All businesses have to focus on their core mission and avoid getting sidetracked. But small businesses don’t have many resources for avoiding certain necessary sidetracks. That’s where companies like VistaPrint find their niche: providing technical services small companies need but would rather not have to arrange for themselves.

VistaPrint started out as a provider of digital printing services. Clients of the Lexington, MA.-based company use the company’s Web interface to input information for business cards, custom letterhead, lawn signs, hats, and other custom products. VistaPrint then manufactures the products based on customer specs.

In the last few years, the company has added other services to its roster: marketing services, mailing services, and Website hosting, for example. Its 1,600 employees work in the Netherlands and Ontario, Canada (manufacturing); Barcelona (European marketing); Jamaica (customer service); and Bermuda (software development).
A GOOD PROBLEM
If VistaPrint had a problem in 2007, it was still a good problem to have: The company was growing rapidly. It had between 50 and 60 employees in its software development organization, called Capabilities, but it had to hire new engineers and other technology employees right out of college to keep up with the company’s overall growth. (For example, this summer VistaPrint will hire 25 graduates in this department.) “Percentage-wise, that’s a big jump, and Capabilities was so busy that nobody had time to write anything down,” says Daniel Barrett, distinguished architect for the organization. “We asked ourselves, ‘How are we going to train all of these new employees who are really green when it comes to the industry?’”

The company had made several efforts before to write down procedures and other information. It had tried public folders on Microsoft Exchange; shared drives; and a blog-based system based on Drupal, an open-source content management platform. All three methods failed dismally.

“E-mail is not a good way to document much of anything,” Barrett explains. “Shared drives are big and disorganized; they basically represent the collective imagination of the entire company, and folders really aren’t a good structure for organizing large amounts of information. With the blogging system, people either did it or they didn’t, and there was no real rollout, no attempt to encourage them to use it.”

GETTING ORGANIZED
Barrett got a mandate to make these systems work somehow, with a specific directive that the company didn’t want to mess with a whole new system. So he gave it the old college try. He started by asking project and program managers to help him create a taxonomy of the Capabilities organization’s technical knowledge. “We created topics, subtopics, and categories of knowledge,” he says. “I wanted to get a picture of the knowledge without doing anything with it.” Eventually, that picture included nearly 1,000 topics that covered everything from how to turn on a PC to detailed, technical procedures. It showed Barrett that Capabilities just couldn’t succeed with the systems it had.

“First of all, people hated those systems, and we would have had to overcome significant resistance to get them to use them,” Barrett says. “Second, knowledge management like this is not a technology problem, it’s a people problem. You have to get people reading things and writing things down, and they weren’t doing either in the current systems.”

WIKIPEDIA TO THE RESCUE?
Barrett knew for this level of knowledge management, he needed a system that was loosely structured—unlike a folder structure, which defines rigid—yet easily navigable that could scale up as more employees were added to the Capabilities organization. The solution he decided on was a wiki, a database of knowledge created, edited, and modified by all the users. The software he used was MediaWiki, the same software used to create Wikipedia, possibly the most widely known wiki in the world. “Everybody knew how to use Wikipedia, and it’s a good system for organizing categories and subcategories,” Barrett says. “And with millions of users, we knew it would scale as much as we needed it to.”

But those were only the criteria for use, not guarantors of success. Barrett knew that even if a wiki were the perfect way to document the department’s knowledge, he had to set it up in a way that would make it easy to participate. If employees had to master complex tools or navigate a complicated set of criteria, they probably would see it as an interruption in their day. Any roadblocks would prevent adoption, so Barrett set out to avoid them. “We embedded our new taxonomy into the wiki, and set up the names of the topics so there was a structure in place,” he says. “Wikipedia’s guidelines say not to do that. But we didn’t want our people to have to work hard to figure out where to document information, and the

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prestructured wiki allowed them to search for topics and add information if it wasn’t there.”

FROM CREATION TO MAINTENANCE

In May 2007, the wiki went live for a pilot group to search out any glitches. Then in June, the rest of the Capabilities organization (about 100 technologists) got access. But that wasn’t the end of the job. Barrett knew systems like these fail without oversight. They get filled up with obsolete or incorrect information, either because users add erroneous information or because they stop adding or updating articles. So he acted as editor-in-chief and head cheerleader for the wiki, moving articles that were categorized incorrectly, changing or rewriting articles as needed, and generally monitoring the quality of the content being added. MediaWiki has tools for monitoring when new articles are added and others changed, so he only had to spend about 30 minutes a day on this task.

He also kept an eye on information distributed through mailing lists, and when he saw information that should be documented outside of e-mail, he asked the author to write an article for the wiki on that topic.

“Eventually, they got into the habit of going directly to the wiki page,” Barrett says. “By comparison, our old blogging-based system had approximately 6,000 articles in it, and half of it was junk. Within six months, we had more articles in the wiki than the blog ever had, and it was all business-critical information.”

CAN WE PLAY, TOO?

New engineers were paired with senior engineers and led through a curriculum intended to get them up to speed. They also were encouraged to use the wiki as a just-in-time job aid for almost any task. Between the two, the average time for new engineers to become independent and productive dropped by 50 percent.

With results like that, and word of mouth, it wasn’t long before departments all over the company were coming to Barrett and asking for their own wiki. He argued for starting with the problem, not the technology. What problem did they need to solve? “They’d listen, then say, ‘Okay, okay, can you make us a wiki?’” Barrett says. “After nine or 10 departments came to me, I went to the company leadership and told them we needed a company-wide intranet.”

That intranet eventually was constructed out of two systems. The wiki made sense for certain types of information, Barrett explains, but not for others. “The open editing model makes sense for updating information that changes—such as procedures for hiring new employees or adding new products to the Website—but the finance and legal departments didn’t like that for their documents,” he says. For documents that need to be protected and access controlled so edits could be monitored, a system like SharePoint was necessary.

Before rolling it out to the whole company, Barrett developed training that could be delivered by video so users in the international offices could follow along on laptops. The training taught users how to write articles for the wiki and the standards to follow in naming and categorizing those articles. “We wanted to show them the tip of the iceberg and motivate them to learn more,” Barrett says. “There are people in HR and marketing who use it because they saw what they could do in 15 minutes or less.” It didn’t hurt that trainees were rewarded with chocolate when they answered questions correctly.

Not everyone in the company uses the new intranet. For example, manufacturing employees are busy on the shop floor. But after the rollout in September 2008, approximately 800 of VistaPrint’s employees use it, some more regularly than others. Barrett and his three reports continue to edit and maintain the repository, although it’s starting to get ahead of them. To solve that problem, he recruited 35 volunteers from around the company to act as a sort of Wiki Patrol to change, move, or rewrite articles that haven’t been created up to standard.

But Barrett finds he has many willing participants who want to keep the wiki uncluttered. “Not everybody completely understands why we want to categorize and write it according to our standards, but they do agree to follow them,” Barrett says. “And even when somebody does a lot of damage by creating 75 articles in one day that don’t meet our standards, it’s easy to fix with the tools MediaWiki has. My team threatened to delete any article that’s off-topic, but they haven’t had to do it because we have smart people who recognize the value of a well-organized resource.”