

DATA & RESEARCH / JOE IAFIGLIOLA

# USING BIG DATA TO OPTIMIZE VENDOR NETWORKS

*Flexibility and agility are the best tools of a field services provider.*

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ngoing markets require companies to adapt with agility and speed, or they will be left behind as others adjust and take advantage of the situation. For example, consider the photography industry. Everything from cameras and film, to how people consume pictures changed with the advent of digital photography. However, some industry leaders didn't see how the world was changing around them. Their inability to acknowledge the digital wave and its impact on photography contributed to their demise. And, once they finally accepted digital was more than a trend, their competition was already firmly seated in the very market they had dominated for years. This scenario plays out in every industry every day. The field services arena is no different. As the industry matures, players need to be aware of how the world is changing around them, what is driving this change, and how to remain relevant.





	Sale	Buy	Grow
Gold	\$377.00	\$462.20	22.60%
Platinum	\$277.00	\$366.19	32.20%
Silver	\$501.00	\$516.02	3.00%
Copper	\$370.00	\$512.25	38.80%
Steel	\$491.00	\$643.21	31.00%
Beryllium	\$371.00	\$455.59	23.00%
Manganese	\$205.00	\$240.26	17.20%
Aluminum	\$539.00	\$678.05	25.80%
Chrome	\$592.00	\$820.51	38.60%
Nickel	\$574.00	\$697.98	21.60%
Bauxite	\$369.00	\$507.74	37.60%
Cotton	\$190.00	\$197.22	3.80%
Flax	\$280.00	\$284.48	1.60%
Textiles	\$107.00	\$116.63	9.00%
Wool	\$156.00	\$192.19	23.20%
Fur	\$290.00	\$316.40	13.00%
Sateen	\$181.00	\$197.65	9.20%
Silk	\$188.00	\$198.53	5.60%
Oil	\$794.00	\$1,105.25	39.20%
Gas	\$502.00	\$673.68	34.20%
Electric power	\$599.00	\$700.83	17.00%



Commodity	A	Manganese	B	Wool	E	Gold	Aluminum	Chrome	Steel	F
Gold	A	Manganese	B	Wool	E	Gold	Aluminum	Chrome	Steel	F
Platinum	B	Aluminum	V	Fur	GT	Platinum	Aluminum	Chrome	Steel	GT
Silver	A	Chrome	A	Sateen	A	Silver	Aluminum	Chrome	Steel	A
Copper	A	Steel	A	Electric power	AX	Copper	Aluminum	Chrome	Steel	AX
Steel	D	Electric power	A	Oil	B	Steel	Aluminum	Chrome	Steel	T
Beryllium	GT	Oil	GT	Gas	GT	Beryllium	Aluminum	Chrome	Steel	GT
Textiles	C	Gas	C	Electric power	C	Textiles	Aluminum	Chrome	Steel	C



*Changes seem to be coming from all directions.*

**TODAY'S REGULATORY ENVIRONMENT IS CONTINUALLY EVOLVING WITH NEW FEDERAL AND STATE OVERSIGHT.**

*Local municipalities also are enacting new ordinances and property registrations to deal with a shrinking tax base and the glut of vacant properties that dot our landscape today”*

Changes seem to be coming from all directions. Today's regulatory environment is continually evolving with new federal and state oversight. Local municipalities also are enacting new ordinances and property registrations to deal with a shrinking tax base and the glut of vacant properties that dot the landscape. Shifts in the market are changing the way field service companies look and function. A couple years ago, many field services companies worked from static reports. Now interactive visualization is used to create graphic illustrations of information to help companies better manage everything from compliance to workforce management.

They say necessity is the mother of invention, and nowhere is this truer than in the field services industry. The industry is in a transition era. It's being reshaped by the influence of strong economic, regulatory, and market forces; but the industry is also agile and is adapting at breakneck speed.

Investments in business intelligence, technology, and quality control are spurring innovations that were never thought of a couple years ago. These innovations are having a significant impact on the ability to manage the boots on the ground—the field services vendors who are working in our neighborhoods as the eyes and ears for mortgage servicers.

#### **APPLYING DATA TO FOSTER BUSINESS AGILITY**

Field services companies gather millions of data points into their systems every day from internal and external sources. Many are turning these nuggets of intelligence into actionable information that can maximize the efficiency of complex vendor networks, such as ensuring the correct number of vendors needed for each geographic region is recruited and those vendors have the necessary skill sets. Each time an order is completed, information is gathered and used for future analysis. For example, property condition reports and on-time order completion can be analyzed to determine contractor performance by geographic region. Work orders then can be allocated based on performance history to continuously improve the quality and timeliness of services provided to clients.

Data analytics also is being used to help clients make informed decisions about millions of vacant,

defaulted, and foreclosed properties across the country so they can proactively address property issues, cutting down on ordinance violations and neighbor complaints and eliminating blight. Safeguard Properties, one of the largest field services companies in the United States, reports 15 to 20 percent of the defaulted properties it inspects eventually become vacant or abandoned by their owners.

