketing program has been very successful in promoting economic development in the county. Tourist expenditures in 2005 were more than $4 million, up from $3.1 million in 2001. Most shops and businesses in the historic Villages of Bentonsport and Bonaparte exist because of the tourism program and related redevelopment and small business development programs provided by VVB. Stacey Glandon, Executive Director of Villages of Van Buren, Inc., also estimated that more than 80 percent of recent county land sales were to nonresidents, many of whom were prior visitors to the area. Finally, new business start-ups in the area, such as furniture manufacturing, are attributed to the increased tourist traffic associated with the festivals and events.

Stacey Glandon noted that the tourism industry is very competitive and attendance has leveled off for the planned tours (Fall, Barn, Canoe, and Bike) and arts and crafts related events. The VVB is considering a number of options to increase their marketing efforts to take greater advantage of their tourism assets and programs. First, Stacey suggested that the VVB would benefit from a more stable source of funding so that the executive director could devote more time to attracting visitors and less time to fundraising. Options for future funding support include tourism grants from the state, endowment monies from the Iowa gaming commission, and revenues from accommodation taxes (currently used only in the City of Keosauqua).

Second, the VVB and county businesses can increase sales and/or reduce costs with greater reliance on the Internet. For example, currently there is a fee for participating on the Barn Tour ($60 per person for motor coach and lunch), yet registration and payment for the tour cannot be made over the Internet. An online registration/payment system would provide a significant savings in time and printing costs for VVB. Similarly, many of the small tourism-related businesses and lodging establishments under utilize their websites for marketing and are not set up to accept payments on line. Mrs. Glandon noted that the use of websites is relatively recent for most area businesses, and these businesses may be reluctant to pay the credit card fees and may be uncertain about the security of online transactions. The VVB sponsors hospitality training for area businesses, but a "small town mentality" remains regarding which days and hours to be open and use of the Internet.

Finally, Stacey Glandon stated that plans are being considered for additional uses of the VVB website to enhance visitor traffic. The VVB is investigating software that tracks

the movement of visitors through the website to better assess their interests in the area (e.g. lodging, recreation, antique stores, events). A follow-up survey of those who accessed the website may be instituted to develop better tourist profiles. The website also may be expanded to include a "re-location page" that provides information on available buildings and economic and demographic information. In summary, the VVB recognizes that visitors are their best target for economic development and potential future residents and business owners. The VVB is investigating how to use these relationships to recruit new businesses, retain the existing businesses, and increase the tourism season from its current April-to-November period.

Voyageur Canoe Outfitters
Outside Grand Marais, Minnesota
Sue and Mike Prom, Owners
www.canoeit.com

Voyageur Canoe Outfitters is a full-service outfitting business located at the end of the Gunflint Trail in northeastern Minnesota and adjacent to the Boundary Waters Canoe Area. This case study shows how e-commerce has been used to grow this recreational business and to provide customers with information and a connection to the region.

Profile

Voyageur provides complete outfitting packages for travel in the Boundary Waters Canoe Area or Quetico Provincial Park in Canada. They appeal to people who are seeking solitude and a simpler way of life – an opportunity to get away from it all. Voyageur is one of a number of recreational tourism enterprises in the northern Minnesota region but they have used e-commerce to develop a distinct niche within this regional industry.

History

In 1961, a Minnesota farmer started an outfitting business, primarily for fisherman, at the edge of the Boundary Waters Canoe Area (BWCA) as a way to make a living in the wilderness he loved. He and his mail order bride ran the business, with his wife doing the bookkeeping. When she died and he lost his partner, he was motivated to sell the business. About the same time in 1993, Mike and Sue Prom, Minnesota natives and recent college graduates, were looking for an opportunity to own an outdoor recreation business. Together they bought what is now Voyageur Canoe Outfitters and moved to the end of the Gunflint Trail outside of Grand Marais, Minnesota.

In the early years of Voyageur, the Proms marketed their business by attending sport and recreation marketing shows that were the traditional tools for businesses in their industry. In addition, they invested in magazine and newspaper advertising. At a Chicago show in 1995, someone was offering to design a website for free – something that the Proms had never even heard about. As they developed their Internet savvy through Sue's determined efforts, the marketing strategy has changed dramatically – they no longer attend shows (which were time consuming and expensive) or take out print advertisements. They rely totally on their website to market the business.

