



The State of CNP False Positives

2018 Report

PRESENTED BY:



THEFRAUDPRACTICE



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Executive Summary

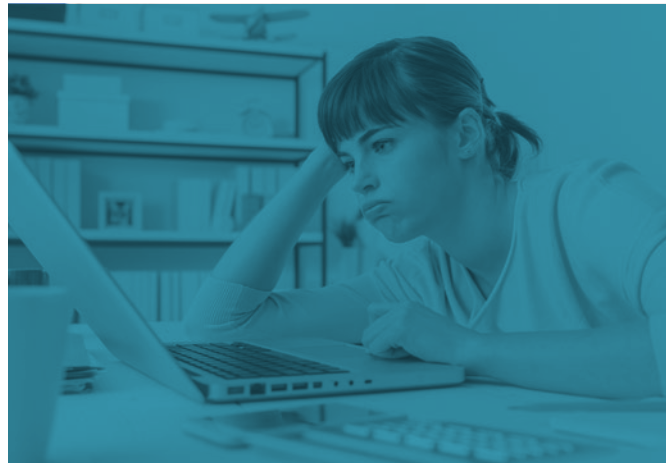
Kount and The Fraud Practice designed the State of CNP False Positives survey because false positives are one of the least, if not the least, understood aspects of risk management. While merchants tend to focus directly on chargebacks and fraud losses, false positives are another major source of lost revenue but are often underestimated if not ignored altogether.

False positives, also known as sales insults (or sometimes just insults), refer to transactions placed by legitimate customers that are declined by a merchant due to suspected fraud. Whether the customer is sending a gift, traveling and coming from an unusual IP address, or the organization is unable to confirm their identity; there are many reasons a merchant may turn away a good customer or order.

False positives present many challenges to organizations operating in the Card Not Present (CNP) channel, beginning with simply being able to estimate or measure sales insults. Just 38 percent of respondents say their organization attempts to track or measure false positives today. Merchants may be discouraged from trying to measure sales insults because doing so is difficult.

Measuring false positives is far from an exact science. Many to most of the legitimate customers turned away for suspected fraud will not bother trying to purchase from that merchant again. Only one-third of respondents have confidence in their organization's understanding of the true volume and cost of false positives. Being able to measure or track false positives is the second most common challenge cited by respondents.

Managing false positives is also challenging because it is just one aspect of risk management



and trying to reduce sales insults can have unintended consequences. Finding ways to reduce false positives without significantly increasing fraud, manual reviews or total costs were some of the other most commonly cited challenges by respondents.

The inaugural State of CNP False Positives: 2018 Report provides a focused look into the many ways merchants are tracking their performance related to false positives and the measures taken to reduce them. Beyond measuring sales insult rates this includes methods for validating declined orders that would have been fraudulent. About 35 percent of respondents said their organization takes measures to identify sales insults, while slightly less, one-third, take measures to validate they made the correct decision on declined orders.

Executive Summary

What merchants do to track performance related to false positives is influenced by factors like the types of goods or services they sell online, their online volume and their average order value (AOV). By examining actual and target false positives rates and other factors across merchants, the State of CNP False Positives: 2018 Report serves as a resource for organizations looking to benchmark their performance related to false positives.

A recurring theme throughout the study is that merchants with larger annual online revenue and higher AOVs are more likely to take steps to measure and understand false positives. Merchants with annual revenue greater than \$100 million are more likely to track false positives, investigate their root cause and have plans to reduce or improve their understanding of false positives.

False positives have an immediate financial impact as each represents what would have been a good sale. This initial impact is felt most by merchants with a higher AOV. Respondents representing merchants with higher AOVs were more likely to identify false positives with both online orders and calls into customer service, as well as more likely to identify correctly declined orders with chargeback and post-transaction analysis.

The survey also sought to understand where sales insults come from, both in terms of the channel and stage of the risk screening process. About 60 percent of respondents say more false positives come from automated screening while 21 percent blame manual reviews. These and many other key findings are discussed and compared across different types of CNP channel merchants in the inaugural State of CNP False Positives: 2018 Report.

False Positive Benchmarks

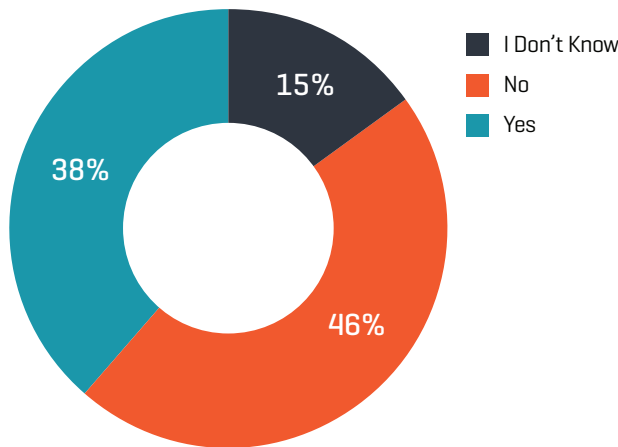
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False Positive Benchmarks

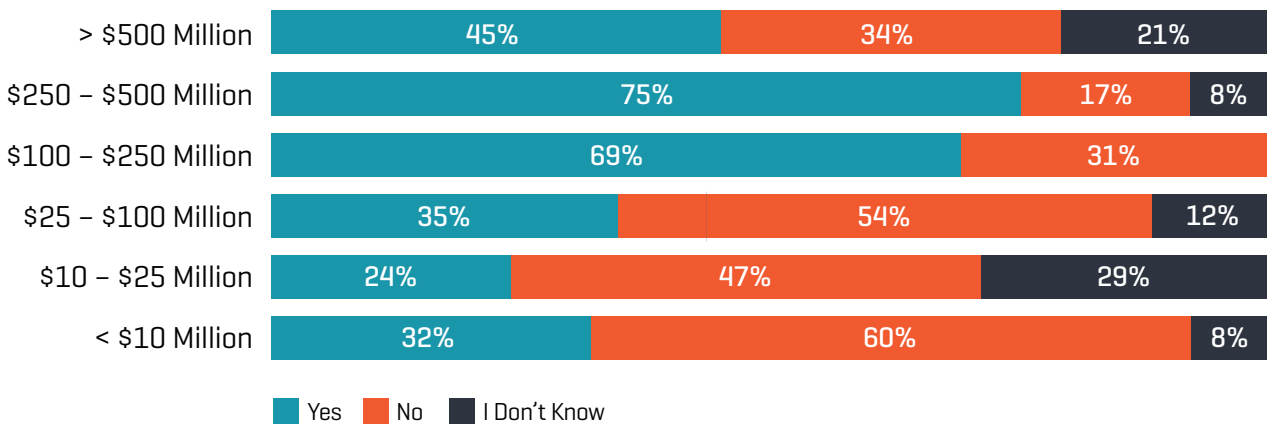
The inaugural State of CNP False Positives survey focused on many aspects of measuring and managing sales insults but began with simply asking merchants whether this is something they attempt to track or measure today. More respondents said “No” than “Yes” overall, at 46 versus 38 percent, while 15 percent did not know whether their organization does anything to measure false positives.

There is a significant disparity between merchants with higher and lower annual online revenues. Less than one-third of respondents representing merchants with annual online sales less than \$10 million said their organization tracks false positives, compared to 56 percent of respondents who reported their organization has annual online sales greater than \$100 million.

Merchants Tracking False Positives



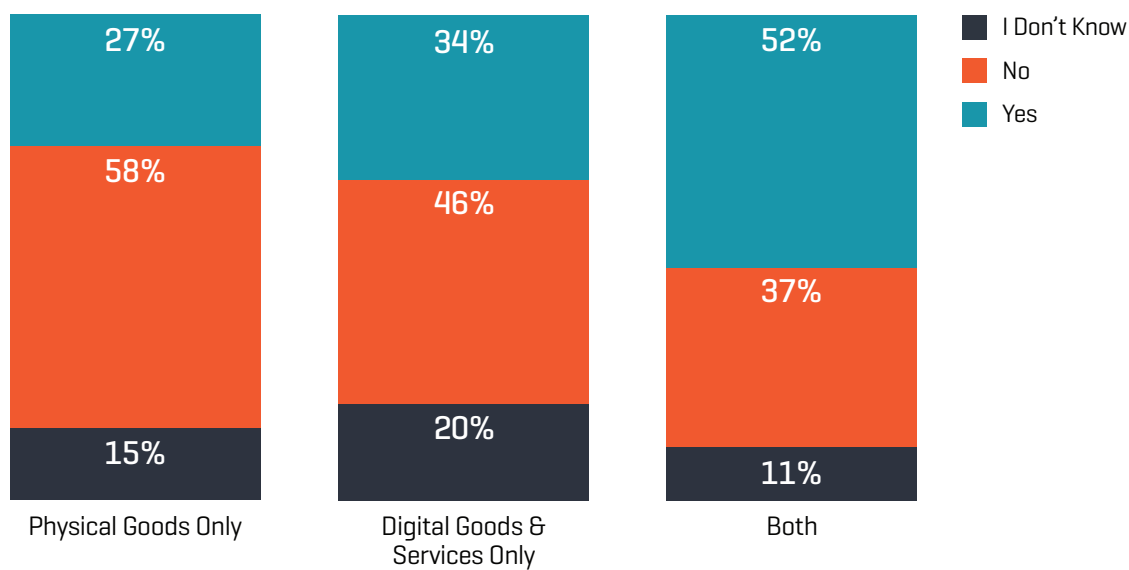
Merchants Tracking False Positives (by Annual Online Revenue)



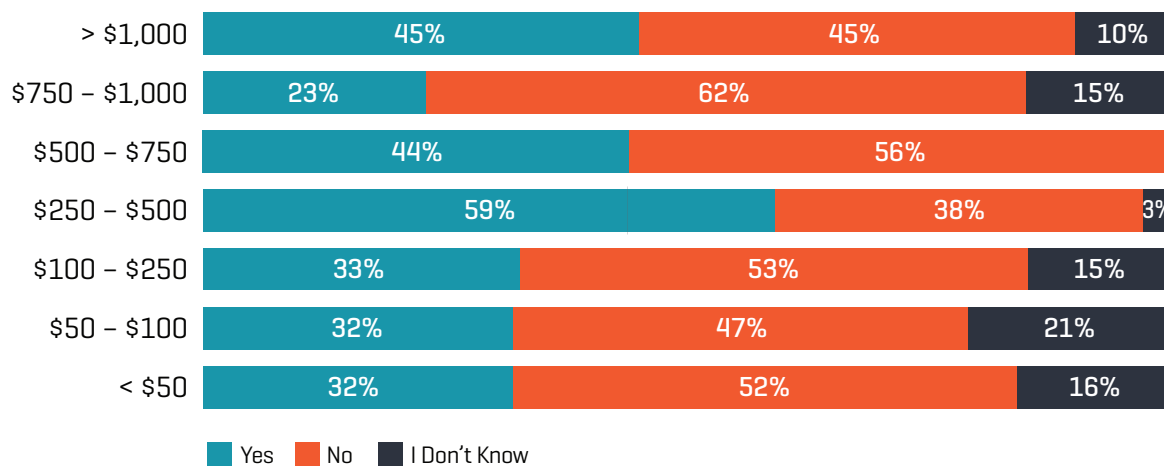
About one-third of merchants surveyed sell both physical and digital goods, and more than half of these merchants are tracking their performance related to false positives. This compares to more than one-third of merchants selling only digital goods or services and just 27 percent of merchants selling only tangible goods who track their false positives.

Nearly 60 percent of merchants with an AOV between \$250 and \$500, as well as 45 percent of merchants with an AOV greater than \$1,000 measure false positives, compared to just one-third of merchants with an AOV less than \$250.

Merchants Tracking False Positives (by Physical vs. Digital Goods Sold)

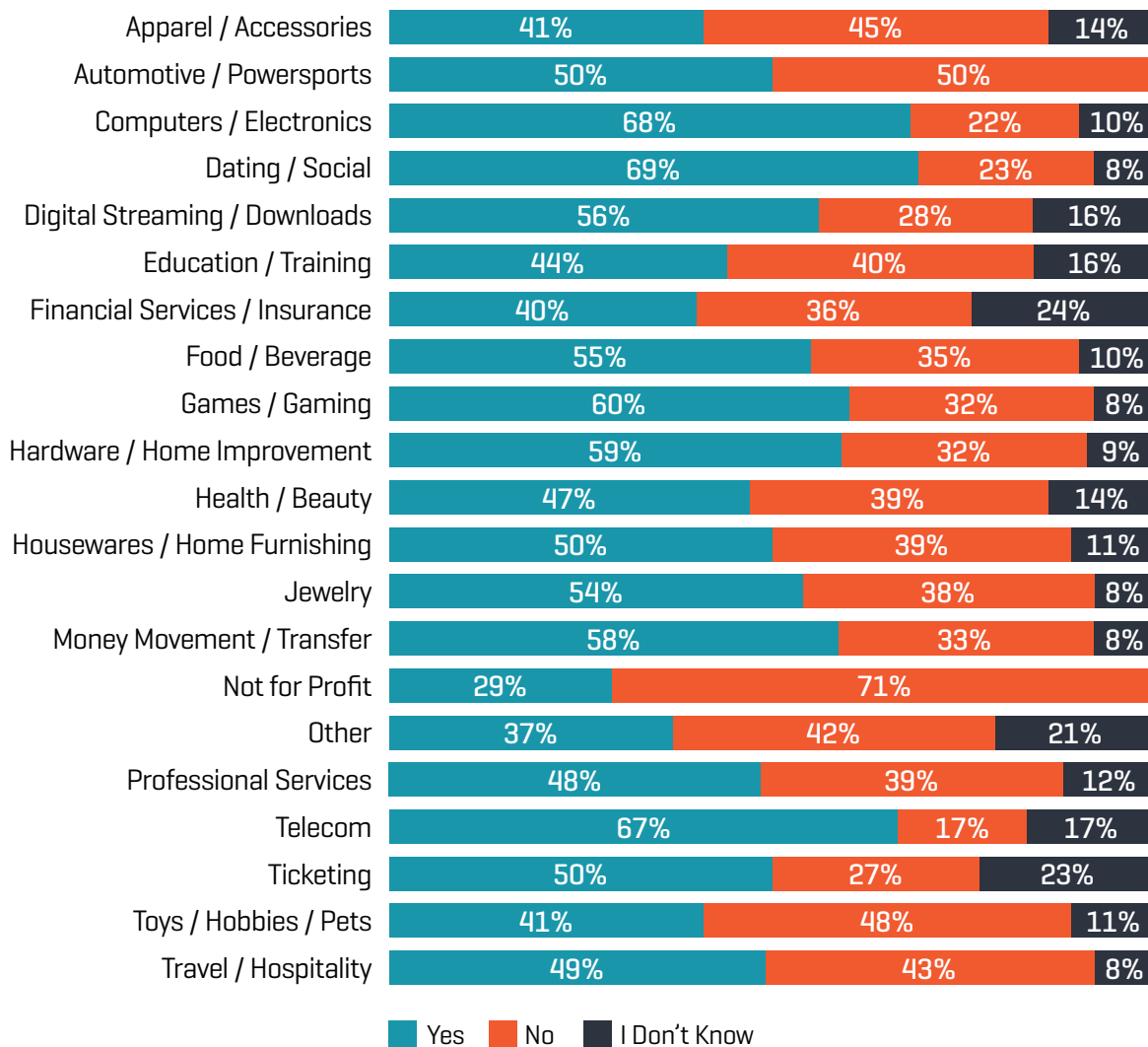


Merchants Tracking False Positives (by AOV)



Certain industries or merchant segments were notably more likely to track false positives than others. This includes about 70 percent of Computers/Electronics merchants and Dating/Social sites, as well as 60 percent of Games/Gaming and Hardware/Home Improvement merchants. There are 12 types of goods/services sold where at least half of merchants are currently measuring false positives, including high risk and high AOV industries like Jewelry (54 percent) and Money Movement (58 percent).

