

# Today's Restaurant

THE FOODSERVICE INDUSTRY AUTHORITY

VOLUME 27

## Artificial intelligence and machine learning study informs on new ways to grow your restaurant business

By James Mansfield

With the risk of a global recession, restaurants are prioritizing opportunities to improve customer experience and sustain restaurant business driver fundamentals. To provide guidance with the uncertain future, traditional and advanced analytics machine learning research was explored to provide guidance of the uncertain future to support restaurant resilience. The research evaluated customer experience and restaurant fundamentals overall and in the context of a use case which exemplified how occupancy, sales and service, the core restaurant fundamentals, can be positively impacted.

### How much do table side racks improve customers experience?

The research studied the use case of restaurant table-side mobile bag racks which has potential to impact customer experience and restaurant business driver fundamentals. Table side bag racks are widely used in restaurants, cafes and other businesses across Mexico and Latin America but developing in the USA. Given the developing utilization of table side racks and the need to improve customer experience and business driver fundamentals, table side bag racks were a perfect tactic to test and learn.

### Restaurant customer experience advanced analytics machine learning research and normative database

First, let's review the new research approach to customer experience measures and impact. Customer Experience measures for restaurants typically include four core fundamentals: satisfaction, loyalty, quality and employee engagement. These overarching customer experience themes are the goal, however, the new research identified important sub-features within the core themes to better understand how and where to make an impact. To assure the research can transcend restaurants and be the foundation of a Customer Excellence Normative Database, an advanced analytics machine learning approach was employed to identify the key features to measure and understand. The machine learning approach employed statistical methods to indicate the degree each feature contributes to predict or impact the customer experience score.

Satisfaction features, for example, were found to be most impacted by a customer citing the feeling of them and their belongings secure, safe and hygienic. Loyalty included a combination of intent to repeat and spend more; Loyalty customers were quartiled and spent 67% more on repeat dining. Advocacy was described as a customer who was willing to submit a review, share a post or which could be an

influencer or success driven. Quality, of course, included the quality of the food but also found quality of service and staff, which included waiting time, capacity to wait, and the combination of

the satisfaction and loyalty fundamentals as important.

The approach enrolled restaurant diners, guests and previous buyers who used table side racks in the customer



## Security and Safety for Your Belongings



### Mexican and Latin American superstition says bags on the ground bring bad luck!

#### Improve Customer Experience:

- The benefits of a mobile bag and coat rack ("los percheros") in restaurants, cafés, bars, clubs and hotels is evident when dining out.
- BAG UP's mission is to provide the security, structured clarity and opportunity to feel empowered, confident and successful by keeping an eye on our precious items.
- BAG UP increases repeat business. Repeat customer revenue increases restaurant revenues by 119%.
- Restaurant revenue triples with BAG UP: A national average sized restaurant can experience an incremental annual revenue of \$7M or three times the revenue.

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experience survey which included the core fundamentals, experience features and sub-features to weight customer frequency and cost per dine.

### Restaurant capacity optimization employing operations research

The second component of the business driver research intended to rewrite the narrative of restaurant fundamentals given both the impending global recession risk and the customer need for secure, safe and hygienic solutions. Restaurant occupancy fundamentals such as capacity, throughput and customer mix have changed, yet the basics of restaurant seats, serving days per month, revenue per customer, and sustaining these inputs continue to be key to maintain and grow revenues. A meta analysis of research was conducted which quantified average sized restaurants' capacity serve dinner and lunch, have ~50 seats with 80% at tables and 20% at bar or waiting areas. The meta analysis quantified customer spending at average sized restaurants to be ~\$29 and \$48 for lunch and dinner respectively. Total capacity for the average sized restaurant with an ~90-minute experience was ~460 customers service. At full capacity with all seats utilized five (5) days a week was estimated to total ~\$4.2MM annually. However, capacity was only being utilized at ~76% with annual revenues at ~\$3.2M. Also considered were the five (5) days of the week restaurant offered dining; Friday, Saturday, Sunday contributed 54% of revenues and Wednesday and Thursday the remaining 46%. With this misunderstood capacity gap, the table side rack use case was a great tactic to employ the customer research and determine how the racks could improve capacity optimization.

### How much restaurant capacity is gained from a table side rack?

Table side bag racks were evaluated for customer experience and also measured to understand the increased capacity by optimizing table utilization at the bar and tables. The meta analysis research supported customers of all diner mixes were using an available chair which was taking the place of potential diners. The loss of this capacity was one of the main drivers of this decreased capacity. The loss of capacity translated into a daily average loss of ~24% of seats which translated into ~\$1M lost restaurant revenue annually for an average sized restaurant.

In summary, an average sized restaurant who can improve restaurant customer experience, optimize capacity and implement table side racks can experience an increase in ~7M or ~219%.

For more information visit [Bag-Up, LLC. online at Bag-Up.us](http://Bag-Up, LLC. online at Bag-Up.us) or email the company at [info@bag-up.us](mailto:info@bag-up.us). Call 973 879-1090.