

Oakwood Increases Efficiency and Sales

Home building is a complicated business that requires builders to manage thousands of bits of information in a consistent and reliable manner. Allow one key bit to slide sideways off the workflow chart, and the result can be an irate customer, meager profit, and stressed relations with the trades.



For years, home builders have turned to software solutions to help them manage all this information as well as provide quality reporting to ensure they can manage their businesses. But there has been a problem. While those solutions could improve individual areas of operations—sales for example, or production, or accounting—they could not tie all of them together in an integrated package that flowed the information seamlessly through the whole organization. And none of them could provide an interface that allowed that information to begin with input from the home buyer.

That was the problem Oakwood Homes and thousands of other builders faced. The Denver-based builder had adopted technology to become more efficient, but the available technologies didn't speak to each other and in many instances, the available technology was rudimentary.

- Sales offices used Microsoft Word , Excel, and FAST
- The Design Center use Pharaoh, FAST, and Excel
- Production relied on FAST and a paper distribution of purchase orders, schedules, plans, and specifications
- Accounting used Great Plains
- Warranty relied on FAST

Few of those systems spoke together and Oakwood found itself manually keying in data multiple times. Consequently, errors crept in. Change orders were nearly impossible to get right. Customers seldom saw the same information twice. Oakwood could not serve its buyers with the efficiency and level of service it desired, and it was hiring people to make up for the inability of the disparate systems to communicate. An integrated software solution remained as elusive as any mythical creature.

This case study looks at how Oakwood Homes solved those issues through the implementation of Sapphire Build. The result was a home building company able to grow without adding positions, and able to offer its buyers greater customization, and compete against national builders in a tough market.

Oakwood accomplished all that and created a dynamic web interface that differentiates it from every builder in the market. All part of the Sapphire Build package.



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SAPPHIRE™ Build

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SALES IMPLEMENTATION THAT CONTROLS THE PROCESS

Oakwood's initial motivation to switch their software systems to Sapphire Build came from the sales side. Oakwood had grown to a point when it could no longer rely on the data being collected on circle sheets and forms, then hand-entered into a separate database. The situation had become rife with errors. "We knew we had to create a system that interacted with buyers and sales people and tie into our production," says Frank Walker, Oakwood Vice President of Operations.

Sales people had to interpret buyers' needs and document them in a confusion of paperwork that was sent to the central office where administrative people struggled to read the notes and enter them into a database that would be available for the design center and production.

"If you think of those systems as touch points for people in the office, says Walker.

"One is, it's very time consuming. And, two, it's very labor intensive in terms of the number of people we have. Now, you can do it, if you're building 150 to 200 homes. You just sit down and gut through it. But when you start to get into the number of homes we were doing when we decided to make the switch [700 to 900], we just couldn't do it. So, we kept growing staff to