Merchants Tracking False Positives (by Industry)

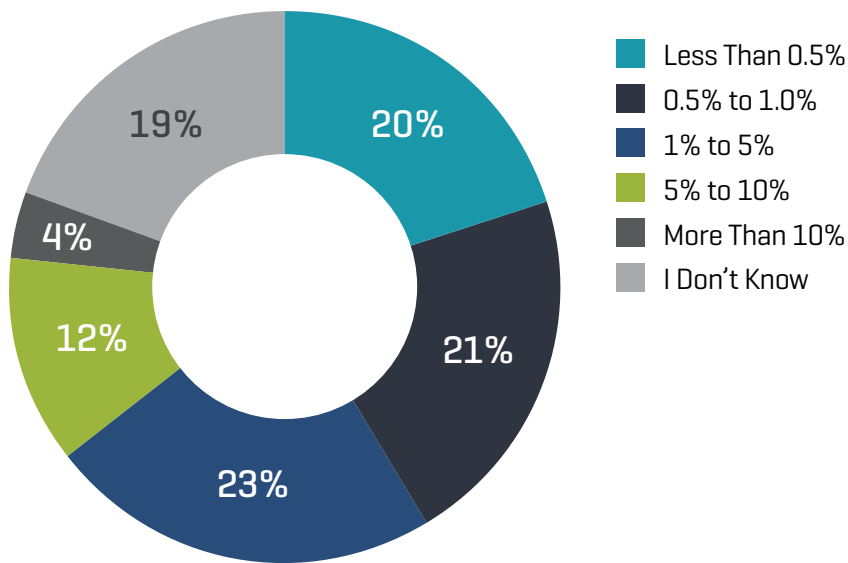


Current False Positive Rates

Respondents representing merchants that measure false positives were next asked their organization's false positives rate. Nearly one-fifth of these respondents did not know their sales insult rate while 41 percent reported a false positives rate of 1 percent or less. Nearly one-in-four merchants, 23 percent, have a false positives rate between 1 and 5 percent. Over 16 percent of merchants measuring false positives have a sales insult rate greater than 5 percent, including 4 percent who report a false positives rate of more than 10 percent.

Two-thirds of Dating/Social sites as well as more than 60 percent of Digital Streaming/Download and Games/Gaming merchants report their false positives rate is less than one percent. Other retail segments where merchants are more likely to indicate lower false positives rates are Toys/Hobbies/Pets (55 percent) and Hardware/Home Improvement (54 percent). Money Movement, Computers/Electronics and Ticketing are the industries least likely to report a false positives rate less than one percent.

False Positive Rates



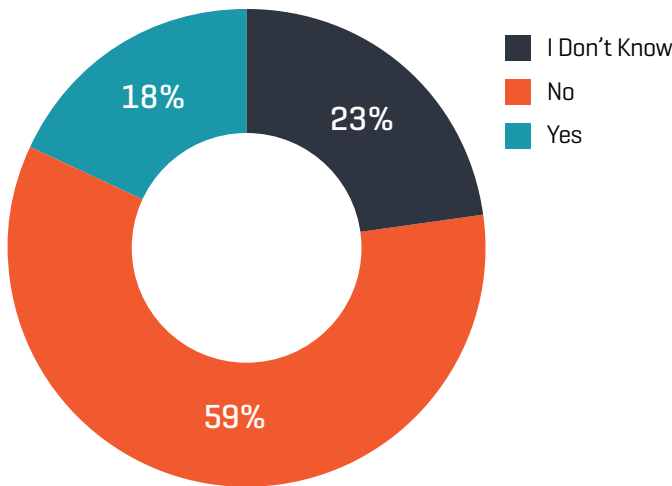
False Positive Rates [by Industry]

Industry	< 0.5%	0.5-1%	1-5%	5-10%	> 10%	I Don't Know
Apparel / Accessories	15%	20%	25%	15%	0%	25%
Automobile / Powersports	0%	50%	25%	13%	0%	13%
Computers / Electronics	14%	21%	32%	11%	4%	18%
Dating / Social	22%	44%	22%	0%	0%	11%
Digital Streaming / Downloads	28%	33%	17%	11%	0%	11%
Education / Training	9%	27%	27%	9%	0%	27%
Financial Services / Insurance	0%	40%	40%	0%	0%	20%
Food / Beverage	18%	24%	24%	24%	0%	12%
Games / Gaming	20%	40%	27%	7%	0%	7%
Hardware / Home Improvement	31%	23%	23%	8%	0%	15%
Health / Beauty	12%	29%	24%	18%	0%	18%
Housewares / Home Furnishing	14%	29%	21%	14%	0%	21%
Jewelry	15%	31%	15%	8%	0%	31%
Money Movement / Transfer	0%	29%	43%	29%	0%	0%
Not for Profit	0%	50%	0%	0%	50%	0%
Other	14%	14%	29%	0%	0%	43%
Professional Services	13%	38%	13%	6%	13%	19%
Telecom	25%	25%	25%	13%	0%	13%
Ticketing	9%	27%	18%	18%	0%	27%
Toys / Hobbies / Pets	18%	36%	27%	0%	0%	18%
Travel / Hospitality	17%	33%	17%	22%	0%	11%

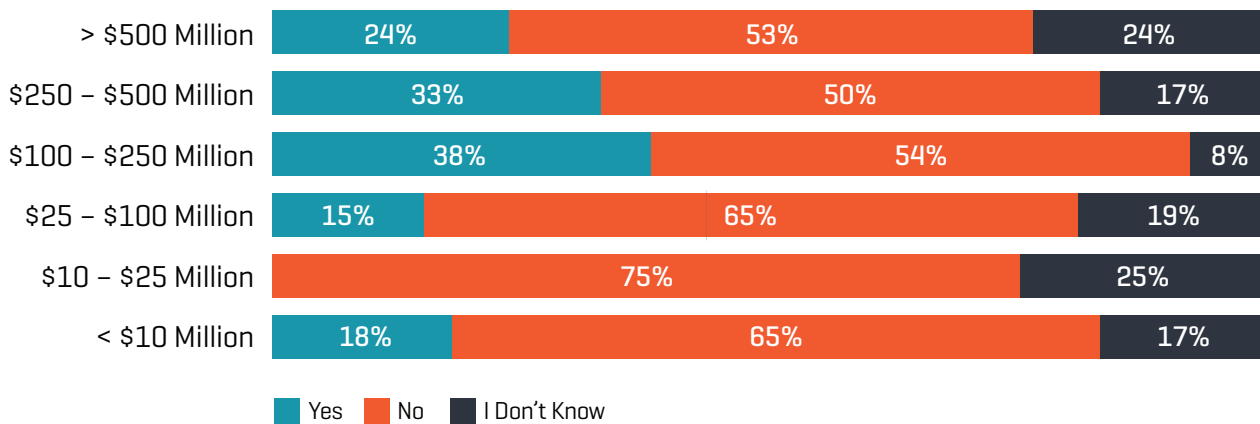
Target False Positive Rates

While 46 percent of merchants do not attempt to track false positives, even more, 59 percent, do not have a standard or goal set in terms of a target false positive rate or measure of performance. More survey respondents said they did not know if their organization had a target false positives rate (23 percent) than who definitively said “Yes” (18 percent). Nearly one-in-four merchants with annual online revenue greater than \$500 million and nearly 30 percent of all merchants with at least \$100 million in annual online revenue have a target false positives rate, compared to 18 percent of merchants with annual online revenue less than \$10 million.

Merchants with a Target False Positive Rate



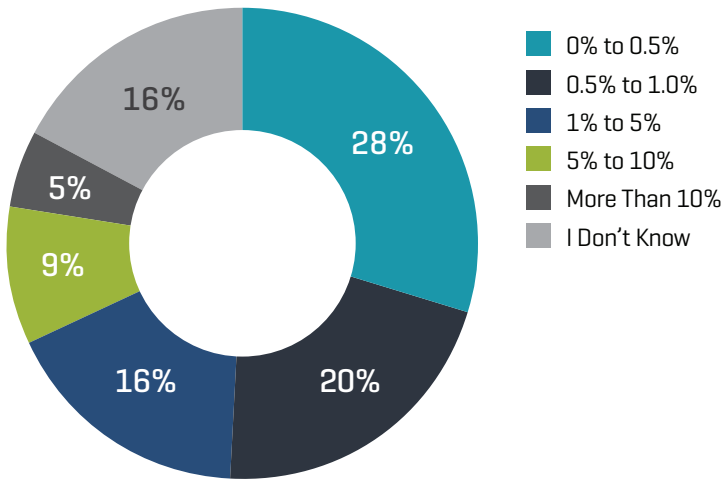
Merchants with a Target False Positive Rate (by Annual Online Revenue)



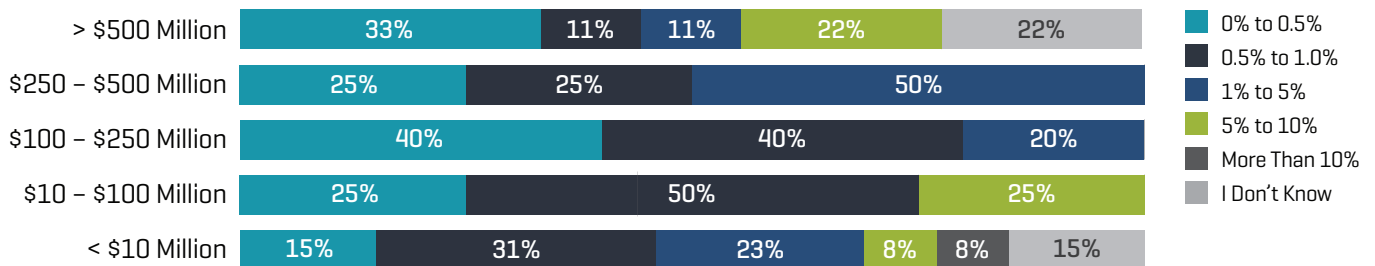
Survey respondents indicating they have a target false positive rate were additionally asked what that target rate was, with 54 percent striving to stay below one percent. About 16 percent of merchants aim for a false positives rate between one and five percent, while 14 percent of merchants manage a sales insult rate of five percent or more.

Survey respondents representing merchants with larger annual online sales were more likely to have a target false positive rate and are more likely to keep this target rate at or below 50 basis points relative to merchants with less annual online revenue. One-third of merchants with online revenue greater than \$500 million per year have a target false positive rate below 0.5 percent, while 40 percent of merchants with annual CNP sales between \$100 and \$250 million have the same target insult rate. This compares to just 15 percent of merchants with annual online revenue less than \$10 million reporting a target false positive rate of 50 basis points or less.

Target False Positive Rates



Target False Positive Rates (by Annual Online Revenue)



How Merchants Track False Positives

The State of CNP False Positives:
2018 Report

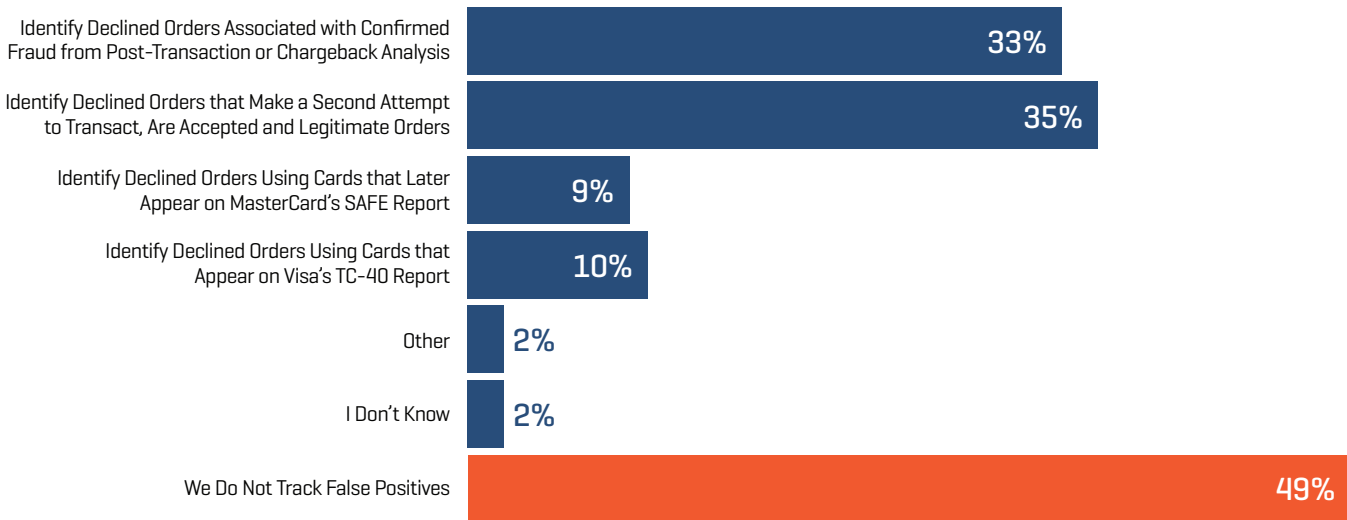
How Merchants Track False Positives

There are many ways organizations can track performance related to false positives and while it is possible to identify some sales insults an organization is not going to be able to detect them all. That being said, there are other proxies or metrics merchants can consider to assess performance related to false positives beyond their insult rate, and this portion of the study explores the multiple methods organizations employ to accomplish this today.

Nearly half of all survey respondents, 49 percent, indicated their organization does not track performance related to false positives. One-third of merchants are able to identify, through post-transaction or chargeback analysis, when they correctly declined order attempts associated with confirmed fraud. Merchants are slightly more likely (35 percent) to be able to detect that a customer had a previous order declined for suspected fraud when a later accepted transaction attempt from this customer was proven to be legitimate. In other words, 33 percent of organizations take measures to recognize **when they got it right** and 35 percent take steps to identify **when they got it wrong** with respect to the order attempts they declined for suspected fraud. The State of CNP False Positives: 2018 Report dives deeper into each of these areas for assessing performance related to false positives.

