E-COMMERCE CASE STUDIES GUIDEBOOK
AND PROGRAM DELIVERY MANUAL

by

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INTRODUCTION

Over the past several years the United States Department of Agriculture (USDA) has made a sizeable investment in e-commerce applied research, educational materials, and training opportunities for Extension educators. This investment resulted in the availability of a wide range of products, including this publication, for Extension educators for use in their work with small businesses. Most of these products are available online at the National E-Commerce Extension Initiative website hosted by the Southern Rural Development Center.¹

The primary purpose of this publication is to provide instructors of formal and informal e-commerce, entrepreneurship, and small business development educational programs with guidance on how to effectively use e-commerce case studies to help guide small businesses in the successful adoption and use of e-commerce. Likely instructors include Land Grant University Extension Agents and Specialists, Small Business Development Staff, Chamber of Commerce Directors, and Community and Technical College faculty. A secondary purpose is to guide entrepreneurs and small business owners in the use of these case studies as they decide how e-commerce might enhance their business operations.

These case studies help relate the story behind the business. Small business owners seeking inspiration and confidence to develop or enhance their web presence can learn from the actual website associated with the case examples. In addition, they can relate to the process, including mistakes and possible pitfalls, which other small businesses undertook to develop and manage their e-commerce strategies and accompanying websites.

This publication is a guide and a companion to the three other publications provided in this series.


The purpose of the review of literature is to provide an overview of previous studies of firms’ use of e-commerce as part of their business strategy. The diversity of case studies available gives the reader insights into alternative applications of e-commerce and its potential to increase sales, reduce costs, and improve customer services, supply chain management, and efficiency of operations. Case studies conducted by researchers at universities and government agencies are presented. These studies range from an in-depth historical analysis of the e-commerce experience of one business (e.g., rural travel agency) to a review of the revenue enhancing impacts of a regional e-commerce service for 163 wood products companies in upstate New York (AdirondackWood.com). Finally, case studies published by private (commercial) e-commerce service providers are discussed even though they should not be considered objective. Even so, these studies help to demonstrate the types of products and services available to interested firms.

This paper presents the 30 case studies developed as part of this project, providing a brief overview of the process and questions used to guide the collection of information for the cases. The case studies include rural and small town businesses in different industries (i.e. manufacturing, trade, and services) and demonstrate the wide variety of e-commerce strategies in use. As can be seen in Tables 1 and 2, these case studies come from businesses scattered throughout the United States and represent both business-to-business (B2B) and business-to-consumer (B2C) activities. There are examples of businesses ranging from those that are completely “virtual”, operating completely on the WWW, to traditional bricks-and-mortar businesses that have successfully embraced an e-commerce strategy. The case studies are categorized to provide both readers and educators with an easy way to access the information that will be most useful for specific business or learning situations.


This paper provides an overview of the firms included in the case studies, reviews the potential benefits available to users of e-commerce, and gives examples of realized benefits from the case study firms. Potential benefits of adopting e-commerce strategies include allowing business owners to have more control over the location of their business and their hours of operation. It can allow them to be “lifestyle entrepreneurs.” An effective e-commerce strategy can help firms to be more profitable by lowering costs or increasing sales by facilitating innovation all along the supply chain. Case studies provide specific examples of innovations in product design, supply and inventory management, production, marketing, sales and distribution, and customer service. Finally, lessons learned are distilled from the case study businesses and suggestions are made regarding how these lessons may benefit other firms that are considering e-commerce strategies.

This guide identifies three ways that these case studies can be used to enhance learning about e-commerce strategies and the benefits and challenges of implementing these strategies. In Section One we provide an overview of well-known formal comprehensive e-commerce training programs and provide a review of the potential use of our e-commerce case-study publications to augment, update, or supplement these programs. In similar fashion, in Section Two we suggest how the information may be incorporated into formal comprehensive entrepreneurship training programs. Finally, in Section Three, we provide advice on how to use these materials in more informal, less comprehensive, or less structured learning situations.
USING E-COMMERCE CASE STUDIES IN FORMAL COMPREHENSIVE E-COMMERCE TRAINING PROGRAMS

There are myriad opportunities for instructors to make creative use of these materials in stand-alone fashion or as value-added elements of other programs. Perhaps the most obvious and direct target for integrating these case study materials is within an existing structured e-commerce program. There are a limited number of formal e-commerce training programs being implemented across the country, most being supported through the Land Grant University system. Instructors should find these programs easily accessible and those coordinating delivery of these programs open to collaboration.

Among the noteworthy e-commerce training programs are the University of Minnesota’s AccessE.info program, the University of Nebraska-Lincoln’s eBusiness program, and an assorted collection of programs and program components sponsored by the National E-Commerce Extension Initiative. The following section provides a brief overview of these programs and some suggestions on how to consider integrating our case study materials into these programs.