Voyageur's business has increased 1000 percent since 1993 and, since 1998-1999, business has been increasing 10-20 percent annually. While some customers come to Voyageur through referrals or word of mouth from seasoned customers, most new business is coming to them through the website. Voyageur has two full-time employees. In addition, they hire 7-9 seasonal guides for the June-August period when most of the outfitting business occurs, and have four full-time employees during the summer months. Mike Prom handles the outfitting side of the business – greeting guests, getting them outfitted and overseeing employees. Sue's responsibility is website development, including her daily blog and live chat.

Over time, the development of the website and its e-commerce capacity has provided Voyageur with a unique competitive advantage in the market. The information provided on the site has helped them build relationships with their customers. Sue's philosophy is that the more people know about them and their business, the more they will be committed to Voyageur as they plan their wilderness adventures.

Business Location
Grand Marais's economy, like much of northern Minnesota, was historically tied to the timber and mining industries. The population, which peaked around 1899, declined to 200 in 1915 as the timber companies moved away. Slowly, with the development of better transportation infrastructure and the creation of a marina and a national recreation area, the region has become a second home and tourist destination. The 2000 population rebounded to 1,353. Grand Marais is the county seat of Cook County, a nonmetropolitan county with a 2000 population of 5,168. The county is the tip of the Arrowhead Region of northern Minnesota, located 110 miles from Duluth and 265 miles from Minneapolis.

Role of E-Commerce
Voyageur's website and its features have evolved over time. As Sue built Voyageur's website capacity, she turned to the cooperatively-owned local ISP in Grand Marais, Boreal Access. Sue provided text and photos and Boreal provided the technical expertise to establish the website. Boreal has continued to provide technical support to Voyageur – Boreal is the first stop when issues arise and if they cannot address the issue, they will find someone who can.

Initially, Voyageur relied on the only form of Internet access available, dial up service through the phone company. However, the dial up service was very slow and made it difficult to be creative on the site, such as by using pictures or live chats. In 2006, the Proms made the investment in satellite Internet, which almost doubled their monthly Internet access costs. Sue estimates that, over time, she has invested almost $2,000 in course fees to build her skill set and incurred an average yearly cost of $500-1,000 for technical support for the site and $3,000 for web development. Monthly costs to run the five computers on their network include $180 for Internet access, both through Boreal and Wild Blue, the satellite provider, and $700-800 for Word Buy – an option for optimizing the site and improving Voyageur's position on search engines. However, Voyageur's growth in sales demonstrates the return on this investment.

The content of the Voyageur website and Sue's expertise in managing the site have grown in tandem over time. The site provides basic information about canoe outfitting and the BWCA region, including a toll-free number visitors can use for more information. The site has routing information so that visitors can explore the region before deciding on a particular route and trip. In the beginning, customers might find information on the website and then call Voyageur to book and plan a trip. Now, the site has developed so that it is possible to book and plan a trip, including menu selection, without talking live on the phone with anyone from Voyageur. The live chat feature added recently has replaced phone conversations for most people. Customers will see that

the live chat feature is available on the site (the live chat button can be clicked only when someone is available on the Voyageur end for a chat) and log in to discuss their trip in real time. The development of the website features has made it easier for Voyageur to be responsive to their customers' needs, even during the busy summer season when staff is often "out on the water" and away from the phones. Staff can respond more quickly to information requests and questions than they did in the past.

Another benefit of the site has been Voyageur's ability to develop a database to communicate with customers. Voyageur can send three, five, seven and ten day updates to customers pre-trip as well as provide post-trip follow up. This service has given them a competitive edge compared to other outfitters in the region, and allows them to get feedback from their customers that can help them improve service in the future.

A particularly important feature of the website, in terms of building and maintaining relationships with customers, is Sue's daily blog. Sue is disciplined and committed to writing the blog daily, even if most entries are made late at night. The blog shares her thoughts on the beauty of the region, the value of getting away from it all on a wilderness adventure, news of the family and the local area. The value of her blog was demonstrated during recent serious fires on the Gunflint Trail and in the BWCA. Sue's daily accounts of the progress of both the fire and fire fighting efforts, and her ability to share information of value to homeowners and customers, made her blog the site of choice for those seeking information about the area. It was particularly useful in communicating with customers who had trips booked early in the season. The blog allowed Sue to share new contact information during their evacuation and to keep paddlers informed about restrictions on access to the BWCA that might affect their planned trips.