Resources to help merchants track when they got it right are also provided by the card associations, who publish a database or lists of payment cards being shut down for fraud or if the card was compromised. Known as the MasterCard SAFE and Visa TC-40 reports, merchants can cross-screen their declined orders against these lists and any matches validate the merchant was justified to decline that order. Only 10 percent of merchants, however, are leveraging Visa TC-40 reports this way, while just 9 percent utilize the MasterCard SAFE report.

Strategies to Track Performance Related to False Positives



More than half (55 percent) of merchants with annual online revenue less than \$10 million do not track false positives today, and 70 percent with online revenue between \$10 and \$25 million per year say the same. This compares to less than one-third of merchants with annual CNP channel revenue greater than \$100 million that do not track false positives. More than half of merchants with annual online revenue greater than \$250 million are both using post-transaction analysis to detect associated orders they correctly declined and are able to identify customers they previously declined who attempt to purchase again and are accepted.

Just 17 percent of respondents said their organizations are using three or more sources to track performance related to false positives, while 41 percent are leveraging two sources and 42 percent are using just one. Some respondents indicating “Other” said their organization manually reviews every decline to find false positives, which may be effective but likely carries large operational costs.

Strategies to Track Performance Related to False Positives [by Annual Online Revenue]

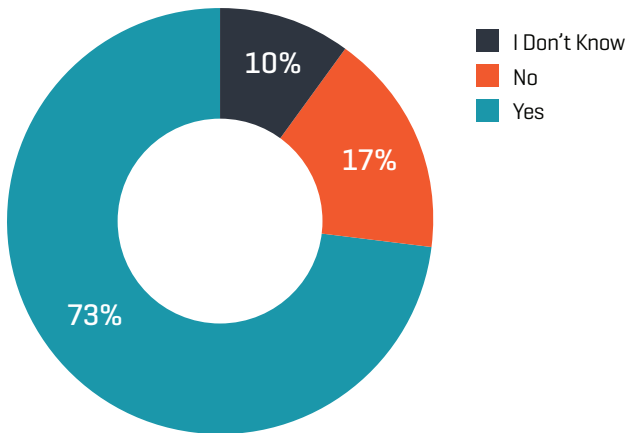
Strategy	< \$10M	\$10-25M	\$25-100M	\$100-250M	\$250-500M	> \$500M
Identify declined orders associated with confirmed fraud from post-transaction or chargeback analysis	26%	31%	28%	31%	55%	51%
Identify declined orders that make a second attempt to transact, are accepted and confirmed legitimate orders	32%	23%	24%	38%	55%	51%
Identify declined orders using cards that later appear on MasterCard’s SAFE Report	13%	0%	16%	15%	9%	11%
Identify declined orders using cards that later appear on Visa’s TC-40 Report	10%	0%	20%	15%	18%	11%
I don’t Know	3%	0%	0%	0%	0%	3%
Other	3%	0%	0%	8%	0%	0%
We do not track false positives	55%	69%	60%	31%	18%	37%

Knowing When They Got It Wrong

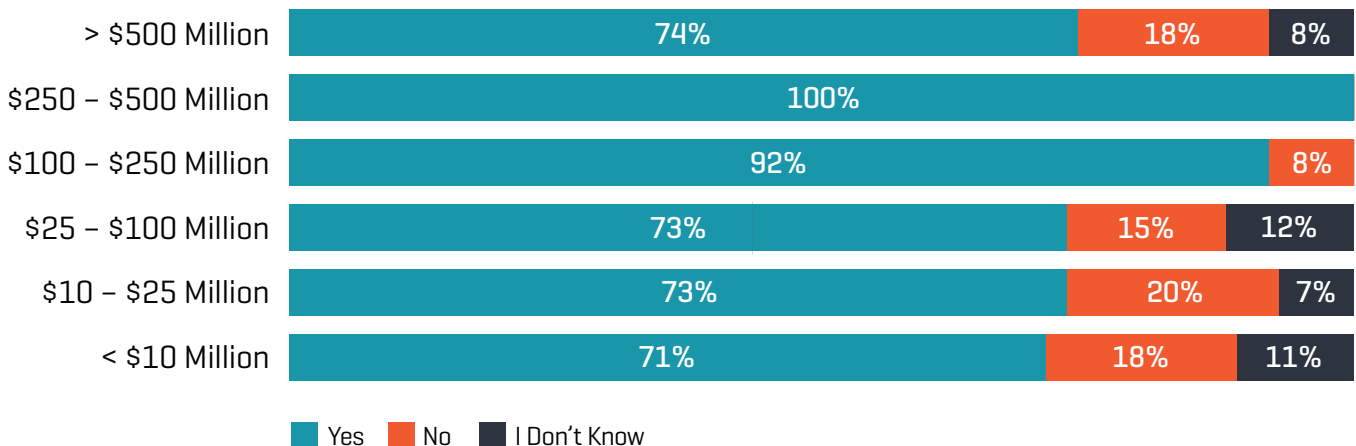
The State of CNP False Positives survey took a detailed look at how organizations are tracking false positives today, and it may sound simple, but being able to identify sales insults begins with recognizing when a customer that was declined is attempting to transact again. This is an important capability just in terms of risk management, but if the new order is accepted and there are no associated chargebacks after several months, then the merchant knows this customer's previously declined order attempt was a false positive.

Nearly three-quarters of respondents, 73 percent, say their organizations are able to tell when a customer who was previously declined is attempting to transact again, compared to 17 percent who do not have this capability and 10 percent of respondents who indicated they were not sure. Merchants with annual CNP channel revenues exceeding \$100 million are more likely to have this ability, including more than nine-in-ten merchants with annual revenue between \$100 and \$500 million.

Ability to Detect When Previously Declined Customers Return



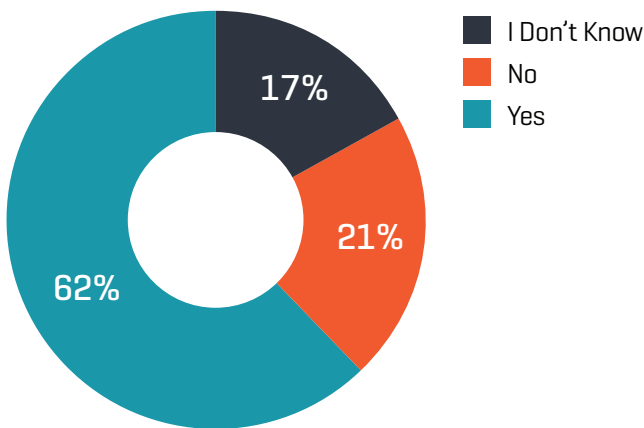
Ability to Detect When Previously Declined Customers Return [by Annual Online Revenue]



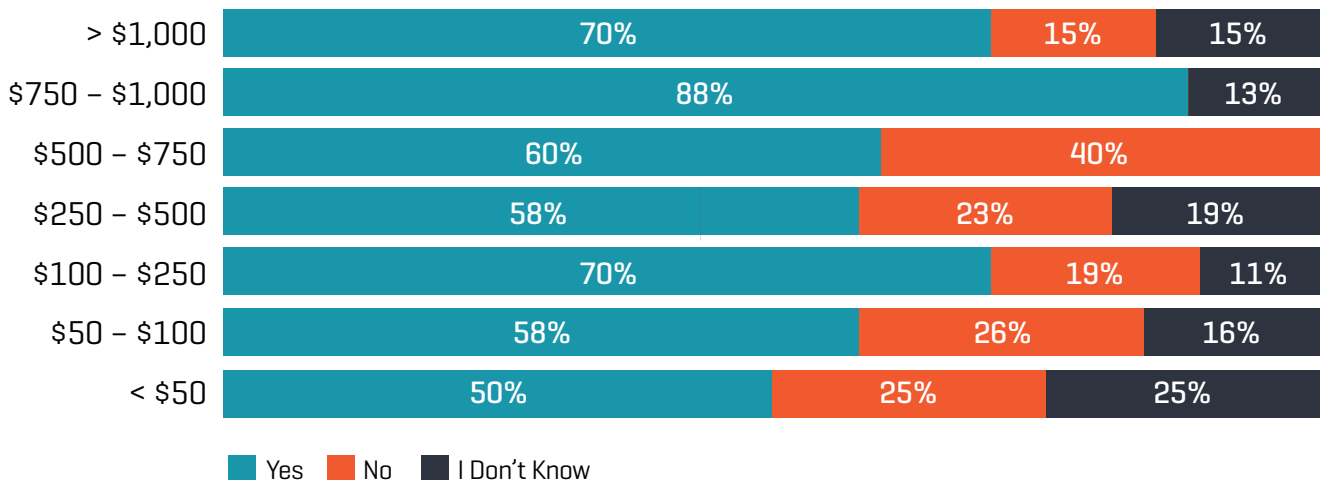
Being able to recognize that a customer was previously declined is Step 1. Step 2 is being able to identify several months down the road that the transaction the merchant did accept from this customer has not been associated with any fraud or chargebacks (thus making the previously declined orders sales insults). Whereas nearly three-fourths of merchants are performing Step 1, fewer than two-thirds, or 62 percent, are taking the next step to follow up with post-transaction reporting, confirming orders accepted by a customer who was previously declined were indeed legitimate. More than one-in-five respondents are sure their organizations are not doing this while 17 percent are uncertain.

Merchants with higher AOVs are more likely to have this ability. Nearly three-fourths of merchants with an AOV greater than \$750 are able to identify sales insults this way, and 70 percent of those with an AOV over \$1,000. Just half of merchants with an AOV less than \$50 take this step to identify false positives, as comparatively the immediate loss of each sales insult is significantly less than merchants with an AOV greater than \$750.

Ability to Identify Legitimate Online Orders from Customer Previously Declined

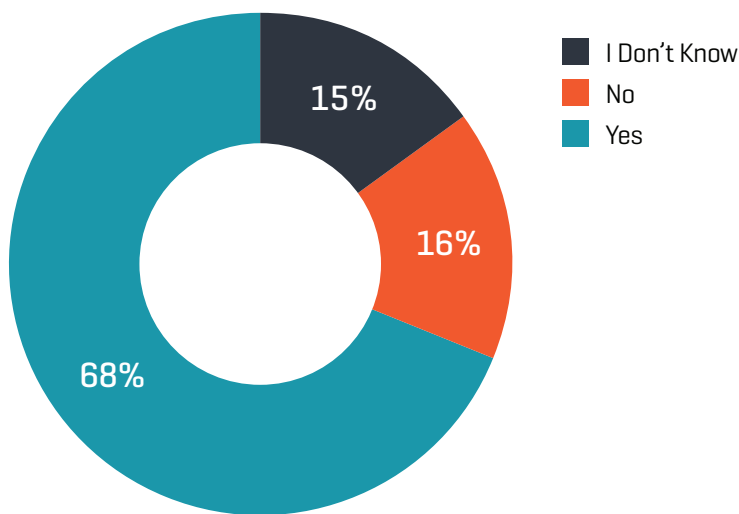


Ability to Identify Legitimate Online Orders from Customer Previously Declined (by AOV)



Rather than reattempting an online or mobile order after being declined, a customer may instead call an organization’s customer service line or 1-800 number. Whether the merchant re-opens and accepts the order that was declined or creates a new order over the phone, the next question asked respondents if their organizations kept record of this and identified such cases as false positives (once the accepted order was confirmed as legitimate). More respondents say their organization has this capability, 68 percent, than who are able to recognize a customer who reattempted their transaction that was approved online (62 percent).

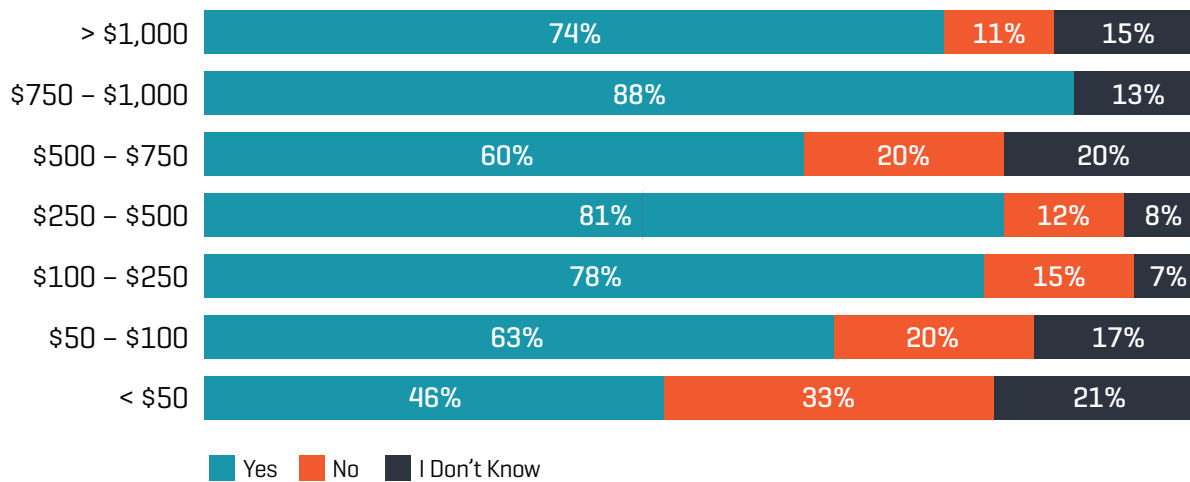
Ability to Identify Customers Who Call-In to Complete Declined Orders



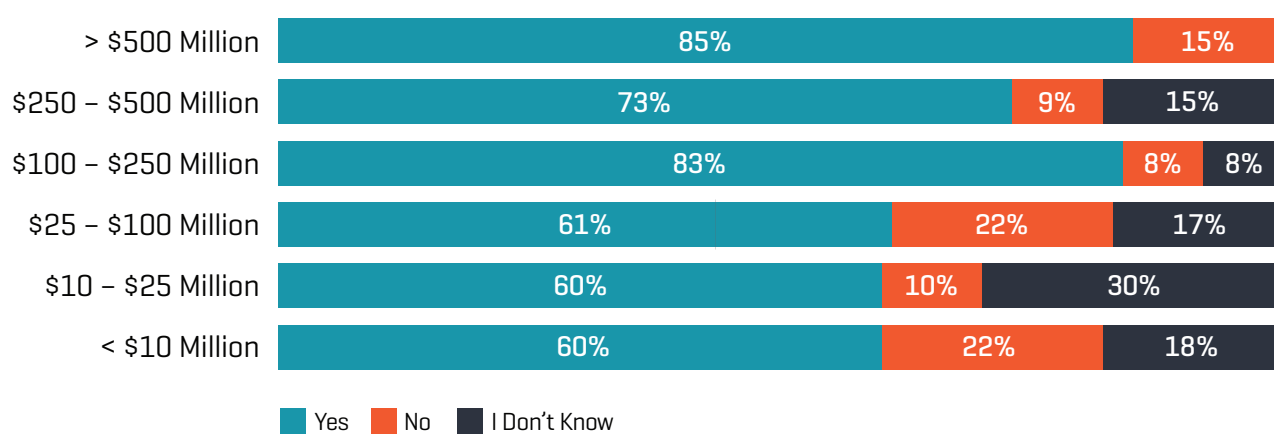
There is a significant disparity between merchants with large AOVs and those with low average ticket amounts in their ability to identify false positives in each of these scenarios. Less than half, 46 percent, of merchants with an AOV less than \$50 identify sales insults from wrongly declined orders converted after a call to the merchant’s customer service line. This compares to more than three-quarters of respondents from organizations with an AOV greater than \$750.

