



# Market Basket Analysis

## Restaurant Chain

Analyzed historical transaction data to determine the most frequent item combinations that are ordered together and identify the opportunities for introducing new 'combos' with bundled pricing

# Market basket analysis for a restaurant chain

## Situation

- Company wanted to understand the basket composition of each order to understand opportunities to potentially introduce new combinations

## Accordion Value Add

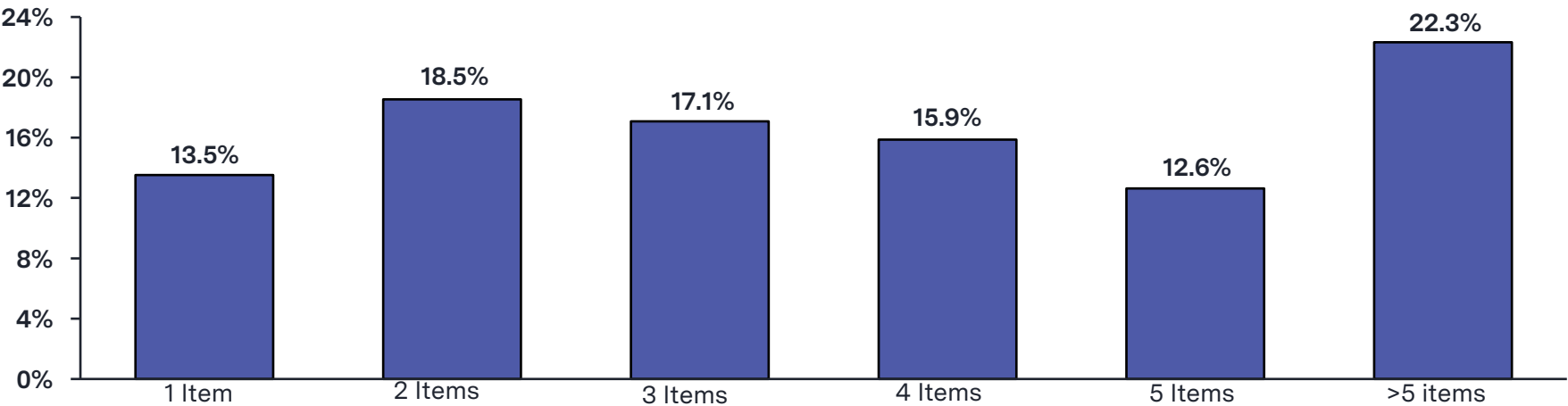
- Analyzed the POS transaction data to identify frequency distribution of item counts across a six-month period
- For each item count segment of transactions (e.g., 2-item transactions, 3-item transactions etc.), identified the most frequently occurring basket at both item-level and food category level
- Conducted the market basket analysis using item set mining by ECLAT algorithm on R platform

## Impact

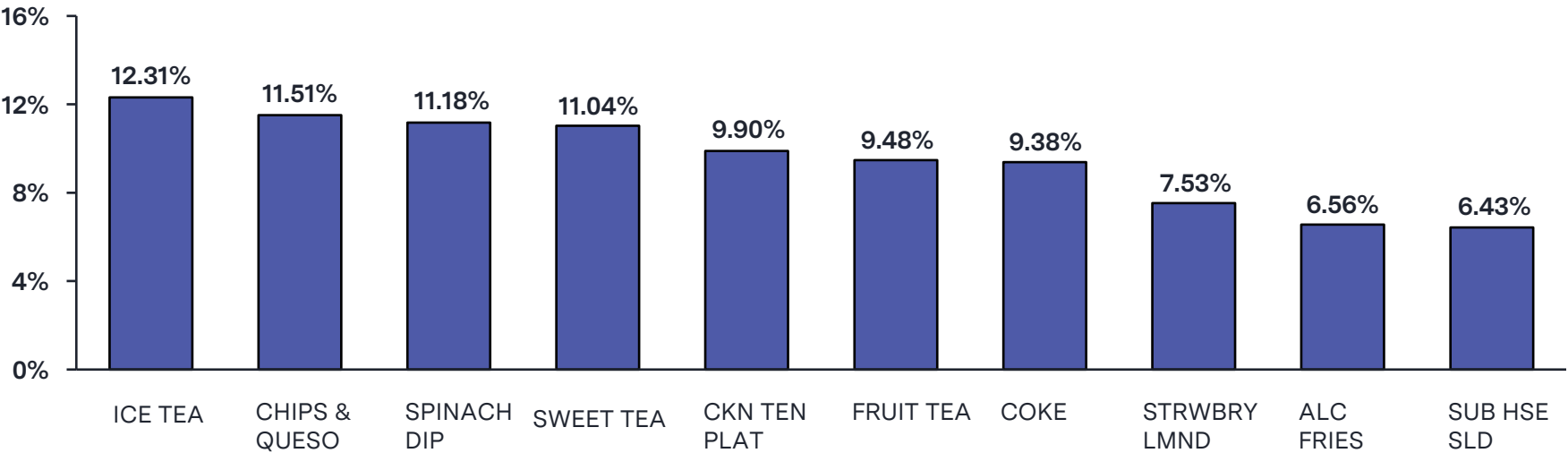
- Identified opportunities for introducing new 'combos' with bundled pricing
- The most frequent combination is Bacon Cheeseburger – Fries combination

