

## **Introduction**

In recent years, the entire retail industry has experienced substantial transformations due to several negative global events. The business model of the AIS Technologies retail department has worked in the past; however, after the easing of the negative effects of the pandemic, the monthly sales revenue per square meter has shown no signs of improvement despite an increase in customers. Based on the store's existing financial performance issues, this report identifies the major problems and proposes solutions by using emerging technologies and automation options. Moreover, following the evaluation of these solutions, this report provides recommendations in the form of a memo to address the issues.

## **1. Major Issues of the Stores**

By analysing the store's performance and the interviews with staff, four major issues can be identified as follows:

**a. Lower Conversion Rate despite Increased Foot Traffic** – The fact is that stores have been generally busy and have experienced a surge in visits because of the ease of the pandemic, while the sales have not been proportional and even been down. That means many visitors who tend to purchase end up not buying, which indicates low conversion rate of the stores.

**b. Overwhelming in-store Experience** – The current store layout and the extensive range of products may cause confusion for customers. Meanwhile, due to social distancing and a preference for self-navigation, customers face challenges in locating items of interest and get overwhelmed. This also caused decreased level of satisfaction.

**c. Understaffing and Declining Employee Morale** – Largely fixed costs and lower revenue of the stores deeply affected the margins, which may cause the experienced employees to be laid off to reduce the whole costs. However, limited staff numbers and increased pressure have affected the sales service performance and have affected the company's culture in turn.

**d. Lack of Tailored In-store Promotions** – Each store caters to a unique customer base, but general advice from the head office doesn't cater to the unique needs of individual stores. This led to unsuccessful promotions and the failure to meet the changes in customers' requirements.

## **2. Solutions Featuring Intelligent Process Automation or AI Automation**

The current challenge and trend in the retail industry is intelligent process automation or artificial intelligence (AI) automation. Automation refers to minimal human input by using the technology to complete tasks. (IBM 2023) Based on the identified issue and new technologies, the following possible solutions can be proposed:

**a. AI-Powered Customer Service robots with Intelligent Virtual Assistants Technologies**

AI-powered customer service robots use Intelligent Virtual Assistant technologies to enhance customer interactions through various means and integrate with enterprise resource planning (ERP) systems to record in the customer relationship management module. According to Gray (2016), the smart foundation of this technology embodies the potential for critical thinking and comprehension which are essential abilities of a customer service representative. These robots can stimulate customer's desire to purchase in the store to **increase the conversion rate** by:

- personalize interactions using voice and touch based on customer history and preferences;
- provide real-time answers to queries through the ERP's database;
- facilitate feedback collection directly into ERP system and
- offer preferred language options through intelligent voice assistant.

**b. Smart Inventory and Product Finder Systems with intelligent process automation**

Many companies are seeing significant benefits from utilizing Intelligent Process Automation (IPA) system, including substantial task automation (Gray, 2016). The system can leverage intelligent process automation to interact with ERP's inventory management module to **enhance the shopping experience** by providing more specific information of products. This will be achieved through:

- update product locations in real-time across digital store maps and in-store systems;
- automated update the real-time stock with in-store system;
- integration with online stores and harmonize the inventory, pricing, and sales service and
- provide personalized suggestions based on customers' histories and interactions.

**c. AI-Driven Staff Management Tools**

AI-driven staff management tools leverage ERP's HR module to optimize workforce operations. This process can give the predictions of the busy time to plan the staff and minimize the errors that occur due to human oversight, such as neglecting to update logged timesheets (Uzialko, 2023). It means the solution can **guarantee enough staff level** in busy time to service costumers in the store. This can be achieved by:

- use real-time data to dynamically allocate staff based on availability and store peak hours;
- integrate staff performance data from the ERP to offer targeted training and improvement initiatives;
- use feedback and performance analysis from the ERP to guide sentiment analysis, ensuring a more accurate view of staff well-being and
- automate repetitive tasks, streamlining workflow and prioritizing essential tasks, thereby promoting efficiency and employee service level.