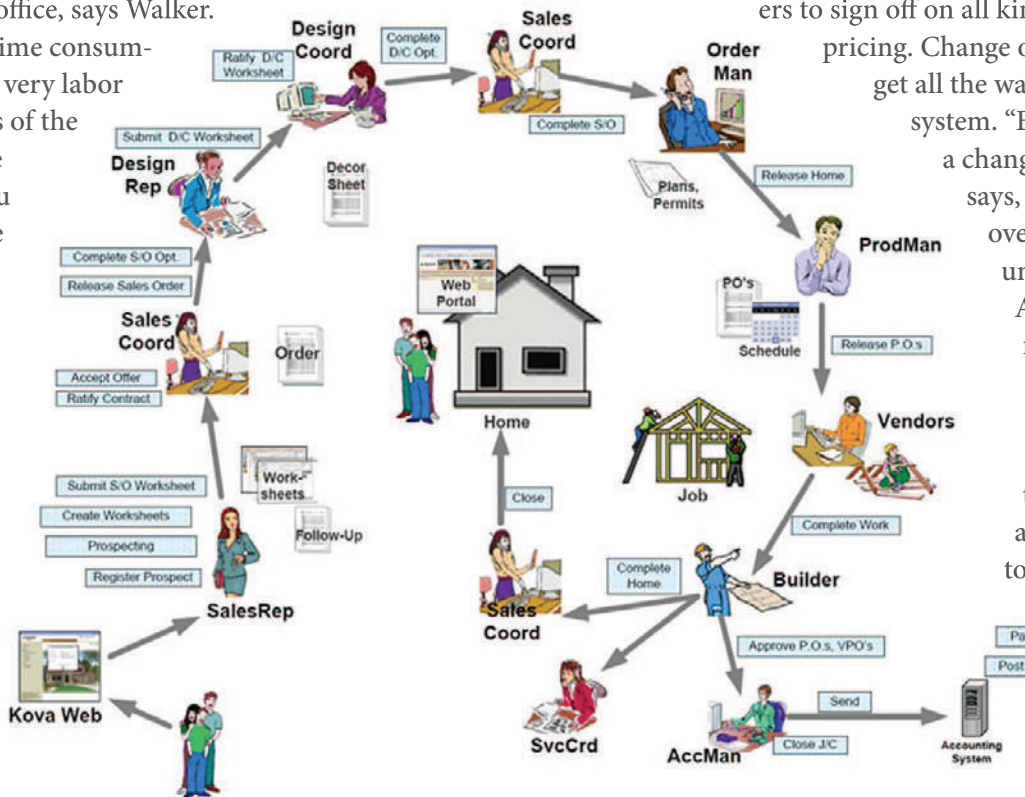
accommodate all the systems. That translated into overhead and people space issues. We had a 25,000 square foot building, and we were running out of space."

Oakwood had to figure out if there were a better way to eliminate the touch points, a way to enter the data once and provide access to the same data for everyone in the company. Sapphire supplied that solution.

And there was another motivation to change their system. Kristen White, Director of Sales and Marketing, explains. "For our buyer it was not seamless at all. The buyer would go to the sales center and write a contract, and that contract would get sent to the design center. The buyer would go to the design center to pick options, and the only thing the design center had to go off was whatever was faxed to them." In the meantime, there may have been two or three change orders for small things, such as outlets or ceiling lights, that the design center didn't get copied on. Closing

coordinators, consequently, were asking buyers to sign off on all kinds of wrong pricing. Change orders could not get all the way through the system. "Every time we did a change order," White says, "We felt like we overpromised and underdelivered." And it was a lot of rework as well.

So what did implementing the Sapphire system allow Oakwood to do? First off, it eliminated the cumbersome forms and circle sheets,



The Sapphire Build Process

Timeline...

Implement Sapphire
Build for Sales
2007

Began implementation
of Web presence
August 2007

Start Doing
Custom Designs
2008

Go Live with
3 Communities
January 2009

A simple online registration card begins a sophisticated marketing, design, production, and accounting management process.

but more importantly, it gave a single start point for all data in the system. Originally, Oakwood sales people would complete registration cards for all prospects and send them to the office on Monday, where a marketing person would load the information into the marketing database. After Sapphire implementation, sales people would enter the registration information in Sapphire and marketing would have access to it immediately. So, if there were an email blast going out that afternoon, new prospects would be included as well.

There also was only one record in the system. If a prospect visited two communities and was registered in one, the sales person at the other community could go online, see the notes from the previous community and append her notes and information to the same record.

Sapphire also provided a complete workflow for sales and marketing personnel that allowed them to create reach-outs for customers, such as notifications of special events, updates to communities, and other parts of the sales and marketing process. When marketing sends out a blast to prospects, the sales person receives a notification that their prospect received something from Oakwood.

Automated workflows prompt sales people to send thank-yous, place phone calls, and send other letters. Oakwood has loaded standardized letters, which makes that process simpler, but many of the sales people prefer letters they have crafted. Not only does the system allow simple upload of customized letters, it allows sales people to share particularly effective letters among each other.

