



Rethinking the Homebuilding Supply Chain

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INTRO

For far too long, the homebuilding industry has failed to harness its economic purchasing power to drive down the costs of construction materials. While there are many reasons for this, the primary culprit has been the industry's reliance on divisional purchasing autonomy. The approach utilizes geographically-specific distribution channels, which determine prices at a local level, and a rebate program.

The strategy neglects economies of scale that homebuilders could leverage by purchasing materials collectively across the enterprise. But how can you do this? After countless interviews with homebuilders, research into solutions, and multiple implementations of JDE Homebuilder, we've developed a new strategy that rethinks and improves materials sourcing and purchasing.

We'd like to introduce the Homebuilder Supply Company (HSC). This is a free-standing entity within enterprise-level organizations responsible for sourcing and procuring construction materials. The HSC incorporates both new business processes and cloud-based technology to automate and manage much of the procurement and planning work. It's a wholly new approach to the homebuilder supply chain—and one that we think is truly transformational.



A NEW VISION

ONE OF THE PRIMARY GOALS

of an HSC is to increase the visibility builders have into the material costs of home construction, without disrupting the overall construction process. To execute the strategy, builders need to implement new and innovative business processes including demand and supply planning, order management, materials

management, procurement, transportation, warehousing, and product data management. They also need to change existing business processes. For instance, implementing an HSC requires a switch in purchasing techniques managed by the JDE Homebuilding module from bid contracts to material purchasing and takeoffs.



DEFINING SUCCESS

ESTABLISHING A DEFINITION of success is a critical element of this transformation. In our interviews, the majority of homebuilding executives were aligned on what a successful HSC entails.

Our definition of success includes:

Improved gross margin contribution thru lower construction material costs

Improved or neutral impact to home construction cycle times

Improved visibility and reporting to construction material costs

Improved proficiency of organization in managing a more detailed costing mode

To achieve these, homebuilders need to:

Track key metrics such as GM% and cycle times

Implement transformational future state business processes across the organization

Ensure user adoption and alignment, as well as quantify impact the HSC has on their daily responsibilities



