Takeout or Delivery? Digesting the Rapidly Growing Online Food Ordering Industry

Background. This year over $1 billion of capital has been injected into online food ordering marketplaces and the word “delivery” has been increasingly mentioned on public restaurant companies’ earnings calls (exhibit 1). Throughout 2018, each of the larger third-party platforms, namely DoorDash, GrubHub, Postmates, and UberEats, has announced strong sales growth and/or subsequent intent to expand delivery coverage in the United States, showcasing increasing evidence of a secular shift to online ordering (see exhibit 2). Further, companies like ChowNow, EZ-Cater, and Olo, among others, are helping accentuate this shift for consumers, corporations, and restaurants.

Further underpinning this shift, many of the largest restaurant chains have demonstrated success with their off-premises businesses and are in turn becoming more aggressive promoting them. McDonald’s, for example, began its exclusive delivery partnership with UberEats less than two years ago but recently indicated that in some markets delivery now represents 10% of restaurant sales, well above the industry average of 7%.

In this industry update report, we provide a detailed addressable market analysis for the United States, reveal key insights from our recent conversations with industry participants, and provide results from our latest consumer survey.

Overall, we remain bullish on the space and project a 25% compounded annual growth rate (CAGR) for online food delivery, growing from about $25 billion today to $62 billion in 2022. With over $250 billion in off-premises sales up-for-grabs and growing in the double digits, we believe that the market for online transactions is becoming large enough to support several platforms and that there will be multiple beneficiaries throughout this growing ecosystem.
Phenomenal momentum in online food delivery continues to persist. Leading 3PL platforms, including Doordash, GrubHub, Postmates, and UberEats, are achieving significant milestones.

**Doordash**
- Raises $535MM in Series D Round
- Nationwide partnership with Wendy’s
- Strategic partnership with Olo to power online grocery delivery

**GrubHub**
- YUM! Brands purchases $200MM of GrubHub stock as part of U.S. growth initiative
- GrubHub is generating 1,000 orders a day in nearly 40 markets; plans to add 100 by year end

**Postmates**
- Report shows $1.2 billion has been generated from Postmates YTD
- Launches pickup
- Raises $300MM from Tiger Global
- Announces acquisition of Tapingo (campus food ordering platform) for $150MM

**UberEats**
- Expands to 100 new cities in Europe, Middle East, and Africa
- At Code Conference, Uber CEO says UberEats is growing 200% y/y globally
- McDonald’s offers delivery (powered by UberEats) in 13K restaurants globally, up from 8K one year ago
- Plans to add 100 new delivery markets October-December

Sources: Doordash, GrubHub, Postmates, Recode Media, Skift, Techcrunch, Uber

*GrubHub defines markets in terms of core-based statistical areas: https://en.wikipedia.org/wiki/List_of_core-based_statistical_areas
**Executive Summary**

- **Page 4: TAM Analysis Suggests Domestic Third-Party Food Delivery to Triple by 2022.** We project third-party ordering platforms will source over $43 billion of delivery orders in the United States by 2022, up from our 2018 estimate of $13 billion (CAGR of 35%).

- We draw a parallel in the shift from online first-party to third-party purchasing in the online travel agency (OTA) space. We believe that third-party online food ordering platforms, like GrubHub and DoorDash, will capture a higher share of online orders than the leading OTAs have been able to, given the higher degree of supply-side fragmentation in food ordering (exhibits 3 and 4).

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### Exhibit 3

<table>
<thead>
<tr>
<th>Online Travel Bookings: Airfare and Lodging</th>
<th>Online Restaurant Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Graph showing percentage of online bookings and food orders](source: Phocuswright and William Blair)</td>
<td></td>
</tr>
</tbody>
</table>

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### Exhibit 4

| 3P Platforms Likely to Capture Rising Share of Online Delivery Transactions |
|-------------------------------|-----------------------------|
| # in U.S. | Top 10 Operators | Supplier Power | 3P Aggregators Approx. Share of Online Transactions |
| Hotel Operators | 53,432 | ~50% | Moderate | 63% |
| Restaurants | 660,755 | 19% | Low | 55% |
| Airlines | 11 National, 22 Regional | 89% | High | 28% |

Source: Phocuswright, STR, Inc., NRA, and William Blair

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- **Page 10: Industry Participants Highlight Driver Acquisition Costs and Google Feature.** One industry participant noted that in tier-3 and -4 markets, driver acquisition costs have surpassed $400-$500 (on average) and in some markets can exceed $1,000. In addition, we learned that Google is potentially planning to launch an online ordering interface soon. The full details are still unknown to us, thus it is difficult to assess if this will have a disruptive long-term impact.

