



WISNAKER
BUILDER SERVICES, INC.

Overview

Country or Region: United States

Industry: Manufacturing

Customer Profile

Wisnaker Builder Services, based in Houston, Texas, is a major builder services company that provides builders with products and programs, and company owned and operated design centers.

Business Situation

Wisnaker wanted to replace a time-consuming and limited project estimation service with a real-time alternative that would increase competitive advantage and customer service.

Solution

Wisnaker achieved its goal with smart client and Web-based versions of a solution that provides highly graphical, real-time information compiled from the company's back-end systems.

Benefits

- Shortened design and development time by 60 percent
- Cuts days from estimating process for each design
- Enables repurposing of one-third of staff
- Supports double-digit sales growth
- Promotes relationships with builders, customers, and suppliers

Building Products Supplier Gains Double-Digit Sales Growth from Visual Design Solution

“Our CEO reminded us that these projects were the most important ones in our company because they could have the greatest impact on our business. In fact, they began to deliver that impact immediately.”

Richard Gladstone, Chief Information Officer, Wisnaker Builder Services

Wisnaker Builder Services wanted to shorten its time-consuming and highly manual process of preparing estimates for its home-builder customers to boost competitive advantage, customer service, and customer satisfaction. The result is a solution based on Microsoft® design and development technologies that completes a once days-long estimation process in real time; boosts estimator productivity by one-third; supports double-digit sales growth; and promotes closer relationships with builders, customers, and suppliers. The solution has been extended to the company's design centers, so consultants and home buyers can immediately see the impact of proposed design changes. The solution has revolutionized the design process at Wisnaker by engaging internal business management more fully, and was brought to market 60 percent faster than anticipated, helping to ensure a competitive advantage.



Microsoft®
Expression®

“I love Microsoft Expression. We made heavy use of Expression because I could show our developers what I wanted and they could immediately work from what I gave them.”

Richard Gladstone, Chief Information Officer,
Wisembaker Builder Services

Situation

When people go house hunting, they may be looking for a contemporary, a split-level ranch, or a Colonial-style home—but, regardless of their architectural preference, they want a house built with the old-fashioned values of strength, durability, and quality.

Wisembaker Builder Services, one of the nation's major suppliers of building materials and construction services for builders of production-made and custom homes, believes in the old-fashioned values as well. Unfortunately, when it came to working up estimates for providing and installing building components—such as flooring materials, counter tops, and window coverings—the company was still doing things the old-fashioned way.

Wisembaker used a mostly manual process that was very time consuming and labor intensive. Estimators worked largely by hand to write up estimates for each construction design offered by the home builders, looking up the availability, specifications, and prices of materials from a range of sources. Proprietary, third-party software helped, but it didn't bring together information from disparate sources, nor did it automate the creation of schematics and other materials.

Wisembaker installation workers needed those schematics in order to install building materials in a way that was consistent with the cost estimate provided to the home builder. To create the schematics, estimators would cut and paste visual elements into a photo-editing application, and then scan the results into another file. The large amount of manual effort meant that some work would inevitably have to be repeated to ensure accuracy.

The process took hours per estimate, which seemed to become ever more complex, and

the number of estimators on the company's staff was growing faster than the company's business. Another drawback was that the estimators' work, particularly the design work, could not be reused in the company's design centers, which Wisembaker operates in Texas, and which provide home buyers with a place to go to make choices about final installation materials and finishes; plumbing, electrical, and kitchen fixtures; and appliances.

Wisembaker was well aware of these limitations. The company wanted a solution that would not only boost the productivity of its in-house estimators, but also provide better service to customers. Given the highly competitive industry in which it operates, Wisembaker sought to bring the solution to market quickly. In addition, it wanted the solution to work in the design centers—which the company operates both under its own name and under the brands of its builder-customers—so that design consultants and home buyers could work together to review and revise design plans and budgets. Wisembaker also wanted a self-service version of the solution so that residential buyers could view and alter the designs for their future homes by themselves, from anywhere with an Internet connection.