Voyageur's success is attributed in large part to the use of e-commerce. Sue's ability to expand the site's e-commerce capabilities and to continually innovate has helped Voyageur achieve rapid growth. Sue is looking at new ways to optimize the site through such means as pay per click and word buys, as well trying to stay ahead of other innovations in e-commerce. Beyond Voyageur, however, the Proms are working to give back to their community. Sue has organized www.pinkpaddles.com, a site where you can order a fully functional, pink paddle that is being sold to raise funds for breast cancer research. In 2007, Voyageur and Black Magic Kennels joined forces to organize the first Mush for a Cure, a fundraising sled dog race to raise money for breast cancer research. A second annual race is being planned by these two Minnesota rural entrepreneurs.

Challenges and Lessons for Rural Entrepreneurs

Voyageur's successful use of e-commerce to grow the business offers some lessons for other rural entrepreneurs:

- Voyageur's investment in website development and e-commerce tools has allowed them to gain a competitive edge over other recreational tourism businesses in the region. Voyageur's use of the website as a tool for information sharing, trip planning, trip follow up, and relationship building is unique among area outfitters. Through Sue's involvement in web development, Voyageur pushes

the envelope in terms of web features and continually invests in keeping the site ahead of the competition. This investment in web development, in turn, has improved Voyageur's ability to respond quickly to customer requests, building a reputation as a business that is both skilled and easy to work with.

- Sue Prom's experience building, updating and improving the website shows the value of working with local service providers, in this case, Boreal Access. However, her experience also shows the time and commitment required to keep abreast of the latest e-commerce developments and the need to continually build the skills to adopt these innovations. While Sue had the interest and capacity to do the research and learning on her own, other entrepreneurs might need to hire qualified staff or contract with other firms to provide these services.

- E-commerce is not just about selling products online. For businesses that thrive on customer loyalty, word of mouth promotion, and developing a relationship with customers, the website can be used as an efficient means of reaching out to customers. Sue's blog can touch customers as often as they want. The live chat feature provides customers with real time solutions to their problems, answers to their questions, or simply confirmation that the trip will go smoothly and the experience will be memorable. These features add to Voyageur's appeal to customers and appear to have helped the business grow steadily over time.

- For rural entrepreneurs considering e-commerce, Sue recommends taking advantage of opportunities to learn new skills, such as through courses offered by service providers in how to build and market a website. But, the commitment cannot stop at the classroom door. Sue recommends that entrepreneurs be committed to following through on the ideas they develop and the new skills they learn. Based on Sue's experience with developing the e-commerce capacity of the Voyageur site, she believes that this investment can pay important dividends to the business in terms of increased sales.

Service Provider Case Study
WESST Corp's www.WesstArtisans.com
Albuquerque, New Mexico
Clare Zurawski, Albuquerque Regional Manager
www.wesst.org

The website, www.WesstArtisans.com, began operation in 2000 to provide artisans with a collective e-commerce site. The featured artisans were participants in a training program, MARKETLINK, offered by WESST Corp. Since most of these artists did not have their own websites, WesstArtisans.com provides a way for them to more readily and inexpensively establish a web presence to expand their market reach.

History and Profile

WESST Corp, located in Albuquerque, New Mexico, has provided services to start up and existing businesses since 1989 through a statewide system of counselors, about half of whom are located in rural areas. One of the programs offered by WESST Corp is MARKETLINK, a 15-week, 45-hour program focused on helping entrepreneurs develop the "perfect pitch" – a five minute presentation to introduce their products and/or services. The seminar series provides practical information for entrepreneurs, specifically targeted to marketing issues such as pricing and identifying target customers. One session in the series is devoted to e-commerce. One group of entrepreneurs that participated in the MARKETLINK program was artisans.

Through a 1999 grant from the Kellogg Foundation, WESST Corp proposed the creation of a collective e-commerce website – one that would feature artists who participated in the MARKETLINK program and were interested in expanding their presence on the Internet. An initial $15,000 investment was made to build WesstArtisans.com and 10 artists joined the site, featuring 12-15 products per person. The website went online in 2000 and has featured 55 artists over time, about 25 percent of whom have gone on to create their own websites.

The website is set up in such a way that artists are encouraged to participate – membership is $200 per year, including a photographer who will create images of the artist's work to post online. WESST Corp gets a 25 percent commission on sales – funds that are used to support the development and operation of the site. The artist must provide the products to be photographed and the text for the site. If an artist is unable to participate in the MARKETLINK program (the series is not offered everywhere in the state), they can work one-on-one with a WESST Corp counselor before joining the site. This requirement is not meant to create a barrier to participation but rather to insure that the artist is committed to doing the work on pricing and other aspects of marketing required to be successful with e-commerce. It is a means of determining readiness for e-commerce.

