We have all experienced rapid technological change over the past twenty years. Consumers now spend $1 in $5 online as the COVID-19 crisis accelerated supply chain digitization by three to four years¹. In this paper, we will explore how rapid digitization relates to B2B foodservice distribution, how distributors can avoid digital disruption, and most importantly, realize the benefits of digital adoption.

The majority of restaurant operators interviewed by Applico already place at least one digital order each week for general convenience and to earn financial incentives in exchange for automatic payments. Distributors benefit from fewer errors, real-time order tracking, shorter accounts receivable cycles, and an expanded special order assortment.

Across business areas, the largest leap in digitalization is the share of offerings that are digital in nature
Average share of products and/or services that are partially or fully digitized, %

<table>
<thead>
<tr>
<th>Region</th>
<th>Global Adoption acceleration</th>
<th>Africa Adoption acceleration</th>
<th>Asia-Pacific Adoption acceleration</th>
<th>Europe Adoption acceleration</th>
<th>North-America Adoption acceleration</th>
</tr>
</thead>
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<tr>
<td></td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
<td>2020</td>
<td>2017</td>
</tr>
<tr>
<td>Precrisis</td>
<td>29</td>
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<td>35</td>
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<tr>
<td>COVID-19 crisis</td>
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<td>26</td>
<td>33</td>
<td>54</td>
<td>50</td>
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<tr>
<td></td>
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<td></td>
<td>33</td>
<td>34</td>
<td>41</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

¹Years ahead of the average rate of adoption from 2017 to 2019

What is a Marketplace?

A marketplace employs a platform business model creating value by facilitating exchanges between two or more parties, namely consumers (buyers) and producers (sellers). Marketplaces facilitate transactions between consumers and producers rather than manufacturing or selling solely from inventory. This construct enables a marketplace to earn revenue without the costs and risks of owning or stocking inventory, charging a commission that is commonly referred to as a “take rate.”

¹McKinsey
Marketplaces are most effective at connecting fragmented groups such as small, up and coming food manufacturers with independent restaurant operators. Many recent successful technology IPOs are platform businesses, as are a large number of successful technology startups. Examples of successful platforms include Google, Apple, Amazon, Facebook, eBay, Instagram, YouTube, Twitch, Snapchat, Slack, WhatsApp, Waze, Uber, Lyft, Airbnb, Pinterest, Square, Social Finance, GitHub, Kickstarter, and ZocDoc.

These businesses are able to scale beyond first-party inventory stocked in a warehouse, offering products from third-party sellers to expand the assortment. For foodservice, this means businesses like Amazon, Choco, and GrubMarket facilitate transactions and collect data but often do not own the inventory they sell, instead passing orders to third parties for fulfillment. At the outset, selling on a marketplace (ex: Amazon) is a great way to expand sales; however, once a platform attracts a critical mass of customers, traditional incumbents risk being relegated to fulfilling orders and abiding by strict rules.

Digital bidding platforms are also gaining popularity whereby operators force food procurement through a bidding process requesting existing and competing distributors to submit proposals. Companies like MarginEdge offer “food cost management” tools alerting restaurants when input prices change, tracking inventory, and optimizing distributor mix. These companies position themselves to DSRs as an opportunity to win new operator customers by bidding for new business. However, each new pricing data point increases the competitive pricing dynamic and drives down distributor margins, creating a “race to the bottom.”

Significant challenges exist for marketplaces in foodservice, including cold chain logistics, larger order sizes, and proximity to operators for perishable goods; all factors which have shielded the food industry from major digital disruption. However, several digital marketplaces, like Pod Foods and Specialty Food Partners, have been successful enabling special orders to be fulfilled directly by the manufacturers. These special orders are generally higher margin, representing a missed opportunity for distributors who currently own the customer relationship.

In summary, marketplaces facilitate price competition, disintermediate the customer relationship, and capture valuable data. Therefore, it is important to analyze what distributors can offer operators to leverage the benefits of a marketplace while preserving the relationship and access to associated data.
Marketplace Technology

The technology powering a marketplace can simply be described as a website with multiple sellers for each product to promote price competition. These multi-tenant features enable aggregation of fragmented audiences like smaller manufacturers and independent restaurant operators through a feature rich platform. The software that powers these marketplaces are offered to the market in two formats - Software as a Service (SaaS) and Marketplace as a Service (Maas):

**Software as a Service (SaaS)**
is a technology product targeted toward B2C or B2B organizations that want to develop their own marketplace and maintain full control of the suppliers and products on the platform. These are generally sophisticated companies with a large internal IT capability to customize and deploy these software packages. Mirakl and Magento are prime examples of companies that offer a SaaS product. UNFI and Kroger both use Mirakl’s software to operate their marketplaces.

**Marketplace as a Service (Maas)**
is a technology company that provides white label marketplace software AND a network of vendors to supply the marketplace, allowing enterprises to create their own marketplaces with immediate access to an existing network of suppliers. These marketplaces generally emerge in industries with highly fragmented supply, like food, where many new suppliers are gaining popularity. Mirakl Connect is a MaaS provider competing with other industry specific marketplaces which generally offer specific expertise through a white label solution.

