The Challenge:
- Too much time spent on building plan code reviews.
- High level of code violations due to out-of-date information.
- New business launched with no support staff.
- Programmer fees for custom web-based application development too expensive.

The Solution:
- Easy access to code specifications reduces code review to just 10 days.
- Centralized database gives instant access to accurate code requirements.
- Web-based project management keeps projects on schedule with minimum staff.
- Publicly shared applications help generate word-of-mouth marketing for the business.

The Results:
- Saved at least $25,000 on development costs for online database applications.
- Saved $40,000 on support staff when launching the business.
- Saves $60,000 yearly on project management staff.

Engineering Consulting Firm Reduces Code Violations and Speeds Construction Schedules with QuickBase Online Database Applications

In 2001, Imad Naffa was on a mission to satisfy a niche requirement of cities and counties to ensure rapid compliance with regional building, fire and accessibility codes that are complex and constantly changing. Failure to comply with codes can drive up construction costs and delay schedules. Yet traditional methods of code review can take as long as 10 weeks because of the time-consuming nature of tracking down regional code requirements—a manual process that's highly susceptible to human error.

Naffa saw an opportunity to leverage the Internet to create an online database that could drastically reduce the time and staff resources needed to conduct plan code reviews and track projects and information. Best of all, he could save his customers money and staff resources by speeding up the process and reducing the incidence of errors that result in code violations.

Naffa tried building a custom online database to accomplish the task, but discovered it would cost as much as $25,000 and take as long as six months to get what he needed. He continued to work with spreadsheets for a while, but they did not offer the advantages that web-based applications deliver – including information gathering, reporting, sharing and process management.

“The idea of being limited to a computer station or an office to manage my projects didn’t appeal to me. I needed to be able to access this information from home or from the road,” explained Naffa.

Momentum Builds Fast with Easy Application Development and Rapid Deployment

Since web-based applications were still in their infancy at that time, Naffa took a chance on a product called “QuickBase.” Naffa subscribed to QuickBase and quickly developed a basic online project management application to track his plan code reviews. The application helped him manage the documentation, technical information and coordination among different specialists associated with each job, along with the required tasks and the status of deliverables. Reports could be generated within seconds, as needed to monitor status, and reminder emails were automatically triggered to keep jobs on schedule with aggressive 10-day deadlines.
But perhaps most importantly, Naffa was able to build the application himself without having to learn programming language or spend money on outside consultants.

“I didn’t want to invest a lot of time programming—and I didn’t have to with QuickBase. It was incredibly easy to create applications that were customized to my needs,” he explained.

Naffa created 10 other applications with QuickBase, including five online database applications that enabled information sharing through his website. The “Plan Check Status” application lets customers log in to monitor job status and completion. This reduces the need for NAFFA staff to provide customer status reports, while giving customers direct access to that information. The “Evaluate NAFFA’s Services” application was created to solicit customer satisfaction feedback. Customers log in to complete an online survey rating their experience. Once the information is entered into the form and then saved in QuickBase, the results are available for prospects to view online in real time—with no intervention by NAFFA or staff resources required.

“Each time someone provides feedback on my website, I receive an email that lets me know it’s there and lets me view the information, so I can keep track of what’s being said about my company,” said Naffa.

Naffa also created and launched a database of national building code specialists that industry professionals can freely access.

“This is a free service that we provide for anyone who needs it, and also it generates word of mouth about our company that often leads to consulting projects,” explained Naffa.

There is also a “guestbook” application that allows site visitors to sign in and rate the helpfulness of the website as an industry resource. This delivers valuable insight that Naffa can use to improve his marketing efforts based on the feedback collected by the QuickBase application.

**Big Savings in Lean Staff Along with Competitive Advantage Deliver Real ROI**

In the seven years during which Naffa has used QuickBase, the applications have delivered valuable cost savings for the company. Naffa estimates that he has saved $25,000 that he would have spent developing custom online database applications with a programmer, compared to the affordable pay-as-you-go investment that he made with QuickBase. Additionally, instead of paying at least $1,000 in monthly maintenance fees on a high-priced enterprise application, NAFFA pays only $250 per month on QuickBase subscription fees—saving the company around $9,000 per year.

Because of QuickBase’s online project management functionality, Naffa did not have to hire support staff when he first launched the business, saving him approximately $40,000 per year on salaries for personnel. Today, he figures QuickBase automation continues to save him at least two staff positions that would be needed for project management—for an estimated salary savings of $60,000 per year.

He further estimates that he saved $10,000 on the development of five applications hosted on his website, which deliver valuable insight into customer feedback and generate word of mouth for his business.

Perhaps most importantly, NAFFA says QuickBase web-based functionality has allowed him to turn plan code checks around to his clients in 10 days—compared to the ten weeks traditionally needed.

“One of the main reasons customers outsource code review is speed. QuickBase gives me the competitive edge I need to satisfy that demand—and be successful in this business,” says Naffa.