- **Page 13: Proprietary Survey Shows Online Orderings Is Achieving Serious Popularity.** In our December 2016 survey, 60% of people claimed to “Never” order using a third-party service (like GrubHub, Postmates, etc.) and just 15% responded either “Frequently” or “Always.” In our recent survey, almost half (48%) of respondents indicated that they either “Frequently” or “Always” order delivery using a third-party service.
Differentiated TAM Build Suggests Rapidly Growing Online Food Delivery Market

Because investors often ask about the market size, growth, and market share by the larger providers, we are providing a TAM model to help investors frame growth assumptions and provider revenue opportunities.

We believe the collective online food delivery market, which includes orders placed by consumers both on third-party platforms as well as those placed directly on restaurants’ websites and apps, will grow from $25 billion today to $62 billion in 2022 (exhibit 7).

For third-party online food delivery platforms specifically, we estimate gross food sales will more than triple in size from an estimated $13 billion in 2018 to about $43 billion in 2022, representing a CAGR of 35%. If we include takeout orders, we project the third-party platforms to generate $47 billion in gross food sales in 2022 (exhibit 6).

There are a number of drivers affecting this strong growth rate including off-premises restaurant sales growth, expansion of online food ordering delivery networks, consumer adoption, and an increasing amount of chain restaurants adding delivery options, among other factors. A list of key assumptions, and our complete TAM build can be found in the appendix on pages 20-21.

A summary of our TAM build is illustrated through the following series of exhibits.
Exhibit 6
3P Platforms U.S. Gross Food Sales Forecast (in millions)
*Consolidation Expected to Continue*

Exhibit 7
Online Food Delivery Growth by Source
(figures in millions)

*Includes Amazon Restaurants, DoorDash, GrubHub, Postmates, UberEats, and other third-party restaurant delivery services*

**Online food orders conducted directly on a restaurant’s app or website**

Sources: Edison Trends, eMarketer, National Restaurant Association, NPD Group, and William Blair
Exhibit 8
Online Continues to Take Share from Offline Delivery Orders (i.e., Telephone)

Exhibit 9
Delivery Projected to Increase Its Contribution to Restaurant Sales

Sources: Edison Trends, eMarketer, National Restaurant Association, NPD Group, and William Blair

*Excludes catering and drinking establishments

Sources: Edison Trends, eMarketer, National Restaurant Association, NPD Group, William Blair
Our detailed TAM build is on the following pages (exhibit 12 and exhibit 13).

In exhibit 12 on the following page, we forecast sales for U.S. online food delivery sourced by 1) third-party platforms and 2) directly from restaurants’ websites and apps.
### Exhibit 12