Beyond marketplace software, two key components are needed to unlock interchangeability of suppliers on a marketplace and enable operators seeking a one-stop-shop with the best price, broad product selection, and order trackability.
### Universal Product Data

Means every product on the marketplace must be uniquely and uniformly identifiable to facilitate price competition and ensure the exact same products are competing for purchase from different sellers. Industry standard product data sets, like GS1, are helpful but require real-time SKU rationalization and updates to maintain the integrity and usability.

### Real-time Connectivity

Means sellers must be connected in a real-time manner to calculate and reserve inventory, accomplished by upgrading from SFTP or EDI (single direction) to API (bi-directional, application level) communications.

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**In our view, two immediate threats exist for foodservice distributors resulting in price competition, conformity to third party product data and connectivity protocols, and loss of the customer relationship through digital disruption:**

1. **Marketplaces**
   - dominate high margin special order volumes, bypassing distributors, delivering direct to operators through parcel carriers and new last mile delivery entrants like *Roadie* (recently acquired by UPS), reducing the overall profit potential for traditional foodservice distributors.

2. **Digital bidding platforms**
   - similar to MarginEdge, gain traction with operators who require distributors to bid for orders, establish bi-directional connectivity between distributors and operators, standardize a unique product data set, thereby disrupting the distributor-operator relationship and squeezing profit margins.

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### Foodservice Opportunities

Restaurant operators recognize the need to connect the data from all facets of their business leading to the popularity of end-to-end platforms like Toast, which recently went public. Operators are seeking a one-stop-shop with features like reservations, guest and kitchen management, point of sale, loyalty and procurement. This has led to recent consolidation with American Express acquiring Resy, Olo acquiring Wisely, SpotOn acquiring Appetize and Seatninja, Toast acquiring xtraCHEF, Lightspeed acquiring Upserve and Gastrofix, to name a few.

Distributors are uniquely positioned to preserve their operator relationships by forging digital inroads with restaurant operator customers. As a first step, distributors can ask their operator customers which front of house systems they use.
Potential Paths to Digitization for Distributors

The below matrix outlines potential options to help distributors digitize and connect more effectively with operators.

- The top row reflects solutions that generate new customer orders through eCommerce (single seller) platforms and Marketplaces (multiple sellers competing on price).
- The bottom row reflects solutions aimed at industry collaboration through connectivity and product data.

- The left column (eCommerce and Connectivity) represents lower complexity and lower risk initiatives from a technology lift and competitive pricing perspective.
- The right column (Marketplace and Product Data) contains solutions that are more difficult to establish and in the case of Marketplace, represent the risk of price competition. Each path comes with unique benefits and risks discussed in detail below.

<table>
<thead>
<tr>
<th>Customer Demand</th>
<th>Industry Collaboration</th>
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</thead>
<tbody>
<tr>
<td><strong>Lower Complexity</strong></td>
<td><strong>Higher Complexity</strong></td>
</tr>
<tr>
<td>eCommerce</td>
<td>Marketplace</td>
</tr>
<tr>
<td>ORO</td>
<td>amazon</td>
</tr>
<tr>
<td>Verto Commerce</td>
<td>MIRAKL</td>
</tr>
<tr>
<td>Insite</td>
<td>Clooz</td>
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<tr>
<td>hero</td>
<td>Pepper</td>
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<tr>
<td>Znode</td>
<td>[me] marginedge</td>
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<tr>
<td>entree</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connectivity</strong></td>
<td><strong>Product Data</strong></td>
</tr>
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<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Distribution eCommerce and Marketplaces
eCommerce solutions

(top left of matrix) promise to improve user experience, expand product assortment, and increase order sizes with a tangible path to protecting the customer relationship. Customization of these technologies may require an in-house IT capability or sizable investment to deploy. These solutions offer the benefit of an improved digital experience and ability to capture special order volumes.

eCommerce solutions

(top right of matrix) can be utilized in two ways: 1) to establish custom solutions using a SaaS offering like Mirakl to capture special order volumes; or 2) participate as a seller on marketplaces or place bids for new business through cost management platforms. First, a custom marketplace requires a complex technology initiative generally undertaken by companies like Kroger who maintain extensive in-house technology resources. Selling on platforms like Amazon or GrubMarket and bidding on cost management platforms like MarginEdge could enable distributors to increase sales in the short term but risks relinquishing control of consumer relationships, abiding by strict rules, and loss of data access in the medium term.

Product Data

(bottom right of matrix) represents the need for detailed data on each product SKU to support eCommerce features, facilitate Marketplace participation, drive user experience improvements, and increase order sizes. Industry standards, like GS1, can act as a foundation but supply chain participants must continuously rationalize and improve the data quality towards an industry standard to defend against marketplaces like Amazon.

Product Data

(bottom left of matrix) represents the real-time, bidirectional communication protocol essential to operators moving from EDI to more modern connection protocols like API. Upgrading these capabilities is imperative to serve operators seeking an end-to-end solution.

