



Social-Mobile-Analytics-Cloud Model for Merchant Service Providers to Enhance In-store Customer Experience



Abstract

Customers waiting impatiently at billing counters in winding queues are a common sight in almost every supermarket, especially during peak hours. Some even leave the queue and the store swearing never to return. This lack of efficiency and loss of reputation has ramifications far beyond the outlet in today's connected world. The queuing problem is a high-priority issue in any trade as it can directly impact brands and businesses. Though merchants use their own ways to prevent it, the queue often resurfaces in new areas of operations over time. Many merchants are striving continuously to devise new methods and implement operational changes. This article discusses implementation of the social-mobile-analytics-cloud (SMAC) model by Merchant Service Providers (MSP) or acquirers to improve customer experience during in-store purchase by comparing customer serving index and overall time spent by customer to complete the purchase cycle.

Introduction

While the retail industry is transforming itself at an unbelievable speed with innovative initiatives and technology to improve the shopping experience, most people still spend at least one whole evening on weekends just buying the essentials at supermarkets. Even worse – often, most of their shopping time is spent waiting at the billing counter. Many a time, customers spend less time selecting products than they do making payments at the counter. Frequently, when customers are waiting at counters, the in-store staff is busy refilling empty product slots, at the cost of providing possible value-added services. This scenario is bringing merchants back to the drawing board for the best available solution to resolve their specific queuing and utilization issues.

A study on US consumers published by a business news daily shows that due to waiting lines 51% of respondents were reluctant to buy from mass merchants, 27% from quick service restaurants, 26% from club stores, 52% from grocery stores, and 29% from drug stores. Analysts point out that British retailers annually lose around GBP 1 billion in sales due to the unwillingness of buyers to stand in a queue.¹ Another study on customer behavior found that respondents were not willing to wait in a queue longer than 2-4 minutes and their perception of time spent in queue was around 36% higher than the actual time spent.

Purchase types and their nuances

Both online and in-store purchases involve certain unique influential factors and characteristics, in addition to advantages and challenges.

Online purchases are made in the comfort of one's home and orders placed using a computer or a mobile device. In this type of purchase, buyers generally do not receive an immediate delivery of goods. The expected latency period can be as long as 1-3 days or more. All that the customer needs to make a purchase is an internet connection and a connected device. There are multiple electronic or mobile payment options available to complete the transaction. For in-store purchases the buyer must reach a physical store and take delivery of goods. Here the buyer gets the freedom to choose available brands in a category while experiencing them live. Two major trends in buyer behavior can be observed in case of in-store purchases: In one scenario buyers arrive at the store with pre-determined lists of items to be purchased. In the other they walk into a store to view or experience products on display. In the first case, while the buyer has a fixed list of items to be bought, there can be impromptu additions based on the actual buying experience and the availability of products on display. In the second scenario, buyers may enter a store only to browse but may pick up products that they never intended to buy while entering the shop.

Undoubtedly, in-store purchase is a valuable opportunity for merchants to showcase products and induce customers to buy more. However, due to the volume of people shopping simultaneously, they are often forced to compromise on some parameters such as service value-add. This lack of focus on service can adversely impact the buying experience. Long waiting time at counters is one of the factors that can lead to customer

dissatisfaction.

Queues stretch long back into time

Waiting queues are not a new phenomenon in any industry. This issue has been attracting the attention of statisticians and operations research analysts for decades. Multiple models have been proposed and implemented to prevent queuing and bottlenecks. Here are some innovative models and solutions:

- Immigration sections at airports employ a single-queue system that feeds to multiple counters. This helps reduce idle time at all counters.
- In super markets, glass capsule elevators and mirrors inside elevators keep customers engaged.
- Items like gum, chocolates, and magazines at cash counters help distract waiting customers. Some buy these items and further drive sales.
- Bank branches, especially in emerging markets, implement token systems to indicate to customers the approximate time for their turn. They also place newspapers and magazines in waiting areas to keep customers occupied.
- Some stores employ representatives to collect feedback from people waiting in queues.
- Many stores run popular TV channels on large-screen sets to entertain waiting customers.
- UK-based retailer ASDA has implemented free Wi-Fi networks for customers' mobile devices. This strategy resulted in adding over 100,000 customers.

While these instances demonstrate the importance of innovation, the social-mobile-analytics-cloud (SMAC) model leverages a group of new technologies to prevent the queuing problem and improve the in-store customer experience. The ubiquity of mobile technologies indicates

strong potential for a speedy acceptance of the SMAC solution.

Customer satisfaction as a function of service and perceived time spent

A look at merchants of similar scale with similar offerings reveals that customer satisfaction depends on the perceived time spent at store and the ability of merchants to provide quality service to their customers.