**Online Food Delivery Market Analysis**

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Restaurant Sales ($B)</strong></td>
<td>$777.6</td>
<td>$817.3</td>
<td>$842.1</td>
<td>$857.1</td>
<td>$895.5</td>
<td>$918.1</td>
<td>$960.8</td>
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<tr>
<td>y/y growth</td>
<td>na</td>
<td>5.1%</td>
<td>3.0%</td>
<td>1.8%</td>
<td>4.5%</td>
<td>2.5%</td>
<td>4.7%</td>
</tr>
<tr>
<td><strong>Commercial Restaurant Sales - Eating Places ($B)</strong></td>
<td>75.0%</td>
<td>75.0%</td>
<td>75.0%</td>
<td>75.0%</td>
<td>75.0%</td>
<td>75.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td><strong>Commercial Restaurant Sales - Eating Places ($B)</strong></td>
<td>$583.2</td>
<td>$613.0</td>
<td>$631.6</td>
<td>$642.9</td>
<td>$671.6</td>
<td>$688.5</td>
<td>$720.6</td>
</tr>
<tr>
<td>% Off-Premise</td>
<td>39.2%</td>
<td>41.2%</td>
<td>44.2%</td>
<td>47.7%</td>
<td>50.2%</td>
<td>53.7%</td>
<td>55.7%</td>
</tr>
<tr>
<td><strong>Off-Premise</strong></td>
<td>$228.4</td>
<td>$252.4</td>
<td>$279.0</td>
<td>$307.0</td>
<td>$337.5</td>
<td>$370.1</td>
<td>$401.7</td>
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<tr>
<td>y/y growth</td>
<td>10.5%</td>
<td>10.5%</td>
<td>10.0%</td>
<td>9.9%</td>
<td>9.7%</td>
<td>8.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Delivery as a % of Off-Premise</strong></td>
<td>16.7%</td>
<td>16.8%</td>
<td>17.2%</td>
<td>17.7%</td>
<td>18.3%</td>
<td>18.8%</td>
<td>19.3%</td>
</tr>
<tr>
<td><strong>U.S. Restaurant Food Delivery ($B)</strong></td>
<td>$38.1</td>
<td>$42.5</td>
<td>$48.0</td>
<td>$54.4</td>
<td>$61.7</td>
<td>$69.5</td>
<td>$77.4</td>
</tr>
<tr>
<td>y/y growth</td>
<td>11.5%</td>
<td>12.9%</td>
<td>13.2%</td>
<td>13.5%</td>
<td>12.7%</td>
<td>11.4%</td>
<td></td>
</tr>
<tr>
<td>delivery sales as % of total commercial restaurant sales</td>
<td>6.5%</td>
<td>6.9%</td>
<td>7.6%</td>
<td>8.5%</td>
<td>9.2%</td>
<td>10.1%</td>
<td>10.7%</td>
</tr>
<tr>
<td>% of Food Delivery Ordered Online</td>
<td>40.0%</td>
<td>45.0%</td>
<td>53.0%</td>
<td>60.0%</td>
<td>66.5%</td>
<td>73.5%</td>
<td>80.0%</td>
</tr>
<tr>
<td>% of Food Delivery Ordered by Phone/Other</td>
<td>60.0%</td>
<td>55.0%</td>
<td>47.0%</td>
<td>40.0%</td>
<td>33.5%</td>
<td>26.5%</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>U.S. Online Restaurant Food Delivery ($B)</strong></td>
<td>$15.2</td>
<td>$19.1</td>
<td>$25.4</td>
<td>$32.6</td>
<td>$41.0</td>
<td>$51.1</td>
<td>$62.0</td>
</tr>
<tr>
<td>y/y growth</td>
<td>25.5%</td>
<td>33.0%</td>
<td>28.2%</td>
<td>25.8%</td>
<td>24.5%</td>
<td>21.3%</td>
<td></td>
</tr>
<tr>
<td>% ordered through third-party platform</td>
<td>37.0%</td>
<td>43.0%</td>
<td>52.0%</td>
<td>58.3%</td>
<td>63.2%</td>
<td>67.2%</td>
<td>70.1%</td>
</tr>
<tr>
<td>% ordered through restaurant app or website (primarily pizza)</td>
<td>63.0%</td>
<td>57.0%</td>
<td>48.0%</td>
<td>41.7%</td>
<td>36.8%</td>
<td>32.8%</td>
<td>30.0%</td>
</tr>
<tr>
<td><strong>U.S. Online Food Deliv. Sales - Sourced from 3P Platforms</strong></td>
<td>$5.6</td>
<td>$8.2</td>
<td>$13.2</td>
<td>$19.0</td>
<td>$25.9</td>
<td>$34.3</td>
<td>$43.4</td>
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<tr>
<td>y/y growth</td>
<td>45.8%</td>
<td>60.9%</td>
<td>43.7%</td>
<td>36.4%</td>
<td>32.4%</td>
<td>26.4%</td>
<td></td>
</tr>
<tr>
<td><strong>U.S. Online Food Deliv. Sales - Sourced Direct from Rest. Site/App</strong></td>
<td>$9.6</td>
<td>$10.9</td>
<td>$12.2</td>
<td>$13.6</td>
<td>$15.1</td>
<td>$16.8</td>
<td>$18.6</td>
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<tr>
<td>y/y growth</td>
<td>13.5%</td>
<td>12.0%</td>
<td>11.4%</td>
<td>11.0%</td>
<td>11.0%</td>
<td>10.8%</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Edison Trends, eMarketer, National Restaurant Association, NPD Group, William Blair
In exhibit 13 below, we forecast gross food sales from specific third-party platforms. We note that these forecasts include both delivery and takeout orders.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GrubHub*</td>
<td>$3.0</td>
<td>$3.8</td>
<td>$5.1</td>
<td>$6.2</td>
<td>$7.6</td>
<td>$9.5</td>
<td>$11.6</td>
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<tr>
<td>% share**</td>
<td>53%</td>
<td>46%</td>
<td>38%</td>
<td>32%</td>
<td>29%</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>6%</td>
<td>14%</td>
<td>18%</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>DoorDash</td>
<td>$0.5</td>
<td>$1.9</td>
<td>$3.3</td>
<td>$5.2</td>
<td>$7.5</td>
<td>$10.6</td>
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</tr>
<tr>
<td>(food only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% share**</td>
<td>n/a</td>
<td>6%</td>
<td>14%</td>
<td>18%</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>250%</td>
<td>80%</td>
<td>55%</td>
<td>46%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Postmates</td>
<td>$0.8</td>
<td>$1.2</td>
<td>$2.0</td>
<td>$3.3</td>
<td>$5.1</td>
<td>$7.3</td>
<td></td>
</tr>
<tr>
<td>(food only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% share**</td>
<td>n/a</td>
<td>10%</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>46%</td>
<td>75%</td>
<td>60%</td>
<td>55%</td>
<td>45%</td>
<td></td>
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<tr>
<td>UberEats</td>
<td>$1.5</td>
<td>$3.7</td>
<td>$5.6</td>
<td>$7.5</td>
<td>$9.5</td>
<td>$11.6</td>
<td></td>
</tr>
<tr>
<td>% share</td>
<td>n/a</td>
<td>18%</td>
<td>26%</td>
<td>30%</td>
<td>29%</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>150%</td>
<td>82%</td>
<td>54%</td>
<td>34%</td>
<td>26%</td>
<td>22%</td>
</tr>
<tr>
<td>Caviar</td>
<td>$0.4</td>
<td>$0.7</td>
<td>$1.0</td>
<td>$1.3</td>
<td>$1.6</td>
<td>$1.9</td>
<td></td>
</tr>
<tr>
<td>% share**</td>
<td>n/a</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>75%</td>
<td>50%</td>
<td>30%</td>
<td>25%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>$1.9</td>
<td>$1.8</td>
<td>$2.3</td>
<td>$3.2</td>
<td>$4.1</td>
<td>$4.3</td>
<td></td>
</tr>
<tr>
<td>% share</td>
<td>n/a</td>
<td>23%</td>
<td>13%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>-8%</td>
<td>32%</td>
<td>35%</td>
<td>31%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$8.9</td>
<td>$14.2</td>
<td>$20.5</td>
<td>$28.0</td>
<td>$37.3</td>
<td>$47.4</td>
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</tr>
<tr>
<td>y/y growth</td>
<td>n/a</td>
<td>60%</td>
<td>44%</td>
<td>37%</td>
<td>33%</td>
<td>27%</td>
<td></td>
</tr>
</tbody>
</table>