The one-record, one-database system is essential to the seamless operation of Sapphire Build. When fully implemented, which Oakwood eventually achieved, the one record allowed every person accessing the database—sales, marketing, production, accounting, warranty—to see all the notes from all the players in the system. There was complete confidence that no other note, change or comment was lurking outside the system. Everything was in one record.

Implementing such a system requires the staff to buy in, and according to White, one of the obstacles Oakwood needed to overcome was the acceptance by sales people of a new registration system. Entering their own registration cards or having the prospects do it was foreign to the sales people. To overcome potential objections, White and her

Every employee has access to buyer information and can add notes and more information.

...Timeline

Move Accounting system to
Microsoft Dynamics
January 2009

Implement Portal
for Vendors
August 2009

Implement Sapphire
in Design Center
October 2009

Implement all outward
Communication strategy
March 2011

LESSONS LEARNED

During the implementation process for Sapphire Build, there are two major lessons learned by Oakwood Homes. The first is that they could have moved much faster implementing the system than they did. As many at Oakwood have said, they took quick baby steps.

The second lesson learned occurred primarily on the database side during the transfer. Moving from FAST to Sapphire Build involved some system similarities, but significant differences as well. According to Scott Saucke, among the similarities is that both systems use groups and activities, and since he had good protocols for those items, he could move them to Sapphire relatively simply. But because management did not want to reengage purchasing and put items out for bid again, he had to transfer data that included things such as pricing into a format that was based on a built item, not an object.

The only way to accomplish this task was to build the database manually for all the options.

“Sapphire will teach you how to use the system,” Saucke says, “but they don’t know your data.... You have to teach Sapphire what the data is and about your company.”

“I did not ask to plug the cable into the old system and plug the cable in the new system, and move the data over,” Saucke says.

team selected specific sales teams to roll it out to teams who were more likely to accept the change easily. Then, when they did roll it out, they followed up quickly with a lot of marketing, so the sales people could easily see the value of the real-time information.

The implementation of a quality customer relationship management system through Sapphire allowed Oakwood to reduce the errors that had crept in, because its cumbersome legacy systems were overwhelmed by work. Now, change orders made it to the design center intact and on time.

For buyers, the system became clearer and more obvious. Something as simple as consistent formatting of contracts and change orders allowed them to have greater confidence that Oakwood was controlling the process and delivering what they said they would.

Because of these simple changes, Oakwood eliminated two sales support positions and currently employs no sales administrative people. Sapphire handles it all.

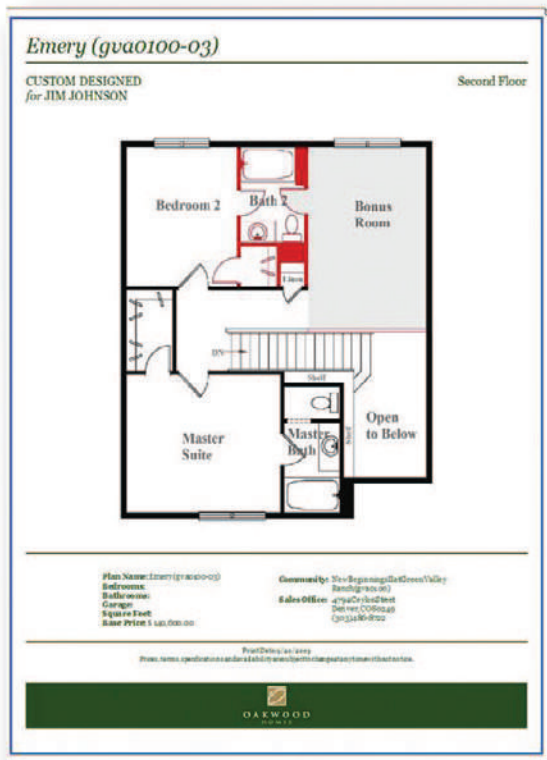
A GAME-CHANGING WEB INTERFACE

The implementation of the Customer Relationship Management module of Sapphire Build made a huge operational difference, but it was the implementation of the Sapphire Web-Pro module that differentiated and changed Oakwood for its buyers. Their experience now was unique to Oakwood.