1) The University of Minnesota’s AccessE.info program (www.accessE.info).

This program consists of a portfolio of program elements, including eCommerce, eGovernment, eNonprofit, eInternet, and eBroadband. These program elements are complementary in nature, allowing instructors to consider a broad range of program design options based upon the needs of the target audiences.

Each program element includes a range of workshop PowerPoint presentations, instructors’ manuals, and other instructional support materials to equip teachers with the tools to deliver programs. Programs range from a four-session, twelve-hour program to a one-hour overview of e-commerce for small to medium sized businesses. In addition, there are variations of the core program tailored to specific audiences including artisans, direct farm marketers, and Spanish speaking business owners.

The AccessE.info program has some noteworthy features including licensing and branding agreement arrangements that allow collaborators in other states and regions to essentially franchise the program and tailor it to their specific needs. These franchisees are termed “affiliates” on the AccessE.info website. Some affiliates have franchised all program elements (eCommerce, eGovernment, eNonprofit, eInternet, and eBroadband), while others have only franchised specific programs Current affiliates include the following:

- Clemson University
- The Appalachian Regional Commission
- Pennsylvania State University Cooperative Extension Service
- Texas Cooperative Extension
- North Dakota State University Extension Service
- Iowa State University Extension
- University of Illinois Extension

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The AccessE.info website also lists a number of past affiliates. Instructors in these states are encouraged to identify contact persons in their states in order to ascertain current interest and to seek potential collaborations. Past affiliates are:

- Southwest Tennessee Development District
- University of Nebraska Cooperative Extension
- Cal Poly Continuing Education eCommerce
- Maine Small Business Development Centers
- Oregon Small Business Development Centers
- University of Alaska Fairbanks Coop Extension

The Access eCommerce full 12-hour program curriculum contains a guidebook, teachers’ notes, and PowerPoint presentation. Much of the material is made available publicly on their website but the teachers’ guide and PowerPoint presentations are made available only to affiliates. The course is organized along the following themes:

- Electronic Commerce Basics
- Finding Business Information and Services Online
- Exploring E-Commerce Websites
- Planning Your Website
- Promoting Your Website
- Developing Your Internet Business Plan

2. The University of Nebraska-Lincoln’s eBusiness Program (http://etruaining.unl.edu)

The University of Nebraska’s eTeam of Extension Educators provides education to rural communities and businesses to enhance their entrepreneurial skills for doing business better, faster and with greater profitability. Their mission is to provide technology education in locations where access to technology education, a computer lab and broadband Internet access is limited; to assist communities in the application of technology to grow regional economies; to teach entrepreneurs to explore global markets; and to develop and deploy their eBusiness curriculum.

The eBusiness courses offered include a manual, access to an online curriculum, 12 hours of hands-on training and access to Extension Educators to provide follow-up expertise and consultation. The basic eBusiness course, eBusiness – Selling on the Internet, is a 12 hour, four-session hands-on course designed for current and new business startups whose owners want to
sell products and services through retail Web sites. Topics include: what e-customers want, building the e-store, Web site design, and Web marketing. Their advanced course, More eBusiness – Selling on the Internet, is a four-session course designed for businesses that have been online for three to five years and who desire additional education to move their e-store to the next level. Topics include: creating a customer communications center, advanced Web marketing, finding vendors and suppliers, and advanced Web applications and design. Participants of both programs receive a high quality reference book and access to the password protected Web site.

Additional courses can be offered if identified by a community as a priority. These courses include eBusiness the eBay Way whose purpose is to help entrepreneurs start a part-time business selling online, or to help them expand an existing business into the Internet market channel through an online auction. Another offering is eKnowledge for Businesses where participants learn the basics of getting the most out of their computers, learn the most effective ways to search for business information, and learn how to be more effective at using e-mail. Two additional courses that are being created now are first, a three session course on Internet security, computer maintenance, and Firewalls; and second, a Spanish version of the eBusiness course.

INTEGRATING CASE STUDIES INTO FORMAL/STRUCTURED/COMPREHENSIVE E-COMMERCE PROGRAMS

Since formal structured e-commerce programs like the University of Minnesota’s AccessE.info and University of Nebraska-Lincoln’s eBusiness programs already make direct and extensive use of case studies, our e-commerce case studies can very easily be directly integrated into the program. Case studies can be used in program marketing presentations with business and civic groups, development organizations, youth entrepreneurship groups, or in consultations with individual business owners.

The most obvious place to replace or augment existing case studies in the Minnesota program is in the “Exploring Ecommerce Websites” sessions. These sessions typically occur near the beginning and the end of the 12-hour courses. If course instructors are able to gather information on the participants prior to the first session, they can then select case studies most likely to appeal to their interests. If this is not possible, we recommend that a wide variety of case studies be used. Selecting several similar case studies would not be appropriate at these early stages if instructors are hoping to expand participants’ knowledge of the various ways businesses are using e-commerce. A narrowly-focused approach would also increase the risk of not connecting with the audience, especially if their possible interests are not known beforehand.