#### **d. Predictive Analytics for Product Promotions by Using Database System**

This strategy can predictive analytics in product promotions using a Database System and ERP data. Integrating database in e-commerce and retail operations allows businesses to match proper products with their clients. These data should include the information of the local market, culture of the specific store's location, the group of their clients and customers' preference, to **improve the promotions of the store**. This solution has four key characters:

- fine-tuning promotional strategies through store-specific data analysis;
- integrating market trend data with sales data for a comprehensive understanding of market dynamics;
- leveraging historical sales data and AI models for accurate sales forecasting;
- tracking the effectiveness of promotional campaigns in real-time to make necessary adjustments.

### **3. Evaluate the Suitability of the Solutions:**

**a. Increasing Customer Engagement and Satisfaction** – The AI-powered customer service robots will provide real-time information and assist in making the shopping process smoother. They can also engage customers in their native language, ensuring better communication and potentially leading to improved sales.

**b. Enhancing Customer In-store Experience** – By implementing a smart inventory and product finder system, customers can swiftly locate the products they're interested in, leading to quicker purchase decisions. For instance, **H&M** introduced an AI-driven system that analyzed local demands, including analyzing store receipts and returns to better align inventory levels with local demand. This system also allows customers to check the products on their mobile phones. This strategy succeeded in a more targeted in-store layout and help users find the items they wanted. In the end, H&M's sales increased by 9% and inventory reduced by 13% (Bernard, 2018).

**c. Optimizing Staff Allocation and Boosting Morale** – The AI-driven staff management tools will better manage human resources. By efficiently allocating staff during peak hours, and reducing their repetitive tasks, their job satisfaction can increase, which will subsequently reflect in their interactions with customers and potentially improve sales. Just like Starbucks, Starbucks uses its advanced analytics tools to optimize workforce deployment. By predicting peak times, the tool assists managers with staffing decisions and ensures adequate workforce during peak times (Eric, 2018).

**d. Tailored Store Strategies** – Predictive analytics for product promotions will enable store managers to make informed decisions about which products to promote. This targeted approach can resonate better with the local audience, leading to an increase in sales. People in each region have different economic levels and have different hobbies in choosing things. Walgreens offers a prime example of using data-driven strategies to optimize store offerings. By leveraging big data and analytics, Walgreens was able to tailor in-store offerings to suit local preferences. This led to a reported 3% rise in sales, partly attributed to their data-driven approach (Abiola, 2022).

#### 4. Benefits and Risks of Implementing Suggested Solutions

The implementation of AI and automation technologies in retail operations comes with several **benefits**. Firstly, AI-Powered Customer Service Robots and Smart Inventory and Product Finder Systems significantly **enhance the in-store customer experience through technology**. They improve personalized interactions between customers with the store and products, which will help customers find what they want to purchase. Secondly, AI-Driven Staff Management Tools **improve sales associate efficiency and morale**. According to Taylor (2019), retail workers can use the AI-Driven tools directly and will have more time to interact with customers, which also tends to improve their working efficiency and enthusiasm. Then, predictive Analytics for Product Promotions leverages historical sales data and AI models for accurate sales forecasting, thereby **increasing sales via personalized in-store promotions**. Finally, these solutions **consolidate the offline and online shopping experience**, offering a seamless shopping journey for customers.

However, new technologies are always accompanied by some predictable **risks**. Firstly, a significant concern is the **high initial investment** in technology, which could strain the financial resources of a business. Moreover, the collection and utilization of customer and employee data **raise serious data privacy concerns**, which needs security measures (PwC, 2017). Also, there is a risk of **over-reliance on automation** leading to **staff reduction**, as well as **possible resistance from employees** in adopting new technologies due to fear of job displacement or unfamiliarity with the technology.

Therefore, while the AI and automation solutions can improve customers' shopping experience and increase sales of the stores, they demand careful consideration of the strategic approach to implementation, balancing the benefits and potential risks.

## **5. Recommendation in the Form of a Memo**

To: Elaine, General Manager of Retail Operations

From: Accountant

Date: 10 September 2023

Subject: Recommendations to Address Store Performance Issues