Role of E-Commerce

Many artists participate on the site because they do not have their own website and feel that they need to be on the Internet in order to establish credibility for their work. These artists do not have the resources to build their own e-commerce capable site so the collective nature of WesstArtisans.com is appealing to them. Participation on the site has helped the artists become savvier about web marketing and to better understand the importance of marketing – something that can be an obstacle for artists whose interest most often is in creating art rather than marketing their business.

The benefits of joining WesstArtisans.com vary by artist. According to Clare Zurawski at WESST Corp, the site is a "sales tool for some people, a marketing tool for everybody." The site provides a doorway or opening for the artists – it has created wholesale exposure for some artists, resulted in custom work for others, and even generated media attention for some. According to Clare, most feel that their participation has generated benefits, primarily credibility and exposure, even if sales are limited. In general, an artist would need to remain on the site for about two years in order for WESST Corp to collect sufficient annual membership fees to break even on development costs.

The WesstArtisans.com site may not meet the needs of all types of artists. The site is standardized so that the each artist's information is similar and the format is the same. For an artist who is looking to create a certain image via a website, this collective site may appear too generic. For these niche artists, investing to develop their own e-commerce capable site may make sense. However, an artist in a relatively saturated market segment may find that the added sales through e-commerce do not cover the development and operating costs of their own site. For these latter artists, the collective site makes sense.

For all the artists, the website is a relationship-building tool. The web site is built to establish a connection to the artist, providing a biography as well as some background on their connection to New Mexico and their artistic training and approach. Artists can keep in touch with their customers, building a deeper relationship online than if they were dependent on customers coming to their studios, particularly in rural New Mexico. The website allows the artist to promote new products, describe new artistic pursuits, alert customers to shows or gallery openings, etc. In essence, the website is trying to emulate the experience one might have by attending an art show.

For WESST Corp, the future of the website is unclear. WesstArtisans.com operates at a loss currently, if staff time is figured into the business model. The MARKETLINK program is no longer being targeted to artists but to other entrepreneurs as well, thus limiting the pool of potential members for the site. Just as entrepreneurs need to continually evaluate their market and business model, WESST Corp will be undertaking this same type of self-assessment regarding the future of the site.

Challenges and Lessons for Rural Entrepreneurs

WESST Corp's experience with WesstArtisans.com offers a number of important lessons to rural entrepreneurs, particularly artists, who are considering e-commerce as a way to expand their businesses, and to the service providers who support them:

- Entrepreneurs need to do the research upfront on their potential domain name to avoid any issues related to intellectual property or trademark infringement. Ideally, the business and domain name would be one and the same.
- Constructing a new website with e-commerce capability is expensive and requires a degree of expertise that not all rural entrepreneurs possess or have an interest in learning. As a result, a rural entrepreneur needs to be able to find someone to work with who (1) has the right skills, (2) is trustworthy, and (3) will be honest with the entrepreneur about how difficult and time consuming it will be to build a site. Organizations such as WESST Corp serve as intermediaries to entrepreneurs who are committed to getting online as a way of building their business.
- Entrepreneurs should not consider investing in the creation of an e-commerce capable website unless they are also committed to investing the money and time required to learn search engine optimization tools, so the site can be found by qualified customers. While there are affordable ways to achieve this optimization, entrepreneurs must be committed to doing the work themselves on an ongoing basis, or hiring someone else to do it.
- It is important to be strategic about what you hope to accomplish with your website. Entrepreneurs need to be clear about what they want visitors to the site to do, e.g., purchase products, browse a gallery, or learn more about the artist and her techniques, and then build the site to meet the objectives. For example, one of the current artists featured on the site, Gail Golden, is in the process of building her own website. She wants the site to reflect both the high quality of her jewelry and the beauty and colors of the New Mexico landscape. While she expects some retail activity, wholesalers and gallery owners are a more important target audience and, therefore, the site must be designed to provide them with the means to view and experience her work – high quality photography presented in such a way that a gallery owner can envision how the work would fit into her gallery.