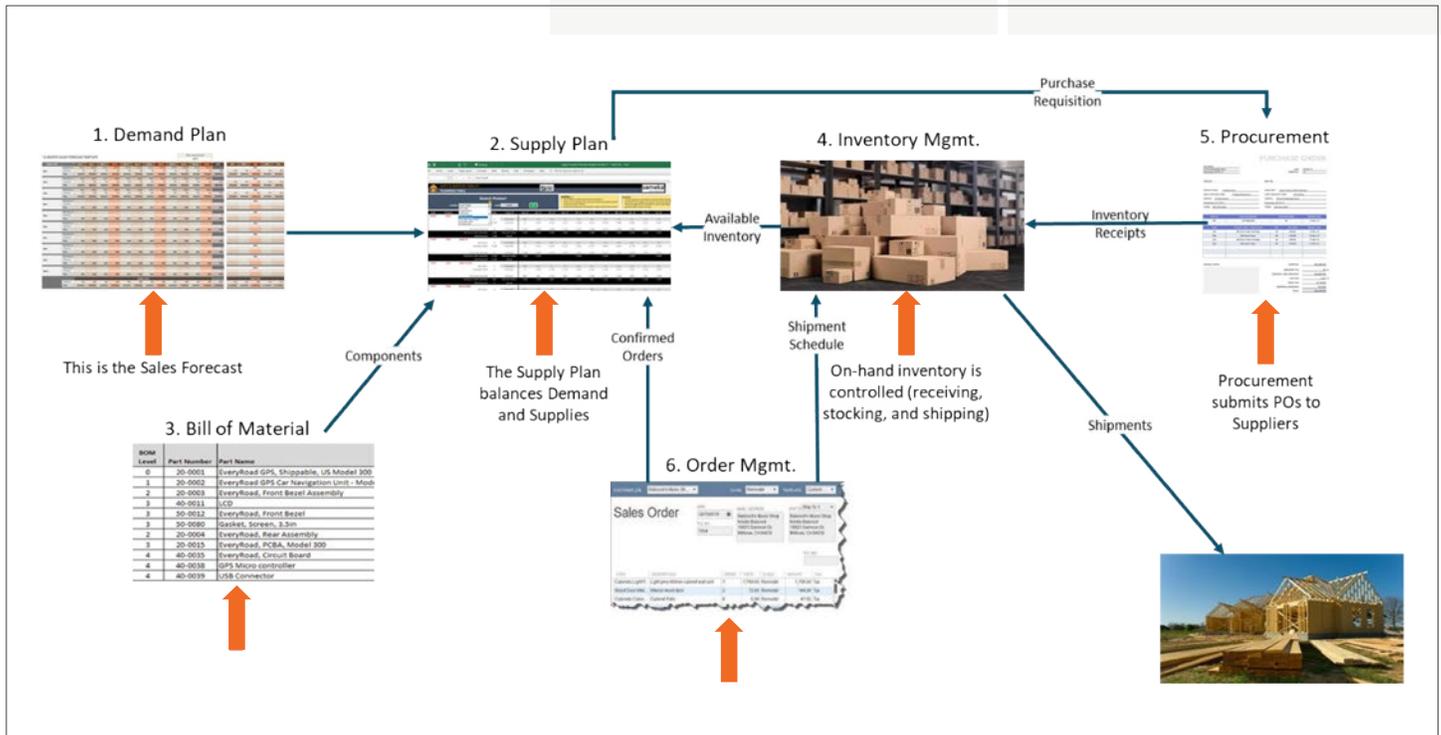
SUPPORTING FUNCTIONS

THE HSC'S OBJECTIVE is to serve as a distribution company within the larger enterprise that specializes in homebuilding materials. The driving motivation: Acquiring supplies at lower costs and delivering them on time to customers aka builders in the field. HSCs achieve these lower material costs by negotiating larger and long-term contracts with suppliers. The HSCs can do this because of the insights they have into immediate, near-term, and long-term demand across the organization.

Effective supply, distribution, and transportation planning is essential to ensuring that the HSC delivers materials based on home build schedules. The HSC procures, stocks, positions, and transports supplies at the correct times, incorporating the following business functions:

- Financials
- Order Management
- Demand Planning
- Supply Planning
- Distribution Planning

- Transportation Planning
- Materials Management
- Warehouse Management
- Procurement





THE IMPACT ON THE JDE HOMEBUILDER APPLICATIONS

A COMPONENT OF THIS SOLUTION is the configuration and output related to the JDE Homebuilding application currently used throughout the industry. As homebuilders incorporate HSCs, E1 Homebuilder remains the application responsible for a home's material orders, which it generates and sends to the supply chain applications. To facilitate the new order processes, the E1 applications, versions, data, and processes need to be adjusted.

The primary change to the JDE Homebuilder environment is a shift from bid contracts to the material handling procurement methods handled by the Homebuilder product. Many builders already incorporate this technique; however, bid contracts or turnkey contracts are still the primary way most builders engage with their suppliers. The material handling solution requires three components: item master, item price and material takeoffs. To add another wrinkle, there is functionality with the E1 version of Homebuilder that supports national purchasing. This functionality does not exist in JDE World. This would be a powerful feature and should be considered as another reason to upgrade to the Homebuilder software.

The item master is straight forward, and so are the material pricing tables. The integration between these two tables and the HSC Cloud solution is another key consideration. This allows the HSC to push new items and products to the Homebuilding

product, while also minimizing the ongoing maintenance of the solution. You can achieve the latter by synchronizing the pricing from the cloud to Homebuilder. The last and most labor-intensive step is to setup the material takeoffs. Think of this as the bill of materials for the home. By plan, elevation and option, the Homebuilder group details the quantities required for the new items procured by HSC.

Then we let the JDE Homebuilder application work its magic. When we start a lot, instead of creating a turnkey subcontract, the system creates a material PO to the HSC entity. For most builders, this then flows up to Hyphen's BuildPro solution for scheduling. Once this is completed, the PO will move to Hyphen's SupplyPro. At this point, we create the integration between SupplyPro and Order Management Cloud. As the HSC fulfills the order, we send additional product and shipping back to both SupplyPro and JDE Homebuilder to close the loop on this process.



FINDING THE RIGHT SOLUTION

THERE ARE A MULTITUDE OF FACTORS that go into any type of technology recommendation. ArganoCSS and the homebuilder community have worked together collaboratively to describe and define the requirements of an HSC. The HSC supports the business processes necessary to create a modern homebuilding supply organization. With all these factors in mind, ArganoCSS recommends that organizations using an HSC implement a SaaS based Supply Chain Management solution. Based on our experience, an end-to-end Oracle Cloud solution is the best match.

There is no one way to structure a project. The right way is what satisfies the needs of the customer. Products can be changed, project timelines can be expanded or contracted, and business processes can be implemented in different orders to fundamentally change the overall project plan.

As ArganoCSS reviewed all the requirements for a successful HSC, it became clear that Oracle's Financial Cloud, Procurement Cloud, Supply Chain Cloud, and Logistics Cloud applications can help execute this transformational vision. Many factors went into this decision. First was giving the HSC concept a modern, future-proofed architecture. Next, we created an architecture that was simple and integrated. We wanted to remove as much technology overhead as possible. Lastly, we structured the project to be the quickest, eliminating any undue risk from the project plan.



LOOKING AHEAD

HOMEBUILDERS CAN TURN A KEY COMPONENT of their business—the sourcing and procurement of construction materials—into a distinct competitive advantage. By implementing an HSC, national homebuilding companies can decrease their materials expense, improve visibility into their supply chain and ultimately improve customer satisfaction. Jobs run tighter, estimates are more accurate and delivering on schedule becomes that much easier. Distributed, siloed materials purchasing is how homebuilders have survived until now. The HSC presents the path to a brighter, more successful future.

INTERESTED IN
LEARNING MORE
ABOUT ARGANOCSS'S
HSC CONCEPT?



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