# The University of Texas at Austin 

# McCombs School of Business 

## National Women's Case Competition

## April 13th - 15th, 2023

## Apple

## Company Background

Apple revolutionized technology with the Macintosh in 1984. Today, Apple leads the world in innovation with our hardware products - iPhone, iPad, Mac, Apple Watch, Apple TV, and various accessories. In addition, Apple's software platforms - iOS, macOS, watchOS, and tvOS - provide seamless experiences across all Apple devices and empower people with breakthrough services, including the App Store, Apple Music, Apple Pay, and iCloud.

## Business Strategy

At Apple, we are committed to bringing the best user experience to our customers through innovative hardware, software, and services. Our business strategy leverages our uniqueness to offer our customers solutions with innovative design, superior ease of use, and seamless integration. Our strategy includes a unique Retail experience for digital and physical stores, comprehensive fulfillment programs focused on convenience, speed, clarity, cost, coverage, customer and channel support, and our unwavering commitment to privacy. Every detail is intentionally crafted with one goal in mind - creating the best customer experience.

## Business Organization

We manage our business primarily on a geographic basis, and our reportable segments
consist of North America, South America, Europe, Greater China, Japan, and the rest of Asia Pacific. Although each segment provides similar products and services, each one is managed separately to better align with the unique market dynamics of each geographic region. Our company's internal reporting structure is aligned by functional expertise. Read more about how Apple is organized for innovation here.

## Markets and Distribution

Apple's customers are primarily in the consumer, small and midsize business, education, enterprise, and government markets. We sell our products and resell third-party products in most of our major markets directly to consumers and small and midsize businesses through Apple Retail Stores, Apple Online Store, and a direct sales force. We also employ a variety of indirect distribution channels such as third-party cellular network carriers, wholesalers, retailers, and value-added resellers.

## Environment

The responsibility to protect our shared planet intersects every aspect of our lives. Apple has dedicated our resources and our best thinking to considering the environment in everything we do. We have led the industry in reducing our environmental footprint for years, and have now set a new goal: By 2030, we are committing to total carbon neutrality. View our 2022 Environmental Progress Report.

## Customer Experience

Apple is committed to the health and safety of our customers and employees. We pride ourselves on maximizing the customer experience with the goal to provide our high quality products in the hands of customers in the most optimal way. We hold a very high standard for the quality of that experience, and we believe that the speed and ease of obtaining the product should be as delightful as the product itself.

## The Case

## Scope: Retail Rewind

A social phenomenon has taken over the nation: across the US, people are flocking to brick-and-mortar stores. Customer behavior has unexpectedly changed, and the historically strong online demand has shifted to in-person retail shopping. Apple is not sure what is driving customers through the door versus shopping online, but is curious to learn more and wants to lean into this trend.

## The Competition

Congratulations! You are hired to join Apple and lead the charge to capitalize on this social phenomenon that is taking over the nation. The Apple leadership team has tasked you to deliver a marketing strategy, execution plan, and business continuity plan to ensure a delightful customer experience while minimizing the impact on the overall business and the environment.

Deliver a strategy that includes (but is not limited to) the following components:

1. Marketing Strategy - Identify a marketing strategy to capitalize on this unexpected demand trend including:
-Reason for the current trend, and opportunities to influence and enhance it. Identify any shifts in customer base and demographics, and analyze the impact leveraging Tableau (Exhibits J-L) and/or Excel.

- Mitigation actions required for potential customer satisfaction impacts.

2. Demand and Supply Forecast - Forecast Demand for AirPods and iPads for the next six months, and define the supply plan to support the demand.

- Consider the impact and lifespan of this new demand phenomenon. - Include shifts in customer demographics and how that affects demand and supply by region - West, Midwest, East.
- Provide forecast assumption details including any supply or transportation trade off decisions made and why.

3. Execution Plan - Define how you will deliver to the new Marketing Strategy,

Demand and Supply Forecast, taking into account key factors including: •
Supply and transportation capacity.

- Carbon footprint of decisions, e.g., shipping Air vs. Ocean.
- Delivery speed based on the mode of transportation.
- Activities and/or metrics to monitor and measure success.
- Note: We can ship directly from Manufacturer (OEM) to Apple DC, Apple Retail Store, or Reseller via Air or Ocean. We can ship from Apple DC to Apple Retail Store or Reseller via Air or Truck.

4. Executive Update - Develop a 1-page Executive Summary to explain the situation and obtain Leadership support for your strategy including:

- Overall customer impact.
- Risk, recovery actions, and timing of recovery.
- Measuring progress and success, both qualitative \& quantitative. 5. Business

Continuity Plan - Define a strategy to mitigate future demand shift risk.

## For Your Consideration

Apple faces many challenges across all parts of its business as we strive to achieve our commitment to bring the best user experience to our customers through innovative hardware, software, and services. Recently, BCRP (Business Continuity \& Resiliency Planning) has become a key component of Apple's successful navigation of extraordinary circumstances. There are often no easy answers, all relevant data may not be readily available, decisions cannot typically be made by a single person or functional team, and there are multiple ways to successfully address challenges that could prevent the company from achieving its vision.

