



# **Corporate Challenge 2022**

## **Riyaz Akhtar Experiential Education Program**

Where Careers Begin

Case on

## **National Supermarket Association**

New York

## Introduction

National Supermarket Association (NSA) was founded by Hispanic entrepreneurs in the year 1989 to represent independent supermarket owners located throughout the East Coast and Mid-Atlantic regions. These entrepreneurs took tremendous efforts to open supermarkets in the minority neighborhoods ignored by the large supermarket chains. Currently, there are over 600 full-service supermarket members, most of whom are of Hispanic background and also run their businesses in these minority neighborhoods to provide healthy foods. In the last two decades, NSA has witnessed a positive growth in representing their supermarket members on various issues impacting the supermarket industry.

The mission of NSA is to provide “outreach services to corporations that want to capture the booming Hispanic market by providing counseling on marketing strategies to reach Hispanic retailers and consumers, including market and cultural intelligence”.

The location of NSA Global headquarter has been mentioned in Figure 1. Figure 2 shows select supermarket members of NSA. NSA supermarket members involve in the selling of dairy products, fruits, canned foods, frozen foods, seafood, meats both fresh and frozen, poultry, and others. According to Statistica.com, the sales volume of supermarkets and grocery stores located in the United States has already exceeded more than \$700 billion. Though NSA supermarket members represent approximately 1.6% of American supermarkets, the members employ more than 22,000 people in the Northeast and mid-atlantic regions.

NSA organizes various workshops for the employees of their members on developing skills and knowledge on effectively serving customers, making interpersonal communication with employees and customers, resolving conflicts, maintaining supermarkets, and understanding rules and regulations about the supermarket industry. Apart from serving its members, NSA has partnered with charitable organizations to serve the community members through an initiative called *NSA Cares*. Some of the *NSA Cares* supports are: partnering with Juvenile Diabetes Research Foundation (JDRF) to support funding research activities that treat people affected by Type 1 Diabetes and prevent T1D; organizing NSA Toy Drive to motivate children and create joy for children over 20 years; and offering discounts to purchases made at Two Blind Brothers, an organization that donates hundred percent of its profits to cure blindness.

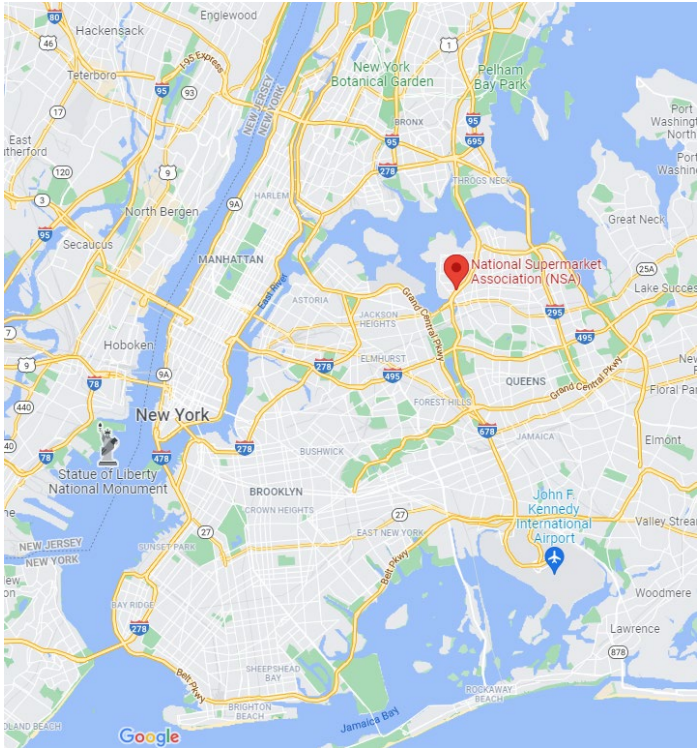


Figure 1. Location of NSA Global Headquarter



Figure 2. List of select members (Source: NSA)

Though NSA constantly provides continuous support to its members on strengthening human resources and addressing regulatory issues, there are complexities arising in the supply chain network of its members due to the current pandemic environment as well as operational procedures of the other supply chain partners. Two such challenges or complexities their members face currently are inventory management and online delivery. NSA should provide the necessary support to its members to ease such supply chain complexities so that its members could serve the minority neighborhoods with healthy food and other supplies.