In later sessions, more specific case studies can be selected to illustrate points or to re-focus or re-energize the participants’ interest in the subject. Tables 1 and 2 organize our case studies in a manner to facilitate selection of appropriate examples. Additional case study examples can be selectively used to illustrate specific lessons learned as participants explore implementation strategies for their own businesses. This approach would be especially useful for
those instructors positioned to provide follow-through technical assistance or consultation to these businesses.\textsuperscript{5} Sector-specific case studies (e.g., Grown Locally - local food systems or Mid West eServices - real estate) can be used to illustrate examples and provide lessons learned in the adaptations of this program focused in these particular sectors.

Further, lessons learned from one sector can have cross-over applicability to other sectors facing similar situations so instructors should look for and exploit opportunities to facilitate cross-sector learning (e.g., retail hardware businesses learning how to better visually present themselves on the Internet from artisan e-commerce entrepreneurs).

OTHER E-COMMERCE TRAINING RESOURCES

In addition to the two programs described above, there is a wide variety of e-commerce curricular and learning related materials available under the auspices of the National E-Commerce Extension Initiative (http://srdc.msstate.edu/ecommerce/index.html). This initiative was launched in 2003 to address the factors that might inhibit the adoption and diffusion of e-commerce in rural areas, including “whether rural areas have the technology in place to embrace e-commerce applications, whether these businesses understand how e-commerce can benefit their operations, and whether Extension educators have the resources to provide adequate educational support to small businesses.”\textsuperscript{6}

Initially, several pilot projects were funded at three Land Grant Universities - Mississippi State University Extension Service, the New Mexico State University Cooperative Extension Service, and the University of Nebraska Cooperative Extension Service. This program has since evolved to a small grants program, administered by the Southern Rural Development Center (SRDC), with a specific aim to develop curricular materials for use in Extension e-commerce training programs. The case studies and supporting materials in this publication series were funded by this program.

A series of Extension education programs has been developed under the auspices of this program and are made available at the SRDC website. Though the authors encourage the use of these case-study materials in any of these programs, there are three programs from this series that are particularly good candidates.

Connecting Rural Communities: A Local Leader’s Guide to Increasing Digital Connectivity by Rae Montgomery and Ryan Pesch, University of Minnesota, and Bill Shuffstall, Pennsylvania State University

This program is organized as an online guide intended to provide information and tools for community leaders to help them identify, develop and implement local Broadband-based projects. Projects include those that might improve the availability of access to broadband connectivity, the ability of community organizations to use digital technology to achieve their mission and goals, or the ability of individuals to use digital technology to improve their social and economic well-being.
The Connected Communities (CC) program offers opportunities to use case studies as concrete examples of what small businesses are able to accomplish even more successfully if their communities have the necessary Internet connectivity and bandwidth, the core focus of the CC program. Case studies can be used to help answer the “why do we need bandwidth” questions.

In order to organize a community effectively for the purpose of increasing bandwidth and access, several meetings with key individuals and groups will likely be necessary to cultivate interests and motivate action. Case studies can be integrated directly into presentations or distributed as part of a set of materials for further reading and reflection by program participants.

Another way is for instructors to use the lessons learned materials while they assist community groups to develop rich, robust, localized content. This might naturally occur as follow-on to the Connected Communities program. It can also occur internally to other programs, which are more focused on facilitating effective use of given access rather than on acquiring better access to the Internet.

Electronic Retailing: Selling on the Internet by Connie Hancock, University of Nebraska

This course is for businesses who have not yet taken their business online. It is designed to help them make decisions about their Website. Guidance is provided on such topics as determining website purpose and appearance, who will design it, domain names and website development and maintenance costs. The program also provides information about the eCustomer, learning from the competition, and training in characteristics of successful sites. A strong focus on marketing leads to topics including marketing a Web store, using keywords, and creating attention-grabbing titles.

Our e-commerce case studies can be used throughout this program in several ways. First, they can be used as concrete examples of small businesses that “took the plunge” and successfully implemented an e-commerce strategy. Second, the lessons learned publication accompanied by the case study collection can be used as a set of directed readings for program participants in order to deepen their understanding of the potential opportunities and challenges e-commerce strategies entail. Finally, carefully selected case studies can be used by the instructor to illustrate specific points during the course of the program. For example, an outdoor recreation-oriented business focused on a singular or a narrow set of seasonal enterprises may become interested in crafting an e-commerce-driven diversification strategy to facilitate their transformation to a broader, more diverse set of enterprises. In this situation, the case studies of Songer Whitewater or Voyageur Outfitters would serve as appropriate examples from which this business can learn.