Wintergreen Herbs and Vegetables
Winslow, Maine
Kate Newkirk, Owner
www.wintergreenherbs.com

This case study of WinterGreen herbs and vegetables demonstrates how e-commerce can be used to provide a flexible Community Supported Agriculture (CSA) model. The website is used to expand the market for organic produce, Maine-produced herb teas, and free range eggs and broiler chickens by providing consumers with a way of ordering products online for pick up at the farm gate.

Profile

WinterGreen Herbs and Vegetables uses a modified Community Supported Agriculture (CSA) model as its primary strategy to market organic produce. WinterGreen's CSA members select their level of membership and order farm fresh products weekly through the website. In addition, the website has an online shop which is used to expand the farm's business activity outside the traditional growing season through the sale of Maine-grown herb teas.

History

In 1998, Kate Newkirk and her husband Peter bought an old dairy farm in Winslow, Maine with the goal of establishing an organic herb and vegetable operation. While farming is a way of life for many in the area, organic farming was a relatively new activity. In addition to herb and vegetable production, the farm also produces free range eggs and pastured broiler chickens which are ordered by customers early in the season and then made available for pick up the day of slaughter.

WinterGreen uses the CSA model as a way to have local residents participate and make an investment in local agriculture. CSA's are meant to help a farm's cash flow at the beginning of the season by supplying needed cash before there is any actual sale of crops. CSA's benefits farmers financially, while also providing local residents access to farm fresh products. Traditional CSA's provide shares to customers each week but customers do not have much choice of what they receive. WinterGreen's CSA model is unique, using the Internet to provide members greater flexibility in using their shares as well as communicating easily with members about the farm and its products.

WinterGreen's produce sales occur in two ways. Prior to May 1st each year, WinterGreen enrolls a limited number of CSA members. Customers purchase shares that range from $50 to $300 and they receive a 15 percent dividend. Shares must be used by October 31st each year and are non-refundable. Unused shares are donated to local food pantries or senior centers in the form of produce. Members receive weekly emails directing them to the online ordering form that lists the herbs, vegetables, eggs and teas that are available for selection that week. Orders must be placed by noon on Friday and picked up at the farm by noon on Saturday. For members' convenience, orders are prepared and ready for

pick up when they arrive at the farm gate. Each member has the flexibility to order only the produce they want and to place orders at their discretion.

In addition to CSA member sales, those who choose not to become members can participate in Wintergreen's online Farm Stand on a 'pay as you go' basis. These customers do not receive any dividend. They receive the same weekly emails directing them to the current online ordering form. They can order products for pick up at the farm gate. CSA members, however, receive priority over Farm Stand customers when quantities are limited. The online Farm Stand allows WinterGreen to extend its sales to local customers who choose not to participate or who cannot afford to participate in the CSA or who find the farm after May 1st when CSA membership is closed.

WinterGreen also sells to three restaurants and two bed and breakfasts in the region that are serving local organic produce. The online features of WinterGreen farm are not as important to these restaurant clients as they are to the CSA and Farm Stand members. Prospective clients can use an online form to express interest in the wholesale distribution of WinterGreen's produce.

Kate Newkirk sees a bright future for local, organic agriculture, particularly in light of recent food scares associated with imported products and those produced by large-scale agribusinesses. The challenge for WinterGreen Herbs and Vegetables, however, will be meeting this increased demand. Currently, the farm has no outside employees, making for a busy growing season. While some CSA members earn shares by working on the farm, this arrangement does not provide the sort of labor that would be required to increase the production of the farm to meet increased demand.

Business Location
Winslow, Maine (2000 population, 7,743) included the town of Waterville until 1802. Its history has been dominated by mills, notably a Scott paper mill in operation until the late 1990s. Located in nonmetropolitan Kennebec County (2000 population 117,114), the town continues to be tied to Waterville, which provides most of the retail shopping opportunities for Winslow residents.

Role of E-Commerce
As described above, WinterGreen's model represents a unique application of the Internet to CSA. Recognizing that customers are relatively knowledgeable in terms of technology and use of the Internet, WinterGreen has created a CSA model that provides maximum flexibility for the customer. While the online ordering for CSA is not accompanied by online purchasing, it does provide an easy way for customers to learn about products available each week and then make their purchasing decisions. In addition, a weekly blog keeps customers connected with the farm and serves as a communication vehicle for information about product availability, slaughter dates for broilers, and even recipes and ideas about preserving foods purchased from the farm. Both CSA members and Farm Stand customers receive the weekly blog.