Merchants with larger annual online revenues are also more likely to have this capability, as reported by 85 percent of merchants with annual CNP channel revenue greater than \$500 million compared to 60 percent of merchants with online revenue less than \$10 million per year.

Ability to Identify Customers who Call in to Complete Declined Orders [by AOV]



Ability to Identify Customers who Call in to Complete Declined Orders [by Annual Online Revenue]

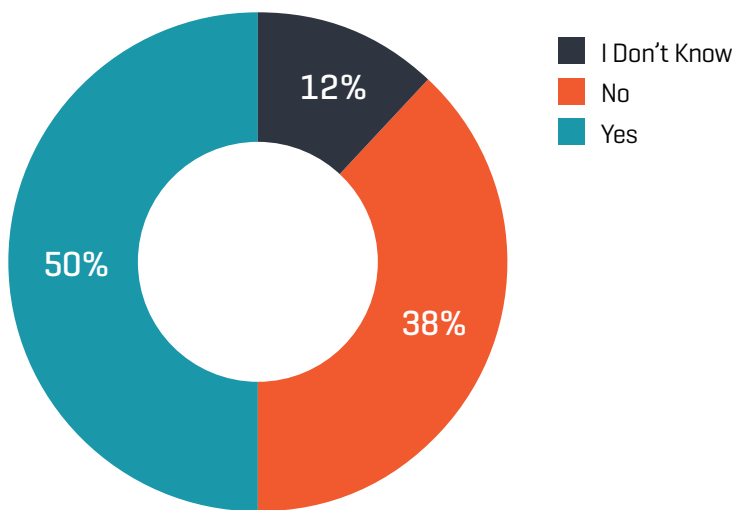


Knowing When They Got It Right

By definition, an organization’s false positive or sales insult rate reflects when the decision to decline an order for suspected fraud was incorrect. This tends to be where most organizations focus their efforts around tracking their performance related to false positives, but considering that the number of sales insults an organization is able to identify is just a fraction of actual false positives, it is also important to consider metrics that validate when the organization made correct decisions to decline an order due to suspected fraud.

Survey respondents representing organizations that actively monitor and track performance related to false positives were additionally asked if their organization specifically performs chargeback analytics to identify when an instance of missed fraud was associated with other fraudulent order attempts that were caught. For example, if a fraudster’s first two transaction attempts were declined then they attempted a smaller order that was accepted and ultimately led to a fraud chargeback, the merchant would be able to identify they were right to decline the first two order attempts. This is something half of survey respondents said their organization does to track performance related to false positives, while 38 percent said their organization does not do this and 12 percent were not sure.

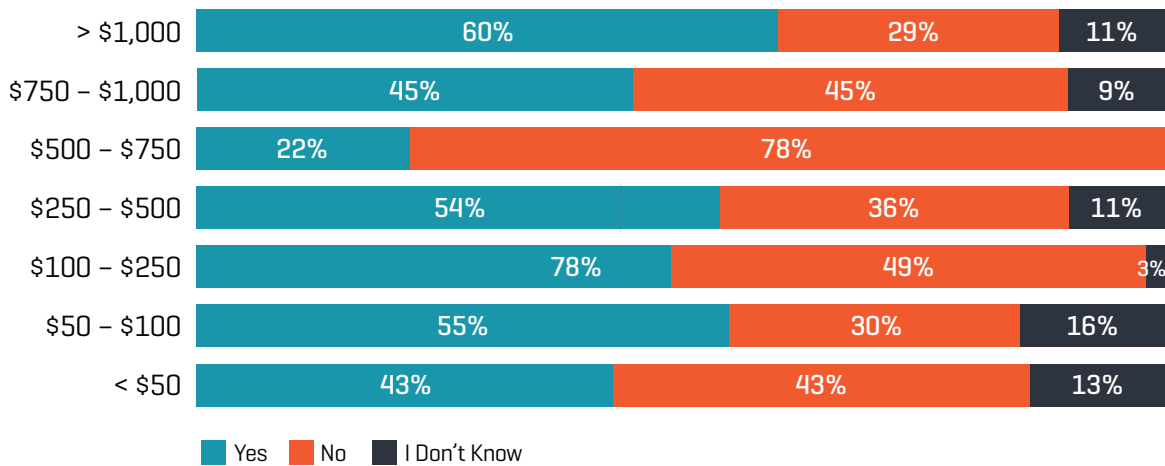
Merchants Performing Chargeback Analytics to Track False Positives



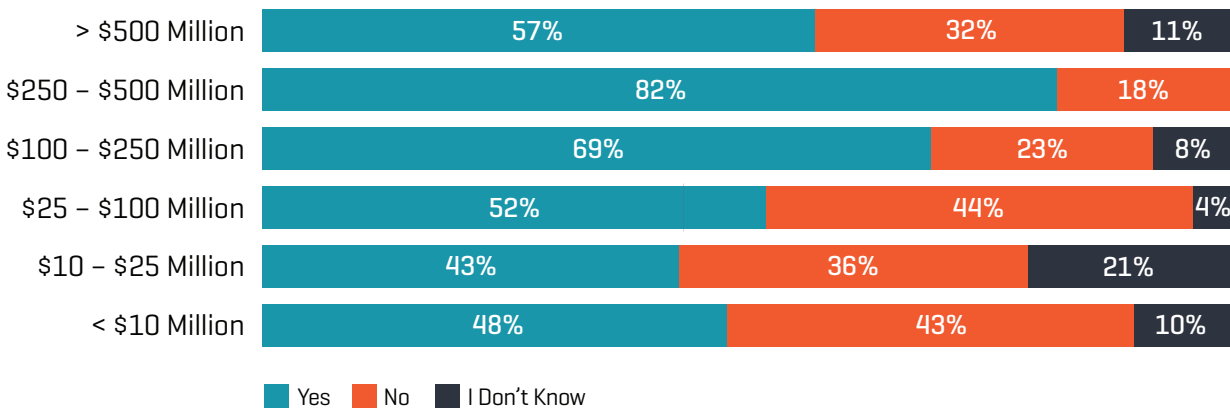
Merchants with larger AOVs showed they were more likely to recognize false positives based on when they made the wrong decision, and they are also more likely to monitor their performance around false positives based on when they made correct decisions. Although half of merchants overall perform chargeback analytics to track their performance related to false positives, 60 percent of merchants with an AOV greater than \$1,000 are performing such tasks compared to just 43 percent of merchants with average order values less than \$50.

Another recurring theme is the list of differences between larger and smaller merchants based on annual online revenue in terms of their abilities to identify false positives and track their performance. Nearly two-thirds of merchants (64 percent) with annual online revenues exceeding \$100 million and nearly 60 percent with annual CNP revenue greater than \$500 million are performing chargeback analytics to track performance related to false positives, compared to less than half of merchants (48 percent) with annual revenue less than \$10 million.

Merchants Performing Chargeback Analytics to Track False Positives [by AOV]



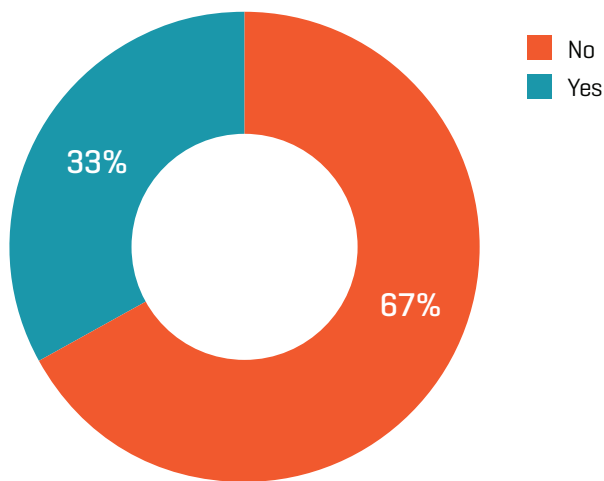
Merchants Performing Chargeback Analytics to Track False Positives [by Annual Online Revenue]



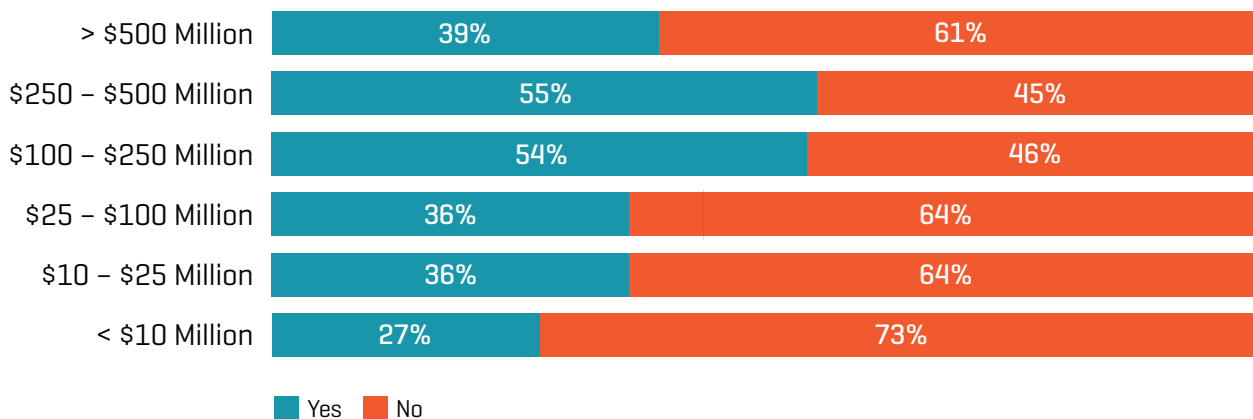
Leveraging the resources from the card associations previously discussed is another way for merchants to recognize when they have made the right decision to decline an order due to suspected fraud. To better understand the use and awareness of Visa’s TC-40 and MasterCard’s SAFE reports, the survey first asked respondents simply whether or not they knew these resources existed.

The survey respondents showed a general lack of merchant knowledge and awareness around these resources as two-thirds of respondents overall were not aware of or familiar with these card association databases or reports. While only one-third of respondents were aware of Visa TC-40 and MasterCard SAFE reports overall, 45 percent of merchants with annual online revenue greater than \$100 million, including 55 percent of merchants with CNP revenue between \$100 million and \$500 million, were aware of these resources. This compares to just 27 percent of merchants with online revenue less than \$10 million per year and 36 percent of merchants with CNP channel revenue between \$25 million and \$100 million.

Merchants Aware of Visa TC-40 and/or MasterCard SAFE Reports



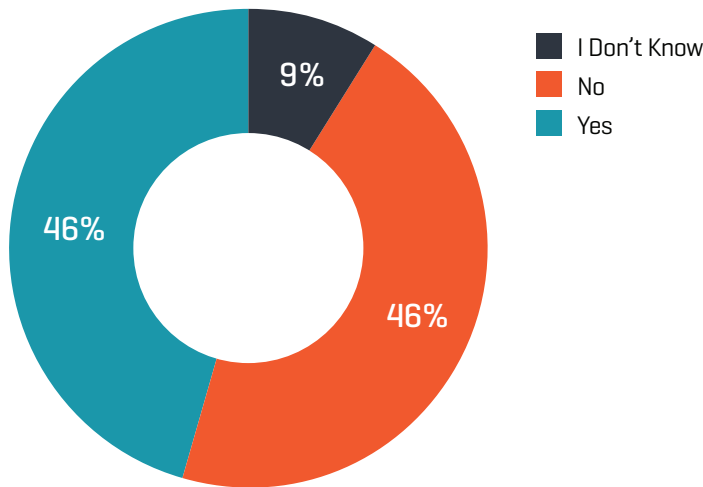
Merchants Aware of Visa TC-40 and/or MasterCard SAFE Reports [by Annual Online Revenue]



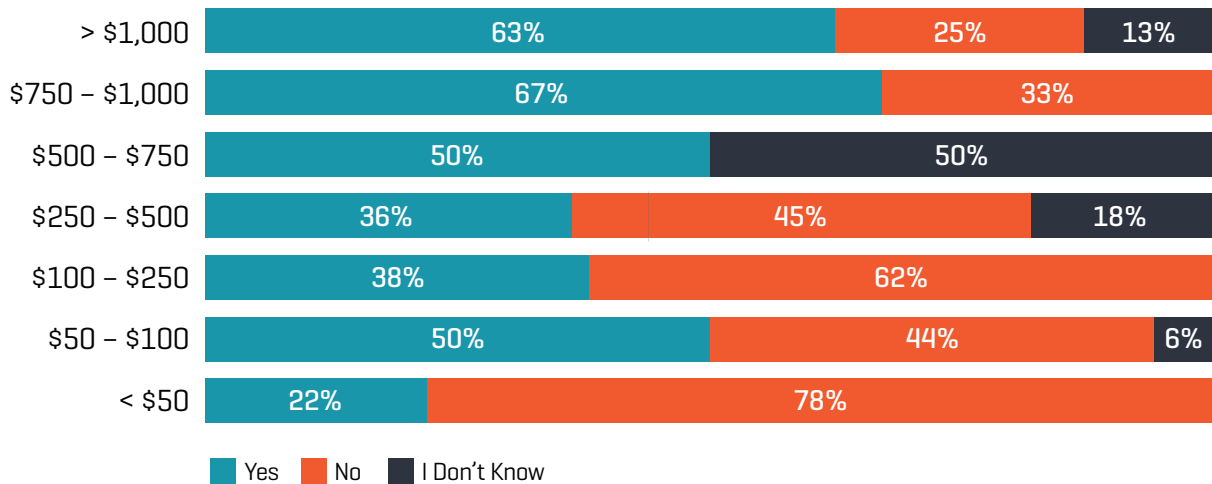
Next, the State of CNP False Positives survey asked only those who were familiar with these card association resources if their organization leveraged these assets to identify and validate their decisions on orders they declined due to suspected fraud. Survey respondents were evenly split as 46 percent indicated their organizations do utilize these resources to track performance related to false positives, 46 percent definitively said this is not something their organization does, and 9 percent were not sure.

