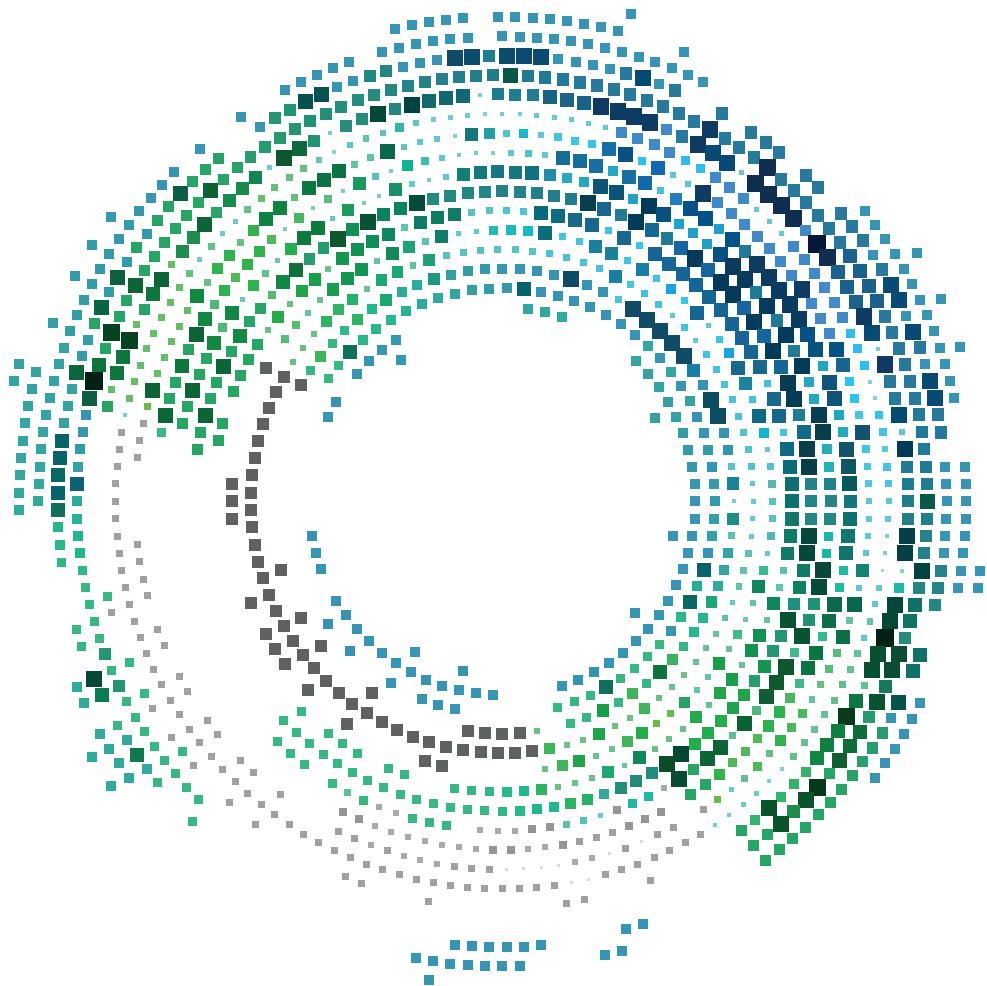


Deloitte.



Wholesale distribution disrupted

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Strategic inflection points

After years of evolutionary change, we believe that the wholesale distribution industry now faces major disruption and a true inflection point. Qualitative evidence for this assertion is found in the multitude, magnitude, and diversity of disruptive forces impacting distributors across all lines of trade. Providing strong, quantitative evidence is the erosion of the industry's financial performance, driven in large part by the disruptions. To date many distributors have survived and in some cases thrived based on their ability to effect incremental changes to their businesses. The current inflection point will be both dramatic and decisive. As such, we believe an incremental approach is no longer viable.

Indeed, we are convinced that the next three to five years will see a marked bifurcation in the industry between those visionary distributors who chart a new course for their businesses (distributors of the future) and those who are constrained by orthodoxies and whose businesses face inexorable decline. A select group of distributor executives are already wrestling with these dynamics and understand the importance of acting decisively now, but many are looking for a foundation of insights into the disruptive forces and a framework for capitalizing on the inflection point. In this point of view, we provide both insights and a framework. With those, we offer a path to becoming a distributor of the future.

Andrew Grove, the iconic CEO of Intel, expounded on strategic inflection points in his book, *Only the Paranoid Survive*, published in 1996.¹ He states, "A strategic inflection point is a time in the life of a business when its fundamentals are about to change. That change can mean an opportunity to rise to new heights. But it may just as likely signal the beginning of the end." Grove also notes that inflection points almost always hit "... the corporation in such a way that those of us in senior management are among the last ones to notice." The distributor of the future will have to both notice and navigate the current inflection point.

It is important to acknowledge that an inflection point in and of itself is not inherently a negative event, but rather a disruption in the current state. This disruption can bring with it either positive or negative consequences. How effectively distributors evaluate their options around the current myriad factors impacting distribution, and how decisively they move forward, will largely determine which path they follow beyond the inflection point. Will their performance against financial and operational metrics and customer expectations continue to deteriorate?

Or, to borrow again from Mr. Grove, will their business convert challenges to opportunities and "reach new heights?"

Many distributors are responding to the changes they see in their business by exploring incremental growth and cost-reduction opportunities. As such they wrestle with such tactical questions as:

- Which tuck-in acquisitions will contribute to growth?
- What products and/or brands can I add to augment my line card?
- How can I stem margin erosion?
- How can I better streamline SG&A?

Only a select few are assessing the disruptive forces and considering more strategic questions, such as:

- How should I be leveraging digital innovations?
- What will be the future basis of competition?
- How can I energize my business with information technology?
- What new business models can I enable with digital?

- What long-term impact will e-commerce and mobile have on my value chain?
- How are leaders from other industries harnessing digital for competitive advantage?

In the pages that follow, we provide evidence to support our assessment of a distribution industry inflection point, including a review of the primary disruptive trends impacting the industry. We also provide a simple framework to help distributors effectively navigate this critical time. Our perspectives are based on numerous interviews and discussions with distributor executives, ongoing analysis of the industry's financial performance, third-party research, and a workshop with 22 executives from nine leading distribution companies.

The winners and losers from the inflection point are yet to be determined.

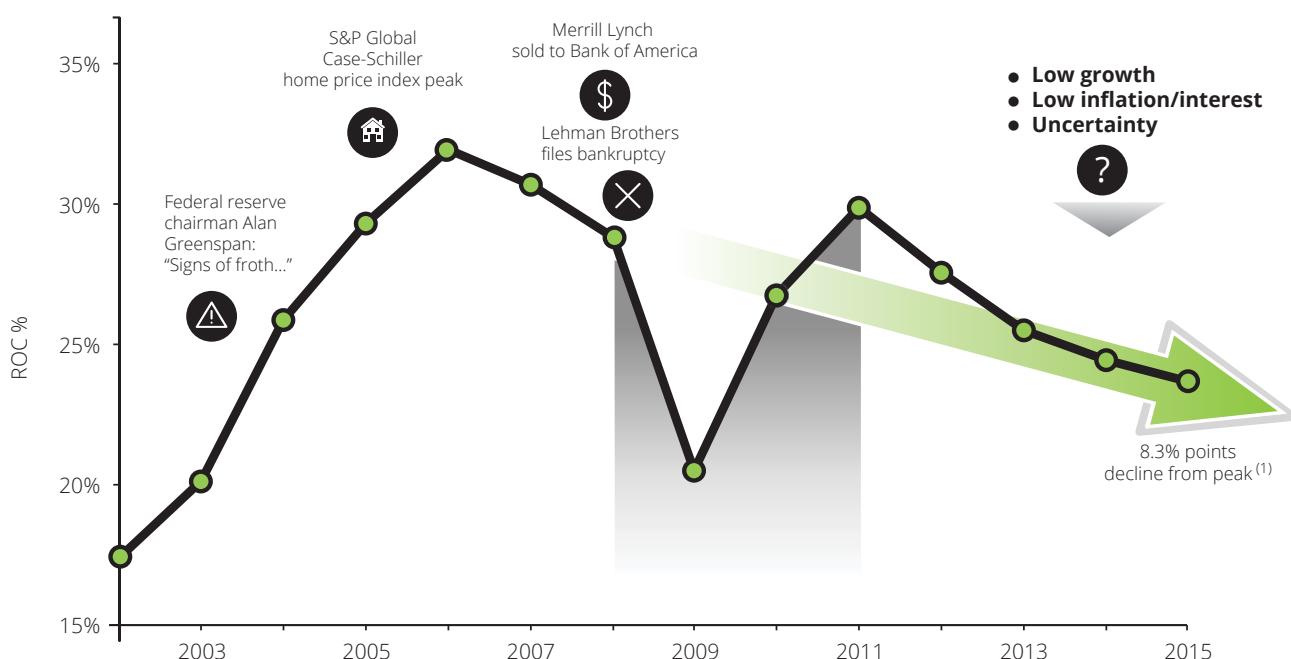
What path are you on?