More traditional e-commerce tools are used in the herb Tea Shop that is part of WinterGreen's website. The Tea Shop features a shopping cart, allowing customers to purchase teas online. At present, e-commerce is an important, but small part of WinterGreen's overall business. Creating the online Tea Shop has increased sales but Kate has not separated out the online sales from the sales for the farm overall. What online sales have done, however, is expand the product line beyond the traditional growing season, providing a source of cash flow when direct farm sales are limited.

While Kate established the online and e-commerce capability of the site herself, she has received assistance from several resources in the region. The Herb Growing and Marketing Network hosts the WinterGreen website, at a cost of $25/month. Kate has a financial advisor who is working with her to develop a business plan for the farm. And, Kate participated in the e-commerce courses offered by Coastal Enterprises' Women's Business Center, receiving assistance with the creation of the online store. Since Kate is supporting the website herself, the cost of e-commerce for the farm is less than $100/month. This cost does not, however, factor in the time Kate spends maintaining the site, preparing online order forms, and blogging for customers.

Challenges and Lessons for Rural Entrepreneurs

WinterGreen Herbs and Vegetables provides a number of lessons for other rural entrepreneurs.

- One of the challenges for WinterGreen's Tea Shop is search engine optimization – getting WinterGreen's website to appear on the first few pages of a web search. To expand tea sales and, perhaps, increase WinterGreen's exposure to potential CSA and Farm Stand customers will require an investment in building this optimization capacity – a challenge for many rural entrepreneurs.
- Kate has also experienced challenges with gaining access to high-speed Internet and some of the technical resources, such as software, that she needs to fully develop her e-commerce capabilities. It is difficult to find someone locally who can help her develop skills beyond the basics of website development, at low cost. Presently, the farm business does not have the resources to make a heavy investment in outside advisors to develop e-commerce tools for the site.
- Initially, Kate's approach to the Tea Shop was "here I am, here are my teas." Now she is thinking about what more she can do with the site. Her advice to others considering the creation of an e-commerce website is to work on building an online community around the products. Through her blog, Kate is working toward having her site viewed as a tool and not an end. She provides advice, information, commentary, etc. in the interest of building a deeper relationship and connection with her customers – creating a website that brings more value to them. This approach is as important for an artisan, a recreational tourism venture, or other businesses that depend upon relationship-building as part of the promotion and sales of their products or services, as it is for WinterGreen Herbs and Vegetables.

Service Provider Case Study
Women's Business Center at Coastal Enterprises, Inc.
Wiscasset, Maine
Marita Fairfield, Director and Business Counselor
www.ceimaine.org

The Women's Business Center at Coastal Enterprises, Inc. provides both counseling and training to women who have started or are interested in starting a business in Maine. One recent innovation in service provision has been the creation of interactive, online workshops to teach the basics of e-commerce. These virtual workshops provide rural entrepreneurs with access to training that might otherwise be difficult or costly for them to receive.

History and Profile

Coastal Enterprises, Inc. (CEI), located in Wiscasset, Maine (2000 population, 3,603), was started in 1977 as a community development corporation with a mission to develop businesses in rural parts of Maine. CEI has grown over time into one of the nation's premier non-profit organizations serving rural communities. While CEI has always had a strong focus on helping women entrepreneurs, a partnership with the U.S. Small Business Administration's Office of Women Business Ownership to establish the Women's Business Center (WBC) at CEI has added additional capacity to meet the needs of this particular group of entrepreneurs.

The WBC provides counseling and training related to issues associated with general business start up, as well as more targeted assistance in the area of Internet and website use. It is in this latter role that the WBC has launched an innovative program to reach more women entrepreneurs – a series of online workshops accessible to entrepreneurs throughout the state. These workshops are interactive, allowing entrepreneurs to engage with the instructor and each other during the workshop. And, entrepreneurs can participate in the workshops from their business or home without spending time and money to travel to on-site workshops.

CEI started doing counseling in telecommunications and developed workshops in this area in the late 1990s. These in-person workshops were offered in Wiscasset, and in satellite offices in other parts of the state. In 2003, CEI created a virtual classroom module, offered first to small farmers and a second time in collaboration with SCORE. The current series of online workshops was launched in 2006 and now CEI sees more online workshop participants than in person.

The series begins with *Introduction to E Commerce*, building a common understanding of terms and laying the groundwork for the other workshops – planning your website success; creating your website; marketing and promoting your website. Each workshop builds on the knowledge base of the previous sessions and helps to create both e-commerce literacy as well as the skills to develop and optimize a website. The workshop on marketing and promoting your website deals with the very real challenge that most

rural entrepreneurs (and others) face – getting a website listed on a search engine and finding ways to promote the site using links and other tools.

