**Business Analysis Report: Food Delivery Performance Insights**

**1. Introduction**  
This report analyses food delivery data to understand order trends, delivery duration variations, and the impact of different order protocols. The goal is to derive actionable insights for optimizing food delivery services and improving customer satisfaction.

**2. Key Findings**

**2.1 Order Trends over Time**

* The **highest number of orders** were placed in **February 2015** (125,852 orders).
* The **lowest number of orders** occurred in **October 2014** (only 1 order).
* This suggests possible **seasonality** in demand, requiring adjustments in inventory and staffing.

**Order Volume by Time Period**

| **Month** | **Year** | **Order Count** |
| --- | --- | --- |
| Jan | 2015 | 66,815 |
| Feb | 2015 | 125,852 |
| Oct | 2014 | 1 |
| **Grand Total** |  | **192,668** |

**2.2 Delivery Duration by Food Category**

* **Fastest deliveries:** **Chocolate (0.0237 avg. duration)**
* **Slowest deliveries:** **Italian (0.0488 avg. duration)**
* **Possible reasons:**
  + Chocolate requires minimal preparation.
  + Italian food (e.g., pizza, pasta) has longer cooking times.

**Delivery Speed by Food Category**

| **Food Type** | **Avg. Delivery Duration** |
| --- | --- |
| Chocolate | 0.0237 (fastest) |
| Italian | 0.0488 (slowest) |

**2.3 Impact of Order Protocol on Delivery Speed**

* **Fastest Protocol:** **Protocol 7 (0.0287 avg. duration)**, commonly used by "Other" category stores.
* **Slowest Protocol:** **Protocol 6 (0.0424 avg. duration)**, used mostly by **Pizza** stores.
* This suggests that order protocols play a significant role in delivery efficiency.

**Delivery Speed by Order Protocol**

| **Protocol** | **Avg. Delivery Duration** |
| --- | --- |
| 1 | 0.0366 |
| 2 | 0.0329 |
| 3 | 0.0326 |
| 4 | 0.0336 |
| 5 | 0.0318 |
| 6 | 0.0424 (slowest) |
| 7 | 0.0287 (fastest) |

**2.4 Store Count Distribution by Protocol**

* **Most stores use Protocol 1 (52,499 stores).**
* **Pizza stores dominate Protocol 6 (254 stores), leading to slower deliveries.**

**Store Count by Protocol**

| **Protocol** | **Store Count** |
| --- | --- |
| 1 | 52,499 |
| 2 | 23,675 |
| 3 | 52,391 |
| 4 | 19,002 |
| 5 | 43,795 |
| 6 | 792 |
| 7 | 19 |
| **Total** | **192,173** |

**3. Business Recommendations**

* **Optimize Protocols:** Investigate why Protocol 6 leads to slower deliveries and explore switching pizza stores to a more efficient protocol.
* **Prepare for Seasonal Demand:** Since February experiences high demand, businesses should adjust inventory and workforce accordingly.
* **Improve Delivery for Italian Cuisine:** Streamline pizza and pasta preparation processes to reduce delivery delays.

**4. Conclusion**  
This analysis highlights the importance of efficient order protocols, demand seasonality, and category-specific delivery challenges. By implementing the recommendations, food delivery platforms can enhance operational efficiency and customer satisfaction.