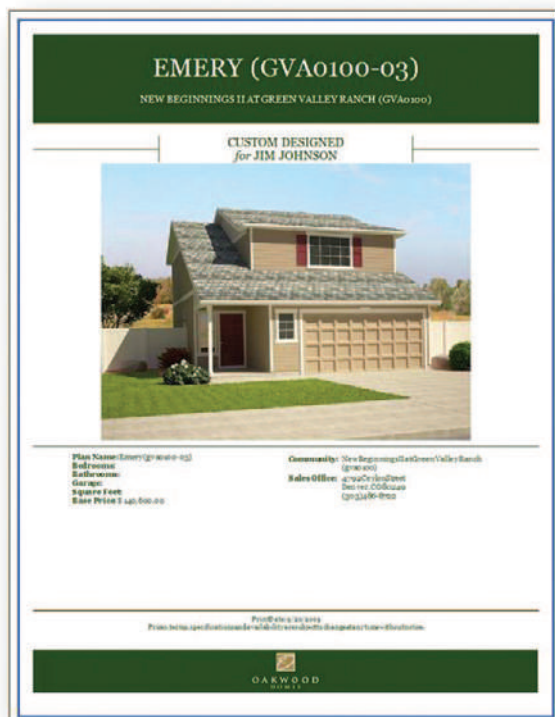
The WebPro interface allows prospects to select models and options on the Oakwood website, designing the home they want. They then can print a brochure and bring it into the sales office. Of course, to print a brochure, they need to complete a registration form, which creates a record for them in the database.

“We actually have had first-time buyers come out to the sales office with the plan printed they want to buy,” White says. “And they did that on their own. Added all their options. Looked at all the plans.... A lot of times the same person would go in and play around, then print two or three different plans.”

Even buyers who find the sales office first, end up going to the website to play with the plans. White estimates that 80 to 90 percent of buyers build plans on the website before they write a contract. It is not unusual for buyers to work with a sales person on one of the plasma screens that are set



Buyers can select communities, models, and options online. Then they can print brochures that show their selection. To do so, they have to provide contact information, which becomes the registration card.



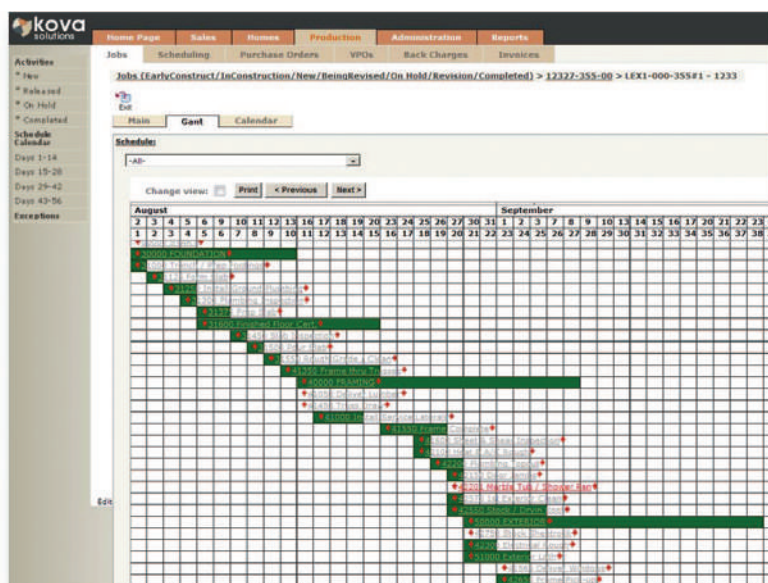
up at the sales offices to design their home. White also notes that people enjoy being able to control the process themselves. "They can see how much they can do on their own instead of feeling like they're in the sales office and being a burden on the sales person."