WD inflection point ... financial indicators

We see compelling quantitative evidence of an inflection point in the financial performance of the wholesale distribution industry. Indeed, as we will show, the industry has exhibited deteriorating performance for an extended period across a number of key metrics and indicators. We believe this is not a cyclical phenomenon but instead the very real manifestation of multiple disruptions that are reshaping the industry. On an ongoing basis, Deloitte analyzes the financial performance of distributors whose financial statements are publicly available. The analysis in this paper reflects the performance of 28 distributors primarily in the electrical, electronics, industrial, chemical, and foodservice lines of trade.

Figure 1. Wholesale distribution companies' performance trend, as measured by return on operating capital, for 28 wholesale distributors, and notable economic developments



Note: Return on operating capital = $\frac{\text{(Earnings before interest and taxes)}}{(\text{Net fixed assets}) + (\text{Net working capital})}$

Source: Deloitte Consulting LLP analysis; S&P Capital IQ database.

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The umbrella metric we track to assess industry and company performance is return on operating capital (ROC) as defined above. While some cyclicalities are evident during the financial crisis, figure 1 identifies a persistent, negative trend among 28 wholesale distribution companies over the past 10 years. The 8.3 percent decline since 2006 represents a fundamental shift in industry performance that will both expose and constrain weaker players, while also creating a breakaway opportunity for leaders.

Digging into what lies behind the ROC decline and looking first at top-line revenue, year-over-year (YoY) growth has slipped from the 16 percent achieved in 2006 to an uninspiring 3 percent rate in more recent years. In the early 2000s, revenue growth was consistently in the double-digit range, and after the global financial crisis, when distributor revenues dipped sharply, growth did return. However, in the period since then, growth has stalled at an anemic 3 percent CAGR, with a negative trend.

Some of this can be attributed to persistent weakness in the broader economy, and some can be linked to an overall lack of inflation, which is arguably many distributors' best friend. However, we believe other disruptive factors are also in play. Some examples include direct-from-manufacturer-to-customer disintermediation along with the growing influence of GPOs, buying groups, and other aggregation organizations in many lines of trade (e.g., foodservice, medical supplies, Jan/San). One leading medical supplies distributor recently lost a \$525M contract with an integrated health network that switched to self-distribution.

Adding to the financial pressure is the 40-basis-point erosion in gross margin that distributors have experienced. This dynamic was confirmed in a recent survey of MRO sellers, where 52 percent reported that

rising costs and flat pricing are suppressing margins.² Here again disintermediation, a lack of inflation, heightened competition, and the influence of GPOs are playing an important role. What is concerning is the apparent inability of distributors to expand margins at a time when most have invested significantly to add incremental services, self-service capabilities, and value-added services. Customers are leveraging these offerings but appear unwilling to compensate distributors for them, suggesting an erosion of the distributor value proposition and the need for greater innovation.

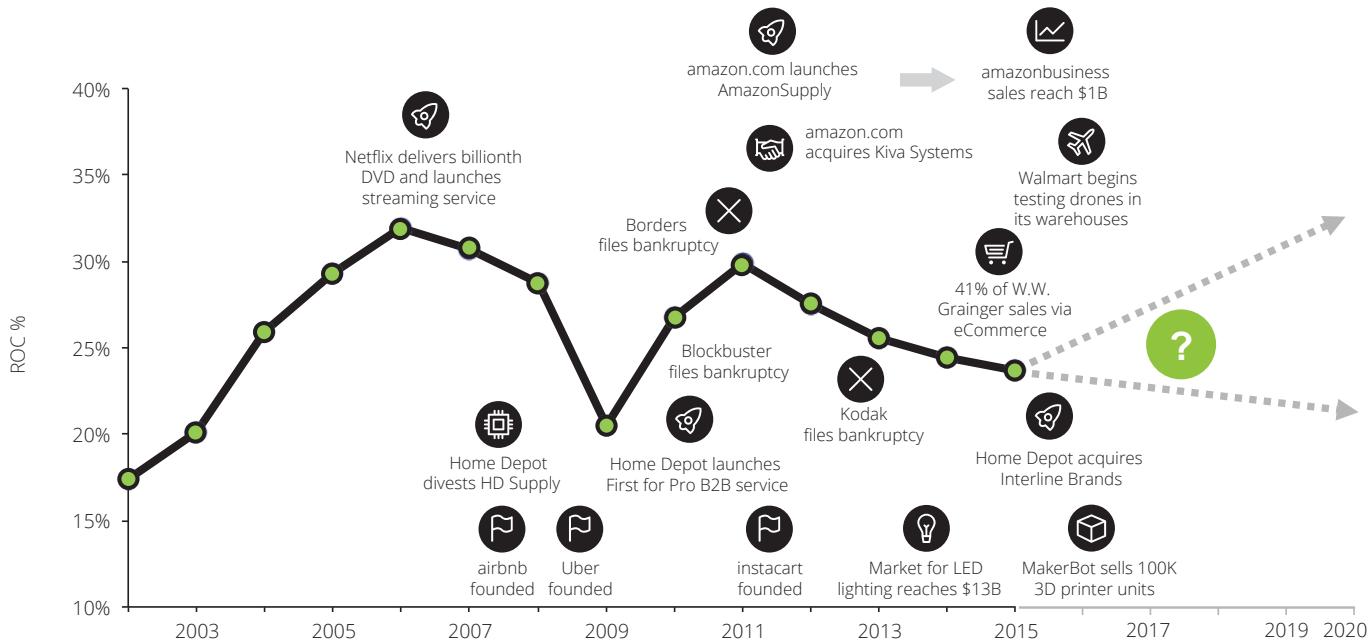
Further down the income statement, we see flat SG&A productivity, largely due to investments in e-commerce, mobile, self-service, a better trained and informed sales force, and other value-added services. Most distributors have yet to realize the offsetting efficiencies in more traditional expense areas, such as sales force headcount. However, as digital revenues grow and distributors better align customer segments with go-to-market and service channels, they will likely drive an improved cost-to-serve profile and lower SG&A: revenue ratios.

When taken together the revenue, gross margin, and SG&A factors have depressed distributor EBIT margins by a full percentage point since 2006. This is the primary reason industry ROC has declined a decisive 8 percentage points since 2006. Balance sheet factors, such as the 7.5 DOH rise in inventory days, has also played a role, but the erosion of operating profit has been the primary determinant.

This obviously has significant implications on distributor stock performance, employee retention, a company's ability to invest, and industry consolidation. Charting a new course in financial performance will require decisive action by distributor executives.

The industry's financial performance creates a stark picture and represents a serious call to action for distributors. All is not lost, but effectively navigating the distribution industry inflection point and avoiding the fate of organizations like Kodak, Blockbuster, Lucent, Borders, Nortel, and Circuit City—and countless other businesses that failed to navigate their industry inflection points—requires new thinking (see return on operating capital chart). One of the strongest manifestations of an inflection point is the emergence of new competitors, which for distribution can be illustrated by AmazonSupply's 2012 launch and growth to \$1B in revenues by 2016.³ This is not just any new competitor; they simply don't exist in the same reality of most distribution businesses, and they certainly don't ascribe to the orthodoxies that have permeated the industry for decades. These orthodoxies can and do have a detrimental effect on distributor decision making. Some to consider, and potentially challenge, are: Distribution is a low-margin business; distributors need a large sales force; and distribution is an asset-intensive business. Reflecting on these orthodoxies and how they impact your decision making can create new perspectives and reveal new opportunities.

Figure 2. Wholesale distribution companies' performance trend, as measured by return on operating capital and notable general business disruptions



Points to note: Some companies successfully navigate an inflection point, while others do not. With disruptions occurring all the time, assessing their relevance becomes a key capability for companies to develop and hone.

Note: Return on operating capital = $\frac{\text{(Earnings before interest and taxes)}}{(\text{Net fixed assets}) + (\text{Net working capital})}$

Sources: Deloitte Consulting LLP Analysis; S&P Capital IQ Database; company annual reports; <http://www.cbs8.com/story/31387841/led-lighting-market-is-likely-to-cross-over-63-billion-by-2020-hexa-reports>.

Year-over-year (YoY) growth has slipped from the 16 percent achieved in 2006 to an uninspiring 3 percent rate in more recent years. This obviously has significant implications on distributor stock performance, employee retention, a company's ability to invest, and industry consolidation. Charting a new course in financial performance will require decisive action by distributor executives.