Not least of all, in the IT realm, Wisembaker was already a “Microsoft® shop.” It didn't want to support a second production environment in order to run a new solution, but wasn't sure whether Microsoft technologies would be able to meet all its needs. And even if the technology was available, could the company's small development staff—just five people in all—create a software solution while continuing to develop and maintain other systems for the company?

Figure 1. Vêo gives builders and their customers an easy, visual way to make real-time changes to floorings, appliances, and other building elements.

Solution

For the answers, Wisenbaker turned to its longtime IT solutions provider, ePlan Partners. The solutions provider, which specializes in back-end systems, enlisted Catapult Systems, a Microsoft National Systems Integrator (NSI) and Gold Certified Partner, to assist in developing the estimating and imaging solution envisioned by Wisenbaker.

Wisenbaker and ePlan Partners asked Catapult to suggest a design and development approach that could deliver the design application that Wisenbaker wanted, and deliver it in a timely, cost-effective way. A key element in the solution that Catapult proposed was Microsoft Expression® Studio software, which includes professional illustration and graphic design tools that

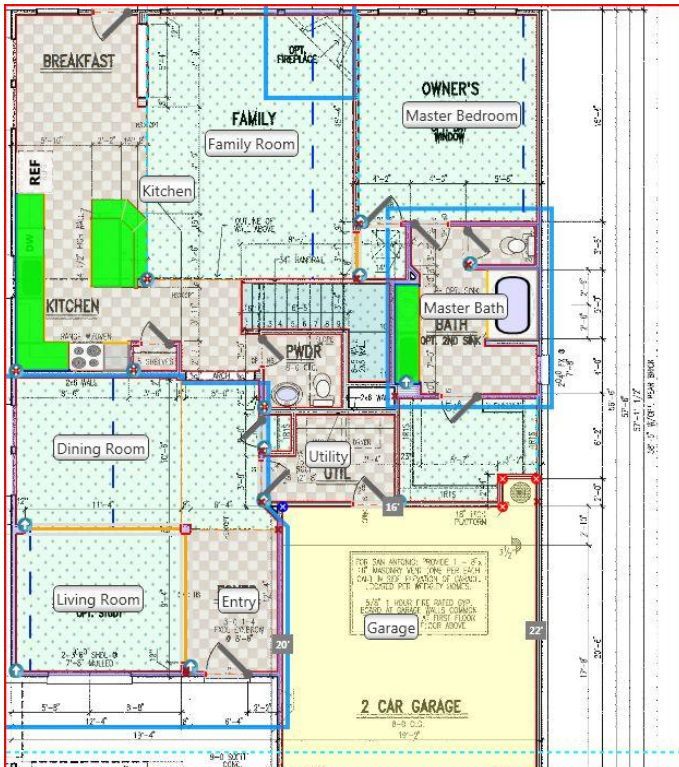
make it possible to build compelling elements for both Web and desktop application user interfaces.

Given the highly visual nature of the proposed application, its visual appeal was among its most important factors—and it attracted attention from the company’s top management. Richard Gladstone, Chief Information Officer at Wisenbaker, used Expression Studio to create the visual elements he envisioned for the application and to turn them into XAML, the declarative markup language that describes user interface elements and rich content (such as 2-D and 3-D graphics, text, animation, and video). Gladstone passed the results of his work, in XAML, to the development team, which created the application based directly on his designs.

Wisenbaker and Catapult created not just one application, but two:

- Vêo-Options Estimator™ (Vêo)– A smart client application that runs on estimators’ desktops and makes it straightforward for them to create designs, schematics, and bills of material (See Figure 1).
- Vêo Concierge-Options Planner™ (Vêo Concierge)– A Web-based application designed for the Wisenbaker design centers—and for the Internet-based self-service solution that Gladstone and his colleagues envisioned—that makes it possible for outside users to revise and create “what if” versions of the initial VEO designs created by Wisenbaker.