The design and option data are attached to the record created during registration, making the interaction of information at Oakwood seamless. There are no silos of information between sales and the design center; between the design center and production; between production and accounting. Everything flows from a single source of information.

MEASURES OF SUCCESS

Oakwood realized a significant number of improvements in operation as well as increased efficiencies. Here are some of the metrics as a result of implementing the Sapphire Build software.

- Increased production from 350 to 404 annual closings with no additional staff, and management predicts 600 closings is possible without increasing staff size
- Eliminated all sales support systems
- Because of the ease of comparing contracts, took closing department from 3 people to 2
- Eliminated 8 customer care positions, because all warranty and customer care can now be handled by builders
- Average buyer increased design center spending \$2,000
- Reduced turnaround time for posting new plans for vendors from approximately 5 weeks to 2 weeks
- Eliminated 2 positions in accounting because ease of entry: 1 accounts payable clerk and 1 bookkeeper



Dynamic scheduling software flows simply from a single database with defined solutions.

Scott Saucke oversees the databases at Oakwood. His team imported community, model and option data from the old database (as well as manually built the Sapphire database), and one of the major benefits the team has seen already is that Saucke can ensure that options that are unavailable on particular models or even particular lots do not appear as available to the buyer. “It allows me to present a home to sales people where they don’t have to think,” says Saucke. “For example, if it’s a stone house, I don’t show them brick selections. They don’t need to see it.... So, now sales people can concentrate on selling the house. Sapphire is mega loaded with option-rule capacity and deep with abilities in what it does. It never ceases to amaze me what it can do.”

Another advantage extends beyond just simple model options. Many builders must face monotony laws that require varieties of elevations on the streetscape. At Oakwood, buyers interested in lot 54 do not get the option to choose the Franklin Model if that has been selected for a nearby lot.

Even more dynamic is the “option on an option” problem that builders face. Every option has consequences in pricing, production, and invoicing. Change a master closet to a walk-in closet and that will

affect framing, door sizes, electrical outlet locations and more. Just from a simple change. But if you select an option on that option, other databases don’t flow the information through for production and change orders often get caught in the field when it is too late and too expensive to adjust easily.

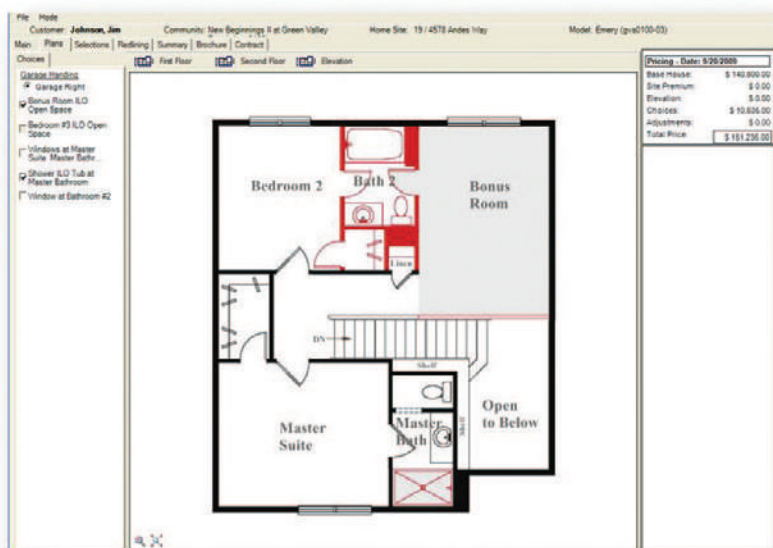
In March 2009, Oakwood came out with a new product to meet customer demand for smaller homes and better prices. The WebPro option allowed the company to roll out the product before building a model. “We put it on our website and gave it to our sales people,” White says, “and that plan accounted for 60 percent of our closings in 2009 without ever having a physical plan.... We can have renderings and virtual tours in Sapphire for plans that we’ve never actually built.”