Mortgage companies are in a classic Catch-22 when it comes to vacant properties in their mortgage portfolios that have been abandoned by their owners but have not gone through the foreclosure process. Failure to identify and secure abandoned properties in a timely manner can expose these properties to vandalism and deterioration. On the other hand, securing a defaulted property in error, believing it to be vacant, can expose a mortgage servicer to potentially significant financial and legal liability.

Assuring inspections are thorough and inspectors proceed according to the most current status of the property is critical. Field services companies that are able to store and access a property's data history, such as property status, color, siding material, and architectural style, as well as the number of garages a home has, can improve the quality and accuracy of inspections.

But data can be misleading or drive the wrong decisions until it is turned into information. By integrating current data with historical data, predictive analytics can be applied to help identify trends and patterns to create agility in services and network capacity to meet changing market and client needs.

Today business intelligence has shifted the focus from having a simple overview of what's going on to now being able to deploy the data to discover causes, effects, and solutions. But it all starts by asking the simple question: "What do we need to know?" And then using data and technology to produce sound information to answer it.

#### **INTEGRATING DATA AND TECHNOLOGY TO OPTIMIZE EFFICIENCY AND LOWER COSTS**

The key combination necessary to grow and prosper in this new business landscape is the ability to integrate the millions of data points and turn them into intuitive displays of information. In fact, Gartner has forecasted an increase in information technology spending in 2014 that

will reach \$3.8 trillion. Strategic investment in technology is the real game-changer with expenditures in mobile technology leading the way. No longer must a vendor be tied to a desktop or laptop to upload reports and photos. Advances in wireless communication have severed the land line and offer vendors the freedom to complete their work anywhere.

As consolidation in the field services industry continues, more emphasis is being placed on efficiency, especially in managing vendors—the boots on the ground. Order workflow has taken on a strategic focus as technology is allowing decisions to be made at the property level. Heat maps that visually plot which contractors in an area have extra capacity help to determine where work orders should be funneled. Supply chain network designers utilize this information to determine where to issue work orders and to which vendors. This information is overlaid with vendor quality results to determine optimal order distribution. It also can alert to the need to change order flow and work distribution to another vendor, if for example, a vendor runs into a capacity issue related to a significant amount of work at a property and needs additional time before it can take another work order. Data analytics and heat maps can identify the next best choice and route work to a different vendor. Distribution of work orders verified by data analytics reduces time loss, leading to faster response times, improved compliance, higher quality of work, and ultimately, reduced costs.

For clients, this efficiency also translates into a higher return on their investments in the form of lower field service costs. As banks place more and more emphasis on reinvesting in vacant properties and getting squeezed by compliance burdens, field service companies need to be cognizant of this new dynamic and savvy enough to integrate data from the field with technology to create processes that optimize efficiency.

#### **SELF-AUDITS: IMPROVING PERFORMANCE AND SATISFYING REGULATORS**

Although market conditions have evened out as the country appears to leave the financial crisis behind, the rules of the mortgage game are still changing. New and tighter regulations are squeezing an already highly-regulated mortgage industry, putting players at greater risk than previously experienced. This scrutiny not only

affects mortgage companies, but also cascades down to field services companies and their vendors and employees. But it doesn't stop there. It cascades further down to sub-vendors who must also comply with all regulatory requirements.

Field services companies are finding themselves in a unique position to help their servicing clients maneuver through myriad of government regulations, as well as strengthen their own risk-management requirements. Servicers today must document nearly every process to demonstrate compliance. To monitor and ensure compliance with internal policies and external regulatory requirements, companies not only audit their own processes and outcomes, but also those of their vendors and suppliers. And this has never been more important than in today's mortgage servicing business.

The ability to maintain compliance ultimately rests on having sound processes. What processes are in place to ensure client and customer confidentiality? Are vendors and their subs licensed in the various municipalities in which they are working? Are work orders being distributed in the most efficient way possible? The list goes on and on.

Vendor audits add another level of oversight and are a useful tool in developing competencies that can help vendors complete work accurately and on time.

A strong focus on compliance and quality control procedures helps assure all parties involved—vendors, field services companies, mortgage servicers, and investors—comply with all regulations and ordinances. This protects the condition and value of vacant and abandoned properties, upholds the value and integrity of surrounding properties and neighborhoods, and protects the most fragile communities from expanding blight.

Being agile in today's business world means being adaptable. It means managing ever-evolving needs and regulations. It means creating nimble operations that can see the forest through the trees as market conditions shift. The common thread that spans the field services industry is that property and neighborhood preservation will continue to be vital to the servicing industry; and data, technology, and compliance are the new forces driving the field services companies that will succeed in this new world. **ES**

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