*We estimate about 30% of GrubHub’s total gross food sales ($5B est. in 2018) represent orders where GrubHub fulfills delivery for the restaurant. For the other third party platforms, we presume the vast majority of gross food sales are delivered by the platform.

**A portion of Caviar, DoorDash, GrubHub, and Postmates orders are for takeout, not just delivery. In addition, a portion of GrubHub and DoorDash gross food sales consist of orders generated on non-owned and operated properties. These are cases where GrubHub and DoorDash provide white label online ordering technology for restaurants.

Sources: Edison Trends, eMarketer, National Restaurant Association, NPD Group, William Blair
Conversations With Participants in Online Food Ordering Industry

We held several conversations with industry experts to understand the current landscape, key issues, trends, etc. Our industry experts included C-suite executives at different national online food ordering marketplaces. Below we summarize the some current key industry topics.

**Increasing take rates and shift to delivery.** Broadly our industry conversations noted online food ordering companies have been increasing pricing without much hesitation from restaurants. For example, one company noted it is renewing contracts at an 18% marketplace take rate, up from 15% previously. Moreover, one executive we spoke with estimated about 50%-60% of orders are now being delivered by its network of drivers, up significantly from last year.

**Driver acquisition costs are growing significantly.** In tier-3 and -4 markets, driver acquisition costs have surpassed the $400-$500 range (on average) and in some markets even more than $1,000. Part of the issue is that driver retention in many of these markets is poor (roughly 30% retained after three months of driving). According to one contact, the current pace of driver acquisition cost growth is likely unsustainable.