WD inflection point ... disruptions

The qualitative evidence of an inflection point in wholesale distribution is as equally compelling as the quantitative. Indeed the sheer number, as well as the magnitude of the factors impacting the industry, present a daunting, shifting landscape for distributors to navigate. And while change has long been a core component of the distribution industry, historically these changes have been evolutionary and not transformational. Most distributors are familiar with cautious, geographic expansion into contiguous markets, extension of product offerings into complementary categories, and acquisitions centered on tuck-in strategies. Distribution is not as accustomed to seeing the emergence of new competitors leveraging completely new business models, rapid advances in the relevance and adoption of new technologies, or seismic shifts in how customers want to interact and transact. Among the more compelling factors in this tumultuous landscape are:

1. Accelerating digitization
2. Expanding competition
3. Emerging customer demand
4. Product innovation
5. Continuing disintermediation
6. Consumerization of expectations

1. Accelerating digitization

Pervasive coverage of technology innovations such as big data, cloud computing, and digital has contributed to a sense of fatigue and skepticism among many business executives. However, executives of leading distributors tend to retain their perspective and appreciate the potential of these innovations. Digital, in particular, is a very real and powerful wholesale distribution "omni-disruptor." Indeed, digital disruptions occur at the intersection of information and technology and are reshaping distribution value chains and transforming businesses and business models. We use the term omni-disruptor to capture the notion that digital itself is a disruptor (e.g., digitizing transactions and interactions), as well as a catalyst for other disruptive forces (e.g., accelerating disintermediation). Digitization in distribution encompasses the democratization and standardization of information via growing adoption of modern packaged ERP, and the transformation of revenue generation via the increasing adoption of e-commerce. It also incorporates disruptions enabled by advances in mobile, including virtual stockroom and such Internet of Things (IOT) capabilities as real-time remote inventory sensing. But what makes digital a truly disruptive force is not the enabling

technology, but the transformational shift in value creation that it is driving. Leading distributors should prioritize surfacing and assessing opportunities that leverage digital, thereby capitalizing on the industry inflection point as the source of value creation shifts from physical to digital.

Ask a distributor executive what their company does, and many will say something along the lines of, "We buy stuff and we sell stuff." Value creation for distributors with this mindset is driven by their efficient conversion of physical assets (i.e., inventory and receivables) to cash. Accelerating digitization is fundamentally disrupting that equation. Now distributors have the opportunity to generate incremental value via effectively leveraging digital assets and applying information, analytics, and insights to critical business decisions and stakeholder interactions. Digitization is not only empowering distributors to make more informed decisions about what inventory to stock, how much, and where to store it, but what value proposition will resonate with each customer segment, what price to charge, which markets are growing, which segments value private label, which customers prefer F2F sales vs. self-service, and which customers offer the strongest growth potential.

The implications of accelerating digitization on distribution are profound. This is, after all, an industry where F2F selling is foundational and where B2B often still means belly to belly. As such, distributors should be shaken by the reality that by a three-to-one margin, B2B customers would rather self-educate about products and services than talk to a sales rep; 59 percent of customers would prefer not to talk to a sales rep at all; and by 2020, one million B2B sales reps are expected to be redundant.⁴ The impact of this mindset shift becomes more compelling when you consider Deloitte research projecting YoY growth in B2B e-commerce of 19 percent is faster than projected growth in B2C.⁵ Perhaps the only other times distributors have faced such significant channel disruption was in the 1960s when household phone adoption reached 80 percent and the late 1990s when computer and Internet penetration also reached 80 percent.⁶

Advances in mobile technology and its adoption are further amplifying the digital disruption, empowering customers to manage their business however, wherever, and whenever they want while at the same time creating a valuable source of contextual insights for distributors. Distributors who have measured their geographic coverage based on the number of branches and distribution centers are now confronted with the reality that their business is increasingly mobile and virtual. Inventory now flows to wherever it is needed, not just from loading dock to truck to store room. Leading distributors empower this shift with increasingly functional mobile apps that facilitate customers' ability to create virtual stocking locations wherever they need inventory. As a result, virtual stocking locations become more flexible:

- A building contractor can create one in a job box on the eighth floor of a commercial construction site.
- An electrical utility can create one at a roadside yard in Iowa where they will soon erect a new transmission line tower.

- A food truck becomes one at every downtown corner stop.

The essential mindset shift for distributors to realize is that technology is no longer a back office cost to manage, and that digital is a weapon they can leverage for competitive advantage upstream and downstream. A further manifestation of the disruptive impact of digital can be seen in IoT-related opportunities. Here, digitalization is not just leveraging new technologies, applications, and/or insights, but imagining entirely new business models. A leading distributor of material-handling equipment embraced this thinking with one of its major carpet factory customers. The manufacturer doesn't pay based on the number of forklifts it buys or leases, instead it pays by the pound. The distributor guarantees the factory a negotiated daily amount of lifting capacity (e.g., based on the production schedule the factory will need 457,000 pounds of capacity) and ensures sufficient units are available to provide that capacity. They get paid based on actual usage measured using IoT-based telemetry on the forklift units.

Another example comes from a leading industrial distributor who is selling training modules to their metalworking customers based on variations they see in tool usage. Sensors and identification technologies embedded in their vending machines allow them to remotely monitor individual usage patterns and suggest training to enhance productivity and efficiency (e.g., Joe is consuming too many carbide-cutting inserts for his volume of milling work and would benefit from remedial training). Other examples include value propositions and replenishment models that leverage sensors on liquid storage containers (e.g., bulk chemicals, cooking oil). Instead of selling a commodity product based solely on price, distributors can structure auto-replenishment services and generate valuable insights from product usage patterns.

In addition to digital's potential for opening new go-to-market channels and enhancing supplier/customer engagement and collaboration, it is also driving greater pricing and availability transparency. Some distributors have thrived in market niches with a certain level of pricing and availability opaqueness. However, digital is enabling customers to more efficiently "shop" for items from various suppliers, and for distributors to offer an endless aisle of products. As e-commerce, online marketplaces, and other digital tools gain further acceptance and capabilities, they will further drive transparency, increase pressure on gross margins, and commoditize some specialty products. In the MRO segment, the majority of buyers are already shopping across at least four channels: online marketplaces, consumer retailers, traditional distributors, and direct from manufacturer.⁷ These disruptions will continue to pressure revenues and margins, while the infrastructure investments they represent will pressure SG&A ratios. The net result is that while digital creates opportunities for leading distributors, it will continue to erode value with the slow movers.

2. Expanding competition

Disruptions are often perceived as inherently negative since they exert powerful and often unpredictable forces on established norms. Indeed, disruptions in business can have dire consequences for those players unable or unwilling to adapt to the forces unleashed. With tens of thousands of participants striving for a sustainable niche in the middle of a value chain, distribution has always been highly competitive. But the number and variety of competitors has reached a new crescendo, creating a very real sense of disruption for established players.

Start by considering the expanding breadth and depth of offerings from traditional distributors. Industrial and electrical

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supplies distributors almost all now offer safety, Jan/San, and a range of core MRO products, with a growing number pushing into vending and VMI. In foodservice, a growing number of distributors now also offer foodservice equipment, safety, and technology products.

Beyond traditional competitors, we see continued interest on the part of B2C retailers in the sizeable B2B market. Few realize that the B2B marketplace of \$780B already dwarfs B2C, but the following examples indicate that awareness of the opportunity is growing.⁸

- In 2014, Ace Hardware sharpened its focus on schools, commercial property owners, and other institutions via its B2B site, The Supply Place.⁹
- In 2015 The Home Depot purchased leading MRO distributor Interline Brands for \$1.6B to broaden its Pro division offerings, which are primarily targeted to contractors and builders.¹⁰
- Also in 2015, Do it Best Corp launched a new program through its rapidly growing INCOM Distributor Supply business—with revenues up 80 percent over the past three years—to help its members boost B2B sales.¹¹

These competitors are able to effectively leverage their purchasing power, retail network, and B2C experience to present a formidable source of competition for distributors. This in turn has created downward pressure on growth and margins for many distributors in segments such as MRO, lighting, and building supplies.

Despite the wave of consolidation reshaping the distribution industry—indeed maybe because of this consolidation—opportunities remain for specialists that target specific product categories, customer segments, and/or leverage different go-to-market channels. For example, through its Restaurant Depot division, foodservice distributor Jetro Holdings tapped into the growth of independent operators in urban markets, opening approximately 120 stores across 32 states for B2B customers only. Sales now top \$10B.¹²

Omni-disruptor digital is exerting a massive influence on the competitive landscape, enabling companies to launch specialty models that focus on a particular customer segment or product category:

- Zoro Tools and Enco Tools are examples in MRO.
- In the lighting category, AtlantaLightBulbs.com with only one physical location has nonetheless become a leader through its aggressive use of e-commerce to deliver an array of products, services, and other tools for buyers. For 2016, it projects 11 percent YoY B2B e-commerce growth.¹³
- A growing array of other Internet-only distributors continue to emerge, evolve, and shift the competitive dynamic as seen with companies such as BuildDirect.com, WebRestaurantStore, and Supplies on the Fly.

3. Capturing new customer demand

We have already affirmed that inflection points are not inherently negative, and indeed many of the disruptive forces we discuss here have potential positive or negative implications. One compelling example of this is the new industries, segments, and companies being spawned by technology and business disruptions. Distributors of the future will likely need an ecosystem of connections to stay aware of these developments and stay ahead of their competition.

