Team 2: (Jessica, Chelsea, William, Graeme, Patrick)

Question #1

Seven-Eleven Japan's (SEJ) strategic and operational business decisions that used analytics to generate business value includes the following:

A. Strategic Decisions
B. Operational Decisions

A. Strategic Decisions

- **Retail Strategy**

  - SEJ's retail strategy is to switch out products once their sales begin to decline, enforcing a short life for their products' shelf time. This helped SEJ to remain actively "fresh" in the market compared to other retailers. This helps support brand image and stronger investments for future forecasts through customer loyalty. Bento was one of the products SEJ paid special attention to that supported their "freshness" strategy.

  - SEJ empowers its store managers and OFCs to make decisions regarding product offerings specific to their local markets, allowing Seven-Eleven stores to cater to their communities. This diversification strategy and the relative freedom of franchisees allows Seven-Eleven to compete at a more grass-roots level than their competitors or big-box food retailers.

- **Information Systems**

  - Continuous investment in information systems technology, driven by inventory management and supply chain analytics (given the limited shelf space in stores that supports their freshness strategy), differentiates the customer experience against competitors, and maximizes profits. This allowed SEJ to have average inventory turns which were more than four times higher than Wal-Mart in 2009.

  - Specific investments in configuration that included choosing an optical fiber network, wireless LAN, the new store computer (SC), new point-of-sale registers (POS), graphic order terminals (GOT), and scanner terminals (ST) influenced by the need for real-time, relevant analytics and the communication of this critical information to HQ and the rest of the supply chain in order to sustain SEJ's loyalty among its customers through competitive prices.

  - Decision to improve analytics through Location/Trade Area Analysis (LTA) was driven by sales trend data in order to mine the data further to improve product offerings within segments or "classes" of stores.

- SEJ was a bit of a pioneer in the information systems technology market due its incorporation of an on-line ordering system in 1979 that enabled store managers to communicate - albeit one-way - with corporate headquarters. The early adoption of IT/IS solutions allowed for the collection of meaningful data that the company is then able to use to make decisions.

- **Feedback Loop**

    - Establish the flow of information from stores to corporate headquarters (HQ) and across the supply chain, combined with the establishment of the bi-weekly corporate meeting to develop action from insights. This was derived from operational analytics of sales data, scrap trends and customer profile data in order to be agile in adapting to shifts in consumer behavior.

    - Empowering Operation Field Counselors (OFC) and Store Managers, who are closest to customer-facing convenience store operations, was driven by a mix of operational and supply-chain analytics in order to have structure for swift, tactical decision-making at the store-level in order to maximize sales.

    - Various analyses are performed based on the collection of data from the POS systems. Such analyses include "[hourly] sales trend for individual items," "[scrap] trend analysis," and "[hourly] sales trends by customer profile." These types of analyses could not be performed without a robust data-gathering system, and through using business analytics.

- **New Product Development**

    - New product development is formed based on POS data that assists manufacturers in forecasting trends and creating project proposals. This development can become a joint one as well, forming original products for SEJ and giving them a unique side to competition. This creates a stronger relationship with manufacturers, and it increases gross margin.

- **Growth**

    - A dominant opening strategy driven by knowing demographic/geographic density through market research analytics, helped establish strong new store sales and with efficiency by taking advantage of their strong delivery network and logistics.

    - Limiting the number of store openings each year was driven by 135 factors across multiple categories such as car & people traffic, population density, and demographic data in order to increase the likelihood of strong sales and to maximize efficiency through their supply chain and delivery operations.

    - **Electronic Commerce**

    - Forward thinking helped form the 7dream.com electronic commerce ordering system in partnership with other Japanese firms was driven by understanding demographic/market research analytics that their customers and stores are near subways, which creates an opportunity for customers to order products digitally in advance, and quickly pick up from the store as they walk home.

B. Operational Decisions

- **Store Operations**

  - Assigning responsibility to store managers for daily ordering, store layout, and merchandising in coordination with HQ was driven by taking advantage of real-time POS data in order to make agile decisions to adapt to consumer needs, manage inventory, and help store sales.

  - Empowering store managers to engage directly with new product development teams through forecasting future trends and demand data continued to sustain SEJ's competitive advantage by offering new, original food and non-food products in their stores. LTA analytics support in partnership with corporate HQ gave stores richer analytics to drive sales.

  - Limiting the number of SKUs, while largely due to space constraints, is an operational strategy because it limits the overhead related to inventory turnover. It also allows for more accurate shrink management due to fewer SKUs to track.

Question # 2

A new store in a growing business district can take advantage of daily sales data in order to plan the next day's deliveries. For example, rapid transmission of POS data to analyze trends from a weekday may help the store manager see that Bento boxes and onigiri are selling out during lunch hours. Given fast foods make-up 27 percent of SEJ's sales, this represents a missed opportunity and could lead to a disappointing experience for a customer who may choose other options in the future. Turning that insight into action quickly by increasing the quantity ordered for deliveries of Bento boxes and onigiri for the very next day allows the new store to make a quick adjustment to meet demand.

Question #3

Seven-Eleven Japan's analytics capability likely evolved from the need to sustain its commitment to freshness for its loyal customers and maximize efficiency to minimize general expense given fierce competition among convenience stores. This capability often takes years to become a core competency. It relies on supportive leadership, a continuous improvement culture, strong teamwork through feedback loops, and a bias for action. The organization's culture of continuous improvement and open communication across stores, headquarters, manufacturers, suppliers, and delivery operations created a foundation in its early years. Consistent leadership from the top-down sustained this culture. Improving core operations daily through observation and manual data collection helped yield best practices and lessons learned that were shared across the organization. This active studying of customer behavior and keeping track of trends helped the organization study the performance of their current business processes and systems. Through strong teamwork, action plans developed and good execution of those plans likely followed.

The speed at which an organization develops its analytics competencies is directly related to the experience and intuition of those employees who are performing the analyses. As with data, “garbage in, garbage out,” and a lack of talented analysts is counterproductive to improving. Once a ceiling of current performance was acknowledged, the organization iteratively changed from a mindset of optimization to system and technology investments to further understand the performance of their processes. Upon systems implementations, the expectations increased for improving effectiveness in getting relevant, real-time data easily accessible on-demand. The capability to get data quickly, interpret, and then infuse the analytics with the rest of organization through strong teamwork increasingly closed the gap in time to move from insight to action.