### **Inventory management in supermarkets**

In general, inventory broadly represents stock we see in the supermarket, and managing inventory is an integrative approach followed for procuring, storing, and selling food-related products, both in the form of raw materials and products. At the beginning of the pandemic and whenever news emerges about a new variant of COVID-19, customers witnessed out-of-stock situations at supermarkets. Whenever hurricane-related news emerges, most of the food- and safety-related items have gone out of stock in the supermarkets located in the hurricane-prone zone. In some situations, customers see more stock in the supermarkets during low-demand periods. These periods significantly contribute to food waste generation. According to the US Department of Agriculture, 30% of food is wasted in American grocery stores which is equivalent to around 16 billion pounds of food every year.

Warehouses play a critical role in managing inventory in the supermarket industry. The warehouse is an intermediate facility between suppliers and supermarkets that are used to manage the inventory of food-related items. Warehouse managers should achieve a tradeoff between the cost of holding the inventory of a product and the market value they provide to customers through this product. Therefore, managers decide which items should be inventoried in the warehouse based on the shelf life of a product, level of perishability, value it provides to customers, and margin of profits.

How do supermarkets manage their inventories? Most supermarkets use a real-time computerized platform to track inventory at their warehouses and supermarkets. This platform aims to manage a mix of products having varied shelf lives in such a way as to reduce replenishing efforts taken by the managers and costs incurred to manage inventories. Retail Point of Sale (POS), a part of this platform, provides supermarkets an integrated view of customers' shopping behaviors, inventory of items, and orders placed. Supermarkets have changed their view that

having a strong inventory management technological capability is a basic requirement to perform the operational processes.

Supermarkets nowadays use inventory management software not only for managing their inventory and replenishment cycle, they go beyond to satisfy their customers with new trends. LS Retail, an inventory management software, can provide personalized offers and individual campaigns for online and in-store customers in such a way to provide a good shopping experience (see [lsretail.com](https://www.l retail.com)). Oracle recently conducted a consumer research study among 5000 consumers and found that 53% of consumers believed that personalized offers contribute to a good shopping experience<sup>1</sup>. The same study found that American shoppers attribute 40% more to out-of-stock items as a bad shopping experience (see below Figure 3 for how much weights global shoppers provide for out-of-stock items).

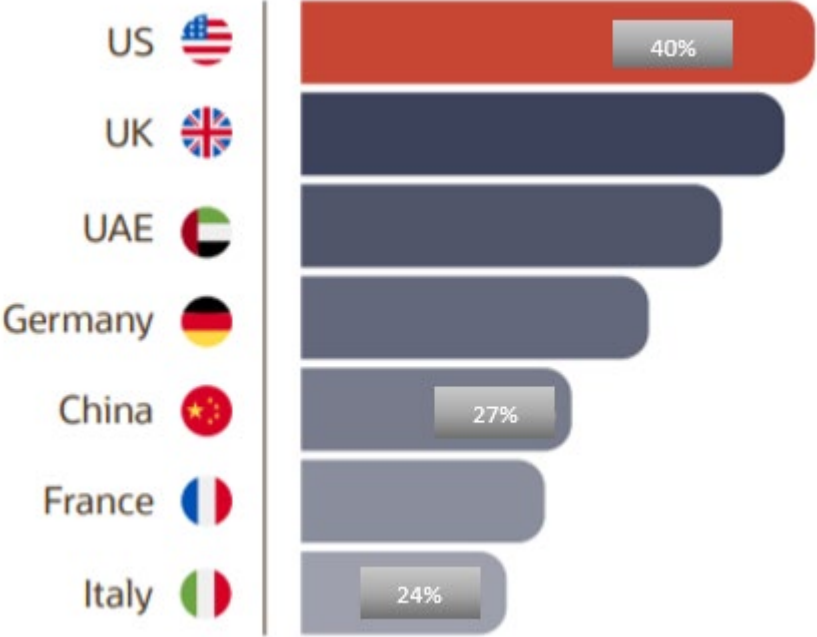


Figure 3. Out-of-Stock items as a bad experience (Source: Retail at an Inflection Point - Consumer Research 2021 US Spotlight)