To mirror this environment, of which thousands of Apple employees find themselves in every day, this case is intentionally vague and open-ended. As you work through this case, please embrace the ambiguity and develop creative ways to address it effectively. You will need to make assumptions, define your assumptions clearly, clarify your data points, and articulate your position to the best of your ability. Prepare presentation material that is sharable throughout Apple, including an Executive Summary update.

## Exhibit A: Year 1 Sales

|  |  | Q1 |  |  | Q2 |  |  | Q3 |  |  | Q4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 000 Units |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apple Retail | iPad | 61 | 66 | 80 | 78 | 80 | 82 | 86 | 89 | 70 | 70 | $\begin{array}{r} 10 \\ 0 \end{array}$ | 112 |
|  | Airpod | $24$ | $\begin{array}{r} 26 \\ 4 \end{array}$ | $\begin{array}{r} 32 \\ 0 \end{array}$ | $\begin{array}{r} 31 \\ 2 \end{array}$ | $\begin{array}{r} 32 \\ 0 \end{array}$ | $\begin{array}{r} 32 \\ 8 \end{array}$ | $\begin{array}{r} 34 \\ 4 \end{array}$ | $\begin{array}{r} 35 \\ 6 \end{array}$ | $\begin{array}{r} 39 \\ 0 \end{array}$ | $\begin{array}{r} 40 \\ 0 \end{array}$ | $\begin{array}{r} 40 \\ 0 \end{array}$ | 448 |
| Apple Online | $\mathrm{s}_{\mathrm{iPa}}$ d | 47 | 55 | 64 | 64 | 76 | 70 | 72 | 74 | 50 | 50 | 80 | 91 |
|  | Airpod | $\begin{array}{r} 18 \\ 8 \end{array}$ | $\begin{array}{r} 21 \\ 9 \end{array}$ | $\begin{array}{r} 25 \\ 6 \end{array}$ | $\begin{array}{r} 25 \\ 7 \end{array}$ | $\begin{array}{r} 30 \\ 4 \end{array}$ | $\begin{array}{r} 28 \\ 0 \end{array}$ | $\begin{array}{r} 28 \\ 8 \end{array}$ | 29 6 | $\begin{array}{r} 31 \\ 0 \end{array}$ | $\begin{array}{r} 28 \\ 1 \end{array}$ | $\begin{array}{r} 32 \\ 0 \end{array}$ | 364 |
| Resellers | $\mathrm{s}_{\mathrm{iPa}}$ d | 66 | 74 | 92 | 95 | 84 | $\begin{array}{r} 10 \\ 0 \end{array}$ | 96 | 90 | 70 | 70 | $\begin{array}{r} 10 \\ 7 \end{array}$ | 118 |
|  | Airpod | 26 4 | 29 6 | 36 8 | 38 1 | 33 6 | $\begin{array}{r} 40 \\ 0 \end{array}$ | 38 4 | 36 0 | 41 0 | 39 5 | $\begin{array}{r} 42 \\ 8 \end{array}$ | 472 |

## EXhibit B: Year 2 Sales

## Youtube

|  |  | Q1 |  |  | Q2 |  |  | Q3 |  |  | Q4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 000 Units |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apple Retail | iPad | 74 | 96 | $\begin{array}{r} 12 \\ 1 \end{array}$ | $\begin{array}{r} 13 \\ 0 \end{array}$ |  |  |  |  |  |  |  |  |
|  | Airpo | $\begin{array}{r} 29 \\ 6 \end{array}$ | $\begin{array}{r} 38 \\ 4 \end{array}$ | $\begin{array}{r} 48 \\ 4 \end{array}$ | $\begin{array}{r} 52 \\ 2 \end{array}$ |  |  |  |  |  |  |  |  |
| Apple Online | $\mathrm{s}_{\mathrm{iPa}}$ $\mathrm{d}$ | 51 | 41 | 37 | 35 |  |  |  |  |  |  |  |  |
|  | Airpo | 20 | 16 | 14 | 13 |  |  |  |  |  |  |  |  |


|  | d | 4 | 4 | 8 | 6 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Resellers | $\begin{aligned} & \mathrm{s}_{\mathrm{iPa}} \\ & \mathrm{~d} \end{aligned}$ | 72 | 80 | 92 | 97 |  |  |  |  |  |  |  |  |
|  | Airpo d | 28 8 | 32 0 | 36 8 | 38 6 |  |  |  |  |  |  |  |  |

s
*Shift to Retail starts

## Exhibit C: Inventory On Hand - Year 2

Note: Subset of total supply by quarter for all Apple Customers

|  | Year 2 <br> (000 units) |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Q1 <br> (Jan - Mar) | Q2 <br> (April 30th) |
|  | DC Inventory on hand | 700 | 400 |
|  | Ocean Inventory <br> (In-Transit) | - | 500 |