Consider the nascent private space business where newly formed companies, such as SpaceX, Blue Origin, and Virgin Galactic, each represent potential significant customers for a wide range of distributor products and services. These products and services include industrial MRO, electrical switches, wire and gear, electronic components, and a wide range of chemicals. Elsewhere, distributors of automotive products can now pursue opportunities beyond the traditional industry players with such emergent players as Tesla, Fisker, and Google. In foodservice, new go-to-market models are creating potential

new customers (e.g., Blue Apron, Freshly, Purple Carrot), an expansion of food service offerings in convenience stores, and the growth of food trucks, which are estimated to generate \$1B of revenues (12 percent annual growth vs. forecasted growth of 5.1 percent for independent and small chain operators).¹⁴ One innovative foodservice distributor in Pennsylvania is already tapping into the direct-to-consumer, internet-only business segment for the high-quality meats that it previously only sold to restaurant operators. Other examples of new customer demand include the wind turbine and solar power segments, where new companies have formed and significant new product and service demands are arising. Additive manufacturing also represents a rapidly growing segment where equipment manufacturers will need traditional distributor support, and end users of the products will need supplies (e.g., filament refills, substrates and other materials such as polymers, metals, ceramics and composites).

These and other examples are truly disruptive in that these industries simply didn't exist just a few years ago, bring different business models and economics to traditional segments, and exhibit rapid growth.

4. Product innovation

Unlike at any other time, product innovations are reshaping distributor value chains, while at the same time creating unanticipated opportunities and challenges.

For many electrical supplies distributors, the advent and rapid adoption of LED lighting has created a paradigm shift in the sales discussion, from sockets and bulbs to TCO, compatibility, and integration. In the process, LED technology has created an entirely new set of suppliers, a different go-to-market channel, and is rapidly eroding the recurring revenue stream associated with replacement bulbs. In the foodservice line of trade, growing consumer interest in locally sourced and organic produce, and concerns about GMO, have created

challenges and opportunities. For our purposes we will suspend discussion of the merits and risks of GMO products. We will, however, highlight that concerns with GMO products have spawned a non-GMO opportunity with an estimated 1,500 companies selling more than 22,000 products generating \$8.5B in annual sales.¹⁵

Another innovation with the power to completely disrupt many lines of trade is additive manufacturing (AM), also referred to as 3D printing. While many are anchored on a narrow vision of 3D printing as thin strands of plastic precisely deposited, layer upon layer, to build up a complete shape, the full suite of technologies is far more complex and compelling. Materials such as metals, ceramics, and even food ingredients are being used to create parts and products as diverse as electrical circuits, shoes, jet engine parts, personalized housewares, and even steaks. A market is growing for the supply of AM machinery and equipment, the raw material inputs into production, and the ongoing MRO needs associated with their use. AmazonSupply was one early entrant into this market and featured 3D printers and supplies on its site before evolving into Amazon for Business.

5. Continuing disintermediation

Disintermediation is certainly not a new topic in distribution. NAW's 2001 *Facing the Forces of Change*TM report discussed the Internet and disintermediation as current issues for wholesale distributors, and while some may feel the topic has lost its relevance, the threat of disintermediation is very much alive and well.¹⁶ In fact, 64 percent of industrial buyers currently indicate that they already buy direct from manufacturers (DFM), and 88 percent indicate they are likely to increase their DFM purchases.¹⁷ However, unlike the past when disintermediation was a gradually evolving and less important threat, its manifestations today are rapidly evolving and exerting significant pressure on many distributors,

forcing them to higher levels of due diligence and introspection about their value proposition and go-to-market channels. For example, many will recall the late 1990s when predictions about the demise of distribution in its entirety were rife; back then many suppliers and customers would transact directly through eMarketplaces, such as Transora, Worldwide Retail Exchange, ChemConnect, and SupplyOn.

That didn't happen for a variety of reasons, and by 2001, 15 percent of distributors viewed it as the most over-hyped topic, but the threat of disintermediation is now playing out in different ways across lines of trade.¹⁸ Some examples:

- In medical supplies, customers such as IHNs and IDNs are building scale and the capacity to self-distribute, thereby completely removing the distributor from the value chain.
- In electrical supplies, many large-scale gear purchases are negotiated directly between customer and supplier, with varying amounts of distributor involvement, and the product is often drop-shipped to the customer direct from the manufacturer.
- In the LED lighting marketplace, manufacturers such as Cree Lighting are not only selling direct to end customers but also providing design services, financing, and installation.

Three-tier distribution in the liquor and wine value chain is alive and well, but cracks

are spreading with a growing number of players looking to change the way product is bought and sold. Retailers including Costco and others successfully lobbied the state of Washington to relax its laws and allow direct purchases from manufacturers.¹⁹

- In the foodservice business, the continuing growth and influence of GPOs are sharply reducing the distributor's role in the transaction, often reducing them to a drayage-only role. Overall GPO penetration in foodservice grew from 16 percent in 2009 to 21 percent in 2014, but more troubling is the growth in the street segment where many foodservice distributors believe they make their money.²⁰

Whether the distributor is completely removed from the transaction or just the price negotiation, the implications on performance are dramatic. Distributor revenue growth and gross margins have suffered over the past 10 years in part because disintermediation has expanded. With digital tools further enabling and in some cases accelerating this disruption, and demographic shifts indicating it will only increase, distributors should prioritize developing a long-term response that leverages their capabilities and reflects their line of trade dynamics.²¹

6. Consumerization of expectations

Distributors often emphasize that B2B commerce is very different from B2C. The table below provides several examples of the most commonly cited differences.

B2B	B2C
I need ...	I want ...
Complex, negotiated pricing	Simple, standard pricing
Retain customers	Acquire customers
Ongoing	Transactional
Purchase approval workflow	No purchase approval
Relationship-centric	Product-centric
Products configured	Products standard
High level of reorder	Low level of reorder
Rational > emotional	Emotional > rational

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However, the expectations in B2B commerce are increasingly informed by developments and experiences in B2C. Expectations common in B2C, such as transparent pricing; a rich, tailored user experience; and communities and social connections are rapidly permeating B2B.

B2B pricing has traditionally been highly complex and somewhat opaque with the negotiated, customer-specific, tiered price bearing little relation to the list price. The growth of B2B e-commerce and the expectation that the price you see is the price you pay, along with the ability of buyers to leverage digital tools to quickly price shop, have increased pressure for greater pricing transparency. Amazon enables B2B buyers to compare their negotiated price for specific items with that of other Amazon sellers, giving them the option buy at a price below their negotiated price. B2B customers are also applying analytics to the price they pay for items, demanding that suppliers disaggregate costs into product, freight, handling and other categories to allow for more direct comparisons.

Customers have high expectations with regard to user experience:

- **B2C expectations are very much driving change in B2B.** E-commerce customers want intuitive, easy-to-navigate ordering platforms; high-quality, 3D product images; visibility into inventory to know if an item is in stock; access to detailed measurements and specification; relevant, faceted search options to facilitate comparison of similar items; fast access to complementary products; and the ability to buy online with a variety of fulfillment options (e.g., deliver to branch, jobsite, my location, your DC on consignment, or pick up at will call).
- **Increasingly, B2B customers also want a consistent experience across channels and platforms and their persona to travel with them.** For example, a sales rep working at the city desk knows the customer recently searched $\frac{3}{4}$ horsepower, 3 phase AC motors on their website and went so far as to put two in their shopping cart. One leading MRO distributor went so

far as to analyze the mobile devices its customers were using to access its mobile e-commerce site, noted that the vast majority were using iPads, and developed an app customized for that platform.

A more emergent aspect of B2C that is permeating B2B is that of peer networking/connections and the relevance of ratings, reviews, and advocacy. Already a handful of leading distributors survey customers about their willingness to recommend them to peers. The resulting Net Promoter Score (NPS) and trends inform distributor marketing, promotion, sales, and customer service decisions. Distributors are also leveraging social platforms such as Twitter, YouTube, Instagram and Facebook to connect with customers, consumers and influencers.

Distributors that cling to outdated perspectives on B2B engagement and experience will likely forego opportunities for fostering customer loyalty and miss incremental revenue growth. At a time when top line revenue growth comes at a premium, this dynamic is not sustainable.

Distributor of the future framework

Distributors of the future will be those that appreciate the magnitude and import of the disruptive forces they currently face and have the courage and conviction to act decisively. This appreciation may well drive a healthy sense of urgency, but distributors of the future will be undaunted by complexity or disruption, instead sensing a unique window of opportunity for differentiation. To effectively navigate the inflection point, they will see transformational opportunities in the disruptions and aggressively capitalize on them. These distributors will embrace a framework that empowers them to assess opportunities, develop plans, and act with purpose. Our distributor of the future framework can assist in these critical activities and in navigating the inflection point.

Success for distributors of the future will center, much as it does today, with the customer. Indeed, despite the myriad disruptive forces impacting distribution and many of its long held orthodoxies, this “customer first” orthodoxy holds true for the current inflection point. However, distributors of the future will transform their thinking from simply meeting customer needs to anticipating and shaping them, then proactively delivering solutions to problems that customers may not even know they have. Two examples bring this to life:

- Most people were unaware how time-consuming the traditional payment process at the end of a taxi ride can be. Uber noticed, however, and their users value the ability to exit the car as soon as they reach their destination.
- Buying bulk products such as laundry detergent, toilet paper, and dog food is one of the hidden burdens of grocery shopping. Amazon’s Dash buttons enable quick and easy reorders with fulfillment to the home.