An E-Commerce Niche for Artisan Businesses by Ashley Lovell, Texas A&M University

The goal of this program is to strengthen the cultural economy by providing educational information to artisans and crafters on the benefits and methods of utilizing e-commerce to strengthen their businesses. The content of the course provides artisans with sound, research-based information to make decisions on whether or not to develop a web page, how to develop it, how to best use available resources, and how to evaluate website effectiveness.
Rural artisans can benefit from a review of our lessons learned publication as well as from the case studies themselves. Besides those case studies illustrating specific examples of rural artisans (e.g., Columbia Falls Pottery, Sivertson Gallery, Gail Golden Jewelry, or Stained Glass Express), they can also learn from the examples of businesses in other sectors. For example, artisan businesses wanting to use their core competencies in design to expand into other product lines might want to read the case studies on the Brush Art Company (advertising) and Dessin Fournir (home furnishings). Finally, the case studies also provide evidence of the difficulties of marketing art and crafts on the internet in terms of the representativeness of the photographs of the items and the availability of the artist's time to keep the website up to date (see, for example, the studies of the Missoula Artists' Shop and Taos Architectural Copper).

In addition, those artisans wanting to live and work in remote rural places could learn from the examples of other lifestyle entrepreneurs like David Schaefer (Owner/Founder of Lakeland Enterprises), April Adams (Owner and Artist of Columbia Falls Pottery), Bernard Sund (Owner/Founder of Nautical Antiques), and Robin Hildebrand (Owner/Founder of Blue Smoke Salsa), all of whom achieved business success in locations they chose by employing an e-commerce strategy. If a more general teaching approach is desired, we recommend that the lessons learned publication be used as a directed reading early in the program to quickly ground participants in a distillation of the wisdom gained from a wide variety of case studies.

**USING E-COMMERCE CASE STUDIES IN FORMAL ENTREPRENEURSHIP AND SMALL BUSINESS DEVELOPMENT TRAINING PROGRAMS**

Formal entrepreneurship training programs also present excellent opportunities to use e-commerce case studies and lessons learned. The primary objective of most entrepreneurship training programs is to help build the capacity of individuals and to provide them with the knowledge, skills, and tools with which to increase their probability of success in the modern, competitive, global economy. These case studies can help build understanding of e-commerce as a business development tool.

The growing importance of effectively using the Internet to increase sales and reduce costs through more effective and efficient communication with customers and suppliers (e-commerce) is becoming an increasingly important issue for all businesses. A recent twelve country study by the International Office of the International Council for Small Business concluded that information technology is extremely important in the profitability and growth of small businesses world-wide. Further evidence from U.S. Department of Commerce statistics shows that e-commerce has shown strong and steady growth since they began tracking e-commerce sales in 1999 (Figure 1). E-Commerce and the effective use of technology are important today and likely will be even more important in the future. Therefore, training programs for small businesses and entrepreneurs will stand to benefit from the inclusion of e-commerce case studies and lessons learned.
There are several significant formal training programs for entrepreneurs available across the entire country. Some are national in scope. Others are locally or regionally-based. All are designed to offer novice and experienced entrepreneurs the tools and capacities necessary for success in business. The following section highlights several of these programs and provides insights on how the e-commerce case studies and supporting materials might be integrated most effectively into them.


FastTrac®, sponsored by the Ewing Marion Kauffman Foundation, is currently provided by over 300 organizations in all 50 states as well as in Australia and Russia. It has been available since 1993 and claims more than 200,000 participants. The FastTrac® website provides links to local program contacts through a searchable database. FastTrac® is a comprehensive entrepreneurship education program focused on building business owners’ capacity as entrepreneurs to create a new business or to expand an existing one. The focus is on building business savvy, leadership skills, and professional networks through practical, hands-on business development programs and workshops. The target audience is existing or aspiring entrepreneurs.

FastTrac currently supports nine separate programs. Of the nine programs, FastTrac®NewVenture™ and FastTrac®GrowthVenture™, along with the new program FastTrac®FirstSteps™, are the most likely targets for integration of e-commerce case study materials. FastTrac®FirstSteps™ is designed for novice aspiring entrepreneurs. Information on this program is not provided on their website, but the program is being piloted in select locations.

FastTrac®NewVenture™ is designed for new business start-ups. This program helps aspiring entrepreneurs develop a business concept and guides them through an evaluative business
planning process. The program is divided into two primary sections, concept analysis and the business planning process. The concept analysis section comprises three sessions that focus on the establishment of a personal vision, the development of a business concept statement, and a feasibility assessment of the concept. Concept analysis session themes include:

- Exploring Entrepreneurship
- Identifying and Meeting Market Needs
- Setting Financial Goals

The business planning section, spanning seven sessions, guides participants through the stages of business plan development. Business planning session themes are:

- Planning the Product/Service
- Analyzing the Market
- Reaching the Market
- Building the Organization and Team
- Planning for a Profitable Business
- Monitoring Cash Flow and Seeking Funds
- Implementing Next Steps

FastTrac®GrowthVenture™ is designed for existing business owners. The program’s primary purpose is to help them (1) evaluate and improve their overall business strategy and vision, (2) increase their odds of maintaining a competitive advantage, (3) navigate their changing management role in the business, and (4) take measures to make necessary changes in their business operation.