**Inventory challenges of supermarket members**

In this supermarket industry, Giant Eagle has invested heavily in Oracle Retail Merchandising and Oracle Retail Inventory Operations Cloud Services to manage more than

<sup>1</sup> <https://www.oracle.com/industries/retail/pos-systems/what-is-retail-pos/>

100,000 products in almost all the stores. The seventh-largest retailer in the USA (see nrf.com), Target, has developed its own inventory planning and control system designed to locate inventory throughout its supply chain. This system is equipped with two-step robotic technology: 1) places individual items to correct box in more than 40 boxes of a vertical grid (each box assigned to a specific aisle) and 2) packed boxes are assigned for truckloads into correct trucks with faster unloading (these boxes skip backroom of the store and go directly to aisles). Most of the NSA supermarket members also have POS software (for example, IBM ACE, Logivision) that serves the purpose of inventory control.

Almost all the NSA members are independent grocers. They have one main supplier who supplies products directly to the members' warehouses. They also have vendors who execute Direct Store Delivery from their smaller warehouses and deliver directly to supermarkets. The main challenge these supermarket members face is to impart knowledge to their employees on how to use this software. Since these software are highly sophisticated software, operating these software require a high level of understanding of their features. If they recruit new employees with such operating knowledge of these software, supermarkets will face high pay rates and consequently, they will not meet their ROI target.

### **Third-party grocery delivery services used by the supermarket industry**

COVID-19 pandemic increased the popularity of grocery door delivery as most consumers did avoid getting sick by going to supermarkets. Such contactless delivery support customers to save time and ensure social distancing from others. Supermarkets such as Aldi, King Kullen, Stop & Shop came up with their own door delivery services. To ensure customer responsiveness, supermarkets leverage the delivery capabilities of third-party grocery delivery companies such as DoorDash, Instacart, and FreshDirect. Brick Meets Click/Mercatus Grocery administered a shopping survey among more than 1800 US adults who have made online grocery purchases in the last 30 days, the total spending for online grocery sales by these delivery companies along with pick up services keeps increasing (see Figure 4). Another survey conducted among 60,000 US consumers by Mercatus and Incisiv shows that in this post-pandemic situation, 90% of e-grocery customers are believed to follow their online shopping behaviors, and around 7% of these customers will return to brick-and-mortar supermarkets. Online grocery sales are still expected to grow in the future (see Figure 5 for compound annual growth rate for grocery delivery).