Distributors of the future will also understand that effectively engaging customers demands true innovation in executing the value chain. Traditional approaches to inventory, logistics, pricing, rebates, and network will be reimagined through the application of advanced analytics and technology innovations. Given the importance of data, analytics, and technology to both engaging customers and executing the value chain, distributors will also need to leverage IT to truly energize—not just enable—the business.

This seemingly simple umbrella framework (engage the customer, execute the value chain, and energize the business), along with its supporting imperatives, can provide a powerful roadmap for navigating the inflection point.

To effectively navigate the inflection point, they will see transformational opportunities in the disruptions and aggressively capitalize on them. These distributors will embrace a framework that empowers them to assess opportunities, develop plans, and act with purpose.

Figure 3. Framework for wholesale distributors to leverage in navigating the industry inflection point



Effective distributors will be those that transform the traditional wholesale value proposition to a relentless focus on engaging the customer, executing the value chain, and energizing the business.

1. Engage ... the customer

A profound shift is underway in wholesale distribution as it relates to customer interactions. Distribution has always considered itself a customer-centric business and placed a premium on F2F interactions. That customer-centric focus is not diminishing; instead it is transforming to better align insights, interactions, and channels with shifting expectations. Going forward, F2F interactions will likely become fewer in number but more relevant in terms of content. Furthermore, instead of reactively meeting customer needs, leading distributors will proactively engage the customer. They will sense and shape demand, deliver a superior experience, capture and leverage insights, and realize incremental value.

These changes are more than semantics. They are being driven by advances in technology, shifts in demographics, increases in competition, and heightened expectations. A new demographic of B2B customers is assuming a position of responsibility. These customers are increasingly willing and able to research products, assess vendors, check availability, and compare prices before engaging with the distributor. A recent Forrester Research survey highlighted that by a factor of three to one, B2B buyers would prefer to self-educate about products and services versus talk to a sales representative. The report went on to note that 75 percent of B2B buyers prefer to buy online versus through a sales representative.²² In this disruptive environment, incremental changes will not suffice, and yet 49 percent of B2B companies still do not have a mobile strategy.²³

With the emergence of such an informed, empowered, and independent B2B customer, the onus shifts to engaging the customer in new ways, at numerous different touchpoints, and at a whole new level. This means that sales reps must consult with customers to identify pain points they aren't even aware they have and deliver solutions, not just the latest product catalog. Distributors should capture mindshare and value before, during, and after the purchase transaction occurs. This dynamic continues to reshape the retail industry, offering some lessons for distributors, but ultimately the experience assumes a different manifestation for B2B than it does in B2C retail.

Create a leading experience

The primacy of customer experience over customer service represents a deep fundamental change in thinking for many distributors. Ever-pragmatic distributors have not traditionally focused on the somewhat amorphous notion of an experience, believing instead it was sufficient to effectively meet the more tangible and immediate customer needs. This mindset was manifested by a relentless focus on broad and deep inventories (we have what you need), competitive pricing (we are the low-cost choice), superior fulfillment (we will get it to you overnight), and responsive customer service (if you have a problem, we are here). Those foundational capabilities retain a high level of importance, but the distributor's value proposition will be driven by a suite of digitally enabled capabilities such as content marketing, SEM, and mobile that are refined and targeted to deliver a compelling B2B experience. A full 72 percent of industrial buyers report a likelihood of increasing spend to a distributor with a user-friendly website, and from our discussions with distributors in other lines of trade, these dynamics are not unique.²⁴ As they wrestle with growth challenges, distributors would be wise to prioritize customer experience.

As they consider this relatively new capability area it would also be wise for distributors to research trends and capabilities from B2C. Traditional drivers of the B2C experience included informed store associates, enticing in-store merchandising, and compelling brand storytelling. More recently these have been augmented with robust omni-channel capabilities, including seamless shopping across mobile, store, and traditional e-commerce. The B2B customer experience has also been enhanced by the application of digital tools (e.g., hangers that trigger a screen to show suggested go-with items, or beacons that sense the presence of specific customers via their smartphones and trigger custom promotions).

Distributors of the future will study and learn from the retail transformation journey and apply relevant B2C lessons to their own business and customer interactions.

Distributors already considered leaders in delivering a superior customer experience typically began with a comprehensive and multi-dimensional customer segmentation (e.g., profitability, cost to serve, share of wallet, and lifetime value). The insights drove decisions about customer engagement, digital capabilities, and the portfolio of relevant value-added services. Recognizing the increasing importance of this capability some distributors have invested in the creation of a true marketing function and a chief marketing officer. Note the emphasis on capital vs. lower case M and attendant focus on developing market insights, customer segmentations, branding, and a compelling value proposition. What these distributors understand is that delivering a superior customer experience is a highly quantitative exercise capturing and assessing a diverse set of metrics (such as net promoter score, average order value, conversion rate, abandoned cart rate, retention, and first call issue resolution) and applying analytics to deliver the desired and required experience.

Another dimension of the B2C experience that has great relevance to distribution is omni-channel, the relevance of which is growing as customer expectations increase and go-to-market channels proliferate. This has important growth and margin implications as 60 percent of B2B sellers report that the more channels customers buy through, the more they spend.²⁵ At too many distributors, go-to-market channels (e.g., e-commerce, sales rep, inside sales) are managed discretely. This means that sales compensation, operations, customer pricing, and the sales and customer service organization are considered in silos, while orders, customer history, and customer profiles do not flow efficiently across touchpoints. As a result, the benefits are not realized. Leading examples of the omni-channel experience include: ordering both stocked items and special orders via the distributor's onsite vending machine portal; placing items in a mobile commerce shopping cart while at a job site; linking to a specific project or work-order, using workflow for approval, then picking up

the items 24x7 at the distributor's nearby branch; and placing a single order via the distributor's mobile app for partial pick-up the next morning at the branch with delivery of the balance to a job site two days hence.

Deliver an insight-driven value proposition

In an effort to better serve the evolving needs of their customers, most distributors have added extensively to their line card and product catalog, expanded and upgraded their service offerings, entered new market segments, and increased business complexity further through acquisitions and geographic expansion. And yet only a select few distributors effectively apply insights to capture the potential value from this intentional complexity.

To navigate the inflection point, distributors should deliver an insight-driven value proposition, one that encompasses a tailored customer experience as well as analytically driven cross-sell and upsell opportunities. They should master the art and science of gathering data and information, converting that into actionable insights, and leveraging those with both customers and suppliers. One leading electrical supplies distributor delivers this value proposition in a simple but valued way by kitting products together for a residential building contractor. The bundle combines pre-cut, labeled sections of wire, wire nuts, electrical boxes, receptacles, faces plates, and light fixtures, providing the electrician with exactly what they need for each room in the house. Other distributors leverage insights to tailor delivery times, product put-away, packaging, palletizing, labeling, replenishment, product selection, and invoicing decisions.

Distributors of the future will leverage insights to effectively drive cross-sell and upsell of products and services. They will understand customer preferences, use cases, and decision making to proactively suggest complementary and/or substitute sections.

Convey incremental value to supplier partners

At most distributors, the primary perceived value of customer and market insights is in the distributor leveraging them to refine their product and service offerings and to develop value propositions that will resonate with specific customer and supplier segments. While there can indeed be value in this application, distributors looking to position themselves as “the preferred route to market for suppliers” are waking up to the realization that being a preferred route means more than saturating the market with branches, inventory, and sales reps. Increasingly distributors are investing to capture a wider array of data and information (e.g., US Foods acquisition of Food Genius), applying an array of analytic tools to extract insights from that data, and collaborating with suppliers on its application in the market.

This data-driven approach is evident in multiple activities such as: the growing adoption of end-to-end category management approaches, investment in S&OP, greater amounts of time spent reviewing results with suppliers, and an ongoing search for ways to enrich the insights with macro-economic, regulatory, and weather data. For example, one leading distributor of HVAC equipment and supplies is modeling market potential for replacement units based on compliance with regulations requiring conversion to new refrigerants and technologies, changing weather patterns, and usage profiles (e.g., whether the unit is designed for a school where usage is highly seasonal or for a commercial building where usage is year round). These and other insights offer great value to the distributor but can also represent a source of great value with suppliers.