Once again merchants with high AOVs showed they are doing more to keep tabs on their performance related to sales insults than merchants with low average order amounts. About two-thirds of merchants with an AOV greater than \$750 who are aware of Visa TC-40 and MasterCard SAFE reports are using these resources today, compared to about one-third of merchants aware of these resources with an AOV less than \$500 and just 22 percent of merchants with an AOV less than \$50.

Merchants Using Visa TC-40 & MC SAFE Reports to Track False Positives



Merchants Using Visa TC-40 & MC SAFE Reports to Track False Positives [by AOV]



Challenges and Sources of False Positives

The State of CNP False Positives:
2018 Report

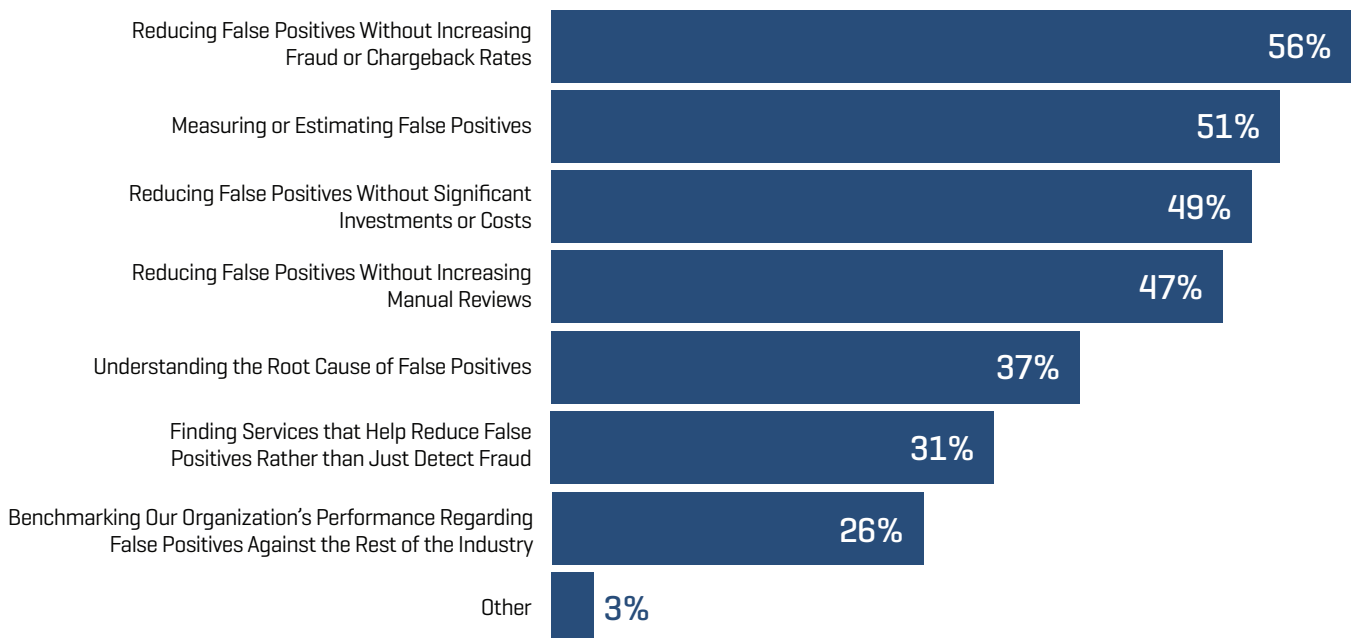
Challenges and Sources of False Positives

While the first half of the inaugural State of CNP False Positives survey focused on how organizations track different measures of performance related to false positives, the second half focused on the causes, challenges and pain-points related to sales insults, as well as what measures merchants are taking to reduce them. This additionally included observing the channels where false positives are more prevalent and understanding what respondents thought of their organization’s ability to manage and measure them.

This started with asking survey respondents to list their three greatest challenges related to managing false positives. More than half of respondents said that just being able to measure or estimate false positives is one of their top challenges. Finding ways to reduce false positives without allowing an increase in fraud was the most cited, as 56 percent of those surveyed consider this one of their greatest challenges. The next two challenges most likely to be considered one of the three greatest are also related to the trade-offs of trying to reduce false positives. Nearly half of respondents (49 percent) say it is a challenge to reduce false positives without increasing costs or requiring significant investment, while nearly as many (47 percent) struggle to reduce sales insults without increasing manual reviews.

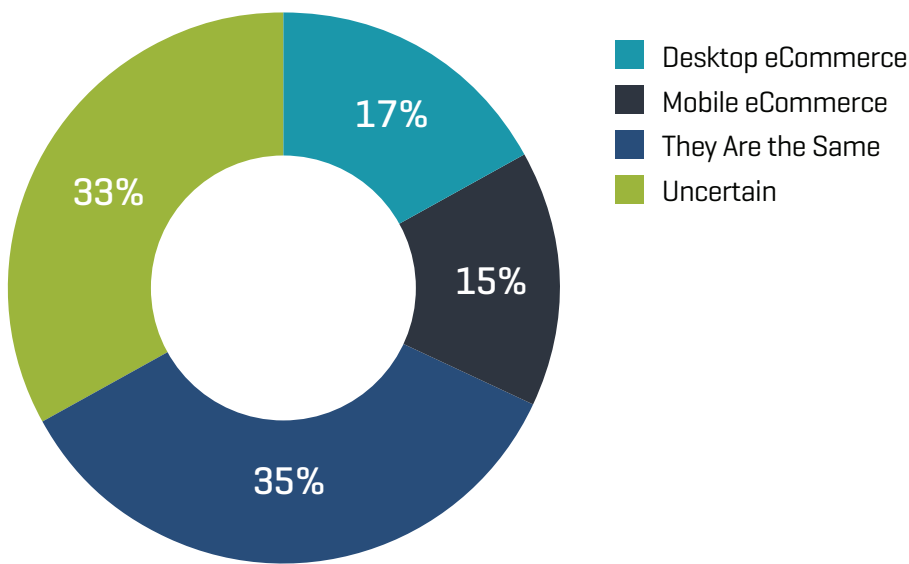
Whether organizations investigate the root cause of a sales insult and observing what merchants believe is the leading cause are explored further in the following section, but being able to understand the root cause of false positives is one of the top three challenges cited by 37 percent of respondents. Over 30 percent of respondents said it is difficult for their organization to find third party services that help reduce false positives, while more than one-in-four say benchmarking their organization’s performance regarding false positives is a major challenge.

Top Challenges with Managing False Positives



Part of tracking and understanding false positives is knowing what channels drive the most sales insults. Survey respondents from merchants who measure false positives were asked whether more sales insults originate from the desktop eCommerce or mobile eCommerce channel, or if there was no difference. One third of these respondents were uncertain which channel had a higher false positives rate, implying many organizations do not track or differentiate false positives across channels. Another 35% of respondents said the false positives rates between these channels are the same while 17 percent say desktop eCommerce and 15 percent say mobile eCommerce have higher false positives rates.

Channel with Higher False Positive Rate

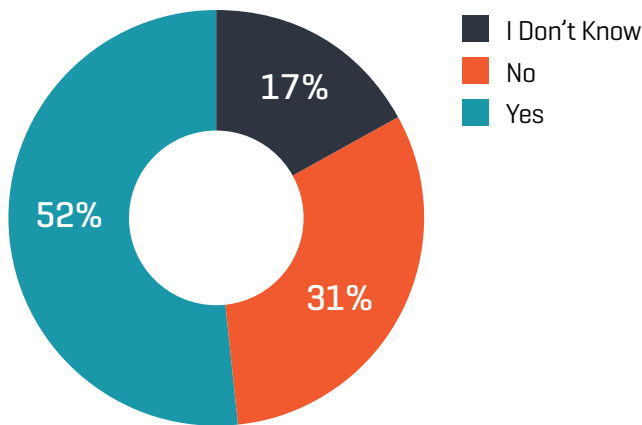


How Well Merchants Understand False Positives

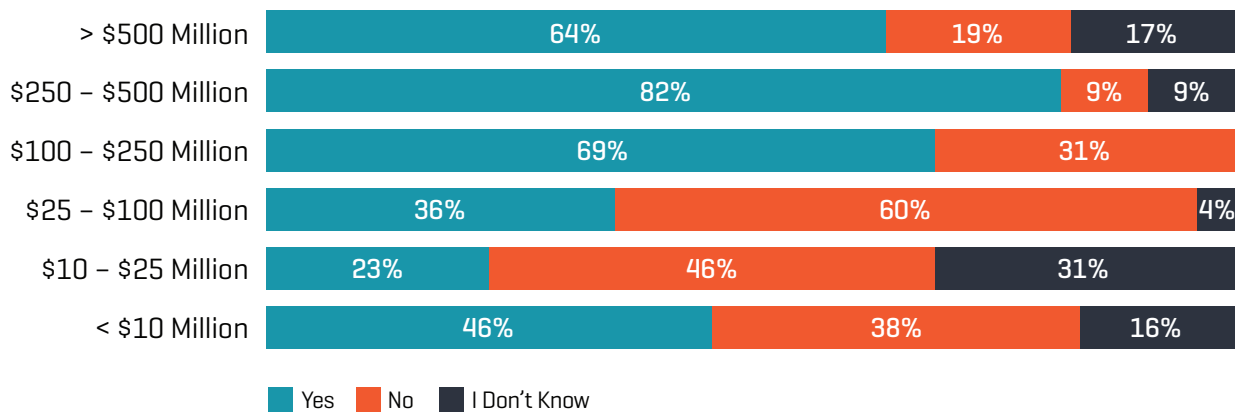
There are varying degrees to which organizations track, estimate and understand false positives in the CNP channel. To gain insights into some of these differences the survey first asked respondents whether their organizations perform root cause analysis on their sales insults, and then those who do were asked what has been the leading cause.

More than half of respondents said their organization does try to understand the root cause of their false positives, while 17 percent are uncertain and 31 percent definitively said “No,” that they don’t investigate the root cause. Nearly two-thirds of merchants with annual CNP revenue greater than \$500 million investigate the root cause of sales insults, while those with revenue between \$100 million and \$500 million were even more likely to do so. This compares to less than one-in-four merchants with annual online revenue between \$10 million and \$25 million and 36 percent of merchants with annual online revenue between \$25 million and \$100 million.

Merchants Investigating the Root Cause of False Positives



Merchants Investigating the Root Cause of False Positives (by Annual Online Revenue)

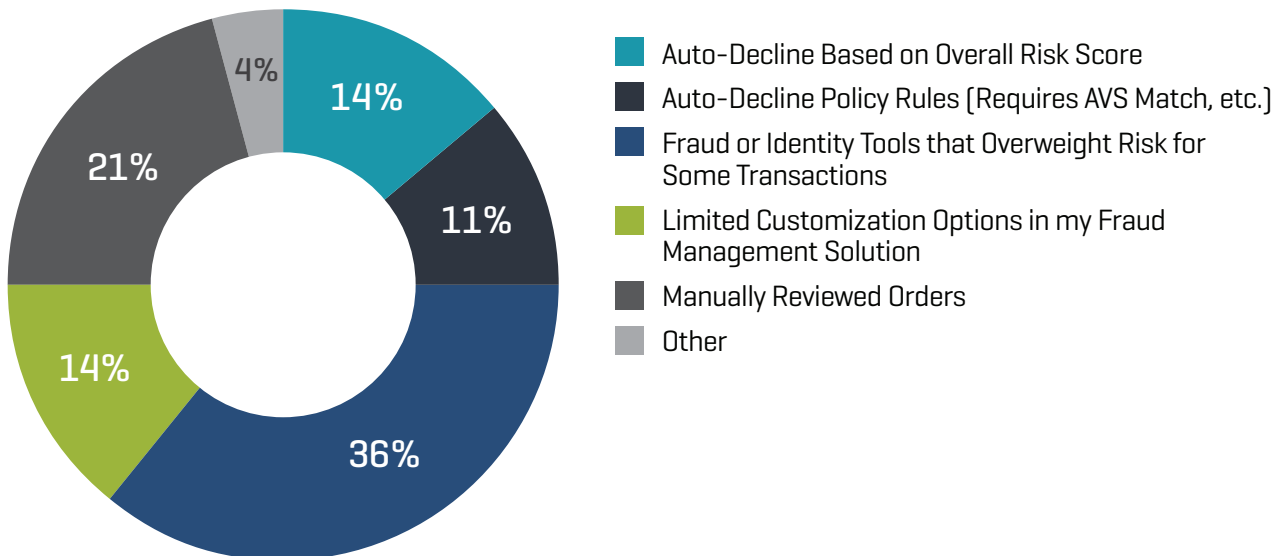


Merchants who are tracking the cause of false positives were most likely to indicate that the primary cause are fraud or identity tools that trigger and overweight the total risk score, as stated by 36 percent. An example of this would be if there was a “No Match” or “Partial Match” response on an identity lookup which caused a significantly higher risk score to an otherwise low risk order. More than one-in-five merchants tracking the cause of false positives say they primarily come from manual reviews. Nearly 15 percent of respondents said their organization’s lack of ability to customize rules and thresholds within their fraud prevention strategy is the leading cause of sales insults.

Although likely understated, just 11 percent of respondents say their organization has strict policy rules that automatically decline orders which are the leading source of their false positives. An example of this would be a strict or blunt rule that captures good orders in addition to bad ones, such as requiring a customer’s billing and shipping addresses to match along with an AVS (Address Verification Services) Full Match. While this is a somewhat extreme or harsh example, there may be other rules impacting many good orders that organizations are not aware of and therefore do not cite this as a leading cause of sales insults.

While one-in-five cited manual reviews as the primary cause of false positives overall, this included more than half of Housewares/Home Furnishings merchants, as well as more than 40 percent of Jewelry, Health/Beauty and Hardware/Home Improvement merchants. More than 80 percent of Money Movement and Ticketing merchants say that automated screening is leading source of sales insults, compared to 61 percent overall.