The design interface does more than just let buyers customize their home. They also can see how their changes affect the price of the home. This feature is particularly important in the design center where there are thousands of options that can be overwhelming. According to Jenna Maxwell, who oversees two 10,000 square-foot design centers in Denver and Colorado Springs, buyers can now sit at a monitor with a design center consultant and work through the selection process systematically and, in real time and real dollars, know the effect of their decisions. It is also possible to tie that information directly into a mortgage calculator, so they can see how their decisions affect their monthly mortgage payments.

Previously, option selections would be completed at the sales center, using circle sheets that then were hand-entered into the Pharaoh software system the design center used.

Select Community	Batch	Address	Act	Activity	Status	Dur.	Start	Finish
<input type="checkbox"/> New Beginnings II at Green Valley Ranch (gva0100)	gva0158a	4629 Argonne Street	83030	Plumbing Rough	Released	2	8/7/2009	8/10/2009
<input type="checkbox"/> New Beginnings II at Thompson River Ranch (tra0100)	tra0101a	3919 Cedarwood Lane	82020	Plumbing Rough	Released	2	8/12/2009	8/13/2009
<input type="checkbox"/> New Beginnings at Thompson River Ranch (37400)	37401f	3855 Heatherwood Circle	83030	Plumbing Rough	Released	2	8/31/2009	9/1/2009
<input type="checkbox"/> New Beginnings II at Thompson River Ranch (tra0100)	tra0101a	3912 Beechwood Lane	82020	Plumbing Rough	Released	2	9/1/2009	9/2/2009

A vendor portal allows trades to keep track of job schedules and purchase orders.



A refined interface allows Oakwood Homes to transfer from production homes with limited options to true custom home building.

Change orders or changes to options would come through at different times requiring updating the database. If the buyer showed up at the design center before the changes had been entered, Maxwell and her staff would end up not getting the pricing right or offering options that were unavailable because of previous selections. The real-time nature of Sapphire prevents this. Changes are entered in the database and nowhere else.

Even so, option selection could be incredibly time consuming and frustrating, if it weren't for another feature. "You can hover your mouse over options and it will show you renderings of what those options look like before you click," Maxwell says. "Buyers love it."

The result can be seen in the bottom line. According to Walker, the average buyer increased design center spending about \$2,000. "We have so much trouble getting price," he says. "We can get them to spend it at the design center with a 30 percent margin. It's a way to raise prices without raising prices."

BETTER INFORMATION STREAMLINES PRODUCTION

Oakwood has gained even more efficiencies on the production side. After implementing Sapphire in sales, on the web and in the design center, Oakwood built portals for its trade contractors to make it easier to interact and get bidding, estimating, and invoicing. "We now post all the plans on the website as soon as we issue IDs for the new community," Walker says. "Trade contractors can download the plans and print out just their sheets. They prepare the

estimates, enter the numbers to the bid request forms generated by Sapphire and e-mail them back to us to review prior them being uploaded to the system."

That implementation changed the turnaround time for getting estimates on new plans from about five weeks to two weeks. Plus, it didn't require Oakwood estimators to keep calling and hounding trades for their data.

The seamlessness and lack of change-order problems has had another consequence. "Because the documents are correct," says Walker, "builders do all the warranty and customer care." Homeowners submit issues through the website; Oakwood contacts them, and schedules an appointment. The builder looks at the issues then sends them along to the vendors. The turnaround time from initial request to follow up is about four days.