# On average, 3-4 unique items are being ordered per check, with the most frequently ordered item being iced tea

Share of transactions by # items in a transaction, %



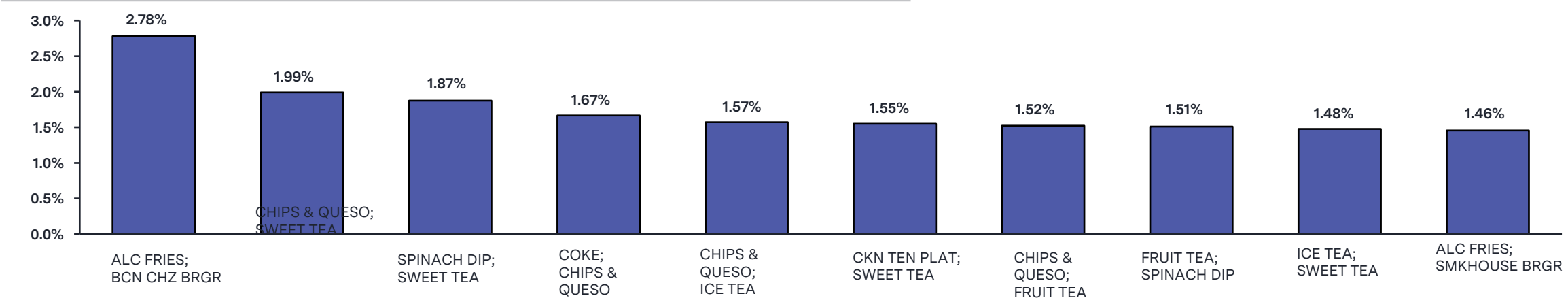
Share of transactions for Top-10 Items based on frequency, %



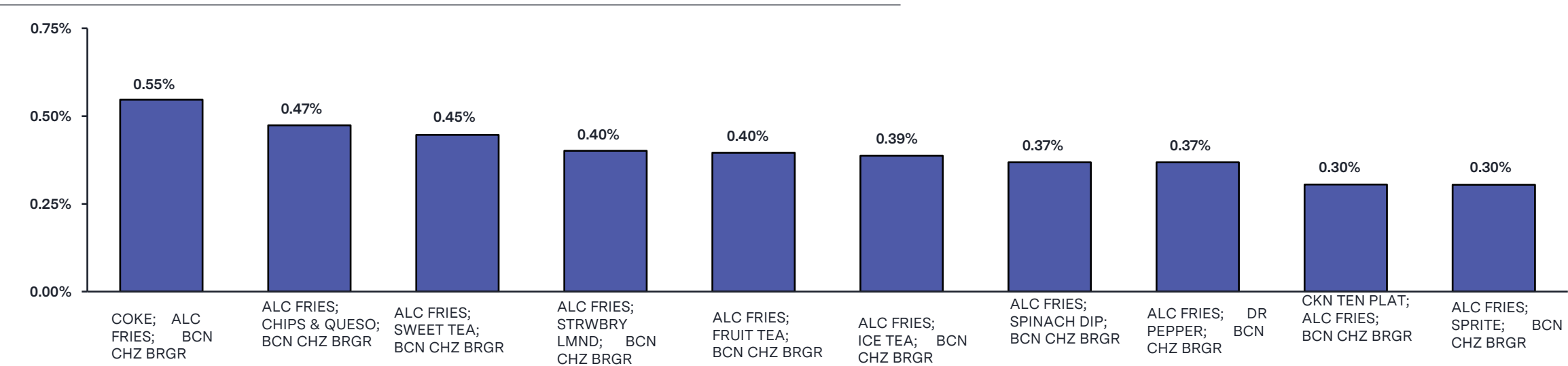
1 Considered transactions of top 10 locations by revenue for the last 6 months

# Bacon cheeseburger & fries is the most frequent 2-item combination, while also present in most 3-item combinations

Share of transactions for Top-10 two item combinations based on frequency, %



Share of transactions for Top-10 three item combinations based on frequency, %



# Majority of 4-item combinations include an entrée with an appetizer, side and a drink

Share of transactions for Top-10 four item combinations based on frequency, %