One of the biggest components of this growing acquisition cost is an increase in order volume. As orders continue to grow, companies must scale their network of delivery drivers, which becomes more difficult. Various companies in the space offer sign-on guarantees and driver referral bonuses.

For instance, DoorDash offers up to $2,000 in guaranteed pay if the driver completes 175 delivers within his or her first 60 days (offer varies depending on the market). To further exemplify the competition for drivers, we found that DoorDash has not only paid search ads on its own keywords, but also pays for GrubHub keywords (in our search) and offers an even better guarantee on these ads ($2,000 guarantee versus $1,000). See exhibits 14 and 15.

Further, one executive noted when an online food ordering company has dominant market share in a particular market, the market can be “extremely profitable.” However, given the battle for drivers in some of the tier-3 and smaller markets, the economics are becoming tougher for companies with less scale.

Sources: Google, William Blair

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**Exhibit 14**

**Google Paid Ads - DoorDash Search**

Search Query: `doordash driver chicago`

About 142,000 results (0.58 seconds)

Source: Google, William Blair
Potential threat from Google. Our conversations gave us insight that Google is testing a new feature in which web users are able to order from restaurants straight through Google’s search engine. While we do not have all the details, we view this feature similarly to the search giant’s attempt into the OTA space with Google Flights. We understand that Google will charge restaurants (and third-party providers like DoorDash, GrubHub, etc.) a referral fee in the 5% ballpark for bringing traffic. In these early stages, our understanding is that Google will not offer its own managed delivery, rather just direct traffic to restaurants and third-party providers to fulfill both carry out and delivery orders. We provide several screenshots of this new feature, which is in beta testing, below.
Next, Google prompts this screen - suggesting with whom to place the order with.

Even after clicking "Menu", traffic remains fully within Google's platform (not the delivery service).
Survey Conclusions

We conducted a survey to understand consumer awareness and use of varying online food ordering companies. We highlight that investors often ask about the competitive landscape (including DoorDash, GrubHub, Postmates, UberEats, and others), as well as the costs associated with delivery for consumers (e.g., delivery fees, service fees, tips).

We previously ran a survey in December 2016, and where applicable, we present trending data. Each iteration of our survey includes a healthy mix between urban and suburban respondents. Below we highlight our key findings.

- **Awareness and usage of major delivery platforms have significantly increased** *(see exhibits 20-21).*
- **A quarter of respondents either don’t use delivery services or don’t use the major platforms we outlined, pointing to major opportunities for incumbents** *(see exhibit 22).*
- **Ordering food through third-party services is gaining serious popularity** *(see exhibit 25).*
- **Frequency of food delivery is increasing** *(see exhibit 26).*

Below, we show the demographics of our respondents.
From December 2016 to August 2018, Amazon Restaurants had the most dramatic increase in the proportion of respondents who had heard of the service. In December 2016, only 20% of respondents had heard of Amazon Restaurants compared with 41% in our recent survey. There were also strong awareness increases in GrubHub/Seamless (11% increase), DoorDash (9% increase), Postmates (8% increase), and UberEats (6% increase), despite showing high awareness in our initial survey.

We observed broad increases in usage, as the proportion of respondents who indicated “yes” to using a particular platform increased by 2,000 basis points on average. The largest gainer was UberEats, from 7% to 43% of total respondents. GrubHub maintained its category leadership, and DoorDash and Postmates both experienced large increases in usage.
Twenty-seven percent of respondents indicated that they use UberEats the most often of the major platforms, while 20% indicated GrubHub. However, 69% of respondents said “yes” to using more than one food delivery service. In addition, 25% of respondents indicated that they either use a service not listed in our survey most frequently, or that they don’t use delivery at all. These figures lead us to believe that there is a significant opportunity for companies to 1) acquire smaller, local providers and 2) convert non-delivery users into delivery users. We point to recent consolidation in the space, primarily by GrubHub, as examples (e.g., EAT24, Foodler, OrderUp).
Exhibit 24

Do you plan to use major third-party delivery services more/less in the future?*

- More 72%
- Less 28%

n = 333
Source: William Blair

Exhibit 25

How do you typically make food delivery orders?