Leading Cause of False Positives

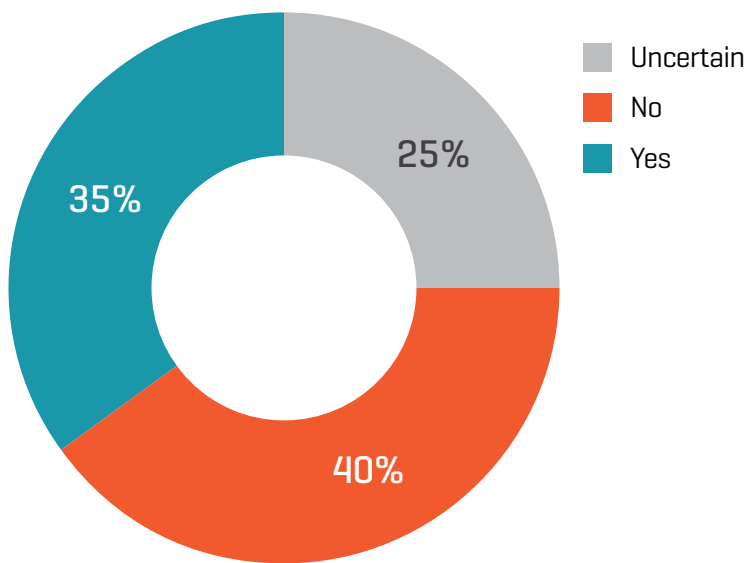


Leading Cause of False Positives (by Industry)

Industry	Auto-decline based on overall risk score	Auto-decline policy rules (require AVS match, etc)	Fraud or identity tools that overweight risk for some transaction	Limited customization options in my fraud management solution	Manually reviewed orders
Apparel / Accessories	8%	15%	27%	12%	38%
Automobile / Powersports	25%	38%	13%	0%	25%
Computers / Electronics	8%	8%	29%	17%	33%
Dating / Social	33%	17%	17%	0%	17%
Digital Streaming / Downloads	16%	5%	21%	16%	37%
Education / Training	33%	0%	22%	11%	33%
Financial Services / Insurance	29%	0%	50%	14%	7%
Food / Beverage	21%	5%	26%	16%	26%
Games / Gaming	17%	6%	28%	22%	22%
Hardware / Home Improvement	14%	21%	14%	7%	43%
Health / Beauty	21%	5%	21%	5%	42%
Housewares / Home Furnishing	13%	6%	6%	13%	56%
Jewelry	11%	6%	28%	11%	44%
Money Movement / Transfer	43%	14%	29%	14%	0%
Other	0%	33%	22%	22%	22%
Professional Services	33%	20%	13%	13%	20%
Telecom	60%	0%	20%	0%	20%
Ticketing	30%	10%	40%	0%	20%
Toys / Hobbies / Pets	11%	16%	21%	21%	32%
Travel / Hospitality	25%	6%	31%	0%	25%

All survey respondents were asked about their organization's understanding of false positives and whether they believe it is a reasonably accurate understanding of the true volume and costs. Finding a reliable way to track sales insults is a major challenge, and only one-third of respondents believe their organization has an accurate or complete understanding of the volume of their false positives. One-in-four respondents are unsure about their organization's understanding of false positives while 40 percent stated their organization is not able to accurately estimate the volume or cost of false positives.

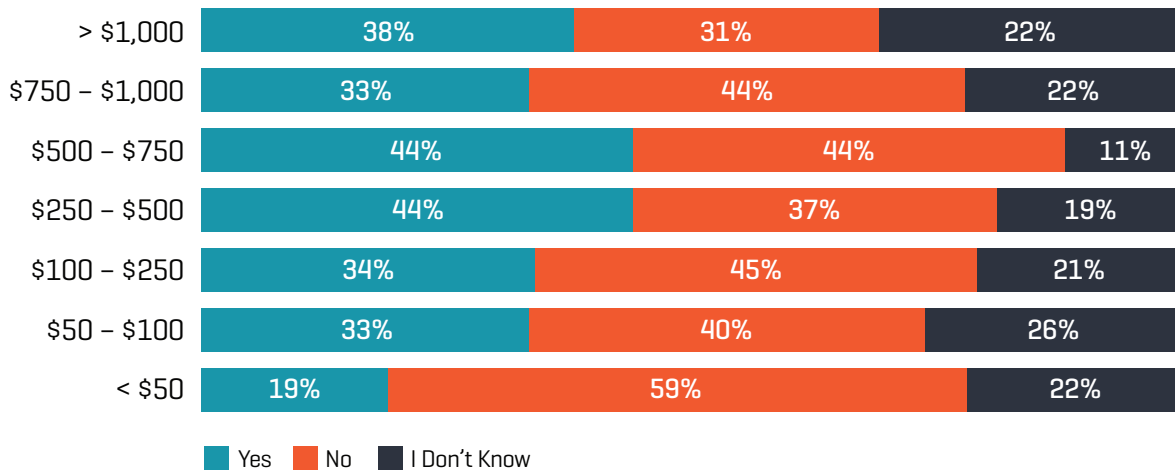
Merchants with Reasonable Understanding of Volume/Cost of False Positives



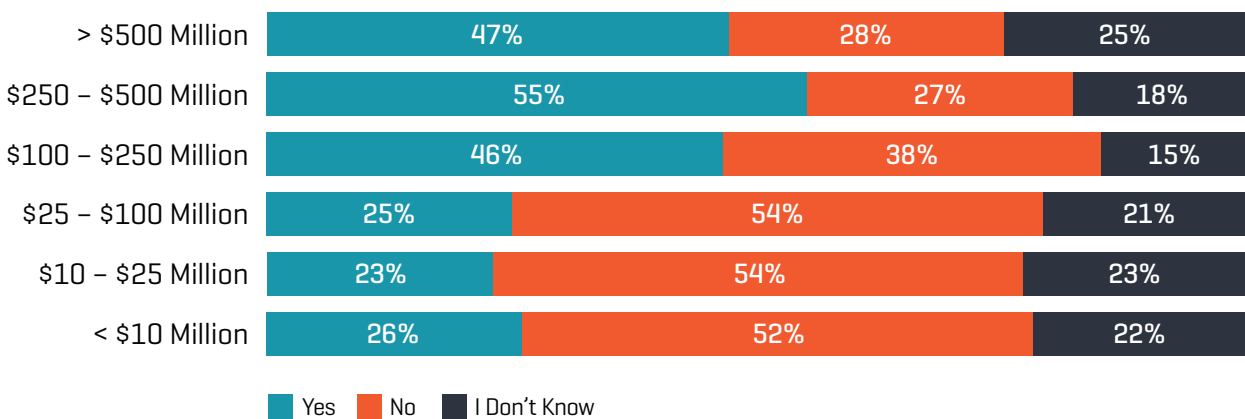
Respondents representing merchants with higher AOVs and higher annual online revenue are more likely to believe their organization can reasonably estimate the true volume of false positives and their cost. Just one-in-five respondents representing merchants with an AOV less than \$50 say their organization has a reasonably accurate understanding of the volume and costs of false positives, compared to more than 40 percent of all respondents from organizations with average order values greater than \$250.

Similarly, only about one-in-four respondents representing merchants with annual online revenue less than \$10 million and less than \$100 million believe their organization has a reasonably accurate understanding of the cost of false positives, compared to nearly half of merchants with annual CNP channel revenue greater than \$500 million and 55 percent of merchants with annual online revenue between \$250 million and \$500 million.

Merchants with Reasonable Understanding of Volume/Cost of False Positives [by AOV]

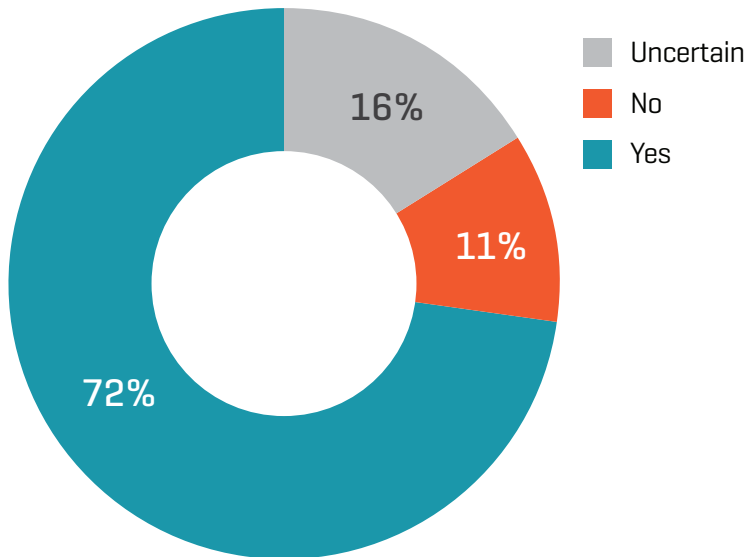


Merchants with Reasonable Understanding of Volume/Cost of False Positives [by Annual Online Revenue]



Nearly three-quarters of respondents, 72 percent, admit their organization should be doing more in terms of trying to measure and understand the impact of false positives. Just one-in-ten survey respondents say their organization has an adequate understanding of false positives and does not need to do more to measure their impact.

Those Who Believe their Organization Should Do More to Understand False Positives



Reducing False Positives

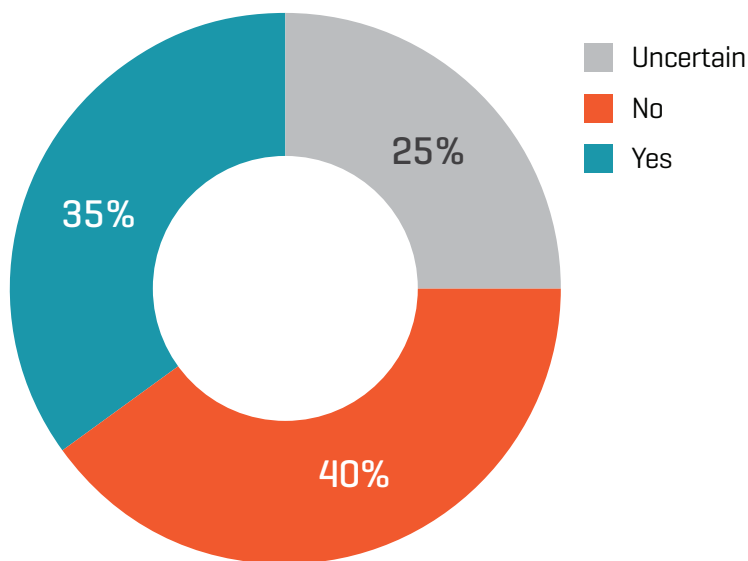
The State of CNP False Positives: 2018 Report

Reducing False Positives

If just being able to measure false positives is half the battle, then figuring out how to reduce them is the other half. Recall that three of the four most cited challenges related to false positives are finding ways to reduce them without allowing an increase in fraud, increasing costs, or increasing manual reviews. This final section of the State of False Positives: 2018 Report examines what merchants are doing to reduce false positives while managing the impact or trade-offs related to risk and costs.

Respondents were first asked whether their organization budgets for reducing false positives. About one-third do while 40 percent do not and one-quarter of respondents were uncertain. The types of merchants most likely to budget for false positives are Money Movement, Jewelry, Games/Gaming and Hardware/Home Improvement. Nearly two-thirds of Digital Streaming/Download merchants do not budget for reducing false positives.

Merchants that Budget for Reducing False Positives

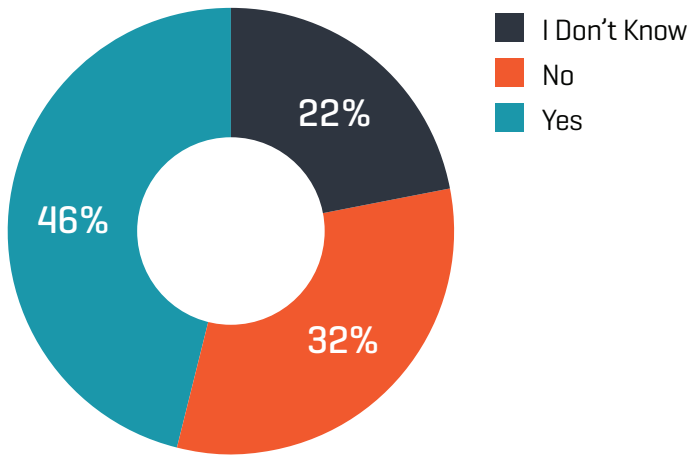


Merchants that Budget for Reducing False Positives (by Industry)

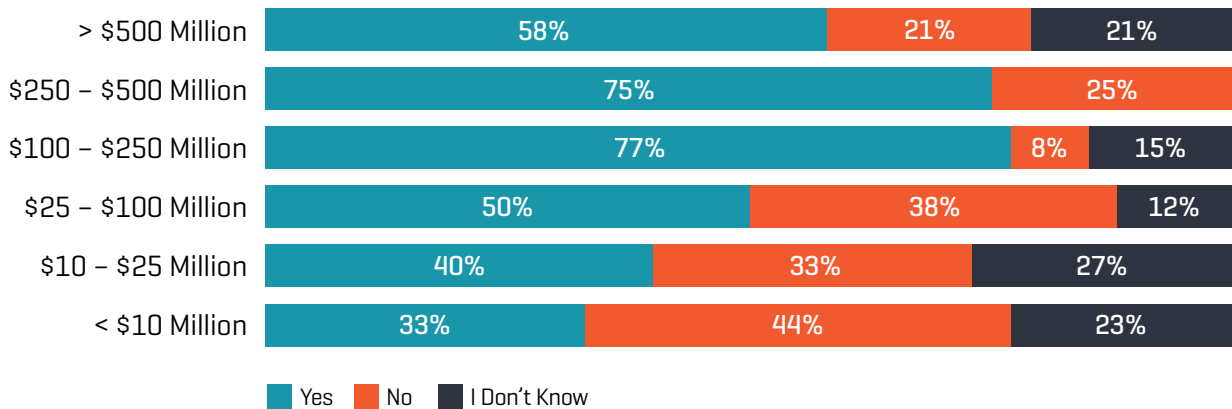
Industry	Yes	No	I Don't Know
Apparel / Accessories	21%	43%	36%
Automobile / Powersports	21%	50%	29%
Computers / Electronics	33%	46%	21%
Dating / Social	25%	58%	17%
Digital Streaming / Downloads	18%	64%	18%
Education / Training	33%	38%	29%
Financial Services / Insurance	18%	55%	27%
Food / Beverage	31%	45%	24%
Games / Gaming	36%	50%	14%
Hardware / Home Improvement	35%	35%	30%
Health / Beauty	28%	41%	31%
Housewares / Home Furnishing	23%	50%	27%
Jewelry	36%	45%	18%
Money Movement / Transfer	36%	55%	9%
Not for Profit	14%	43%	43%
Other	0%	53%	47%
Professional Services	23%	46%	31%
Telecom	33%	44%	22%
Ticketing	26%	37%	37%
Toys / Hobbies / Pets	29%	43%	29%
Travel / Hospitality	21%	52%	28%

Even if their organization doesn't specifically budget for it, many respondents say they have plans to improve how they measure and/or reduce false positives. While it's only in the budget for one-third of merchants, 46 percent of respondents say their organizations have plans to better measure or reduce false positives. About one-third have no such plans for this year while 22 percent did not know. Nearly 60 percent of merchants with annual online revenue greater than \$500 million and more than 75 percent with annual online revenue between \$100 million and \$500 million have plans to improve how they measure or reduce false positives, compared to one-third of merchants with annual online revenue less than \$10 million and half of merchants with annual CNP channel revenue between \$25 million and \$100 million.

