Mayville State University

A Technology Center Takes Root on the Prairie

Here is a "dot com" company that has weathered the storm in the e-commerce business just fine: ComMark, Inc., a web-services firm based in Mayville, North Dakota. Launched by two college professors and a student in 1995, it now boasts 19 employees and a half-million-dollar annual payroll. That may not seem like much to high-tech hotbeds like Palo Alto or Seattle, but for Mayville, a town of fewer than 2,000 people planted amid the sprawling wheat, barley, and sugar beet farms of the Red River Valley, it is one of the most promising economic developments in years — proof that the "new economy" can benefit rural areas as well as big cities and suburbs.
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"This is our hope," says Del Kessler, principal of Mayville's high school. "You can find good, high-paying jobs and still live in North Dakota."

ComMark's success, which has given Mayville a renewed sense of optimism after years of decline in farm employment, demonstrates how information technology could change the face of rural America. It also shows, however, that the promise of a business resurgence will remain unfulfilled unless community leaders join forces, develop a sophisticated understanding of the new economy and, perhaps most important, put in a lot of hard work.

Mayville has good reason to nurture new industry. A continuing revolution in farm-

ing technology has made six out of every seven North Dakota farm jobs obsolete in the last two decades. Consider just one innovation. The traditional seed-planting device, for instance, was 12 feet wide, and it planted crops at a three-miles-per-hour pace; but newer versions seed swaths of land 60 feet wide at seven miles per hour. Innovations like that have set off an exodus from farms, which in turn has under-cut what once was a healthy retail trade in towns like Mayville. Half of the stores that lined Main Street in the mid-1970s have vanished, and in recent years, some North Dakotans have even questioned whether the state still can afford institutions like Mayville State University, a land grant college that trains about 750 students for careers in teaching and other occupations.

The Need to Diversify

The people of Mayville know they have to diversify their economy, but until recently there seemed to be no obvious way to accomplish the job. Forty miles from the nearest city and 11 miles from an interstate highway, the town lacks access to the abundant supplies of power and water needed by modern factories. The high cost of transporting raw materials and finished goods keeps large-scale manu-facturers away. And weather is a problem, too. Companies are reluctant to set up operations for fear that winter storms will prevent them from making timely deliveries to distant customers over the two-lane roads that link the town to the outside world.

None of these barriers would apply to Internet-based companies, of course. But Mayville had to meet other conditions before it could hope to find high-tech employers. For one thing, it needed a well-trained workforce that could fill the demanding jobs generated by information technology companies. That is where Mayville State University (MSU) came in. Since the mid-1990s, the university has quietly built a reputation as a leader in information technology. In 1997, it became one of the first colleges in the nation to issue laptop computers to all of its students. Teachers and students use the computers in practically all of the university's educational activities, and the university requires each student to meet national standards for information technology skills in his or her chosen field. Any high-tech company interested in moving to Mayville today will find a ready pool of technology-savvy interns, and 135 prospective employees who are graduated each year well versed in information technology.

Mayville needed one more thing to emerge as a rural hub of the new economy: affordable, high-capacity connections to the Internet. That proved a bit trickier. As recently as 1997, townspeople still could not connect to the Internet over regular telephone lines without making long-distance calls. And even though the cost of wiring the town for high-speed communications links would be negligible compared to what Mayville would have to spend to widen its highways or up-grade its power or water systems sufficiently to at-tract traditional manufacturers, telecommunications providers for years said the town lacked enough cus-tomers to justify the investment needed to wire it.

A Business Incubator

That calculation is changing rapidly. One factor is the Traill County Technology Center, which MSU and local economic-development agencies cre-ated in 1999 with support from TOP. Housed in two

buildings at the university, the center gives tenants access to a statewide, high-speed telecommunications network at the same competitive rates the university and other state agencies pay under a contract between the state of North Dakota and private telecommunications companies. Moreover, it gives start-up businesses low-cost office space, access to student interns (and hence, a first chance to identify promising future employees), technical support from university faculty and staff, and an opportunity to work alongside like-minded companies

ComMark, whose name stands for "Communications and Marketing," illustrates the kind of synergies the incubator is designed to foster. The company regularly draws on the resources of the university. Once, for instance, when it was short of workers versed in a complex software package known as Cold Fusion, it turned to the university, which quickly established a special training program. MSU benefits from the relationship, too. It looks to ComMark to provide valuable "real-life" experience for students. The company pays these interns less than what full employees earn, but that does not mean it is profiting from cheap labor. The higher cost of training student interns offsets any savings from paying interns lower salaries, according to Lee Kaldor, the company's vice president.

Like many new economy employers, ComMark is looking for lifelong learners — people who can acquire new skills, learn or create new kinds of software, quickly adapt to technological innovations, and respond to fluctuating market demands throughout their careers. It also needs people who can combine diverse disciplines. The company's own founding partners include a business professor and a computer and information systems professor, and it expects its employees to bring both disciplines to bear in their approach to clients. More than simply designing websites, they have to understand their clients' businesses thoroughly, and then help them find new ways to interact with customers. In addition, they have to help businesses use the web to understand their own customers more completely so that they can fine-tune product lines and inventories to reflect changing market conditions. "We have tried

to differentiate ourselves from the traditional 'dot com,'" notes Kaldor. "We're much more about using databases and developing business solutions than in putting a pretty face on a company's website."