The program is comprised of two sections - Setting Direction and Taking Action. The Setting Direction session themes are:

- Sizing Up Your Business
- Exploring Growth Opportunities
- Making Strategic Decisions

The Taking Action Session themes are:

- Using Financial Tools
- Strengthening the Product/Service
- Seizing the Market
- Leading the Organization
- Managing Operations for Growth
- Charting Financial Performance
- Making It Happen
NebraskaEDGE (http://nebraskaedge.unl.edu/) and WesternEDGE\textsuperscript{10} programs

The NebraskaEDGE (Enhancing, Developing, and Growing Entrepreneurs) is a community-based entrepreneurial training program operated by the University of Nebraska-Lincoln’s Center for Applied Rural Innovation (CARI). The program focus is on helping small rural businesses, including agricultural businesses, to increase their capacity to plan and manage their operations more effectively leading to increased profitability. They also support a youth entrepreneurship program, helping the next generation of business leaders to explore self-employment opportunities.

According to the NebraskaEDGE website, program participants will learn how to:

- Determine the feasibility of starting or expanding a business
- Structure a business plan that aligns with personal ideals and aspirations
- Research the industry, set pricing, and effectively deliver the product or service to market
- Develop marketing strategies that effectively reach the customer base
- Understand the terms used by lenders and legal advisors
- Efficiently manage operations -- finances/cash flow, legal issues, employees, suppliers, and more
- Craft a detailed business plan and actively use it as a road map to manage a business

Each course provides opportunities for one-on-one advice from instructors, as well as a chance to solicit fresh ideas from a group of fellow entrepreneurs. Courses are taught by people with first hand business or consulting experience.

Rural Entrepreneurship Through Action Learning (REAL) (www.NCREAL.org)

The North Carolina REAL program office serves as a clearinghouse for the states and organizations with active programs. The REAL entrepreneurship development program is a hands-on program that focuses much of its attention on building entrepreneurial capacity in high school and post-secondary school students. The program is somewhat formal in its structure in that it requires that those engaged in delivery of the program participate in a five-day REAL Entrepreneurship Institute. Further, only those who have been through this training are allowed to purchase and use their curriculum.

The REAL Entrepreneurship curriculum is contained in a four-volume set designed for those setting up hands-on REAL Entrepreneurship programs in their school or community organization. The curriculum contains more than 170 group and individual activities, business planning journals, an integrated technology component, a course planning guide and an implementation guide.

REAL programs are implemented by REAL Institute-trained instructors who typically use the curriculum materials to custom design programs according to audience need and instructor interests and abilities. Instructors are encouraged to use non-REAL materials to supplement the REAL curriculum where necessary or desirable. REAL members are actively developing e-commerce educational components for their curriculum materials as well as integrating e-
commerce training components into their REAL Institute. Once this is accomplished REAL instructors will be more likely to have interest in integrating e-commerce case study elements into their program design.

Given the flexibility and the encouragement to develop customized curriculum inherent in this decentralized approach, the integration of our e-commerce case study and lessons learned materials will likely require that instructors develop good working relationships with trained REAL instructors or that they consider taking the training themselves. Either or both approaches would provide instructors the necessary access and authority to consider integrating our e-commerce materials into the REAL program. Collaborating with REAL instructors, or becoming instructors themselves, could help to synergize new opportunities for both REAL and e-commerce instructors.

In addition to the programs detailed in this report, there are several other entrepreneurship training programs that could benefit from the inclusion of our case study materials. These programs include:

- Core Four - [http://www.corefouronline.com/](http://www.corefouronline.com/)
- NxLevel - [http://www.nxlevel.org/](http://www.nxlevel.org/)
- ACCION’s ABCs of Business: Microenterprise training program (domestic and international) - [http://www.accion.org/abc.asp](http://www.accion.org/abc.asp)

Most state Small Business Development Centers (SBDC) also offer some type of entrepreneurship training. Many SBDCs are partnering with existing entrepreneurship training providers (e.g., FastTrac or REAL) though some are developing their own programs. Extension and other e-commerce trainers are advised to discover what is being offered in their states and regions and to encourage their use of these e-commerce case study materials in their programs.