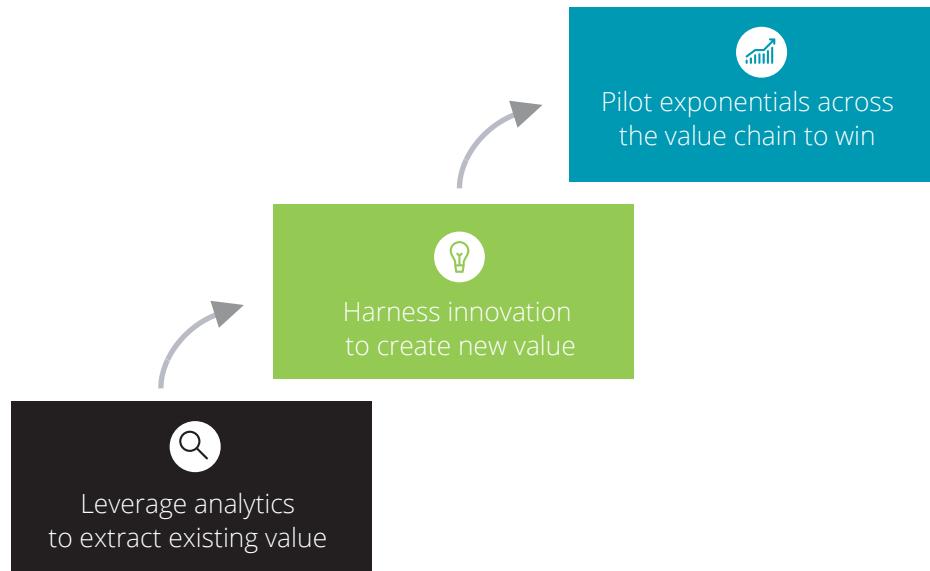
2. Execute ... the value chain

Consolidation in wholesale distribution has reshaped the competitive landscape in most lines of trade with a relatively small number of large distributors operating in different domains versus the numerous smaller players. Foodservice, pharmaceuticals, and chemicals are among the lines of trade where such consolidation has exerted a major influence. As we have already established, the distribution industry has generally struggled to drive top-line growth for an extended period of time. For many, the path to growth has been via a steady stream of tuck-in/fill-in acquisitions.

By focusing on these “bite-size” transactions, many distributors believe they are mitigating the myriad risks typically associated with larger transactions. It is true that some risks—such as disruptions to the core business—may be reduced with smaller transactions, but over time the accumulated

physical infrastructure, IT systems, and headcount can create a strain on earnings and ultimately pose a bigger risk to the overall business. Indeed the very real and persistent everyday pressures of the distribution business may result in many of these acquisitions failing to realize the potential synergies. This is especially true in the value chain area where branches, DCs, customers, suppliers, delivery routes, product lines, and inventory tend to accumulate and calcify. As is demonstrated by Fast Radius’s creation of an automated, distributed manufacturing hub that leverages 3D printing technology on the UPS Supply Chain Campus in Louisville, Kentucky, many truly innovative technology and business model innovations are reshaping the end-to-end distribution value chain.²⁶ For many distributors there is sufficient residual value to warrant a near-term focus on extracting existing value.

Figure 4. Hierarchy of executing the value chain capabilities



Distributors should leverage analytics and process improvements to extract existing, stranded value and invest a portion of these monies to innovative and exponential technologies.

Leverage analytics to extract stranded value

There are multiple, analytically driven approaches that distributors can leverage to help extract stranded value (see figure 5). Proceeds from these foundational initiatives can be used to help fund investments in more forward-looking, transformational opportunities. Explicitly linking the initiatives at the inception helps build organizational excitement and maintain focus on long-term value creation.

Figure 5. Summary of demonstrated analytic- and process-driven improvement initiatives that distributors can leverage to help extract existing, stranded value

Gross margin	Operating expenses	Working capital
 Pricing <p>Distributor pricing practices and the application of analytic tools lag other industries. Transaction complexity creates significant opportunities for value capture.</p>	 SKU management <p>Broad and deep inventory has long been viewed as source of competitive advantage for distributors. Analytics can identify SKU reduction opportunities without impacting revenues and creating cost savings.</p>	 Sales effectiveness <p>Sales are typically high cost, autonomous organizations with often limited alignment to corporate priorities. Account coverage, sales segmentations, and incentive structures can be aligned for heightened effectiveness.</p>
 Rebates <p>Distributor EBIT margins average approximately 6 percent and rebates 5-10 percent of revenues. Distributors can realize substantial benefits by managing rebates as a business.</p>	 Cross-sell <p>Expansions of product catalogs and additional service offerings multiply the potential for cross-sell/upsell. Distributors must overcome compensation, organization, analytics, and other challenges.</p>	 Shared services/outsourcing <p>Most distributors lag in capitalizing on the available benefits of shared services and outsourcing. Finance, project management, and customer service are frequently duplicated across branches and DCs.</p>
		 Inventory <p>Distributors can leverage established strategies from other industries to bump up the performance curve with regard to inventory performance, without sacrificing customer service.</p>

In the following sub-sections we will dig a little deeper on four out of the eight improvement areas. A relatively quick assessment of current performance versus leading practices and benchmarks can assist distributors in prioritizing their investments for maximum benefit.

Rebates

For many distributors a significant source of gross margin leakage can be found in their management of vendor rebates, chargebacks, and deviated pricing. Indeed, with typical distributor EBIT margins of approximately 6 percent and rebates ranging from 5-10 percent, it is no exaggeration to say that effective rebate management can make or break a

distribution business and that successful distributors manage rebates as a business.²⁷

Quick-hit areas for identified benefits include shifting spend to maximize rebates/incentives across manufacturers, reducing rogue spend, tracking compliance, ensuring earned rebates are captured, and empowering the organization with insights (i.e., true net/net cost comparisons) to negotiate more effectively with suppliers.

SKU management

SKU management also represents a significant source of value for distributors that typically carry tens if not hundreds of thousands of SKU. Distribution businesses tend to be very good at adding to their

portfolio and touting the number of items in stock, available for purchase online, and offered in the catalog. Distribution businesses tend to struggle rationalizing their portfolio. They assume that if customers are looking for items in stock and available 24/7, then they need all those items. However, the application of analytics can reveal duplicate items and significant hidden, non-value-added cost. Variant tree analysis of the nitrile glove assortment at one leading MRO distributor revealed 73 different SKUs (color, thickness, manufacturer, powdered, powder-free, pack size, medical grade, left glove only, right glove only), but just eight of those SKU were generating 55 percent of unit volume at a higher margin than many lesser performing

SKU, and customers were completely indifferent about many of the attributes driving the SKU count higher.

Network optimization

If given a clean sheet of paper, the vast majority of distributors would likely position DCs and branches, stock inventory, and route deliveries very differently than their existing network. Too often distributors have grown through a steady stream of tuck-in acquisitions and accumulated a disjointed, duplicative, costly network along the way. As a consequence, a significant amount of the value they expected to realize from the transactions is often left—metaphorically speaking—on the shelves of the DC.

Inventory

A growing number of distributors are applying advanced analytics to their most sacred of assets—their inventory—and more effectively managing the trade-off between service levels and stock levels/locations.

Traditional thinking is that companies, including distributors, must manage a direct relationship between service levels and inventory levels (i.e., higher inventory levels are needed to support and deliver improved customer service levels). Graphically this relationship takes the shape of a curve, and by changing performance, distributors traditionally move either up or down this curve. However, the application of proven analytics and supply chain process improvements enables distributors to shift the curve and helps reduce inventory levels while at the same time delivering improved service levels.

In other instances, distributors engage directly with customers to validate service-level requirements. Are current service levels more than customers actually require to efficiently run their business? Distributors can thus reduce inventory levels without impacting customer satisfaction. Questions distributors might ask include: Do you really need items delivered overnight, or is two-day fulfillment acceptable? Are we actually driving cost into your business by shipping multiple times a week when you'd rather

receive a single bundled order? As they look to drive inventory benefits, it is critical for distributors to understand and model supplier performance to manage levels and better position inventory to meet actual customer needs.

Harness innovation to create new value

Executing the value chain effectively also requires that distributors harness innovation by reinvesting the monies released through the application of process improvement and analytics. The conservative posture of many distributors can prove a barrier in embracing this aspiration. Although the zip codes of their headquarters may suggest otherwise, the vast majority of distributors mentally reside in Missouri, unofficially at least the "Show-Me" state. Indeed, when it comes to investing in emerging technologies and other innovations, their preference is often to adopt a wait-and-see attitude, allowing others to test and refine before considering adoption. Show-Me, Show-Me again, and then maybe I'll consider it in the future!

For many years this cautious approach aligned with the slow evolution of the distribution industry. That approach can no longer be supported given the accelerating pace, degree of change, and the financial realities of distribution. Companies looking to create "moats" and sustainable differentiation rather than chasing their peers down a spiral of declining revenues and compressing margins should embrace a more balanced approach to risk when it comes to investments. This is not to say distributors should "bet the farm" on every new shiny object that comes out of the Carnegie Mellon Robotics Hub in Pittsburgh, or Grand Sky, the drone hub in Grand Forks, ND. What we would suggest—implore—distributors to assess is the application of tried-and-true, Internet of Things technologies to their business. Indeed, according to Forrester Research 14 percent of distributors are already leveraging IoT and another 24 percent are planning to. Further, UPS research suggests that 32 percent of industrial buyers foresee using 3D printing extensively within MRO.²⁸

The reality that distributors must understand, and the dynamic they must harness, is that IoT is far less about putting tags, sensors, and readers on physical items (e.g., packages, trucks, machinery, shelves) and much more about understanding what incremental information can be captured across the value chain, and how that information can be converted into insights then monetized via a new business model. Within this, distributors should evolve their thinking to appreciate that a broad set of stakeholders, rather than traditional customers and suppliers alone, may prove instrumental in monetizing that information. For example, in the waste management business, a waste-to-energy cogeneration facility will place great value in knowing the timing and composition of inbound loads as well as projected energy needs of the surrounding community it serves. Knowing a sufficient amount of high-energy coefficient materials are inbound from routes to cover the projected energy needs means it can avoid purchasing fuel, such as natural gas, on the open market, greatly improving profitability. In the same way, a local utility may value information about progress on a municipal LED lighting retrofit and renewable energy project, allowing it to better project and balance load requirements.