Merchants Planning to Reduce False Positives



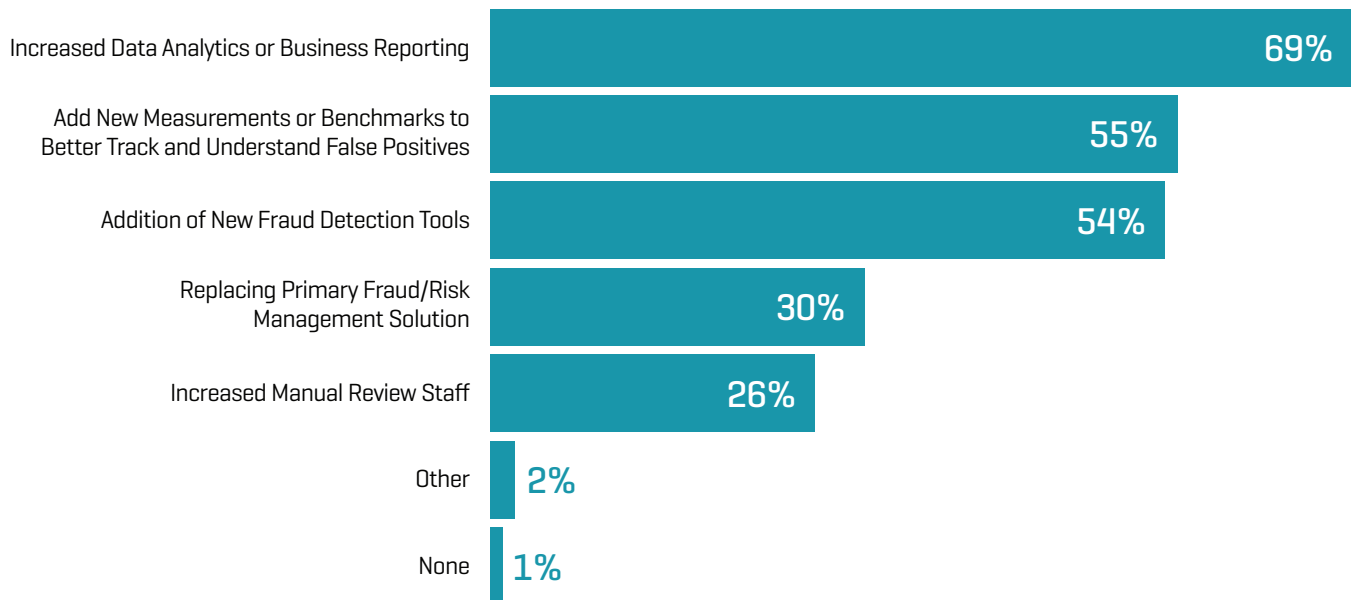
Merchants Planning to Reduce False Positives (by Annual Online Revenue)



Respondents who said their organization has plans to reduce or improve how they measure false positives were next asked what these initiatives might be. The most commonly cited investment was increasing data analytics or business reporting around false positives, as reported by nearly 70 percent of respondents. The next most common measures organizations are taking to better understand false positives are adding new fraud detection tools and adding new measurements or metrics for benchmarking.

More than one-in-four respondents said their organization will increase manual review staff to reduce false positives while one-in-three are going as far as to replace their primary fraud or risk management solution. About 70 percent of respondents say their organizations will be taking on two or more of these initiatives to better understand or reduce false positives, while 41 percent say their organization has plans around three or more and 21 percent are taking on four or more of these initiatives in the coming year.

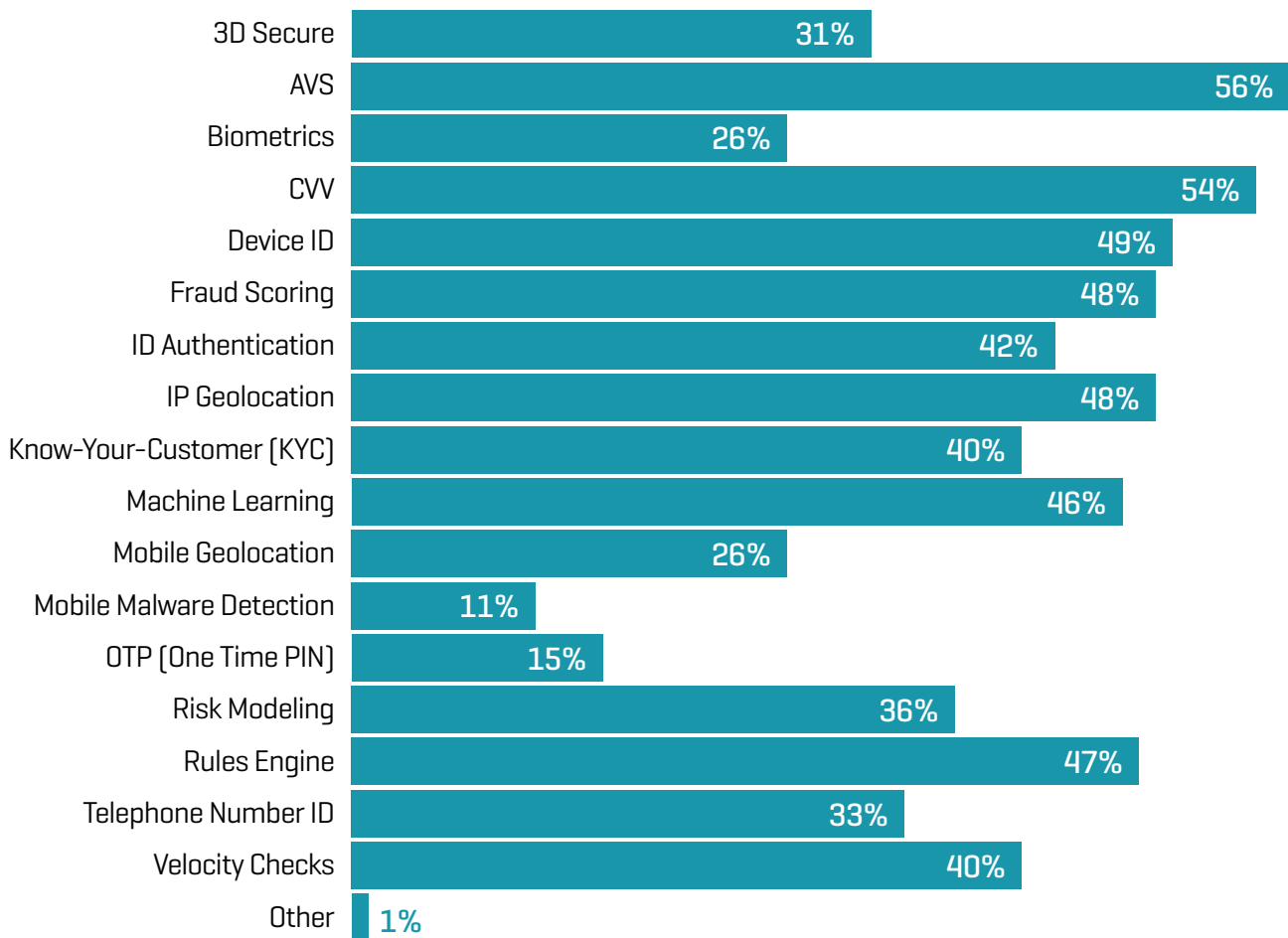
Initiatives Planned to Better Understand or Reduce False Positives



Lastly, survey respondents whose organizations measure or track false positives were asked which fraud prevention tools and services they believe are most effective for reducing sales insults. There were seven tools or services listed by at least 45 percent of respondents as important or effective for reducing false positives. These include AVS and CVV (Card Verification Value) checks, Device Identification, Fraud Scoring, IP Geolocation, Rules Engines and Machine Learning. Other tools or services considered important for reducing false positives by at least 40 percent of respondents include Velocity Checks, ID Authentication and Know-Your-Customer (KYC) checks.

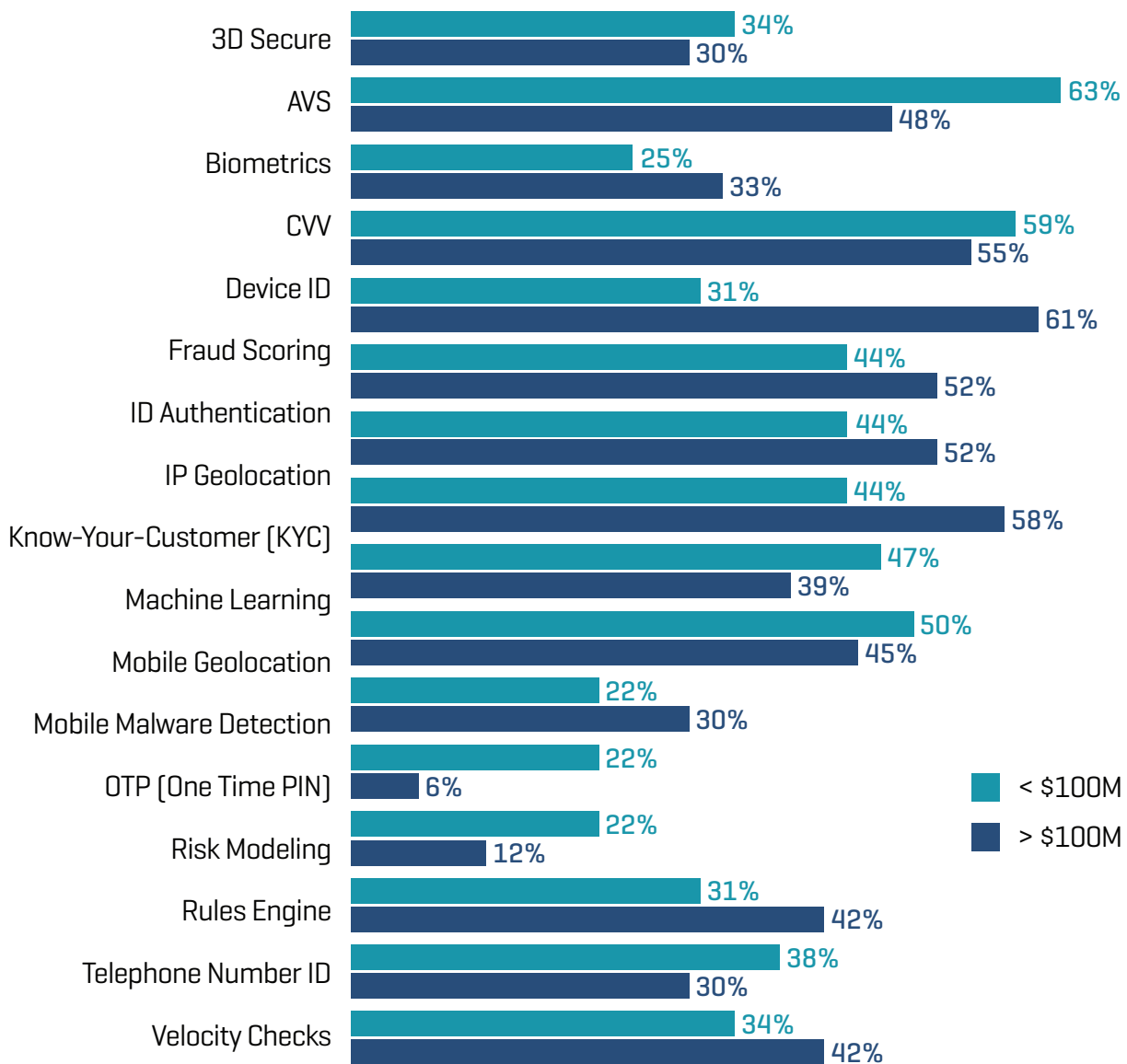
Rules engines and machine learning weigh both high and low risk signals to make an overall determination while device ID can help recognize things like a good customer transacting while on a business trip. These signals and aids in making risk decisions are useful in reducing false positives, but it was surprising to see AVS and CW checks even more likely to be considered effective tools for reducing sales insults.

Most Important or Effective Tools for Reducing False Positives



Respondents from merchants with annual online revenue less than \$100 million were much more likely to consider AVS important for reducing false positives, as indicated by 63 percent of these respondents compared to 48 percent of those representing merchants with annual online revenue greater than \$100 million. Respondents representing merchants with annual CNP channel revenue greater than \$100 million are more likely to consider Device ID (61 versus 31 percent), IP Geolocation (58 versus 44 percent), Fraud Scoring (52 versus 44 percent) and Velocity Checks (42 versus 34 percent) important for reducing false positives than respondents representing merchants with annual online revenue less than \$100 million.

Most Important or Effective Tools for Reducing False Positives (by Annual Online Revenue)



Conclusion

The State of CNP False Positives: 2018 Report

Conclusion

The inaugural State of CNP False Positives survey reached more than 330 respondents to better understand how merchants in the online commerce channel track and measure their performance related to false positives and methods for trying to reduce them. While most organizations tend to focus on direct fraud losses, sales insults or false positives are also a major source of lost revenue.

Perhaps because they are difficult to estimate and measure, there is an overall lack of awareness around tracking and understanding the impact of false positives. Only 11 percent of respondents believe their organization is currently doing enough to understand the costs and impacts of false positives. Just one-third believe their organization has a reasonably accurate understanding of the true volume of false positives, yet only one-third of respondents say their organization budgets to reduce or address false positives.

Just being able to estimate and track false positives is the second most cited challenge when it comes dealing with false positives overall. The three other challenges merchants are most likely to say they face are related to reducing sales insults while managing other aspects of their business, such as not allowing a major increase in costs, missed fraud or manual reviews. More than 60 percent of respondents said automated screening causes the majority of their false positives while 21 percent said manual reviews were the leading source and 14 percent cited a lack of risk management capabilities.

Beyond the general lack of awareness and borderline apathy regarding false positives, it is also disconcerting to see AVS and CVV checks listed as the top tools for preventing sales insults. The reality is that harsh policy rules around

these checks are likely the result of many false positives and in many cases, fraudsters have the information to pass these checks in their possession.

The impact of false positives can go beyond the initial lost sale to the lost lifetime value of a potential customer, but merchants with higher AOVs feel the most pain from the immediate impact of a sales insult, and for that reason these organizations tend to be doing more to understand and prevent false positives. Relative to merchants overall, those with an AOV less than \$50 are less likely to be able to identify false positives when a customer reattempts a transaction online or calls customer services attempting to complete a declined order, and less likely to be able to recognize orders they correctly declined based on post-transaction or chargeback analysis.

