



Micropayment Trends Report 2023

The way we all pay has been **shifting.**

First it was cash to card, and now swipe to tap.

Micropayments — any transaction less than \$10 — have been following that same trend. Micropayments occur across many different business verticals, and are common in self-service applications. As a leading processor of micropayments, Cantaloupe has a unique perspective on how these trends in micropayments reflect consumer payment behavior for the self-service retail industry as a whole.

In this report, we're excited to share our analysis of these micropayment trends using a sample set of food & beverage vending and amusement machines, as well as make some predictions about how they'll evolve into the future. Our goal is to show operators how their customers prefer to pay. Whether you have one machine or one thousand, we hope you find this information valuable.



What are we looking at?

Initially, we partnered with graduate students from Michigan State University's Broad College of Business to analyze a smaller data set of card readers installed on food & beverage vending and amusement machines in the United States and Canada. We then expanded our analysis to include a sample set of **over 700,000** active card readers from January through December 2022.

When looking at the payment transaction data, we organized transactions into the following categories:



Cash transactions are payments made with bills and coins.



Cashless transactions are **non-cash payments** made by swiping a credit/debit card, inserting a credit/debit card, or tapping a debit/credit card or mobile wallet.



Contactless transactions are **cashless payments** made by tapping a debit/credit card that has a chip, or a mobile wallet stored on a cellular device.

To break out machines within the vending and amusement categories, we organized machines based on the following criteria:

674,000 card readers were installed on food & beverage vending machines.

26,000 were installed on **amusement or** gaming machines.

Of the food & beverage vending machines analyzed, **451,000** were considered low-volume, or machines placed in locations that drive \$2,000 or less in sales per year.



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Trends in vending

In 2022, consumers spent more than \$2.5 billion at food & beverage vending machines.

This boost in consumer spending at these machines suggests a road to recovery for vending operators and could represent a rebound in sales to come. In fact, in 2022, sales at vending machines increased nearly 19% over the prior year.

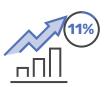
This is promising news for operators and the industry as a whole. Not only are consumers continuing to move back into in-person work, but their spending remains undeterred by inflation.



Payment trends



Cashless payments accounted for 67% of all sales at vending machines in 2022.



Year-over-year, cashless payments increased 11% from 2021.

eport

Consumers also showcased their willingness to try different ways to pay at food & beverage vending machines. Of the cashless transactions made in 2022, contactless payment methods — "tapping" with a card or mobile phone — made up more than half of sales. In fact, the data shows **contactless payment methods made up an average of 53.9% of all cashless sales.**

The 2022 sales data reinforces the necessity of having a card reader on all your vending machines. Consumers increasingly prefer to pay by swiping or tapping with their card or phone. **This means vending machines without card readers are missing out on a significant amount of sales.**

Average ticket size

While we've known for some time that cash is no longer king at food & beverage vending machines, our 2022 data confirms that customers spend more when they have a cashless option.

In 2022, the average cashless ticket size for vending machine purchases was \$2.11, compared to only \$1.36 for cash purchases. This means that on average, consumers spend a staggering 55% more when they go cashless.

What does this mean for operators?

Installing card readers with cashless payment options on your vending machines is a **likely** way to increase ticket amounts and improve your bottom line.





The role of inflation

In 2022, consumers saw some of the highest inflation rates in decades. Nearly everything — from eggs and butter to fuel and airfare — seemed to get more expensive.

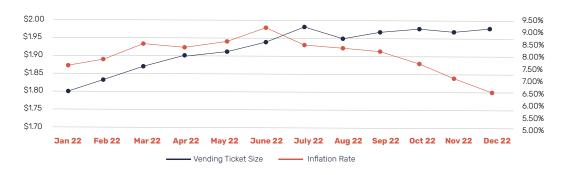
Although this increase in inflation could have meant less consumer spending at food & beverage vending machines, this wasn't the case. Our data did not show any correlation between the rising inflation rate — which peaked at 9.1% in June¹ — and the amount of vending machine transactions in 2022. Surging prices did not seem to have affected overall monthly sales performance either.