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**INTEGRATING CASE STUDIES INTO FORMAL/STRUCTURED/COMPREHENSIVE ENTREPRENEURSHIP AND SMALL BUSINESS TRAINING PROGRAMS**

Though there are differences between these programs, there is also a great amount of similarity. Our advice to the Extension educator is to identify what programs are being offered in your region of influence or responsibility, assess their viability, make contact with those delivering the programs, and take measures to effectively integrate e-commerce examples and other teaching materials into these programs. Our experience in contacting those involved with these programs is that they recognize that e-commerce is an important topic that they need to address in their training programs, that they are not currently providing enough specific training, and that they are eager to find ways to improve upon this situation. Our materials should provide the educator with much of what they need to make these improvements. The following paragraphs provide additional advice on how these e-commerce materials can be integrated.

The audiences for the FastTrac®FirstSteps™, FastTrac®NewVenture™, REAL, and many of the EDGE programs are comprised of those who have never previously owned a
business. These participants are typically energized and eager to learn the lessons that will make them successful. This presents many opportunities for entrepreneurship training program instructors to introduce innovative e-commerce examples early and often to these novice entrepreneurs in the course of teaching these programs. However, even those more seasoned entrepreneurs, especially those who have not yet developed an e-commerce strategy, will learn some key lessons from the businesses we have documented in our publication series. It is up to the instructors of these courses to make sure that the examples they select are the most appealing to the audience and that they represent strategies that are most likely to enhance participant success with their business.

One of the key lessons learned from the businesses we interviewed is that in order to be effective, e-commerce strategies should be considered for their impact on the entire business as “e-commerce holds the promise and challenge of affecting every aspect of a business’ operation from product design and production to distribution and service delivery” (Barkley, Markley, Lamie, p.19). Therefore, businesses using or considering e-commerce should investigate the potential roles for e-commerce in all aspects of business operations. Our case studies provide examples of e-commerce applications in product development (Farmchem, MidWest e-Services), marketing (Eolian Farms, Villages of Van Buren), enhanced production efficiencies (Dessin Fournir, Grown Locally), inventory and warehouse management (Louis Williams & Sons, Mountain One), distribution and sales (Sterling Biotech, Mainely Metals), and service before and after the sale (Vanns).

Encouraging the study of case studies early in an entrepreneurship training program can help spur creative conceptualization about the product and service mix. The hallmark of the knowledge economy is that the creative application of knowledge and the innovative use of information and communications technologies are resulting in a steady increase in the availability of new products and services. For small businesses to effectively compete in this environment they will likely need to “fish or cut bait”. Several cases in our study illustrate how e-commerce and related Internet-based strategies provided the necessary ingredients for rural businesses to conceive and deliver profitable new products and services (e.g., Brush Art, Farmchem, and Mid West eServices) or find niches in existing markets (e.g., Blue Smoke Salsa, Grown Locally, and Nautical Antiques).

Our case study examples also show that analyzing and reaching the desired market with these products and services can be facilitated by effective e-commerce strategies. As all of our case study firms had websites, all had taken the initial step in implementation of an e-marketing strategy. However, each website represents an individualized expression of the efforts put forward by the business to reach and attend to their customer base. Even though exposure to a wide variety of websites would be beneficial to entrepreneurship training course participants, most will not have the time to thoroughly review more than a handful, so instructors will need to help them choose the most appropriate examples. Some particularly good examples that demonstrate the variety of e-marketing website approaches used include Blue Smoke Salsa, the Villages of Van Buren, Songer Whitewater, Mainely Metals, and Eolian Farms. Several of our case studies illustrate businesses that were able to reach new markets, increase sales to existing markets, reduce middleman costs, and/or reduce the costs associated with these sales, all leading
to increased profits (Gail Golden Jewelry, Vann’s, Dessin Fournir, Mountain One, Lakeland Enterprises, and Blue Smoke Salsa) (Barkley, Markley, Lamie).

Besides the more obvious product/service mix and marketing considerations, e-commerce strategies can also affect other related dimensions of the business. Customer service enhancements can be provided before and after the sale by making it easy for the shopper to find what they want or after the sale in terms of addressing order returns, repairs, or operational questions. In a highly competitive market, excellent customer service can be the competitive advantage necessary to make a business profitable. There were two case studies in our collection that clearly illustrated this lesson (Vann’s and Louis Williams and Sons). Similarly, e-commerce strategies can be used to strengthen customer relations. This is especially important for those businesses that build their business model around providing high-quality experiences to their customers (e.g., Songer Whitewater, Black Magic Kennels, and Voyageur Outfitters) or those that focus on repeat sales (e.g., Grown Locally, Wintergreen Herbs and Vegetables, and Sivertson Galleries).

**USING E-COMMERCE CASE STUDY MATERIALS IN LESS FORMAL LEARNING ENVIRONMENTS**

Extension educators and others interested in motivating businesses to consider the adoption of e-commerce strategies will find a wide variety of opportunities available to them. These opportunities might include meetings with local business or civic groups, conference presentations, or one-on-one consultation with small business owners. Our case study materials are well-suited for these occasions and can be integrated in many creative ways, including those provided below.