Participants register for the workshops and are provided, by email, with detailed information about using the virtual classroom, Ivocalize. Most workshops run for 1½ hours on three consecutive days, at a cost of $30 per participant. Unlike some online workshops that are self-paced and non-interactive, these workshops permit individuals to see the instruction materials, hear the instructor's commentary, ask questions and interact fully with other participants. The experience, according to some participants, is equivalent to being in the same room with other entrepreneurs.

Role of E-Commerce

After several years of working with rural entrepreneurs one-on-one, in traditional classroom workshops, and now in online workshops, Marita Fairfield, director of the Women's Business Center and instructor in the online workshops, has developed some observations about the role of e-commerce for these entrepreneurs. She observed that most rural entrepreneurs who are interested in the Internet need a website, not e-commerce. They need a site where they can feature their business and market their products, rather than a site where they can handle online purchasing. Most of the interest in e-commerce assistance from the WBC has come from small artisans who are trying to figure out how to better market their products. They have also had interest from small farmers who are trying to supplement their seasonal production with other products, and are turning to the Internet to help them. More and more, however, e-commerce is important to product-oriented entrepreneurs because consumers expect to have the option of purchasing products online.

Many rural entrepreneurs get into e-commerce in stages, beginning by using PayPal and then moving on to the development of their own e-commerce site at a later stage. PayPal provides a relatively easy way for business owners to accept credit cards and results only in variable costs that can be covered directly by sales. While some entrepreneurs prefer to move away from PayPal, the addition of a secure site with a merchant account to accept credit cards can add to the fixed costs of doing business and may be justified only when sales are expected to increase significantly. Entrepreneurs must understand these costs as they decide how best to use e-commerce tools to benefit their businesses.

One of the keys to helping entrepreneurs develop both their websites and their e-commerce capability is planning. As a service provider, according to Fairfield, this involves putting yourself into your customer's shoes and looking at the challenges and opportunities that face this particular business. There is no single way to be successful on the Internet, and entrepreneurs need to make the commitment to doing the time consuming work of figuring out what strategies might work best for them. The online workshops are designed to take them through this planning process and provide information about the many options available to them.

The impacts of e-commerce on the business, as described by Fairfield, vary from entrepreneur to entrepreneur. In most cases, developing e-commerce on a site results in

online orders, which lead to increased sales and revenue for the business. In some cases, these increased revenues are also associated with increased employment as the business expands. However, simply creating a website is not enough to start this chain of events. Entrepreneurs need to make a commitment to do the marketing and optimization required to make the website visible and effective. For small entrepreneurs, many of whom in rural Maine are what Fairfield described as "income patchers," finding the time and resources to spend on marketing the business and the site can be difficult.

Challenges and Lessons for Rural Entrepreneurs

The experience of CEI's Women's Business Center in providing e-commerce services to rural entrepreneurs has generated a number of important lessons for service providers in other rural landscapes:

- In many rural parts of Maine, broadband access continues to be a barrier for entrepreneurs. Although dial up access is sufficient for entrepreneurs to access the WBC's online workshops, dial up is limiting for entrepreneurs who are trying to market a diverse array of products online. Websites that feature quality pictures of products, such as those required by a potter or jewelry maker, present a particular challenge to dial up users – if it takes minutes or longer to simply load a website, both the use and updating of the site will be limited.
- While e-commerce may offer a means of expanding sales and increasing income, an entrepreneur must be open to exploring this new marketing vehicle. Fairfield's experience has been that many rural entrepreneurs think about e-commerce as an option for their business, but do not always follow through and develop the skills needed to move forward. The entrepreneur needs to see the value in creating and optimizing a new website, and must be committed to making the marketing investment needed.
- Entrepreneurs will take advantage of new instructional techniques, such as the interactive online workshops offered by CEI's WBC, if they are provided at a time, place and cost that work for them. CEI's WBC makes it easy to participate in these workshops, reducing the cost to the entrepreneur. They have removed barriers to participation, such as requiring the entrepreneur to go to a satellite office or computer lab. And, they have provided a virtual networking opportunity that few entrepreneurs will pass up, adding even more value to the workshop that goes beyond its content.
- Entrepreneurs benefit from, and are looking for, assistance from service providers in understanding e-commerce and navigating through the many competing options for building e-commerce capability. The entrepreneurs who participated in CEI's workshops, both on-site and online, described their great value and also suggested how important it was to be able to get information from a service provider who was not selling a particular product or service. This unbiased assistance from a trusted intermediary like CEI remains a critical need for many rural entrepreneurs.