Connectivity

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It is also important to consider the operator customers’ priorities when developing a digital strategy. The above considerations should be combined with your operator customers’ goals and priorities.
Restaurant Operator Priorities

In consideration of the operators' needs, we've gathered the main digital priorities from our restaurant operator customers:

1. Provide customers with high quality service with a digital environment customized to the restaurant's style and in-person experience
2. Communicate digitally with customers before, during, and after their visit in line with the restaurant's brand and experience
3. Operate efficiently to optimize labor resources, minimize wastage, and track inventory for accurate ordering
4. Procure quality products at the lowest possible price and highest available service levels
5. Track all operating data by closing the loop between input costs and point of sale transactions to maximize revenue per unit of input

To address these priorities, operators are seeking to adopt platforms that can serve their end-to-end needs by capturing and analyzing data to provide insights that drive efficiency. Given the recent consolidation noted earlier, there are many end-to-end platforms available in the market but distributors must be able to communicate with these platforms. This includes capabilities in the areas of both product data and connectivity.
Build vs Partner Analysis

Applico has developed the below matrix as a way to analyze how distributors large, medium and small can prioritize their digitization strategy.

<table>
<thead>
<tr>
<th></th>
<th>Build your own</th>
<th>Seek Low Risk Partnerships</th>
<th>Consider High Risk Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large Broadliners</strong></td>
<td>YES</td>
<td>MAYBE</td>
<td>MAYBE</td>
</tr>
<tr>
<td>$1B+ Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Midsize Distributors</strong></td>
<td>MAYBE</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>$200M to $1B Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Smaller Distributors</strong></td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>&lt;$200M Revenue</td>
<td></td>
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</tbody>
</table>

Marketplace strategy is a complex subject with many potential risks including margin compression and customer disintermediation. The matrix reflects the view that larger broadline distributors (greater than $1B annual revenue) are best positioned to build or acquire technology capabilities while midsize to smaller distributors are best positioned to develop partnerships.

Furthermore, marketplaces represent a “Winner-Take-All Dynamic” meaning as the supplier base grows, they are able to develop a dominant market position and take ownership of all facets of digital commerce including eCommerce volumes, connectivity protocol, and universal product data.

This dominance is what enabled Amazon to grow market share in general retail. Therefore, only the largest distributors in the space can afford to partner with high risk companies in the marketplace area of the potential paths matrix (Amazon, Grubmarket, BlueCart, MarginEdge, Choco, and Mirakl). Some platforms offer SaaS tools, like WholesaleWare by GrubMarket, but distributors should be wary as these tools are only meant to strengthen their marketplace and increase price competition.
In summary, we have assembled some guiding principles to help distributors adopt the technology necessary to enable the digital environment operators are seeking. By enabling digital adoption, distributors can increase lock-in with their customers and reduce the risk of price competition and customer disintermediation.

Guiding principles for digital adoption

1. **Seek partners with product data capabilities and broad access to manufacturers in the supply chain:** the universality of Amazon’s ASIN is a significant competitive advantage and necessary to facilitate B2C and B2B eCommerce, beginning with the foundational GS1 initiative, distributors should pursue product data with deeper attribution and direct access to manufacturers with the ability to continuously improve and share this data.

2. **Adopt technology with a real-time connectivity capability:** implementing eCommerce requires suppliers to be connected via a real-time, bidirectional connection to reserve inventory and relay orders for immediate fulfillment.

3. **Answer the demand from operators for high quality eCommerce tools:** serve customers digitally by offering technology to operators that connect with the data originating from their front of house systems (reservations, menu, point of sale, etc.) allowing better insights and inventory management.

4. **Avoid direct price competition and bidding platforms:** the immediate risk posed by bidding platforms and longer term risk of marketplace adoption are both aimed at forcing direct price competition, instead distributors can adopt technology that helps customers achieve their goals without aggressive discounts.

5. **Utilize platforms that capture special order volumes:** the most immediate threat from marketplaces is the loss of access to special order revenues due to the inability to stock new items without predictable inventory turnover, therefore distributors should seek platforms that allow for some monetary benefit for originating special orders with operator customers.
**Recommendations**

In summary, we believe the most advantageous path for foodservice distributors is to focus on partnerships that provide superior digital experiences for operator customers and seamlessly connect with the front of house software solutions operators use to manage guest and kitchen operations for their business.

The ability to communicate with these front of house solutions is essential to support the operators’ ability to glean insights from supply procurement through menu, recipe, and point of sale with the guest. Absent the ability to connect data from procurement, operators will continue to seek price reductions from distributors, or worse, force a bidding process or adoption of a marketplace to promote price competition.

**We also believe an opportunity exists for distributors willing to adopt new digital tools.**

**Distributors that upgrade can:**

- Offer new special order products without the need to stock them in the warehouse, thereby capturing volumes that otherwise go to marketplaces
- Reduce ordering errors through digital re-ordering, auto-review algorithms, and electronic confirmations
- Gain workforce efficiencies and the ability to more easily upgrade other systems with warehouse management and routing functionality
- Improve operator experience with a seamless omnichannel approach - phone, in-person, web, and mobile app - to reduce time spent for operators
- Provide simple connectivity to operators’ front of house systems to support analytics and secure operator lock-in
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