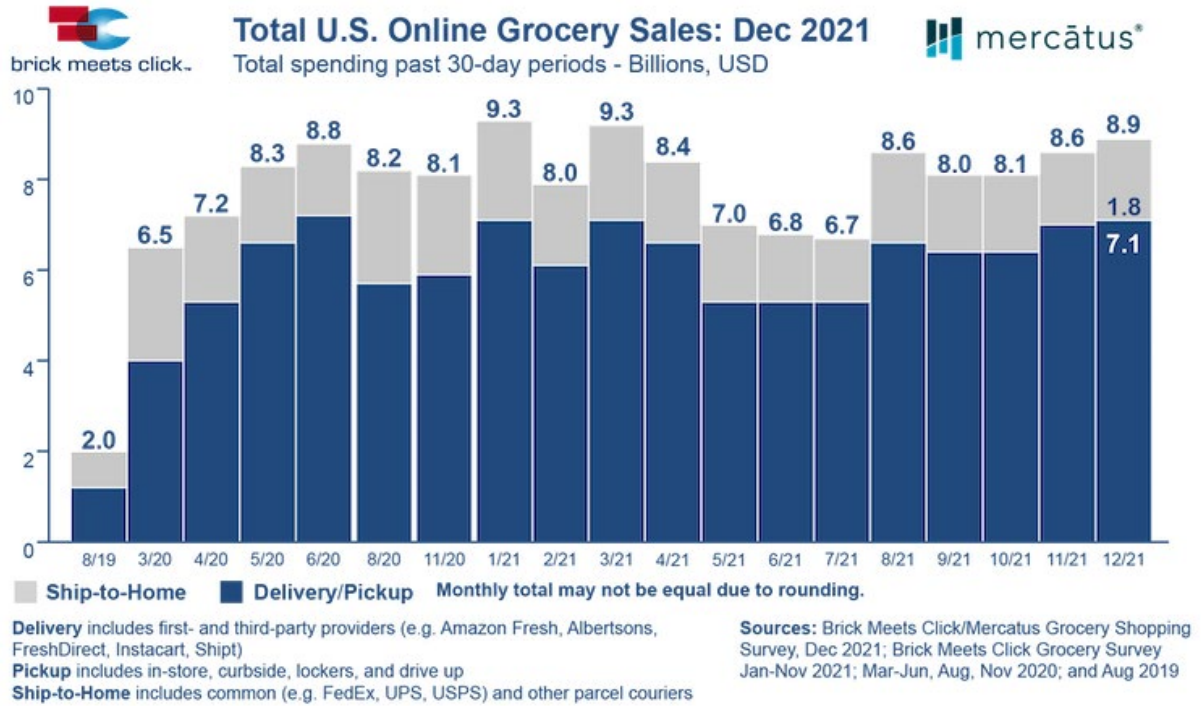


Figure 4. Online grocery monthly sales (Source: Brick Meets Click/Mercatus, 2021)

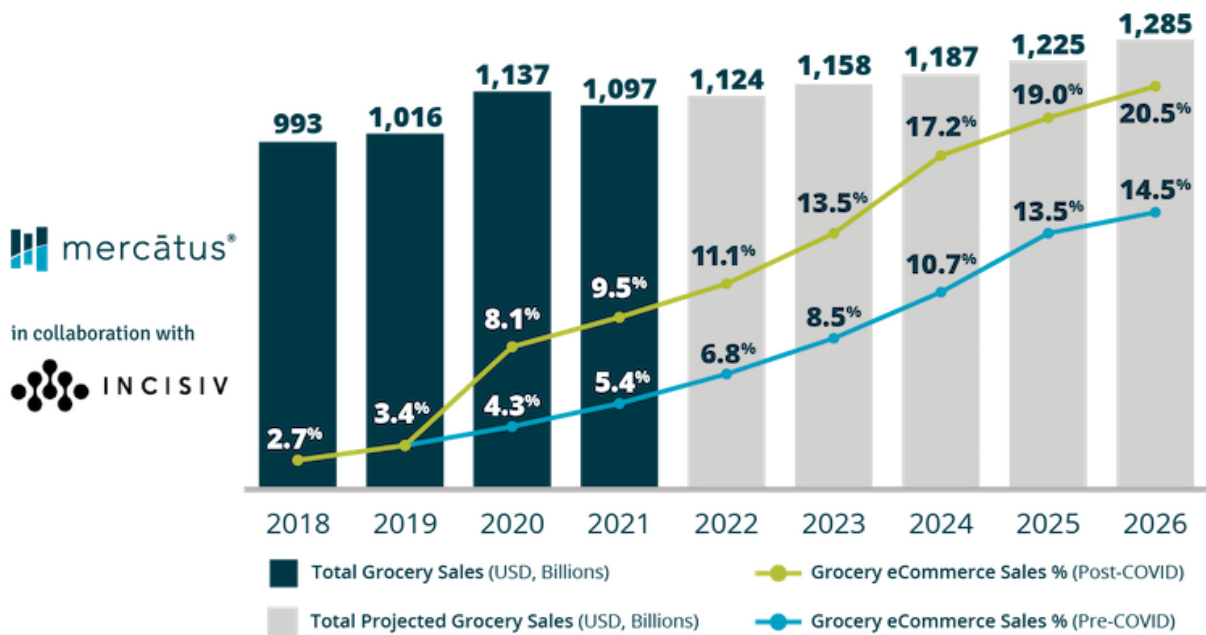


Figure 5. Online grocery future growth (Source: Mercatus/Incisiv, 2021)