1. **Creating awareness and cultivating interest in a formal e-commerce educational program.** Case studies can be effectively woven into briefings and presentations made to civic and business groups, they can be integrated into press releases about the program, or they can be used as examples in more lengthy educational articles (e.g., Extension newsletters or circulars) to help generate interest in the program. The power of positive examples provided by these case studies can offer the spark of hope necessary to motivate others to follow.

2. **“Breaking in” the learners with a non-threatening assignment.** Case studies can be used early in a day-long or longer program to encourage participants to read, reflect upon, and discuss some real-world examples. Depending on the objectives of the instructor, these case studies could be pre-selected for their broad appeal and their ease of understanding at this early stage in the learning process. Individual reading and reflection followed by small group discussion and then sharing observations with the entire class would be an effective teaching method for larger groups.

3. **Illustrating particular points through example.** As the training progresses toward more specific objectives and lessons, identification of case examples that illustrate the intent of the lessons can serve as a reality check and a break from the merely pedantic.
The E-Commerce as a Business Strategy: Lessons Learned from Case Studies of Rural and Small Town Businesses publication is designed to efficiently guide instructors (and learners) to case studies that illustrate particular points. Tables 1 and 2 provide a summary of basic information about the features of each case study and are organized by location, products or services offered, whether they are primarily B2B or B2C, and their sector (i.e., manufacturing, service, wholesale, retail, service, or business support). In addition, there is a section that summarizes the lessons learned and the accumulated wisdom distilled from the entire collection of case studies. Instructors can decide on the particular lesson they hope to instill and focus on the particular case studies that best illustrate these points. Assigning as “homework” a set of case studies that make a specific point and providing a set of reflection questions can be an effective teaching method.

SUMMARY

This guide has identified three ways that our e-commerce case study materials can be used to enhance learning about e-commerce strategies and the benefits and challenges of implementing these strategies. We provided an overview of well-known formal comprehensive e-commerce training programs along with a review of the potential use of our e-commerce case-study publications to augment, update, or supplement these programs. We also identified several formal comprehensive entrepreneurship training programs and suggested how case study information might best be incorporated into these programs. Finally we provided advice on how to use these materials in more informal, less comprehensive, or less structured learning situations.

As consumers and businesses continue to increase the volume of business over the Internet, successful adoption of e-commerce strategies becomes increasingly important for firm success, if not survival. This guide and the case studies themselves are designed to provide inspiration to small businesses and entrepreneurs, and those who support them, which will help to increase the number of success stories in the future.
Table 1. E-Commerce Case Studies for Rural Areas and Small Towns