The true power of IoT comes from the business model innovations it enables. As with many other facets of business, an array of nimble competitors are also looking to capture and monetize this information. Heavy equipment manufacturers are increasingly interested in delivering predictive maintenance services to end users of their products. The construction company that previously relied on the local branch of a fluid power or bearing distributor for their MRO needs as parts degraded and failed shifts strategies by contracting with a manufacturer for predictive maintenance service that leverages sensors and tags embedded in their excavators, backhoes, and dozers. In the foodservice business, increased information about cold chain integrity and humidity conditions during storage

and transport can help operators reduce spoilage of meats, fruits, and vegetables. These insights are increasingly critical to profitability as consumers demand locally sourced, organically grown items. For MRO distributors, there is great potential value in the incremental information and insights that can be derived through knowing machine tool usage patterns. One distributor of the future has already developed an IoT-based service for its metal-working customers, alerting them to training opportunities when usage of cutting inserts exceeds certain norms. These workers are prioritized for remedial training on the speeds and feeds of specific machines.

Pilot exponentials to deliver unique value

Traveling well beyond the comfort of their Missouri zip codes, distributors will find the land of exponentials. This is truly uncharted territory where such unwieldy characters and capabilities as drones, additive manufacturing, driverless vehicles, and robotics dwell. The innovations and opportunities in this domain occur in fits and starts and often move in unpredictable directions. In December 2013, Jeff Bezos generated widespread buzz with his discussion on *60 Minutes* of the potential for drone delivery.²⁹ In June 2014 the FAA issued a "Notice of Interpretation" that effectively banned drone-based deliveries. And yet, in July 2016 7-Eleven announced that it—and start-up Flirtey—made the first drone-based delivery to a customer's home in the U.S.³⁰ Walmart has already announced it is piloting drone usage within its distribution centers to perform such tasks as checking inventory.³¹ At least one distribution company has explored leveraging drone technology for assessing the condition of remote utility powerlines and towers, and identifying the location of downed lines following a storm.³² Our overall message to distributors is that while commercial adoption of these technologies may seem to be several years down the road, some leaders are already piloting,

testing, and in some cases selling services based on them. Like it or not, distributors looking to remain or become leaders should consider applications of these exponential technologies and possibly begin pilots and tests now.

To date, it may seem that drones have captured a disproportionate share of the business world's imagination and the media's attention. But in reality, their potential has also already been demonstrated. For example, for three years starting in 2011, the U.S. Marine Corps deployed two Kaman K-1200 K-MAX drone helicopters to Afghanistan where they moved approximately 4.5 million pounds of gear, in dangerous or low-visibility conditions (including at night), resupplying remote fire base locations.³³ Elsewhere, since 2011, Matternet ONE drones have been making deliveries of medical supplies and picking up samples in areas with lagging infrastructure, such as Haiti, Bhutan, the Dominican Republic, and Papua, New Guinea.³⁴ The potential applications of drone technology in distribution are many and go beyond delivering packages. Indeed, service opportunities exist extending from checking inventory levels to assessing the condition of job sites and critical infrastructure in remote, hard-to-reach locations. (Aibotix drones, for example, are used to check the condition of wind turbines, potentially a \$6B industry.)³⁵

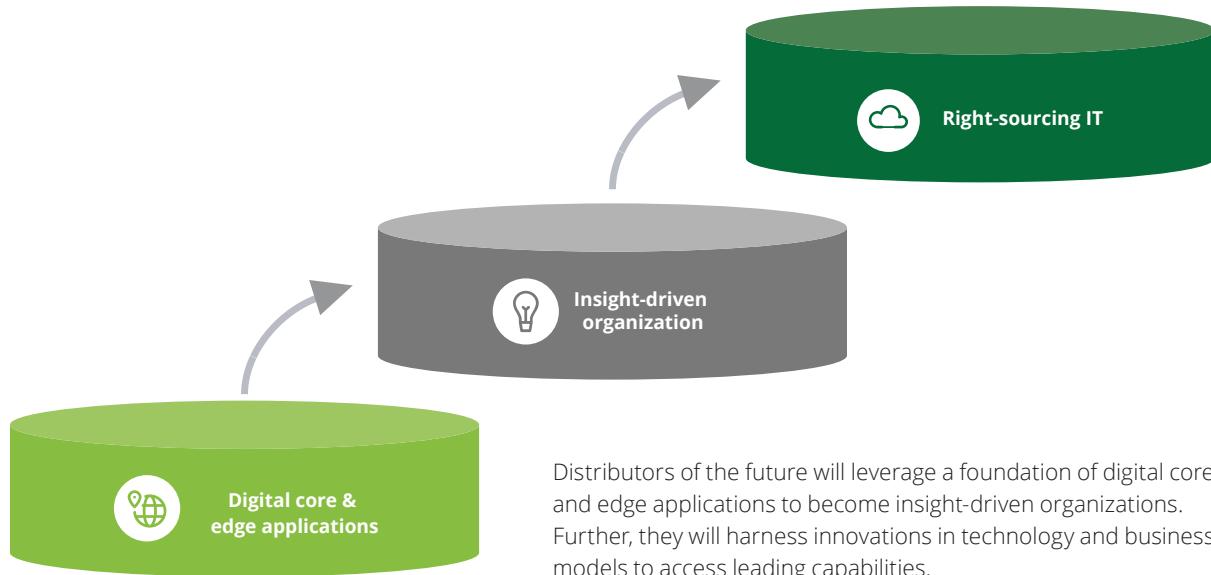
Another exponential technology already transforming distributor value chains is 3D printing, or more accurately put, additive manufacturing. This exponential encompasses a range of technologies that creates physical products through the addition of materials (typically layer by layer) rather than by subtraction (e.g., through machining or other types of processing). The list of technologies under the AM umbrella is ever changing and includes stereo-lithography, laser sintering, material extrusion, and powder-bed printing. The most immediate implications and opportunities for AM are in the industrial

MRO and medical supplies industry. A range of companies across industries as diverse as aerospace, automotive, and medical are already leveraging AM technologies to create production parts and components, design prototypes, and mass-customized products. AM is already impacting the volumes of machine tools that the industry is consuming. A recent capital spending survey reports "interest among buyers for additive manufacturing machines is increasing rapidly," and indicates that machine builders are unlikely to be able to make enough machines to meet projected demand.³⁶

3. Energize ... the business

The distributor of the future will *Engage* the customer with an insight-driven value proposition as well as a compelling experience that will capture and drive incremental value back to their suppliers. The distributor of the future will *Execute* the value chain by leveraging analytics to extract existing value. They will reinvest proceeds to harness innovations for new value and to pilot exponentials. By fulfilling these aspirations, distributors of the future will *Energize* the business. This way of working represents a fundamental shift for most distributors. Indeed most distributors continue to view the IT function and technology more broadly as a cost to be at best managed, or, in too many cases, minimized. Few distributors have advanced their perspective to embrace a more aggressive use of IT. Fewer still have managed to operationalize that perspective with real action and incremental investment. To effectively energize the business (versus just enabling it) will require distributors to leverage digital ERP and edge applications, embrace big data and analytics, as well as right-source IT infrastructure, apps, and services business.

Figure 6. Hierarchy of energizing the business capabilities



Leverage digital ERP and edge applications

Distribution is among the last industries to make the transition to packaged Enterprise Resource Planning (ERP) solutions and the expanding universe of edge applications. This despite the fact that many of their customers and suppliers made the transition years ago. In a recent survey, only one-third of distributors reported that their current ERP system would meet their needs now and through 2017.³⁷ This despite the fact that leaders in the food, industrial, electrical, chemical, construction, and hospitality industries made the transition long ago, and they are well into harnessing the benefits. For many, the perceived risks of an implementation, competing priorities, and a false sense of complacency about the functionality of the legacy system have kept distribution lagging.