## Which delivery companies do NSA members use?

According to Rodolfo Fuertes, the past president of NSA, NSA members predominantly use DoorDash, UberEats, and Instacart. DoorDash, an American company, operates an online food ordering and delivery platform with a 56% market share. It is the largest food delivery company in the United States as it has a 60% market share in the convenience delivery category. As of December 31, 2020, the platform was used by 450,000 merchants and 20,000,000 consumers. UberEats, an online food ordering, and the delivery platform provides customers the ability to read menus, reviews, and ratings, order and pay for food from participating restaurants using the online platforms. Users are also able to tip for delivery. Payment is charged to a card on file with Uber and meals are delivered by couriers. It is operational in over 6,000 cities across 45 countries as of now. Instacart, an American company operating a grocery delivery and pick-up service, offers its services via a website and mobile app. The service allows customers to order groceries from participating retailers with the shopping being done by a personal shopper.

As per Edison Trends (2021), an analysis of 450,000 convenience store delivery transactions made between 30 Dec 2019 and 10 Jan 2021 shows that DoorDash leads convenience store delivery with more than 60% market share, UberEats (9%), and InstaCart (4%) have less than 10% of market share in the American market (see Figure 6).

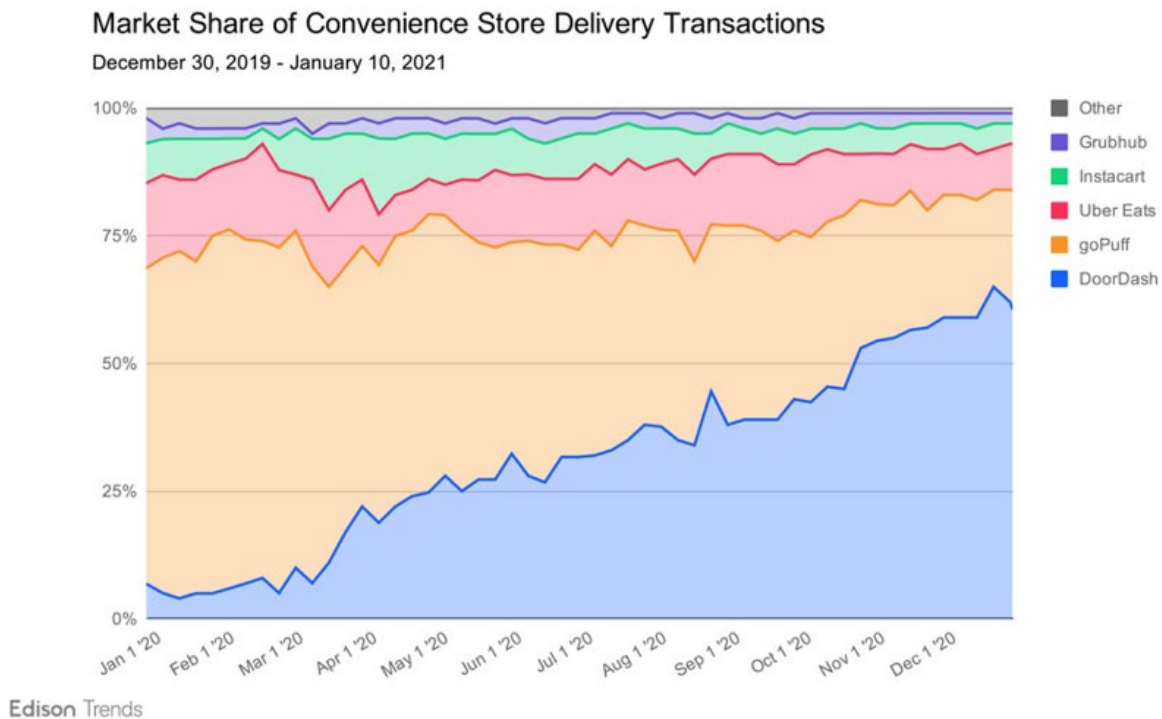


Figure 6. Market share of grocery delivery companies (Source: Edison Trends, 2021)