<table>
<thead>
<tr>
<th></th>
<th>December 2016</th>
<th>October 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use 3rd party service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order on restaurant's site/app</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call restaurant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% that “Frequently” use a 3rd party service substantially increased</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n_{October} = 333
n_{December} = 389
Source: William Blair

In our prior survey, 60% of people claimed to “Never” order using a third party service (like GrubHub, Postmates, etc) and just 15% responded either “Frequently” or “Always.” In our recent survey, almost half (48%) of respondents indicated that they either “Frequently” or “Always” order delivery using a third-party service. We expect more online food ordering and delivery share gains going forward.
We asked respondents how frequently they order food delivery on a monthly basis. We found that in our December 2016 survey, 83% indicated three or less times per month and 17% four or more. In this recent survey, 71% indicated three or less and 29% indicated four or more.

Source: William Blair
Exhibit 28
How much do you typically pay as a delivery fee?

<table>
<thead>
<tr>
<th></th>
<th>October 2018</th>
<th>December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 (free delivery only)</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>$1.99 or less</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>$2 - $4.99</td>
<td>30%</td>
<td>38%</td>
</tr>
<tr>
<td>$5 - $7.99</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>$8 or more</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: William Blair

Exhibit 29
How much do you spend in total on a typical delivery order?

<table>
<thead>
<tr>
<th></th>
<th>October 2018</th>
<th>December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15 or less</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>$15 - $25</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>$26 - $35</td>
<td>30%</td>
<td>38%</td>
</tr>
<tr>
<td>$36 - $50</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>$51 - $100</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>$100 or more</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Basket sizes appear to be increasing between our surveys

Source: William Blair
If some of your favorite sit-down chains started offering delivery, would you be more likely to order delivery?

Exhibit 30

<table>
<thead>
<tr>
<th></th>
<th>October 2016</th>
<th>December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>No</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: William Blair

If some of your favorite fast-food / quick-serve chains started offering delivery, would you be more likely to order delivery?

Exhibit 31

<table>
<thead>
<tr>
<th></th>
<th>October 2016</th>
<th>December 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>No</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: William Blair
Appendix A: TAM Key Modeling Assumptions

Our key assumptions for 2022 are outlined below:

- Off-premises sales continue to grow in the double digits.
- Delivery sales amount to nearly 11% of restaurant sales, up from about 7.6% today.
- Online delivery sales account for 80% of sales, up from about 50% today.
- 70% of online delivery sales are sourced through third-party platforms versus directly through restaurants’ apps/websites.

Excluded from our model are:

- Any orders outside the United States
- All off-premises orders that are not delivery, such as drive-thru and pickup (over 80% of off-premises orders).
- All delivery orders that are not from restaurants, including grocery stores and non-food orders.
- Explicit modeling of technology vendors that power online ordering to restaurants’ websites or apps. For example, companies like Olo and ChowNow have technology services that, among other features, enable restaurants to build an online ordering platform for their owned and operated properties and drive customer loyalty.

We believe that delivery will increase its share of an off-premises segment that is growing double-digits. We expect the shift to delivery to be driven by expansion of third party online food ordering platforms and the potential for these platforms to lower delivery fees as driver fleets scale and expand into more cities.

In some cases, third-party platforms have led to delivery sales growing to 10%-plus of restaurant sales (see below).

Exhibit 32
What McDonald’s Is Saying About Its Delivery Partnership With UberEats

Within food delivery, we estimate by 2022, roughly 80% of delivery orders will be transacted online, compared with about 50% today. We believe both the promotion of proprietary apps from chains as well the aforementioned delivery fleet expansion from third-party platforms will enable online transactions to grow disproportionately relative to phone calls.
We also point out that though our TAM analysis focuses on sizing the delivery opportunity, our research suggests there is massive potential for takeout orders, which represent over 80% of restaurants’ off-premises sales, or over $200 billion in the United States, to shift online, in our view. Further, 90%-plus of these orders are placed offline (drive-thru, walk-ins, telephone). We believe the scope of the takeout opportunity explains why DoorDash, GrubHub, and Postmates have all addressed the pickup piece of the market on some level in 2018, and this is something we are monitoring heading into 2019.
The prices of the common stock of public companies mentioned in this report follow:

- Alphabet, Inc. (Outperform) $1,076.77
- Amazon.com, Inc. (Outperform) $1,598.01
- GrubHub, Inc. (Outperform) $92.74
- McDonald’s Corporation $176.90
- Walmart, Inc. $100.28
- Wendy’s Company $17.24
- Yum! Brands, Inc. $90.41
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DOW JONES: 25115.80
S&P 500: 2711.74
NASDAQ: 7305.90

GrubHub Inc. Rating History as of 10/30/2018
powered by: BlueMatrix

Additional information is available upon request.