To create the Vêo smart client application, the development team used the Windows® Presentation Foundation in the Microsoft .NET Framework 3.0. Windows Presentation Foundation can take advantage of the latest graphics hardware for faster and more realistic images and gives developers an easy, consistent way to integrate a host of visual features such as 2-D and 3-D graphics,



“Faster estimates and the ability for customers to view design changes in real time over the Web aren’t just conveniences—they are real game-changers.”

Richard Gladstone, Chief Information Officer,
Wisembaker Builder Services

advanced typography, animation, audio and video, and more, into their applications. The development team used Microsoft Visual Studio® Team System development system to directly access the XAML of the initial designs, making it possible for the developers to turn those designs into the interface for a fully functional solution.

Wisembaker and Catapult faced a somewhat different challenge for Vêo Concierge, the Web-based version of the application. Because users at the Wisembaker design centers—or at home for that matter—would view and alter their home designs using only a Web browser, the application couldn’t depend on Windows Presentation Foundation and the .NET Framework.

Instead, the developers used the Microsoft Silverlight™ 2 browser plug-in, which provides a subset of the functionality in Windows Presentation Foundation. By using Silverlight, developers were able to take advantage of their existing work on Vêo, including XAML and the highly distinctive visual architecture, rather than having to re-create their work from scratch.

To avoid the limitations of the previous software, which required estimators to manually aggregate data from various sources, Vêo and Vêo Concierge integrate directly with the company’s back-end systems.

One such system is a custom inventory system that provides data on available building components and their costs. These back-end systems, including the custom inventory system, were integrated through services developed by ePlan and Catapult using Windows Communication Foundation. These services provide both applications with common functionality needed to develop accurate and repeatable estimates for

estimators, design consultants, and home buyers.

As estimators, design consultants, and home buyers use Vêo and Vêo Concierge, they can change building elements with a few mouse clicks. Floors, for example, can be covered in carpet, tile, wood, or other materials. The application automatically calculates the least amount of material needed to cover a specified area, the cost for that material, and even the direction in which installers should lay down the flooring to conform to the estimate. Interior walls can be added or deleted; lighting and plumbing fixtures can be added, changed, or deleted; and counter-top material types selected and priced. The home buyer can even choose which windows should have coverings installed. Bills of material for each room, showing the materials, their quantities, and costs, are updated automatically as the user considers design changes.

Benefits

“Our CEO reminded us that these projects were the most important ones in our company because they could have the greatest impact on our business,” says Gladstone. “In fact, they began to deliver that impact immediately.”

That impact includes faster time-to-benefit, greater productivity for estimators, increased revenues, and closer relationships with customers and partners.

Shortened Design and Development Time by 60 Percent

Gladstone estimates that the creation of Vêo and Vêo Concierge would likely have taken five years using traditional design and development tools or technologies, such as Flash. Instead, the solutions went into production in just two years—60 percent faster than anticipated.

“We now have the agility to continually enhance our relationships with home builders and home buyers—and even with our suppliers.”

Richard Gladstone, Chief Information Officer,
Wisembaker Builder Services

He attributes the greater speed—and associated lower cost—with the use of Microsoft technologies that work together and fit in with the company’s existing environment, especially Expression Studio, Windows Presentation Foundation, and Silverlight.

“I love Microsoft Expression,” says Gladstone. “We made heavy use of Expression because I could show our developers what I wanted and they could immediately work from what I gave them. I never had a problem with Expression; it was always intuitive, stable, and delivered what I wanted. Whenever I looked for something like blurs or special effects, they were always right there, easy to find. I had tried Photoshop before and couldn’t figure it out. The use of Expression eliminated the need for me to communicate my ideas to a designer who would then pass designs to the development team.”

The use of Windows Presentation Foundation made it easy for the development staff to take maximum advantage of graphics possibilities without learning a complex graphics language, and to integrate the resulting code into the company’s primary development system, Visual Studio. The use of Silverlight over a visual and animation technology such as Flash also saved considerable time, according to Gladstone.

“If we’d used Flash, we would have had to translate the geometric properties for floor plans from XAML to Flash, and we would lose the ability to retain the XAML from design through production, which streamlines the process and gives us added abilities, such as the ability to filter out elements or designs that we only want estimators to see.”