FROM OPTIONS TO TRUE CUSTOMIZATION

The ease with which the new system handles change orders and options created a new and unexpected dynamic for Oakwood. In a market dominated by large, national builders, Oakwood could now differentiate itself by offering more options and even customization, while continuing to deliver high customer satisfaction.

"We went from hoping to do regular change orders right to be able to do custom change orders without any hiccups," says White. A typical scenario would involve a buyer who likes a specific plan, but who wants a larger master suite which wasn't offered. Sales can take the request and submit it to product development, which comes back with a drawing. Purchasing delivers a price, and sales gives it to the buyer. If the buyer agrees, sales makes the contract and the custom change flows through the system seamlessly.

Oakwood can even roll out common requests as standardized options and take them to market quicker.

REAL-TIME REPORTING PROVIDES CONTROL

Communication among staff and trades has streamlined Oakwood's operations. Engaging buyers at the emotional level also helps the company improve sales and meet customer expectations. But the backbone of a home building company is the accounting, purchasing, and management functions that provide the necessary environment for

those other arenas to thrive. Without efficient accounting processes, trades don't get paid on time and their devotion begins to waver, making it more difficult to deliver services.

According to Walker, the greatest benefit of Sapphire is that it is a seamless system with a single database that "nobody can get their fingerprints on." On the accounting side, Sapphire works with Microsoft Dynamics seamlessly as well. The integration of the two databases is perfectly matched with one field duplicating another.

For Oakwood, this meant that its switch from FAST to Sapphire Build gave it the ability to take advantage of the much more robust accounting and reporting mechanisms of Microsoft Dynamics.

There is still only one data entry. Once the vendor is set up, the accounts are automatically updated from Sapphire, so there is no need to duplicate vendor set up. The same is true of payments and journal entries. Oakwood established templates in Sapphire that automatically enter information in the accounting system for things such as job costing.

Walker explains that Oakwood used to be on an even flow production system but now uses an authorized start system. Even so, the 47-day build schedule is tight and reliable. The ease of the Sapphire system allows accounting, then, to do a cash-flow forecast which most builders can't do.

The use of Sapphire and vendor portals also has allowed the accounting department to stop having to field calls from vendors about when they will be paid. Walker elaborates. "Instead of vendors coming to us to ask for information, we drive everything out. When we first implemented, gas was at \$4, and we had vendors driving to get PO's signed by builders in the field. When the job is done, now they click on the PO. We don't have vendors driving around, and it saves them money."

The lack of phone calls has helped free up the accounts payable person to be able to execute the job, rather than fielding inquiries.

The accounting system uses an easily managed reporting mechanism that allows owners and managers to set up dashboards, giving them the essential information they need to manage the business while not overwhelming them with information that is outside their key work areas. These reports are set up automatically, and don't require anybody to pull them together on a weekly or monthly basis.

JOB COST REPORT

#gva0158-002-0019#1
Date:3/20/2009

OAKWOOD HOMES

Job#: gva0158-002-0019
Model: Emory (gva0100-03)
Delivery Address: 4578 Andrus Way
Denver, CO 80249