Bottom line: Consumer spending at vending machines wasn't affected by inflation in 2022.

Data from US Inflation Calculator, https://www.usinflationcalculator.com/inflation/ current-inflation-rates/. In 2022, the rate of inflation went up over the course of the year, but after June, it grew at a slower rate compared to previous months.



Average Ticket Size Compared to Monthly Inflation Rate



Monthly Vending Sales Compared to Monthly Inflation Rate



Monthly Vending Transactions Compared to Monthly Inflation Rate



The growth of **EMV**

What is EMV?

EMV is a security standard named for the companies that created it: Europay, Mastercard, and Visa. EMV cards store consumer payment information within a metallic chip rather than in a magnetic stripe. The data, transmitted from the chip to the payment device and back, is difficult to replicate and is considered more secure than mag stripe cards. EMV payments are cashless and can be either "swipe" or "tap" transactions.

These days, EMV cards are commonplace around the world. And 2022 was the year that EMV payments became the "new norm" at food & beverage vending machines. Starting on May 1st, 2022, processors Visa and Mastercard indicated that they would begin charging monthly fines for all merchants accepting non-EMV contactless "tap" payments at vending machines. Which forced some big changes for operators who hadn't yet made upgrades to their non-EMV card readers.





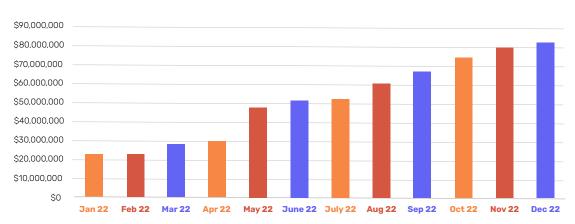
The growth of **EMV**

To that end, our data found that EMV payments **grew over 350%** as a share of cashless sales at food & beverage vending machines in 2022, accounting for **more than \$500 million** in sales for the year.

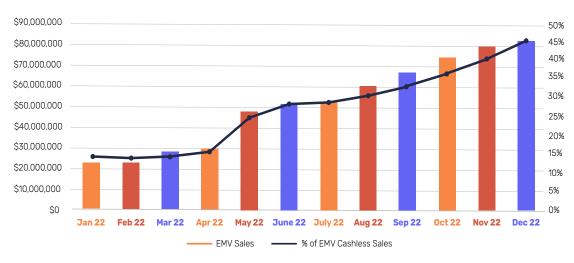
In fact, the amount of EMV transactions increased over 400% from January 2022 to December 2022 and accounted for 52.98% of total transactions by the end of the year, which shows explosive growth in the use of EMV in vending. The data also revealed a significant increase in the share of EMV cashless transactions in May, coinciding with the processors' initial transition dates.

Most notably, EMV contactless payments were the main drivers of contactless sales in 2022, and by December made up 51.69% of all "tap" transactions.

2022 EMV Sales



2022 EMV Sales as Percentage of Total Cashless Sales





Low-volume machines

When it comes to low-volume food & beverage vending machines — those that make \$2,000 or less in sales per year — we observed the same overall payment trends.



Cashless payments made up **an average of 51.83%** of all sales at low-volume vending machines in 2022.



Contactless payment methods made up **an average of 52.97%** of cashless sales.

The data indicates that cashless payments are the preferred way to pay. Which means that no matter the size of your vending operation, having a card reader is an important part of your sales strategy.



Predictions for 2023

Based on the analysis of data we have from 2022, there's a lot to be excited about for food & beverage vending in 2023.

We expect total sales at vending machines to grow 10-12% in 2023¹, keeping with that narrative of growth and rebuilding across the industry as a whole.