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Location</th>
<th>Product or Service</th>
<th>Class of E Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Magic Kennels</td>
<td>Grand Marais, MN</td>
<td>provides sled dog adventure weekends</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Blue Smoke Salsa</td>
<td>Ansted, WV</td>
<td>manufactures and markets salsa</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>Boreal Access</td>
<td>Grand Marais, MN</td>
<td>Internet service provider</td>
<td>Service Provider</td>
</tr>
<tr>
<td>Brush Art</td>
<td>Downs, KS</td>
<td>full-service advertising agency</td>
<td>Primarily B2B</td>
</tr>
<tr>
<td>Columbia Falls Pottery</td>
<td>Columbia Falls, ME</td>
<td>manufactures and markets pottery and tiles</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Dessin Fournir</td>
<td>Plainville, KS</td>
<td>designs and manufactures home furnishings</td>
<td>Primarily B2B</td>
</tr>
<tr>
<td>Eolian Farms</td>
<td>Newcastle, ME</td>
<td>produces and sells fibers from llamas and Shetland sheep</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Farmchem</td>
<td>Floyd, IA</td>
<td>equipment and service provider for crop input dealers</td>
<td>Primarily B2B</td>
</tr>
<tr>
<td>Gail Golden Jewelry</td>
<td>Arroyo Seco, NM</td>
<td>handmade silver, gold, and gem jewelry</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>Grown Locally</td>
<td>Northeast, IA</td>
<td>markets and distributes locally grown farm products</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Lakeland Enterprises</td>
<td>Seneca, SC</td>
<td>designs and markets car top carriers and vacation gear</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Louis Williams &amp; Sons</td>
<td>Henderson, NC</td>
<td>multi-purpose home improvement store</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>Mainely Metals</td>
<td>Gardiner, ME</td>
<td>manufactures metal mailboxes plus metal fabrication</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>Mid West eServices</td>
<td>Salina, KS</td>
<td>Internet real estate advertising and sales</td>
<td>Primarily B2B</td>
</tr>
<tr>
<td>Mountain One</td>
<td>Leland, IA</td>
<td>manufactures and distributes supplies for making dolls and bears</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>Nautical Antiques</td>
<td>Jonesport, ME</td>
<td>retailer of nautical antiques and gifts</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Sivertson Gallery</td>
<td>Grand Marais, MN</td>
<td>retailer of regional and Inuit art work</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Songer Whitewater</td>
<td>Fayetteville, WV</td>
<td>whitewater rafting and adventure trip outfitter</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Stained Glass Express</td>
<td>Waterville, ME</td>
<td>stained glass products, supplies, and repairs</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Sterling Biotech</td>
<td>Sterling, CO</td>
<td>manufactures bio-based skin care products</td>
<td>Primarily B2B</td>
</tr>
<tr>
<td>Taos Architectural Copper</td>
<td>Taos, NM</td>
<td>manufactures copper sinks and lighting fixtures</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>The Missoula Artists' Shop</td>
<td>Missoula, MT</td>
<td>retail gallery for local artists' cooperative</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Vann's, Inc.</td>
<td>Missoula, MT</td>
<td>retailer of appliances and home electronics</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>Villages of Van Buren</td>
<td>Keosauqua, IA</td>
<td>nonprofit regional economic development organization</td>
<td>B2B and B2C</td>
</tr>
<tr>
<td>Voyageur Outfitters</td>
<td>Gun Flint Trail, MN</td>
<td>full-service outfitter for Boundary Waters Canoe Area</td>
<td>Primarily B2C</td>
</tr>
<tr>
<td>WESST Corp</td>
<td>Albuquerque, NM</td>
<td>service provider for start-up and existing businesses</td>
<td>Service Provider</td>
</tr>
<tr>
<td>Wintergreen Herbs and</td>
<td>Winslow, ME</td>
<td>sells herbs and vegetables, community supported agriculture initiative</td>
<td>Primarily B2C</td>
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<tr>
<td>Vegetables</td>
<td></td>
<td></td>
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<tr>
<td>Women's Business Center, CEI</td>
<td>Wiscasset, ME</td>
<td>service provider for start-up businesses, targeted at use of Internet</td>
<td>Service Provider</td>
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<tr>
<td>A. Manufacturing</td>
<td>Dessin Fournir</td>
<td>Columbia Falls Pottery</td>
<td>Blue Smoke Salsa</td>
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<td>Sterling Biotech</td>
<td>Eolian Farms</td>
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<td>Grown Locally</td>
<td>Taos Architectural Copper</td>
</tr>
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<td></td>
<td></td>
<td>Wintergreen Herbs and Vegetables</td>
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<tr>
<td>B. Merchant Wholesalers</td>
<td>Farmchem</td>
<td>Songer Whitewater</td>
<td>The Villages of Van Buren</td>
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<td></td>
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<td>Voyageur Outfitters</td>
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<td>Black Magic Kennels</td>
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<td>C. Selective Services</td>
<td>Brush Art</td>
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<td></td>
<td>Midwest eServices</td>
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<tr>
<td>D. Retailers</td>
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<td>1. Virtual</td>
<td>Lakeland Enterprises</td>
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<td>Nautical Antiques</td>
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<tr>
<td>2. Bricks-and-mortar</td>
<td>Columbia Falls Pottery</td>
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<td>Louis Williams &amp; Sons</td>
</tr>
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<td></td>
<td>Missoula Artists' Shop</td>
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<tr>
<td></td>
<td>Stained Glass Express</td>
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<tr>
<td></td>
<td>Vann's Inc.</td>
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<td>Silverston Gallery</td>
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<td>E. Small Business Service</td>
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<td>Provider</td>
<td>WESST Corp</td>
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<tr>
<td></td>
<td>Women's Business Center at Coastal Enterprises</td>
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</tbody>
</table>
ENDNOTES

1. These products can be accessed at http://srdc.msstate.edu/ecommerce/events/previous.html.

2. Another noteworthy program was developed at New Mexico State University. Since the program is currently inactive, it is not discussed in this guide.

3. From http://www.accesse.info/partners.html. Links are provided where available. Note that some states have developed websites specific to particular program components.


5. For example, if Extension Specialists delivered the e-commerce program, local Extension educators or agents could provide follow-up consultation.


7. Program description content provided by the Southern Rural Development Center website.


10. According to John C. Allen, former Western Rural Development Center director, the NebraskaEDGE entrepreneurial training program provided a model for a similar program in west central states called the WesternEDGE. Similar to the NebraskaEDGE program, the WesternEDGE is based on five primary objectives. These include assisting entrepreneurs in evaluating and creating business plans, helping business owners plan for growth and expansion, providing participants with program support, creating and retaining jobs in communities, and facilitating community capacity building.

11. If a program is being supported by your employer (university or college, development organization, non-profit) we would advise you to give it a great amount of positive consideration before approaching one supported elsewhere.