APPENDIX A: CASE STUDY INTERVIEW PROTOCOL FOR BUSINESS OWNERS

History of Owner and Company	
1. How many years has the business been in operation?	
2. How many years have you owned the business?	
3. Did you have experience owning a business prior to this one?	
4. How long have you lived in this community or region?	
5. Did the business bring you to this community or region?	
6. What is your educational background?	
7. How would you describe your technical/computer skills – excellent, good, average, poor, very poor	
Description of Business Activity	
1. How would you describe your business's principle activity? (e.g., manufacturing, service, natural resource related, retail, wholesale, etc.)	
2. What specific products or services does your business provide?	
3. How many years of experience do you have in this particular business activity?	
4. Is this activity unique to the region or is this a traditional activity in this region?	
5. What opportunities do you see for your business in the next 1-3 years?	
6. What challenges do you see for your business in the next 1-3 years?	
Evolution of E-Commerce Activity	
1. Describe the ways in which you use e-commerce in your business. How has this usage changed over time?	
2. How important is e-commerce to your business right now?	

Technical Aspects of E-Commerce	
1. How did you establish your e-commerce capability – outside consultants, public sector service providers, existing staff, new staff)?	

2. What specific issues or challenges do you face in terms of:
    a. Hardware required
    b. Software required
    c. Personnel required
    d. Support services required	

3. Where have you been able to find the support you need to effectively use e-commerce (e.g., what specific public or private sector service providers)?	

4. What would you estimate the cost of using e-commerce to be in terms of
    a. Start up costs
    b. Annual operating costs	

Impacts on the Business	

1. Describe how your use of e-commerce has affected each of the following:
    a. Overall sales
    b. Overall operating costs
    c. Employment - # and type of skilled employee
    d. Revenues
    e. Direction of the company in terms of entering new markets, offering new products or services, etc.
    f. Ability to generate sales or revenues to cover cost of using e-commerce	

General Questions	
1. What challenges have you faced in <u>initiating</u> e-commerce in this rural region (e.g., availability of support services, of technical personnel, etc.)?	
2. What challenges have you faced in <u>implementing</u> e-commerce in this	

rural region?	
3. What would you do differently if you were starting the e-commerce process over again?	
4. What advice would you give to other rural businesses considering the adoption of e-commerce?	
5. What services and/or support would you like to see available locally to help businesses like yours start up and maintain e-commerce activities?	

APPENDIX B: CASE STUDY INTERVIEW PROTOCOL FOR SERVICE PROVIDERS

History of Service	
1. Give some history of your organization's involvement in providing e-commerce services in the region?	
2. How many years have you been providing e-commerce services?	
3. Are the services specifically targeted (or adapted) for rural entrepreneurs?	
Description of Business/Service Activity	
1. What e-commerce services or activities do you offer?	
2. How has demand for your services changed over the past 1-3 years?	
3. What changes do you anticipate for the next 1-3 years?	
Evolution of E-Commerce Activity	
1. Describe the ways your clients use e-commerce in their businesses. How has this usage changed over time?	
2. How important is e-commerce to your rural clients right now?	
Technical Aspects of E-Commerce	
1. How do you help rural businesses with the technical aspects of e-commerce?	

2. What specific issues or challenges do they typically face in terms of:
    c. Hardware required
    d. Software required
    e. Personnel required
    f. Support services required	

3. What would you estimate the cost of using e-commerce to be in terms of
    g. Start up costs
    h. Annual operating costs	

Impacts on the Business	
1. What kinds of impacts do you see the use of e-commerce having on	

your clients? Can you generalize about impacts on such things as sales, operating costs, employment, revenues, and ability to enter new markets or offer new products?	
2. Are most of your clients able to increase revenues enough to cover the investing in e-commerce?	
General Questions	
1. What challenges do rural businesses face in <u>initiating</u> e-commerce in this region (e.g., availability of support services, of technical personnel, etc.)?	
2. What challenges have do they face in <u>implementing</u> e-commerce in this rural region?	
3. What advice would you give to rural businesses considering the adoption of e-commerce?	
4. What additional services and/or support do you think are needed locally to help businesses start up and maintain e-commerce activities?	