Act	Budget Base	Budget S/O Opt.	Budget D/C Opt.	Variance	On Order	Paid	Proj. Total
81045-Systems Development Fees	\$ 5,100.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 5,100.00	\$ 0.00	\$ 5,100.00
81060-Water & Sewer Tap Fees	\$ 2,830.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 2,830.00	\$ 0.00	\$ 2,830.00
81070-Water Tap Fee #	\$ 2,898.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 2,898.00	\$ 0.00	\$ 2,898.00
81075-Site Specific Engineering	\$ 100.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 100.00	\$ 0.00	\$ 100.00
81080-Building Permit	\$ 1,137.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,137.00	\$ 0.00	\$ 1,137.00
81115-Impact Fees	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
81120-School Impact Fee	\$ 500.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 500.00	\$ 0.00	\$ 500.00
81140-Plot Plan	\$ 105.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 105.00	\$ 0.00	\$ 105.00
81150-Stake Lot	\$ 100.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 100.00	\$ 0.00	\$ 100.00
81154-Erosion Control Blankets	\$ 95.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 112.00	\$ 0.00	\$ 112.00
81155-Landscaping Fee	\$ 1,500.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,500.00	\$ 0.00	\$ 1,500.00
81160-Oakwood's Customer Care	\$ 1,200.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,200.00	\$ 0.00	\$ 1,200.00
81165-GVR Golf Club	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
81210-Excavate #1	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
81260-Foundation Form Check	\$ 65.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 65.00	\$ 0.00	\$ 65.00
81310-Water and Sewer Laterals	\$ 1,160.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,160.00	\$ 0.00	\$ 1,160.00
81610-Build Pads	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
81850-Front Yards Inspection	\$ 85.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 85.00	\$ 0.00	\$ 85.00
81715-Ground Copper Plumbing #1	\$ 718.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 718.00	\$ 0.00	\$ 718.00
81760-Ground Electrical	\$ 50.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 50.00	\$ 0.00	\$ 50.00
81760-PT Cables Placement Insp	\$ 85.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 85.00	\$ 0.00	\$ 85.00
81790-Foundation - PT Slab	\$ 5,913.63	\$ 200.00	\$ 0.00	\$ 0.00	\$ 6,113.63	\$ 0.00	\$ 6,113.63
81805-PT Cables Stressing Insp	\$ 85.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 85.00	\$ 0.00	\$ 85.00
81810-Grade Lot to PT Slab	\$ 285.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 285.00	\$ 0.00	\$ 285.00
81850-Utility Conduit #1	\$ 165.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 165.00	\$ 0.00	\$ 165.00
81920-Driveway Paving	\$ 1,004.00	\$ (9,076.00)	\$ 0.00	\$ 0.00	\$ (8,072.00)	\$ 0.00	\$ (8,072.00)
81950-Order Foundation Survey	\$ 90.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 90.00	\$ 0.00	\$ 90.00
82090-Drop Steel Beams and Posts	\$ 288.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 288.00	\$ 0.00	\$ 288.00
82130-Drop Wall Panels	\$ 6,841.00	\$ 275.00	\$ 0.00	\$ 0.00	\$ 7,116.00	\$ 0.00	\$ 7,116.00
82160-Frame Turnkey Fee	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
82160-Drop Lumber Pack	\$ 4,530.00	\$ 745.00	\$ 0.00	\$ 0.00	\$ 5,275.00	\$ 0.00	\$ 5,275.00
82200-Frame Walls 100%	\$ 1,316.00	\$ 250.00	\$ 0.00	\$ 0.00	\$ 1,566.00	\$ 0.00	\$ 1,566.00
82230-Install Stairs	\$ 297.74	\$ 0.00	\$ 0.00	\$ 0.00	\$ 297.74	\$ 0.00	\$ 297.74
82260-Drop Roof Truss	\$ 3,960.00	\$ 448.00	\$ 0.00	\$ 0.00	\$ 4,408.00	\$ 0.00	\$ 4,408.00
82250-Install Siding and Trim	\$ 4,750.00	\$ 656.00	\$ 0.00	\$ 0.00	\$ 5,406.00	\$ 0.00	\$ 5,406.00
82300-Frame Roof 100%	\$ 1,146.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,146.00	\$ 0.00	\$ 1,146.00

All the data in Sapphire shows up-to-the minute conditions. That makes job costing reports dead-on accurate.

FOR MORE INFORMATION

Sapphire Build provides integrated software solutions for builders. Sapphire offers a unique, interactive experience for home buyers and builders, allowing builders to manage their complicated business by the efficient sharing of information, clear workflow management, improved customer relation experiences, and simpler reporting.

To learn more about Sapphire Build, please visit the website at www.sapphirebuild.com

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