Current Rating Distribution (as of October 31, 2018):
Coverage Universe Percent Inv. Banking Relationships * Percent
Outperform (Buy) 67 Outperform (Buy) 22
Market Perform (Hold) 32 Market Perform (Hold) 8
Underperform (Sell) 1 Underperform (Sell) 0

*Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

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John F. O’Toole, Partner  Manager and Director of Research  +1 312 364 8612
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**GLOBAL SERVICES**
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Tim Mulrooney  +1 312 364 8123
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Real Estate Services and Technology

**HEALTHCARE**
Biotechnology

Tim Lugo, Partner  +1 415 248 2070
Co-Group Head–Biotechnology
Therapeutics

Y. Katherine Xu, Ph.D., Partner  +1 212 237 2758
Co-Group Head–Biotechnology
Biotechnology

Andy T. Hsieh, Ph.D.  +1 312 364 5051
Biotechnology

Matt Phipps, Ph.D.  +1 312 364 8602
Biotechnology

Raju Prasad, Ph.D.  +1 312 364 8469
Therapeutics

Healthcare Technology and Services

Ryan Daniels, CFA, Partner  +1 312 364 8418
Co-Group Head–Healthcare Technology and Services
Healthcare Technology, Healthcare Services

John Kreger, Partner  +1 312 364 8597
Co-Group Head–Healthcare Technology and Services
Distribution, Outsourcing, Pharmacy Benefit Management

Jeffrey Garro, CFA  +1 312 364 8022
Healthcare Technology

Margaret Kaczor, CFA  +1 312 364 8608
Medical Technology

Matt Larew  +1 312 364 8242
Healthcare Delivery

Brian Weinstein, CFA, Partner  +1 312 364 8170
Diagnostic Products, Medical Technology

**CONSUMER**
Sharon Zaffis, CFA, Partner  +1 312 364 5386
Group Head–Consumer
Lifestyle and Leisure Brands, Restaurants

Jon Andersen, CFA, Partner  +1 312 364 8697
Consumer Products

Dylan Carden  +1 312 801 7857
Apparel and Accessories

Daniel Holkin  +1 312 364 8965
Hardlines, Specialty Retail

Ryan Sundby, CFA  +1 312 364 5443
Outdoor and Recreation

**GLOBAL INDUSTRIAL INFRASTRUCTURE**
Nick Heymann  +1 212 237 2740
Co-Group Head–Global Industrial Infrastructure
Multi-industry

Larry De Maria, CFA  +1 212 237 2753
Co-Group Head–Global Industrial Infrastructure
Capital Goods

Louie DiPalma, CFA  +1 312 364 5437
Aerospace and Defense

Brian Drab, CFA, Partner  +1 312 364 8280
Industrial Technology

Ryan Merkel, CFA  +1 312 364 8603
Commercial Services, Industrial Distribution

**TECHNOLOGY, MEDIA, AND COMMUNICATIONS**
Jason Ader, CFA, Partner  +1 617 235 7519
Co-Group Head–Technology, Media, and Communications
Enterprise and Cloud Infrastructure

Bhavan Suri, Partner  +1 312 364 5341
Co-Group Head–Technology, Media, and Communications
IT Services, Software, Software as a Service

Jim Breen, CFA  +1 617 235 7513
Internet Infrastructure and Communication Services

Justin Furby, CFA  +1 312 364 8201
Software as a Service

Jonathan Ho  +1 312 364 8276
Cybersecurity, Security Technology

Maggie Nolan, CPA  +1 312 364 5090
IT Services

Matthew Pfau, CFA  +1 312 364 8694
Software as a Service

Ralph Schackart III, CFA, Partner  +1 312 364 8753
Digital Media, Internet

Alessandra Vecchi  +1 212 237 2764
Semiconductors/Wireless

**EDITORIAL AND SUPERVISORY ANALYSTS**
Steve Goldsmith, Head Editor and SA  +1 312 364 8540
Beth Pekol Porto, Editor and SA  +1 312 364 8924
Kelsey Swanekamp, Editor and SA  +1 312 364 8174
Lisa Zurcher, Editor and SA  +44 20 7868 4549