Mathematically, keeping other offerings constant, Customer satisfaction $\propto \frac{\text{Customer serving index}}{\text{Perceived time spent at store}}$

Where,

1. Customer serving index = $\frac{\text{Customer requests processed per unit of time}}{\text{Customers arriving per unit of time}}$
2. Perceived time spent at store = Actual time spent at store + Perceived time wasted
 - a. Actual time spent at store = Actual time spent in selecting products + Actual time spent at cash counter

Therefore:

The higher the customer serving index, lower the customer's time wasted, and higher the satisfaction.

The lower the perceived time spent at store, lower the depth of the queue at the store and higher the customer satisfaction.

The SMAC model—new and effective solution to queuing

SMAC technology combines new-age innovations to prevent the problem of queuing in these modern times. To see how the SMAC model can help merchants, let us imagine a situation in the context of regular in-store purchases where a consumer has her list of items ready. She logs on to her mobile app with this fixed list. The mobile app provides her information about various aspects of purchase such as:

- A nearby store for the merchant category of her choice: grocery, medical store or quick-service restaurant along with their user ratings and comments about service
- A catalog of items with their availability at the store
- Her previous purchases around the same product category, so that she can quickly add items to the shopping cart
- A comparison of selected product/ category of product to help her choose the right brand
- The feasibility of putting products from different merchants in the same shopping cart

- Related items that she might require in combination with the selected item
- Data points from social media and comments from the previous buyers of the same product

The app also allows the consumer to:

- Place an order from home while listening to her favorite music
- Pay for the order using the payment method of her choice – cards, mWallet, coupons, reward points, etc., in such a way that the entire shopping cart is paid for using only one transaction

The app provides a time slot when she can pick up the goods (even from different merchants) to avoid the queue. At the store's take-away counter at the given time, she identifies herself, collects the parcel and leaves the place with a smile.

By using a cloud-based application, which can be accessed via a simple mobile app, merchants can provide better service to buyers. Buyers can be offered a mechanism to communicate their opinions to merchants or other buyers. As the payment is already completed by the customer at the time of ordering, the tasks for the staff at the merchant's take-away counter are reduced significantly. This improves their capacity to serve the customer.

For the customer, perceived time spent at the store can be the same as the actual time spent in the store. These changes can enhance overall customer satisfaction for regular in-store purchases.

Most merchants use their point-of-sale (POS) systems to track multiple activities ranging from inventory management to payment acceptance. Simply integrating their existing POS system with the cloud-based application and instructing store employees to keep the parcels ready, can release significant quality bandwidth for the staff. Apart from improving customer satisfaction, SMAC implementation also implies comparatively less crowding at the store. This can help the staff utilize additional capacity to provide value-added suggestions to buyers. For instance, if a customer is not sure about which brand to select for a specific product among the multiple choices available, staff members can provide additional information and assist the customer to make the best buying decision. Such initiatives can improve the customer's buying experience and result in increased customer satisfaction for in-store buyers.

Looking ahead

The merchant community will benefit from this solution. However, if all merchants start implementing such a solution, it will mean repetition of work and duplication of hardware and software resources. It will also mean varied customer experience, since not all applications will provide exactly the same purchase experience and consumers will need to track multiple applications. Instead of such standalone implementations by multiple merchants what if there is a centralized implementation for interested merchants?

Merchant Service Providers (MSP) or acquirers are best suited for hosting such a centralized system. Here, MSPs can provide membership-based access to a hosted system of their merchant community using Platform-as-a-Service (PaaS) model. Such a ready-to-use and simple-to-operate hosted service for a small charge will be much more cost effective for merchants, compared to investing in creating and hosting their own solutions. The SMB merchant community can even draw additional benefits. It automatically provides indirect marketing support to merchants when consumers search for stores in their proximity.

A hybrid model, which accepts orders remotely and provides take-away delivery at a predefined time using the SMAC solution, can be an effective way of preventing long waiting queues at counters and their long-term consequences on business. This model can be used successfully, especially, for in-store regular purchases where the buying wish-list remains constant. MSPs or acquirers can reach a wider range of merchants using the Platform-as-a-Service (PaaS) model to provide the solution. MSPs or acquirers will be in a position to increase their top line and lead through innovation. The platform option allows merchants to publish a variety of services like placing an order, booking a table and ordering starters/drinks at restaurants, ordering gifts, etc. The hybrid approach can help merchants segregate consumers making routine purchases from others. With the take-away delivery model option, the number of regular customers visiting the store for routine needs can be reduced significantly. Further more, as the in-store staff focuses on providing value-added services and regular customers spend less time paying for their purchases, merchants achieve better staff utilization and improved customer satisfaction.

The SWIFTNet platform of the Society for Worldwide Interbank Financial Telecommunication (SWIFT) enables banks to focus on defining their customized services while SWIFT manages the underlying technology platform. Similarly, MSPs can enable the merchant community with a centralized platform, allowing merchants to focus on their core business. Analytical support will further benefit merchants in effective business planning over a period of time.

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