Faster time-to-market has been an important benefit to Wisembaker. “Microsoft technologies helped us to bring Vêo to market three years faster than we might have

done otherwise,” Gladstone says. “We are the first to market with this solution, solidifying our reputation for innovation and customer service that can’t be found elsewhere.”

Cuts Days from Estimating Process, Enables Repurposing of One-Third of Staff

Vêo automates the creation of design plans, producing them in real time and eliminating the several days of manual labor formerly required to produce each estimate for each design. The designs are not just produced more quickly—they are also more comprehensive. Wisembaker estimators now can include every design component that customers want to see in the estimates, while earlier estimates focused on the flooring options, due to technology limitations.

Vêo is increasing estimator productivity so rapidly that Gladstone estimates that Wisembaker can repurpose one-third of its estimator staff to more value-added functions while increasing design throughput. But greater speed and productivity are only the start of the benefits delivered by the solution, according to Gladstone.

“Faster estimates and the ability for customers to view design changes in real time over the Web aren’t just conveniences—they are real game-changers,” says Gladstone. “When residential buyers have to wait days to see the impact of design changes, they can lose interest, and builders can lose sales. When buyers see the results of their changes immediately, it means increased sales for home builders. That, in turn, brings the builders—our direct customers—closer to us, helping to ensure our continued growth, despite market conditions.”

“Microsoft technologies helped us to bring Vêo to market three years faster than we might have done otherwise.”

Richard Gladstone, Chief Information Officer,
Wisembaker Builder Services

**Supports Double-Digit Sales Growth,
Draws Customer Interest**

Builder interest in the solution, especially for using Vêo Concierge in the branded design centers that Wisembaker operates for them, is very real, according to Gladstone. “We showed Vêo Concierge to our customers as it became ready for live use,” says Gladstone. “The only problem is that they all want it, which is keeping us busy customizing it with branding for each customer—but that’s a happy problem to have.”

Gladstone says that the new solution has already helped Wisembaker to acquire new customers and to expand its sales to existing customers. He sees the solution contributing to double-digit growth in sales and gross profit margins to the company.

**Promotes Closer Relationships with
Builders, Customers, and Suppliers**

Because Vêo and Vêo Concierge are built on Microsoft technologies—most notably Windows Presentation Foundation, Silverlight, and Windows Communication Foundation—Wisembaker has a product road map for expanding the solution to make it increasingly attractive and useful. For example, Wisembaker plans to add photorealism and 3-D presentations to the current graphics-based, 2-D content in the solution. Those elements will make the solution more useful to home buyers by giving them more detailed views of their chosen designs. They will also make the solution more appealing and fun to use—another desirable trait in a consumer-oriented application.

The openness of Microsoft technology gives Wisembaker the option to extend its solution to include information from its suppliers. “By integrating Vêo and Vêo Concierge over the Internet with systems from the manufacturers of the products we sell and install, we can provide information from those manufacturers directly to customers when they use Vêo Concierge to review the product offerings. For example, when a residential buyer selects a carpet, the carpet manufacturer might include information on durability, ideal uses, and complementary materials and products.

“We now have the agility to continually enhance our relationships with home builders and home buyers—and even with our suppliers,” says Gladstone. We’re counting on that to help us keep our leadership position in the industry.”

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: www.microsoft.com

For more information about Catapult Systems products and services, call (800) 528-6248 or visit the Web site at: www.catapultsystems.com

For more information about Wisenbaker Builder Services, Inc. products and services, call (281) 233-4000 or visit the Web site at: www.wisenbaker.com

Microsoft Expression

For more information about Microsoft Expression please visit: www.microsoft.com/expression

Software and Services

- Microsoft Expression
 - Microsoft Expression Studio 2
- Microsoft Visual Studio
 - Microsoft Visual Studio Team System 2008 Team Suite

Technologies

- Microsoft .NET Framework 3.5
- Microsoft Silverlight
- Windows Presentation Foundation
- Windows Communication Foundation

Partners

- Catapult Systems
- ePlan Partners