## **Delivery challenges faced by NSA supermarket members**

NSA members currently have no online shopping platform as they rely on third-party delivery platforms to address the online customers' demand. Online shopping is particularly intriguing since shopping has changed dramatically during the pandemic. Covid has accelerated the transition from in-store shopping to online shopping, and this pattern is expected to continue as we mentioned before, 90% e-grocery shoppers will follow the same online delivery services. Currently, the online shopping options for independent grocers are through other platforms such as DoorDash, UberEats, and InstaCart. These platforms in general offer two different pricing models.

- 1) These companies create an online shopping platform, where customers place orders online. These companies send the supermarkets these customers' orders. Supermarkets are then responsible for picking up the shopping and delivering the groceries to the customer on time. The pricing for this model followed by these companies is around 5% of online sales.
- 2) The second pricing model is that these companies create an online shopping platform and these companies take responsibility to fulfill customers' orders and deliver the orders to the customers. As per this model, the price is 15% of total sales.

Supermarket members historically work with very low margins and rely on high volume. These members witness net profits usually around 3-5% of total sales. It implies that supermarkets leverage the capabilities of the online delivery platform provided by these companies as a service for their customers, and therefore, these supermarket members in general gain profit growth out of leveraging the services given by these companies. However, these members are happy to see that the order volume nowadays goes up which supports these members to reduce their operating costs, which are usually around 20-25% of total sales. If NSA members increase their online shopping volume, their fixed expenses such as rent go down, in essence lowering their operating costs. These members agree that there are pros and cons of the current models with both pricing models. Currently, NSA expects to find out the various pricing models offered by other grocery delivery companies and suggest the best grocery delivery company for their supermarket members to increase their profitability.

## **What should student teams do?**

### **Task 1**

Student teams are required to explore two of the following POS/inventory management software that the independent supermarkets predominantly use in their facilities:

1. Loc SMS
2. NCR Scanmaster
3. Upfront Software
4. IBM ACE
5. Logivision
6. ECRS Catapult
7. MCR POS

In parallel, each team may visit nearby supermarkets to learn POS/inventory management software that they use to learn the basics of the day-to-day work of their software. Thereafter, teams should come up with a template of a training technique such as Mobile Apps, traditional manuals, videos, and others to provide training to new and existing supermarkets employees on using these software.

### **Task 2**

Student teams require to analyze and compare the third-party grocery delivery platforms and propose the best platform that their supermarket members use. Students need to analyze the expense associated with working with these online vendors, their pros and cons, and conclude which one is suitable for the NSA. Students can also implement cost-benefit analysis and multi-criteria decision-making techniques to rank the best possible grocery delivery company. Cost, ease of use, real-time support, level of automation (inventory management, order management, and e-commerce capabilities will be completely automated and update customers with SMS/Email at every touchpoint), marketing integration (includes promotion and offer-based messages/emails sent to customers, campaigns as per their marketing calendar and loyalty programs through their POS system or dashboard), and communication channels (marketing campaign integrated with the sales CRM to help supermarkets to seamlessly execute the task and record the performance of the campaign to retarget it if needed), are some of the criteria of interest that student teams may use.

Imagine that your team is functioning as the operations and production management team for the NSA. Your task is to perform the aforementioned analysis. To do this, conduct your own

research first, and then develop a recommendation for providing training to use inventory system and online delivery platform NSA members can procure for operation and sales purposes. Your recommendation should also include a financial projection.

## References

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