

# Independent Logistics Consultants Provide Critical Benefits in Designing DCs

The leveraging of broad supply chain experience from multiple industries and incisive analytics are important tools for independent logistics consultants.

BY JEFFREY B. GRAVES



**G**iven the changing and increasingly complex dynamics of the distribution industry, the need for independent logistics consultants—with the precision supply chain analytics and broad scope of design solutions that they provide—has become more critical for supply chain executives than ever. However, some logistics executives rely on systems integrators to not only install automated equipment solutions in their warehouses but also to develop the conceptual design for the DC's entire material handling system.

Many of these DC projects put in place by systems integrators shortcut the critical design phase and install automated systems that are not the best fit or the most cost-efficient option for the corporation. At risk is supply

chain executives' need to maximize their throughput efficiency and successfully capitalize on their long-term return on investment.

Faced with the prospect of building a greenfield distribution site or upgrading their current distribution center, logistics executives are confronted with thousands of decision points to be worked out. Yet not all distribution center executives possess the extensive knowledge and analytical capabilities in-house to fully conceive, plan, manage, and bring to successful fruition a large-scale, highly automated DC. Their concept of what an ideal DC should look like, how it should function, and what material handling systems should be in place is influenced by their distribution experience, the insight that they have gained from material handling equipment

suppliers, and by visiting the sites of other distribution centers of similar application.

Evaluating the tremendous volumes of information required and making the correct decisions throughout every step of the process can be risky and daunting tasks for any logistics team, no matter how talented they may be. Key amongst these decisions is assessing which planning, equipment, and management aspects of the project can be provided in-house and which should be outsourced. Equally important is whether these functions should be outsourced to an independent logistics consultant or a systems integrator.

If services are to be outsourced, it is desirable to have a single point of contact and responsibility to design and manage the entire project. Systems integrators—in their effort to position themselves as single-source suppliers for their client company's distribution needs—are increasingly making critical decisions on initial conceptual design and equipment selection for their clients' material handling systems. By contrast, DC executives have traditionally relied upon independent supply chain consultants to help navigate through these challenging logistics decisions.

Possessing the skilled personnel, extensive case history databases to draw upon, and in-depth experience with precision analytics and financial modeling tools, consultants are ideally equipped to fully analyze and develop conceptual designs for even the most complex supply chain and distribution center scenarios. Once a solution has been decided upon, independent consultants are then well-positioned to assume single-point responsibility for contracting, installing, and integrating the various sub-systems in the DC into one efficiently functioning material handling system spanning the entire distribution center. This gives the best guarantee that the DC will operate as designed and meet the throughput levels and expected system efficiencies when the system goes live.

For DC executives, using an independent logistics consultant versus a systems integrator is vital to the very set-up and running of an efficient and cost-effective distribution center. Three very critical factors differentiate the methodologies of independent logistics consultants from systems integrators: objectivity in system design; focus on the level of automation; and change management.

### **Objectivity in system design**

When designing a multi-million-dollar distribution center, few factors could be more important than ensuring that the DC's executive team has the opportunity to review and select any and all material handling system options available.

The methodology of independent logistics consultants permits an objective examination of any material handling systems that may be viable to a new distribution center's operation. This is critical to selecting the right equipment that will meet the requirements for a DC's throughput, efficiency, and expected ROI.

Consultants also draw on solutions from many industries, thus providing a broad perspective on potential solutions that might otherwise not be considered.

But this breadth of design flexibility is not offered by systems integrators. Closely aligned with specific equipment manufacturers whose systems they routinely specify, systems integrators typically specify only a limited number of manufacturers' equipment lines.

A systems integrator that has been retained by a company's executive team will present several system options. Because the integrator is using a limited universe of equipment manufacturers, the DC's executives will be presented with design choices relative to what those manufacturers produce. Other system possibilities will most likely not make it to the executive planning table to be reviewed.

The capability for objectivity can be further limited with the equipment bidding process. Because the breadth of manufacturers associated with the systems integrator does not include other possible relevant systems, when the bidding process is instituted it is inherently not representative of a realistically competent universe of manufacturers.

Objectivity of system design without the constraint of single-source limitations is the best guarantee that the optimum material handling systems will be put in place to achieve the operational and financial needs of the new distribution center.

