

New Urban Builders Lops 95 Days Off Cycle Time with BuilderMT

California Builder Finds Dramatic Efficiencies and Cost Savings Through the Application of BuilderMT's Workflow Management Suite.

by Tom Gebes

Executive Summary

New Urban Builders dropped their cycle time from between 220 and 250 days/home down to 155 days/home, dramatically affecting their bottom line by lopping up to 95 days of carrying costs per home off their books. Across 80 starts, that's a gross reduction of 7,600 days, a dramatic impact for a \$20 million company.

About New Urban Builders

New Urban Builders competes in the booming single family residential markets north of Sacramento. In 2007, they will deliver 80 closes, up from 50 homes in 2005. With houses priced between \$200,000 and \$425,000, (950 to 1,700 square feet; 8-10 per acre), they keep their 10 employees busy, including purchasing and estimating departments, a customer service and warranty department, design and planning staff, and two site supervisors, who are spread across three projects in two neighborhoods.



With a two-year supply of land already locked down or optioned, New Urban Builders is using seven house models to start between six and eight homes a month. All this activity will bring New Urban Builders a healthy top-line revenue of around \$22 million in 2007. But, New Urban Builders is also involved in planning a 2,700-unit, mixed-used development on 200 acres. So, the company does not foresee a downturn in their immediate future; indeed, they are preparing for strong growth.

Part of New Urban Builders' plan for growth has been to upgrade their back office software. Tracking the schedules, work orders, and purchase orders required for 80 homes in 2007 (and perhaps even more starts in 2008) is no small task, and they were mostly interested in cycle time reduction. So, in 2003, the management of New Urban Builders set out to look at a variety of possible solutions, but they were prudent when shopping for and planning their software update. Like any builder who reads the leading trade magazines or attends conferences, New Urban Builders heard horror stories of builders who had rushed upgrades and database conversions, only to have the rush turn into long delays, unexpected costs, and painful tearouts. So, New Urban Builders picked their solutions with great care and even then decided on a multi-month, step-by-step implementation that would allow them to activate increasingly sophisticated functionality as

workflow templates were built out and their processes carefully mapped.

Step One: Drop QuickBooks Pro®

The first step New Urban Builders took in their upgrade path was to drop QuickBooks Pro®. Though it has acceptable accounting, there was no way to bring a process-driven workflow template to QuickBooks Pro®. Without a process-driven system layered on top of QuickBooks Pro®, all the accounting data contained in QuickBooks Pro® was forever static. Sticking with QuickBooks Pro® would have made it hard to "push" data access into the field, and equally difficult for field workers (e.g. site supervisors) to reach from the field into QuickBooks Pro®, as they updated their minute-by-minute, job-by-job activities. Yet everyone knows that the field is where the workflow data exists (orders, sign-offs, schedule updates). So, even the best accounting system can be nothing more than a historical record of data, a static repository. Accordingly, the accounting system should not be the center of any workflow management system, but the record of what has transpired as the workflow progresses.

New Urban Builders replaced their accounting system with Sage Timberline® Office. It took six full months to map their old data out of QuickBooks Pro® into Sage Timberline® and that was by far the hardest and most painful aspect of the upgrade. Once they had that data in Sage Timberline®, Sage Timberline® had to be "accessorized" with a process-driven template that would bring utility to the data, by allowing people along the critical path of building houses (subs, supers, estimating, warranty management, and customer service) to extract and update Sage Timberline's® ERP data and motivate the accounting system to be responsive with information as the schedule changed.

Step Two: Adopt Workflow Management Linked to a Core ERP

As New Urban Builders set out to find a workflow management software system to wrap around and accessorize Sage Timberline® with critical path management, the company made another critical decision. They were determined not to proliferate databases. So, for the added functionality that they required—especially the transacting of job-site level data between the back office, sales, and the supers—New Urban Builders wanted all the data captured in their central Sage Timberline® ERP database. There are many stand-alone sales software systems available and even a few critical path schedulers, the same for warranty management and reports. But, many of these

systems don't have the ability to integrate directly with Sage Timberline®, and costly custom code is required to map the data from one system to another. (When software versions change on these various extraneous systems, even more custom code is required so all the modules of the system can speak with one another.)

As a sophisticated \$20 million company, New Urban Builders didn't want to cobble together its software solution; it wanted a future-ready, professional-grade system with multiple modules of functionality. So, after a search of competitive landscape, New Urban Builders settled on BuilderMT to drive its processes and manage its workflow. BuilderMT's Workflow Management Suite includes Scheduling & Wireless Scheduling, Purchasing, Sales Pricing, Warranty Management and Sage Timberline's® ProStart Estimating database. These BuilderMT modules work in concert with one another, as they draw off one authoritative database: the Sage Timberline® ERP system. (BuilderMT is one of only two "Master Developers" in North America, and their ability to seamlessly collaborate is legendary.)

Step Three: Work Your Plan

To create the schedule that BuilderMT would proliferate across all of New Urban Builders' various departments employees and allied trades, New Urban Builders took time to collectively assemble their various stakeholders to understand their concerns and expertise: lead times were examined, and subs shared their expectations and schedule tolerances. "We built models, collectively, as staff exercise," said Dave Wallace of New Urban Builders. "After we were done, purchasing, warranty, supers—everyone bought into a master set of templates, which we built directly into BuilderMT. BuilderMT takes the schedule and populates each job record, including the various wireless devices in the field, and everyone with authorization sees the information. But the super drives the job; that's the key. Indeed, he is the only one with sign-off capability for POs and payment. And he can drive it from his BlackBerry®."

New Urban Builders also loaded quality control (QC) checklists on their supers' BlackBerry® wireless devices, and all purchase orders are driven exclusively by those QC checklists. All invoices and payments are tied to those QC checklists as well. The super is the only one who has the authority to approve a work stage, and thereby approve payment. If a work stage meets the criteria set up by the quality control checklist, then the work stage can be approved, and the purchase order gets converted to an authorization-to-pay for the vendor or sub. If the work stage is incomplete, e.g. "masking tape not removed by painter at 171 Boulevard," then the service vendor or sub is sent a punchlist or variance message, which he has to respond to get paid. Payment cannot be triggered from the ERP system, unless the super approves the work stage. But once it is approved, all the required ERP data populates the required data fields in Sage Timberline® Accounting, keeping records straight. The BuilderMT-Sage Timberline® relationship is one seamless, dynamic, integrated system, driven by the work stage on the schedule. With a wireless scheduling and checklist-driven processes run from the field, New Urban Builders is able to pay their subs net 15 days.

Step Four: Reap the Rewards - Dramatic Cycle Time Reduction

Soon after implementation of these workflow processes, through paperless purchase orders and wireless scheduling, New Urban Builders dropped their cycle time from between 220 and 250 days/home down to 155 days/home, dramatically affecting their bottom line by lopping up to 95 days of carrying costs per home off their books. (It doesn't take much math to calculate that a 95-day reduction in cycle time, when multiplied across 80 starts, can save any company a bucket-load of money.) The company is now moving toward 135 days/home cycle time, and they think they will achieve that easily in 2007.

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In addition to costs reduced through shorter cycle times, New Urban Builders has a cost-avoidance on future staffing, because they have the capacity to increase their starts without increasing their staff loads. The processes built into BuilderMT-Sage Timberline® have a collective, expert intelligence that allows New Urban Builders' systems to be run without a great deal of staff. Intelligence is embedded into the system; systems are automated. Today, New Urban Builders is built for growth, with a future-ready system that can grow as fast as they can.



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