A Winning Formula

That seems to be a winning formula. In 2000, ComMark contracted with Avenet, a Minneapolis-based company, to design websites that were used by 500 political candidates around the country. After the elections, the company began developing websites for city and county governments and for religious organizations. ComMark also developed a website for "We-Fest," an annual music festival in Minnesota. The festival's sponsors originally thought they might sell a few tickets online, but their low expectations grew much higher after ComMark showed them how they could use its software to increase their overall efficiency. Now, We-Fest uses its ComMark-created website to keep track of all of their sales — including ones made by telephone and in person.

Similarly, ComMark developed an e-commerce site for Agsco Inc., a supplier of agricultural chemicals in the upper Midwest. Besides opening a new avenue to reach customers, the website has helped the company manage its own inventory more effectively. Agsco is so convinced of the value of the tool that it now resells it to agricultural suppliers in 20 states.

ComMark has profited from such successes, and in turn it has rewarded its employees by paying salaries higher than many rural North Dakotans thought possible. The company has hired a number of its student interns into full-time jobs after they graduated from MSU, and it already has brought back one student who had left the state. For leaders who have watched the community's slow decline in recent decades, ComMark's success is a welcome bit of good news. Del Kessler, principal of the local high school, says he sends as many of his students as possible to see ComMark in action, and he has invited Carrie Osland, a local student who now man-

ages a help desk at ComMark, back to the school to tell students what new opportunities are opening up right in town.

"Our students are very traditional," Kessler says. "They just don't see this technological age happening. But a whole world of high-paying jobs is opening up for them."

A Connected Community

Ultimately, the community itself, not the technology center, will determine whether Kessler's optimism is well founded. North Dakota law allows private companies in business incubators to use the state's high-speed communications network for only four years. After that, they must contract for their own telecommunications. To sustain its success, Mayville must attract competitively priced, high-capacity communications services.

On this front, too, the outlook is encouraging — thanks again to Mayville State University. Even before they began issuing laptop computers to students, MSU officials were meeting with community members to stir interest in computers and technology. Later, when community members complained they could not gain Internet access without making long-distance telephone calls, the university created a special Internet class and enrolled a group of community leaders so they could gain dial-up access as students. That led to formation of a "community technology committee," which set out to attract a local Internet service provider to town. It was a hard sell. In 1997, many telecommunications companies doubted that little Mayville would produce enough Internet users to justify the cost of connecting them. "It took a lot of gnashing of teeth and banging heads on walls," recalls Jay Henrickson, who runs MSU's internship program and heads the technology center.

In the end, Polar Communications, a rural telephone cooperative based in Park River, North Dakota, agreed to provide bare-bones, local Internet service. But, saying it needed to sign up 160 cus-

tomers to cover its $40,000 cost, it demanded that the local economic development commission pledge to pay $10,000 if fewer customers signed up in the first year. At the time, the commission had little more than enough funds to buy stamps and coffee, but their confidence paid off. Polar reached its minimum goal in six months.

Things have changed a lot since 1997. This year, Polar has decided to invest $3 million to bring competitive telephone service, cable television and a range of high-speed Internet connections to every home in Mayville — without any financial guarantees from the community. As a result, "we hope the digital divide issue will be completely resolved within four years," says Keith Stenehjem, MSU's chief information officer.

Looking Ahead

What made the difference? David Dunning, the cooperative's general manager, says he now is convinced that Mayville will prove to be a strong market for telecommunications services. Polar expects to sign up 60 percent of Mayville telephone customers in the next four years, and surveys suggest at least one-quarter will want some kind of Internet connection. What's more, the demand for high-speed links appears likely to grow at a healthy pace. Already, a gasoline company, a grain elevator, and an electronic goods retailer who runs a helpdesk for Polar out of a back office say they want high-capacity communications services. The technology center also should catalyze business demand. The director of the county economic development commission has moved into the center, and plans to spend half of his time for the next few years attracting new businesses to it. And Polar, which just four years ago worried about losing $10,000 on providing basic Internet service, donated $6,500 in wiring to the new center at no charge.

That could be just the beginning. As this report went to press, officials at the technology center were negotiating with a California-based defense contractor who wants to open a branch office in

Mayville — a move that would create a minimum of 70 jobs in the community over five years. The incubator, the strong training of MSU graduates, and the palpable enthusiasm for information technology among community leaders all were powerful selling points, according to a company official. "The whole community has really bonded together to make this happen," said the official, who asked not to be identified.

To Gary Hagen, MSU's vice president of academic affairs and a long-time member of Mayville's local economic development commission, this development comes as relief after years of battling out-migration and failing to attract new industry to the town. "We're finally in the game again," says Hagen. "A while ago, we weren't in the game."

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