### **Focus on the level of automation**

Designing a DC from an automation focus delineates a significant difference in how systems integrators and independent logistics consultants approach distribution solutions.

Too many supply chain executives make the fundamental mistake of thinking that technology should be the basis and starting point of their distribution solution. Where, in fact, thorough conceptual design aimed at process improvement should be the central aspect of any solution, rather than focusing on the material handling equipment.

Given the massive influx of new technology information flooding the distribution market, it is no wonder why logistics executives jump first to technology as the solution to their throughput issues. They are influenced by what they see in other facilities, what they read, and what they hear from equipment manufacturers.

But supply chain executives are also considerably influenced by systems integrators, who are key contributors in pushing automation as a first option. Systems integrators rely on equipment sales and implementation as a central focus of their solutions and revenue. These solutions are centered on their preferred technologies and based on limited conceptual designs revolving around these usually capital-intensive systems. Consequently, systems integrators' solutions may not be the best fit or the most cost-efficient options for their clients' needs.

Independent logistics consultants approach distribution center challenges from a completely different perspective, embracing process solutions as the key motivator rather than equipment. They are brought in to consult the DC's logistics executives very early on in the initial stages of conceptual design. The analysis that they provide for supply chain executives revolves around



precise process needs for the DC, from both a localized and multi-distribution center perspective.

Approaching system design from a process perspective does not necessitate the implementation of any specific automated technology, but leaves the door open to any options to achieve the objectives of the DC's supply chain executives.

The first step of a full conceptual design is to define the distribution center's needs and parameters. These determine volume requirements that drive DC size, capacity, and velocity. A capital estimate is prepared for the recommended solutions from a material handling standpoint and/or a facility build-out perspective. These factors then drive storage solutions, mechanical conveying and sortation solutions, and pick systems down to the applications of the equipment. The labor content required is then factored.

Finally, a complete return on investment analysis is prepared, comparing current operating procedure to the new, proposed operating structure.

This level of analytics, however, is seldom performed by systems integrators, falling short in providing a fully complete conceptual design analysis prior to finalizing a system design. Such analytics are best provided by independent logistics consultants that are equipped with the expertise and experience to achieve the full desired results.

### Change management

Change management is a critical link in the smooth transition of new and upgraded DCs into functionally efficient live operations. It is so vital that inadequate change management can be isolated as a key reason why new DCs are not operating at full capacity.

Despite its importance, successful change management strategy is seldom fully embraced by systems integrators in projects that are under their management. This is evident in the many warehouse management systems of new dis-

tribution centers that are not adequately functional and fully utilized by the DC's staff, in some cases years after they were completed. It is also evident in the excessive number of cost overruns caused by system crossovers that were not properly planned and executed.

Systems integrators are focused on selling and installing equipment. A more holistic perspective is required for putting in place successful change management practices.

Implementing such strategies is better suited for independent logistics consultants who are uniquely equipped to embrace and coordinate the full functionality of all activities within the scope of the distribution center.

For example, before the DC goes live, the coordination of equipment testing, system conversion, and equipment start-up is critical to ensure the interlinked material handling systems in the new DC come up without interruptions. Once

the go-live or switchover takes place, it is vitally important for the DC's staff to be fully trained in the operation of the WMS, WCS, pick station modules, and the dozens of other functions involved with the operation of the new DC. This requires considerable coordination between equipment manufacturers and installers, the DC's executives, operational personnel, and the company's executive management.

Unless these activities are thoroughly addressed, the new DC will not operate at full functionality no matter how streamlined the automated equipment solution might be. The utilization of independent logistics consultants and their holistic approach encompassing the operation of the entire DC has proved to be the most effective option to achieving this objective.

### The critical advantage

Independent logistics consultants provide critical benefits to supply chain executives that systems integrators cannot deliver. They are ideally equipped to fully analyze and develop conceptual designs for even the most complex distribution center scenarios. While leveraging broad supply chain experience from multiple industries, independent logistics consultants possess the capability to objectively examine and propose any design and system options to their supply chain clients.

For operations executives that desire to maximize their throughput efficiency and successfully capitalize on their long-term financial return on investment, the role of the independent logistics consultant has become more important than ever. **WT**

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