There were also many notable differences between merchants based on their annual online revenue. Relative to merchants with CNP channel revenue less than \$10 million per year, merchants with annual online revenue greater than \$100 million were more likely to:

- Track false positives – 56 versus 32 percent
- Identify false positives from customer service calls – 80 versus 60 percent
- Identify correctly declined orders with post-transaction analysis – 64 versus 48 percent
- Investigate the root cause of sales insults – 68 versus 46 percent
- Have plans to reduce or improve how they track false positives this year – 66 versus 33 percent

Top 10 Common Pitfalls Leading to Higher False Positive Rates

- 1.** Companies fail to measure and understand how much of an impact fraud operations have on conversion by measuring overall declines as a part of the funnel.
- 2.** Companies fail to conduct periodic reviews of their decline population to understand how much is real fraud and how much are false positives.
 - a.** Just 38 percent of respondents said their organization attempts to measure or track false positives.
- 3.** Risk strategies with an over-reliance on rules rather than using modeling can lead to higher false positive rates as they can reflect transient activity.
 - a.** 36 percent say the leading cause of false positives are fraud or identity tools that overweight the risk of a transaction, while 11 percent cite an auto-decline policy rule.
- 4.** Companies focus too much on a tool or fraud signals impact to fraud reduction without asking or assessing its impact on sales conversion.
- 5.** Companies make use of generic modeling signals that are not tuned to their vertical market.
- 6.** Companies fail to measure and monitor a fraud analyst's false positive rates, or overemphasize "good" work with a high catch rate versus the quality of the catch rate.
- 7.** Companies don't scrub their chargebacks to differentiate fraud from non-fraud, or conduct post-transaction analysis to add non-fraud chargeback information to black lists.
 - a.** Stopping a would-be friendly fraudster should not be counted as a sales insult.
- 8.** Companies rely too heavily on AVS and CVV for fraud decisioning.
 - a.** 56 percent consider AVS and 54 percent consider CVV checks important or effective tools for reducing false positives – more than any other tool or service.
- 9.** Companies overemphasize automation and fail to make proper use of manual review to convert more business.
 - a.** 21 percent believe manual reviews are the leading cause of false positives, compared to 61 percent citing factors related to automated screening.
- 10.** Fraud Attack Hangover - Companies implement overly stringent rules and decline logic after encountering a fraud event, creating a larger sales decline bubble on the backend.

Appendix

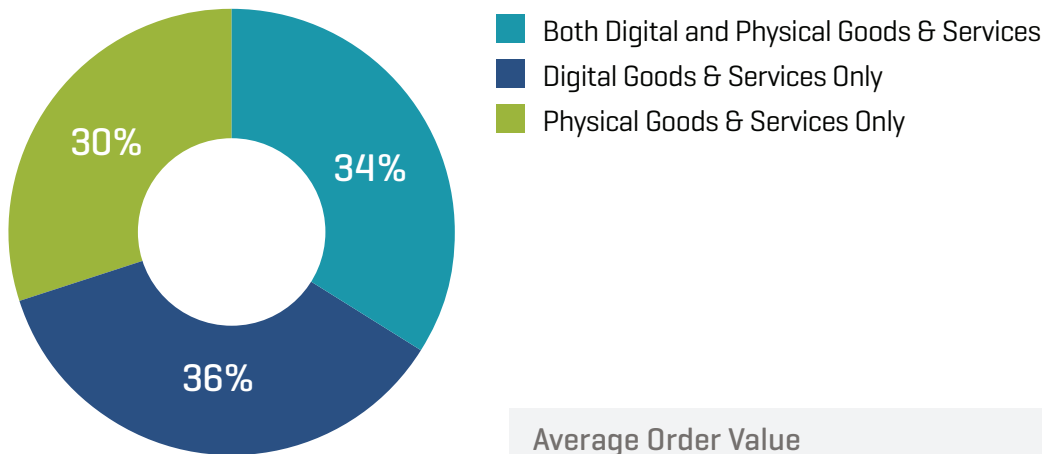
The State of CNP False Positives: 2018 Report

Appendix: About the Survey Respondents

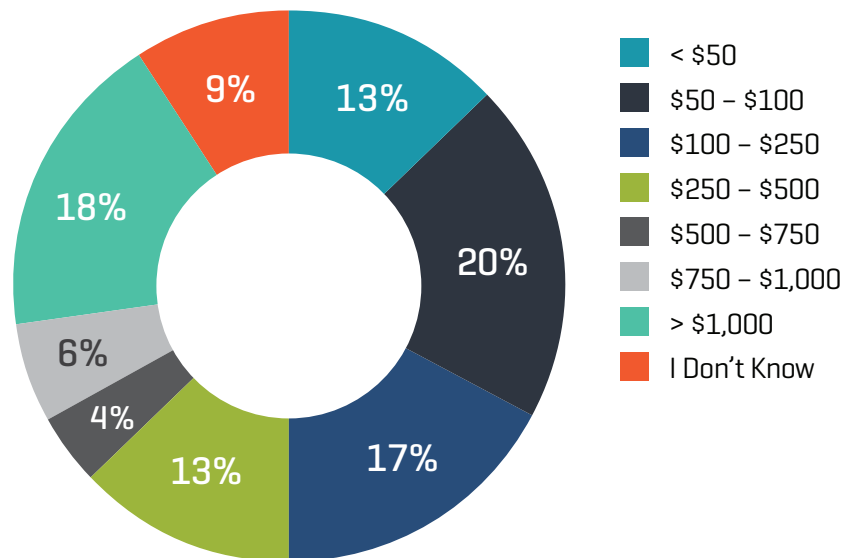
The inaugural State of False Positives survey reached over 330 merchant respondents and only Card Not Present (CNP) merchants were eligible to participate. This included 36 percent of merchants who sell digital goods or services exclusively online, 30 percent who only sell physical or tangible goods, and 34 percent who sell both digital and physical goods in the CNP channel.

Respondents that participated in the study were fairly evenly distributed in representing both digital and physical goods merchants as well as across their AOVs. One-third of respondents reported their organization has an AOV of \$100 or less while 28 percent have an AOV of at least \$500. About 17 percent of respondents reported an AOV between \$100 and \$250 while 13 percent said their organization had an AOV between \$250 and \$500.

Type of Goods/Services Sold in the CNP Channel

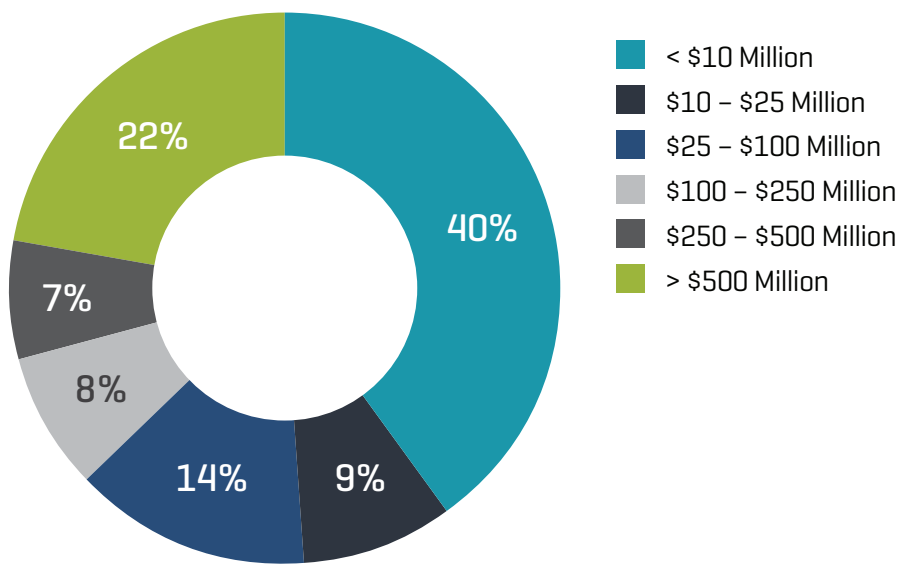


Average Order Value



Survey respondents also represented merchants of all sizes. Half of all respondents represent merchants with less than \$25 million in annual online revenue and 40 percent have CNP channel revenue of less than \$10 million per year. More than one-fifth of respondents are high volume merchants earning more than \$500 million per year in online revenue. About 15 percent of merchants surveyed earn between \$100 million and \$500 million online each year, while 14 percent earn between \$25 million and \$100 million in CNP channel sales annually.

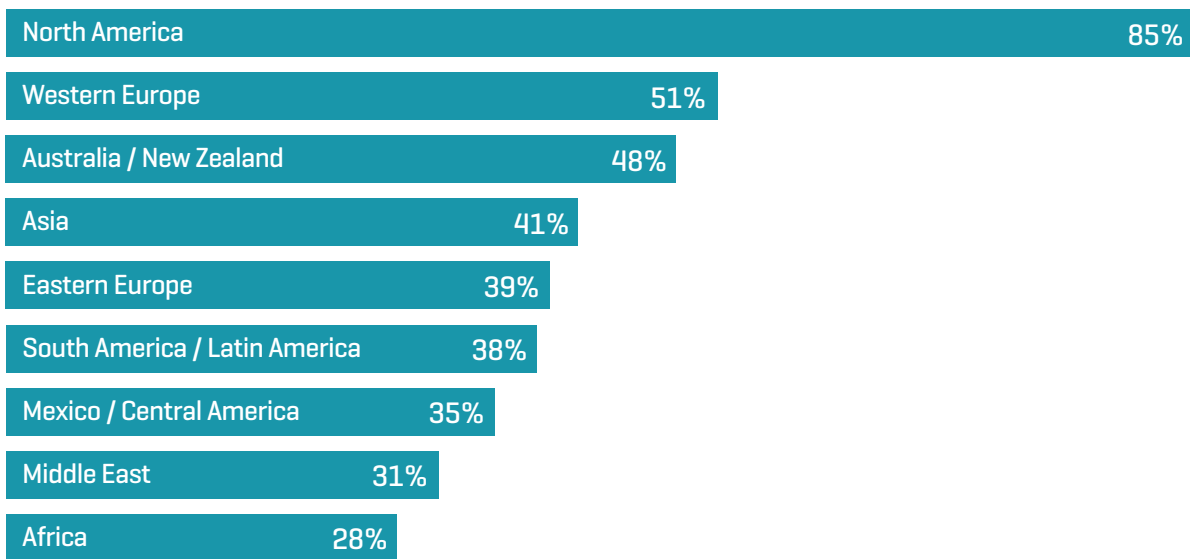
Annual Online Revenue



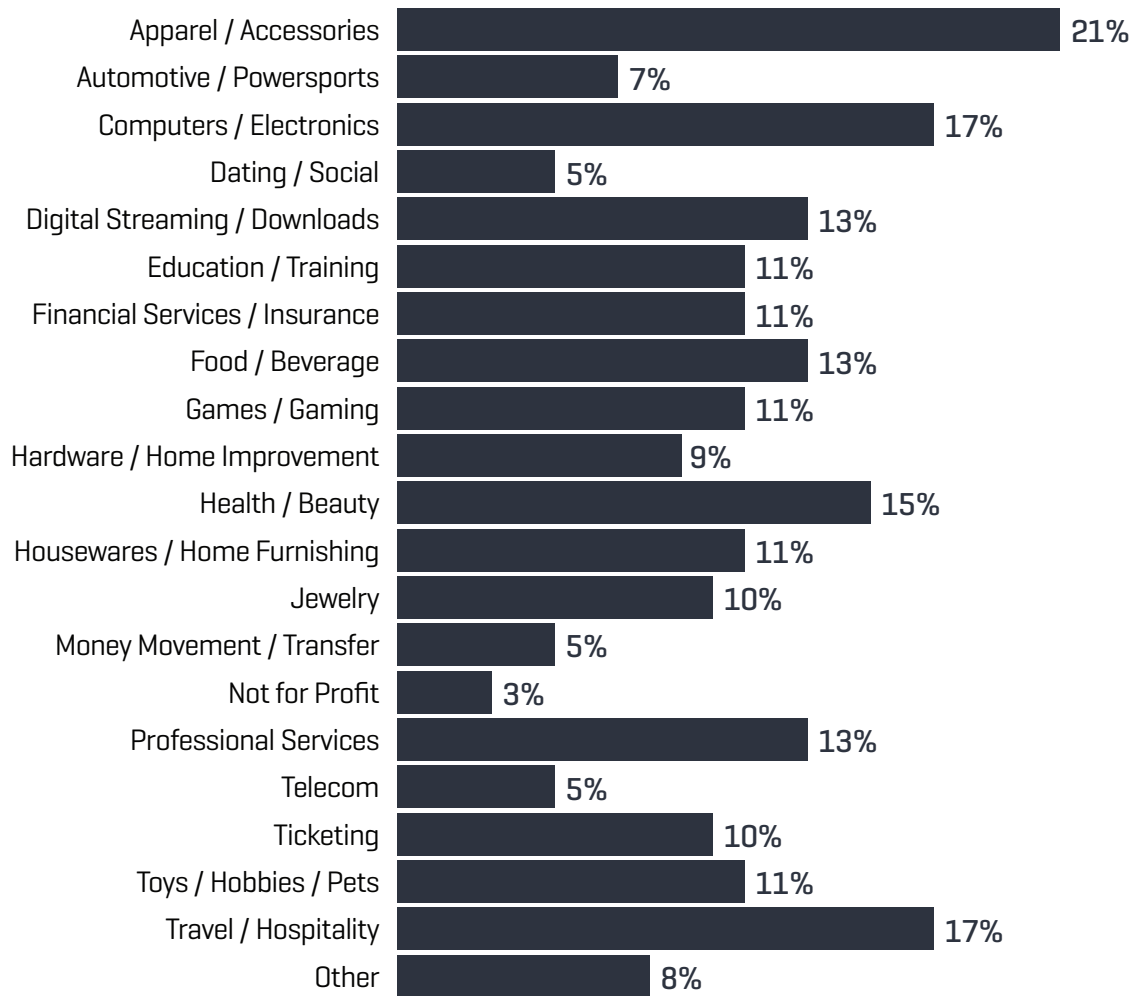
Merchants that participated in the survey sell goods and services online worldwide and operate in a wide variety of retail or market sectors. The majority of survey respondents, 85 percent, sell goods or services online to consumers in North America, while more than half sell online to Western Europe, 41 percent sell online to consumers in Asia and 38 percent sell to CNP channel customers in South America.

About one-in-five merchants surveyed sell goods in the Apparel/Accessories category online, more than any other category or segment. Computers/Electronics and Travel/Hospitality are the two next most common industries, with these goods or services sold online by 17 percent of merchants surveyed, followed by Health/Beauty at 15 percent. There are 14 industries or vertical markets represented by at least 10 percent of survey respondents.

Regions Merchants Sell Goods/Services



Merchant Industries



About the Sponsors

Kount

Kount helps businesses boost sales by reducing fraud. The all-in-one, SaaS platform simplifies fraud detection by applying patented machine learning through Kount's proprietary platform offering maximum protection for some of the world's best-known brands. Companies using Kount accept more orders from more people in more places than ever before.

The Fraud Practice

The Fraud Practice is a privately held US corporation based in Sarasota, Florida. The Fraud Practice provides consulting services, training, and research on eCommerce payments, fraud prevention and credit granting. Businesses throughout the world rely on The Fraud Practice to help them build and manage their fraud and risk prevention strategies. For more information please visit www.fraudpractice.com. For more information about online training and professional certification programs please visit www.CNPtraining.com.