While the risks associated with an ERP implementation are real and should not be minimized, they can be mitigated, and advances in technology and implementation approaches can further reduce their potential risk. Further, the risks of not embracing a

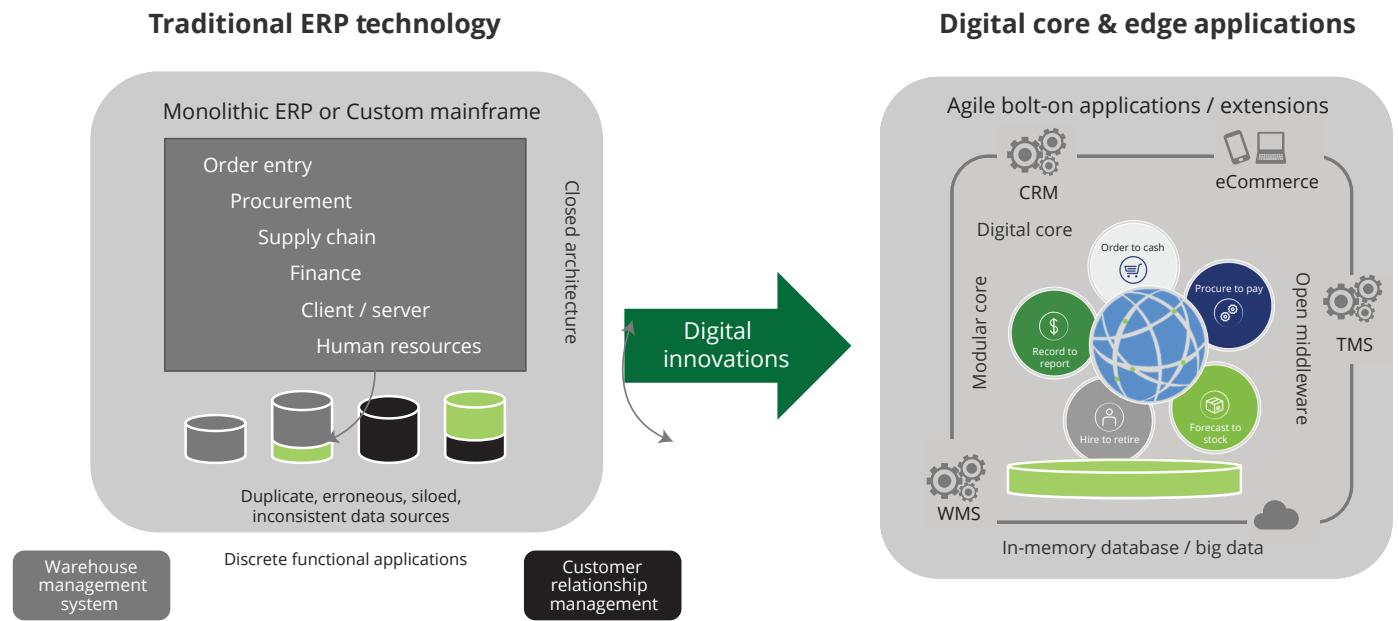
modern ERP grow insidiously even if quietly. Effectively managing the growing complexity of the distribution business is one of the factors driving the imperative for modern ERP. The factors include:

- A variety of sales channels, including vending, consignment, and digital
- Expanded product portfolios with categories well beyond the core, including customized, configured, complex, and bundled offerings
- Value-added services, which comprise a growing portion of the business, encompassing kitting, assembly, labeling, and a profusion of inventory management services (e.g., VMI, CMI)
- Pricing, rebates, and other incentives that are highly variable and critical drivers of profitability
- The complexity of cost-to-serve calculations, which increases the importance of timely and accurate customer segmentations

Technology implementations are no longer an opportunity to change your systems, but an opportunity to transform your business with streamlined processes, centralize back-office functions, enable new service offerings, and better understand business profitability. Simply put, the days of a technology-focused ERP implementation have passed, and ERPs are now the drivers of digital transformation.

Innovations in the ERP technology itself are essential for distributors to understand and leverage. It used to be that ERP packages could be described as monolithic, expensive, complex, and rigid, with a closed architecture and limited flexibility in implementation or provisioning. However, today's leading ERP packages can leverage flexible and modular core architectures, extensive middleware, in-memory databases, and agile implementation approaches to mitigate risk, accelerate implementation speed, and reduce cost. Agile bolt-on applications and extensions further enhance the flexibility and scalability of the solution to suit the evolving needs of the distributor business.

Figure 7. Technology and digital innovations have fundamentally transformed traditional ERP from an environment based on a monolithic, closed architecture with duplicate data sources, to a more flexible, scalable, open architecture that leverages agile and bolt-on applications, middleware, and in-memory database



Many distributors believe that their processes are unique and a source of differentiation from their competition. While this is true for some parts of some businesses, many or even most processes are standard, repeatable, or otherwise handled by out-of-the-box-style solutions. Generally speaking, more standard processes mean simpler ERP implementation and lower cost, while more customizations mean more complicated, longer implementation timeframes and higher cost. Often, the higher the level of customization, the higher the competitive advantage. As a result, it is important to take the time to leverage process segmentation to identify which processes fall into the standard and repeatable categories and which are truly unique to your organization and require customization from an ERP standpoint.

Embrace big data analytics, BI, and MDM

We've evolved to an era when effectively managing data, sometimes exceedingly large amounts of data, and extracting insights

is an imperative to business success. And yet, few, if any, industries are as awash in complexity and underused data as distribution. Without efficient means to capture, store, analyze, and act on this data, wholesale distributors large and small are likely missing opportunities and losing competitive value.

One of the primary innovations in this domain—and one with great potential for distributors of the future—is in-memory computing. With the ability to conduct on-the-fly, what-if analyses in real time will be a game changer not for those that implement the technology, but for those with the vision to transform the way work is done as a result of these innovations. It facilitates asking questions about how my business would look if:

- Sales reps could model the cost-to-serve and profitability impact of different service-model scenarios in real time with customers

- Real time allocation decisions regarding scarce inventory could be made based on customer lifetime value and competitive analysis
- CFOs could close the books in hours, not days, monitor the performance of the business in near real time, and conduct extensive what-if scenarios
- Category managers and procurement could track rebates

Right source IT infrastructure, apps and services

But what about the cost of all these investments? How can a distribution business with 1 percent to 3 percent net margins possibly fund all the required infrastructure, application, and service investments and organization? While advances in technology and their adoption create a compelling need for the outlined capabilities, advances in technology and their provisioning are also helping to reduce the cost, complexity, and potential risk of the associated investments. These innovations

—which we put under the umbrella of right-sourced IT—include cloud technology, in-memory computing, software as a service, web applications, agile implementation approaches, new organizational models, and other hosted/outsourced models for application development and maintenance.

A vigorous debate is likely over which technology innovation will have the greatest impact on distribution. Is it packaged ERP and the cost, process, and organizational efficiency it drives? Is it e-commerce and the transformation in customer engagement it enables? Is it the dependability of the mainframe server? Or, is it the combination of cloud computing and software as a service? The flexibility of dynamic cloud and SaaS tends to rule the day when it comes to creating a new competitive dynamic in the industry (small distributors able to harness technology innovations) and fundamentally rebalancing the risk and cost. Cloud-based innovations offer financial flexibility by creating a more variable cost structure, shifting more OpEx versus CapEx, and providing greater transparency into IT costs and usage. They also offer agility benefits through more rapid deployment and scalability, an unparalleled ability to access upgrades and innovations, and access to leading security and resilience capabilities.

New versus old complexity

Although the innovations we mention here offer tremendous potential for accelerating business transformation, we would be remiss if we didn't also acknowledge the abundance and complexity of decision-making they introduce. Old model IT may not have been particularly flexible, scalable, or easy to deploy, but there were also relatively few decisions to be made (e.g., packaged ERP vs. custom code, IBM mainframe A or IBM mainframe B, maintain it myself or outsource). The new world of IT brings greater flexibility and scalability, but many more decisions as well.

Distributors of the future will have as a core competency the ability to chart a capability roadmap that puts energy behind the aspirations of the business to assess myriad options. Implicit in this roadmap-building exercise is a well-developed ability to assess available and emerging options, quantify benefits and costs, and mitigate change management considerations.

Organization

Forward-thinking CIOs and their business counterparts are collaborating to energize their distribution businesses through right-sourcing models. Effectively harnessing these innovations and aligning

the organization behind them involves a visionary CIO who can work hand in hand with the business as well as third-party suppliers and service providers. Such executives are prized not just in distribution but in many other industries, driving a high level of turnover in these positions and a competitive market for their services. More and more distributors are awakening to the reality of the industry disruptions and the inflection point and looking to technology to energize their business. But they are also awakening to the need for a next-generation CIO to catalyze the transformation. Indeed, turnover among distributor CIOs appears to be accelerating as expectations change and increase.

Beyond IT, functional leadership distributors of the future will also transform their IT organization both in terms of structure and skills. This will include assessing the structure and reporting of the IT and digital organization. Factors influencing these decisions will include corporate culture (e.g., highly decentralized decision making), geographic scope of the business, customer segmentation, branding, and digital aspiration.

Conclusion

As much as the disruptive forces impacting the industry appear daunting, distributors of the future see the opportunities being created and are building the capabilities needed to capitalize on them. The focus on the customer remains, but distributors of the future will leverage new insights and deliver a differentiating experience. In the future, the supply chain transforms with technology to become more efficient, transparent, and integrated. Distributors of the future will elevate information technology from back-office enabler and cost to be managed to front-office energizer and source of differentiation.

Will you navigate the inflection point?





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