As EMV transactions continue to increase, we expect the total percentage of EMV as a share of cashless transactions to **grow** 6-7% in 2023. More importantly, we expect the total percentage of EMV as a share of cashless sales to grow 6-7% in 2023 as more card issuers (and their customers) transition to this new security standard.

When it comes to the average ticket size for all transactions, both cash and cashless, we expect **an increase to \$1.71**, **or 6%**. In fact, we anticipate that both cash and cashless transactions will grow in 2023. While we expect the average ticket size for cashless transactions to grow to \$2.40, or 6-10%, we believe the average ticket size for cash transactions to **grow to \$1.52**, **or 10%**.

In terms of payment trends at food & beverage vending machines, we expect the total percentage of cashless payments (transactions) to grow 6-8%, assuming inflation has plateaued. We anticipate the total percentage of cashless payments (sales) to grow 1-2% in 2023.

Additionally, we anticipate an increase in the share of contactless transactions. We predict the total percentage of contactless payments (transactions) as a share of cashless transactions to grow 6-7% in 2023.

Additionally, we believe the total percentage of contactless payments (sales) to grow 6-7% in 2023.

1. Cantaloupe does not make any predictions on the monthly or yearly rate of inflation, or its potential effects on the numbers provided here.



Trends in amusement and gaming



In 2022, consumers spent more than \$85 million at gaming and amusement machines.

These machines include video games, pinball machines, jukeboxes, kid rides, and crane machines.

Payment trends

The consumer trend toward cashless payments isn't limited to vending machines.

Although our data found that while cashless payments represented only 32.85% of all transactions at amusement machines in 2022, **cashless payments made up 73.89% of total sales volume**. What this means for operators is that their customers who go cashless are spending more money. In 2022, the average cashless ticket size for amusement and gaming purchases was \$5.32, compared to only \$0.93 for cash purchases — 5x more.

The significant difference in cash versus cashless transaction size could be due to the convenience of being able to play multiple rounds without having to constantly insert coins or bills. Cashless payments are not only easier to use, but they're less disruptive to the overall gaming experience. Therefore, adding a card reader to your amusement machines not only increases convenience for customers but also increases revenue for operators. **This means that investing in card readers could result in higher profits and increased customer satisfaction.**



Cashless payments made up 73.89% of total sales volume at amusement machines in 2022.





Predictions for 2023

Based on the analysis of data from 2022, we expect to see growth continue in the amusement and gaming industry in 2023. We anticipate total sales at amusement machines to grow 4-6% in 2023, assuming consumer spending remains resilient.

Reflecting changing consumer payment preferences, we anticipate the total percentage of cashless payments (transactions) to grow incrementally, around 1% in 2023. We expect the total percentage of cashless payments (sales) to also grow around 1% in 2023.

Over the next year, we anticipate that the average ticket size for all transactions will grow 1-2%. We expect the average ticket size for cashless transactions to grow to around \$5.60, or 4-6% compared to our prediction that the average ticket size for cash transactions will remain flat, between \$0.88 and \$0.92.



About

Cantaloupe, Inc. is a software and payments company that provides end-to-end technology solutions for self-service commerce. Cantaloupe is transforming the self-service industry by offering one integrated solution for payments processing, logistics, and back-office management. The company's enterprise-wide platform is designed to increase consumer engagement and sales revenue through digital payments, digital advertising, and customer loyalty programs, while providing retailers with control and visibility over their operations and inventory. As a result, customers ranging from vending machine companies to operators of micro markets, car charging stations, laundromats, metered parking terminals, kiosks, amusements, and more can run their businesses more proactively, predictably, and competitively.

Disclaimer: Any forward-looking statements or predictions for food & beverage vending and amusement categories for the year 2023 are not intended to reflect Cantaloupe's financial performance. All predictions are made based on the data set used to generate the report, and actual 2023 performance could differ. Cantaloupe does not make any predictions on the monthly or yearly rate of inflation for 2023, or its potential effects on the forward-looking statements provided in the report.