## Exhibit D: DC Capacity - Year 1 (AirPod + iPad)

| 000 units |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shipping | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Midwest | 200 | 221 | 268 | 270 | 273 | 286 | 289 | 287 | 295 | 285 | 323 | 361 |
| East | 360 | 408 | 495 | 498 | 503 | 528 | 532 | 530 | 545 | 525 | 596 | 666 |
| West | 320 | 354 | 429 | 432 | 436 | 458 | 462 | 460 | 473 | 455 | 517 | 578 |

## Exhibit E: Transportation Capacity from Manufacturer (OEM)

|  |  |  | 000 units |  |
| :---: | :---: | :---: | :--- | :--- |
| Airpods + <br> iPad | Avg <br> Transit <br> Time | CO2 <br> equiv. <br> (KG) | Year 1 | Year 2 |


| Ocean | 30d | 0.24/unit | 29/day | $30 /$ day |
| :---: | :---: | :---: | :---: | :---: |
| Air | 7d | 10.47/unit | 18/day | 20/day |

## Exhibit F: Manufacturing Capacity (Supply)

|  | 000 units |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year 1 |  |  |  | Year 2 |  |
| Asia | Q1 <br> (Jan - Mar) | Q2 <br> (Apr - Jun) | Q3 <br> (July - Sept) | Q4 <br> (Oct - Dec) | Q1 <br> (Jan - Mar) | Q2 <br> (Apr - Jun) |
| iPad | 615/qtr | 721/qtr | 765/qtr | 861/qtr | 564/qtr | 742/qtr |
| AirPods | 2,425/qtr | 2,915/qtr | 3,065/qtr | 3,444/qtr | 1,992/qtr | 2,808/qtr |

## Exhibit G: US Regional Demand

| Consumer Demand by Region | Year 1 |  |
| :---: | :---: | :---: |
|  | AirPods | iPad |
| East | $40 \%$ | $43 \%$ |
| West | $35 \%$ | $37 \%$ |
| Midwest | $25 \%$ | $20 \%$ |
|  | $100 \%$ | $100 \%$ |

## Exhibit H: Greenhouse Gas Calculator

https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

## Exhibit I: List of US Retail Stores

https://www.apple.com/retail/storelist/

## Exhibit J: Potential Data Sources

File types - Excel, TXT, CSV

| Tableau <br> Public Data <br> Sets | https://www.tableau.com/learn/articles/free-public-data |
| :--- | :--- | :--- |
| sets |  |


| Apple Retail | https://www.apple.com/retail/storelist/ |  |
| :--- | :--- | :--- |
| EPA | https://www.epa.gov/energy/greenhouse-ga <br> c equivalencies-calculator\#results |  |

## Exhibit K: Tableau Resources

Specific topics can be searched based on Tableau function


| Graphing Examples | $\underline{\mathrm{https}: / / w w w . \text { dataplusscience.co }}$$\underline{\mathrm{m} / \text { TableauReferenceGuide/ }}$ | cata + scrence <br> Tableau Reference Guide |
| :--- | :--- | :---: |

## Exhibit L: Tableau Training

| 1 | Connect to your datasource - <br> https://data-flair.training/ blogs/tableau-data-sources/ |  |
| :--- | :--- | :--- |
| 2 | Pic an Excel file to connect to..... |  |
| 3 | Select the table and review the data |  |
| 4 | Build a worsheet from the data and create <br> visualizations thru dashboards |  |
| 5 | Explore and create customized dashboards with <br> Tableau https://public.tableau.com/app/discover |  |

## Judging Rubric

|  | Criteria | Points Available (100) |
| :---: | :---: | :---: |
| Deliverable Content (40 points) | Defines demand shift root cause and Marketing Strategy to maximize sales opportunity and customer satisfaction. | 10 |
|  | Leverages exhibits to forecast demand and define Manufacturing and Logistics strategy (transportation/ distribution center) to support forecast while considering cost, lead time and environmental impact | 10 |
|  | Defines business continuity plan for future risk proofing | 5 |
|  | Incorporates customer impact and experience | 5 |
|  | Solution references details in the case | 5 |
|  | Success criteria are clearly established and measurable | 5 |
| Presentation Organization (10 points) | Arranges themes in a sequence that makes sense, with clear connections between supporting data and ideas | 5 |
|  | Uses a comprehensive and professional format to clearly articulate solution | 5 |
| Presentation Delivery <br> (10 points) | Verbal delivery and professionalism are achieved across the team | 5 |
|  | Speakers demonstrate mastery of the team's deliverable content and key recommendations | 5 |
| Recommendatio ns (20 points) | Recommendations meet the needs of the problem | 10 |
|  | Key Performance Indicators (KPIs) for success | 5 |
|  | Recommendations are feasible given constraints | 5 |


| Written Executive Summary (10 points) | Respondents demonstrate ability to net out key information up-front | 5 |
| :---: | :---: | :---: |
|  | Respondents organize content in a clean, easy to read format | 5 |
| Q\&A <br> Responses <br> (10 points) | Responses demonstrate the breadth and depth of thinking by the team with supporting backup data | 5 |
|  | Respondents receive constructive feedback well | 5 |

