LexisNexis® Risk Solutions
2017 True Cost of Fraud℠ Study

October 2017

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The LexisNexis® Risk Solutions 2017 True Cost of Fraud℠ Study helps merchants (retail and online/mobile), financial services companies and lenders grow their business safely even with the growing risk of fraud.

The research provides a snapshot of current fraud trends in the United States and spotlights key pain points that…

- Merchants (retail and online/mobile) should be aware of as they add new **payment** mechanisms and expand channels into online, mobile, and international sectors.

- Financial services companies and lenders should be aware of as they add new **transaction and account opening** mechanisms, as well as when expanding into the online and mobile channels.



**How do I grow my business, navigate and manage the cost of fraud while strengthening customer trust and loyalty?**

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# The study included a comprehensive survey of 1,196 risk and fraud executives during March & April 2017, broken out as follows:

- 653 from retail organizations
- 190 from e/m-Commerce organizations that earn a majority of their revenue (80%+) through online and/or mobile channels
- 185 from financial services companies
- 168 from lending institutions

Surveys were conducted online. LexisNexis® Risk Solutions was not identified as the sponsor of the study.

**Fraud Definitions**

- Fraud is defined as the following:
    - Fraudulent and/or unauthorized transactions *(for retail and online/mobile merchants)*
    - Fraudulent transactions due to identity fraud, which is the misuse of stolen payments methods (such as credit cards) or personal information *(for financial services companies and lenders)*
    - Fraudulent requests for refund/return; bounced checks
    - Lost or stolen merchandise, as well as redistribution costs associated with redelivering purchased items
- This research covers consumer-facing fraud methods
    - Does not include insider fraud or employee fraud
- The LexisNexis Fraud Multiplier℠ cost
    - Estimates the total amount of loss a merchant occurs based on the actual dollar value of a fraudulent transaction

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# Segments by Industry Definitions

**Small**
Earns less than $10 million in annual revenues.

**Mid/Large**
Earns more than $10 million in annual revenues.

## Retail

**Physical Goods only**
Sells physical goods only.

**Digital and Physical Goods**
Sells digital goods only, or digital and physical goods.

**Large merchants with an online channel**
Accepts payment through multiple channels, but maintains a strong online presence, earning 10%-100% of their revenue from the online channel and earning $50 million+ in digital sales.

## E-Commerce

**Physical Goods only**
Sells physical goods only.

**Digital and Physical Goods**
Sells digital goods only, or digital and physical goods.

## Financial Services

**Mid/Large Some or No Digital Transactions**
Earns $10 million in annual revenues; less than 50% through the online and/or mobile channels.

**Mid/Large Primarily Digital Transactions**
Earns $10 million in annual revenues; 50% or more through the online and/or mobile channels.

## Lending

**Some or No Digital Transactions**
Less than 50% of revenue through the online and/or mobile channels.

**Primarily Digital Transactions**
More than 50% of revenue through the online and/or mobile channels.

# Company Types by Industry

**Retail & e-Commerce companies operate across various industries including:**

- Apparel
- Home Improvement
- Housewares
- Food and Beverage
- **Retail**
- Electronics
- Sporting Goods
- Books
- e/m-Commerce
- Computers
- Clothing
- Gifts
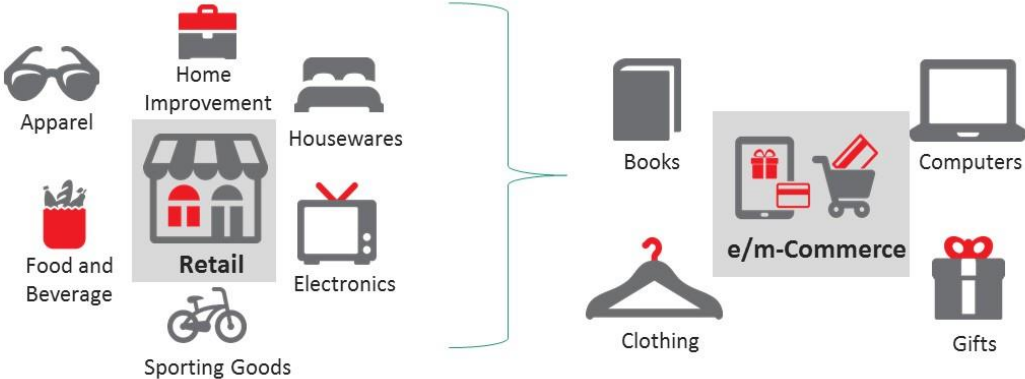
## Financial Services Companies Include:

- Retail/Commercial Banks
- Credit Unions
- Investments
- Trusts
- Wealth Management

## Lending Institutions Include:

- Auto Lenders
- Finance Companies
- Mortgage Companies
- Non-Bank Credit Card Issuer
- Non-Bank Personal Loan Issuer

# Sample Sizes by Industry Segments

| Retail | Revenue Size | | | Goods Sold | |
|---|---|---|---|---|---|
| | Small (<$10M) | Mid/Large ($10M+) | Large ($50M+) w/ Online Channel | Physical Goods only | Digital + Physical Goods |
| # Completions | 404 | 249 | 138 | 346 | 259 |

| E-Commerce | Revenue Size | | Goods Sold | |
|---|---|---|---|---|
| | Small (<$10M) | Mid/Large ($10M+) | Physical Goods only | Digital + Physical Goods |
| # Completions | 148 | 42 | 110 | 80 |

| Financial Services | Revenue Size | | Goods Sold | |
|---|---|---|---|---|
| | Small (<$10M) | Mid/Large ($10M+) | Mid/Large ($10M+) Some or No Digital Trans. | Mid/Large ($10M) Primarily Digital Trans. |
| # Completions | 62 | 123 | 100 | 50 |

| Lending | Revenue Size | | Goods Sold | |
|---|---|---|---|---|
| | Small (<$10M) | Mid/Large ($10M+) | Some or No Digital Trans. | Primarily Digital Trans. |
| # Completions | 53 | 115 | 116 | 52 |

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# Executive Summary: Key Findings

# Key findings

**1**

**Sizeable fraud is occurring across retail, eCommerce, financial services and lending sectors.**

- Every $1 of fraud costs organizations in these industries between $2.48 to $2.82 – that means that fraud costs them more than roughly 2 ½ times the actual loss itself.

- Fraud cost as a percent of revenues ranges between 1.58% to 2.39%.

- Up to 31% - 43% of monthly transactions involves fraud attempts. This of course depends on the season, with holiday periods representing the higher spikes.

**2**

**The eCommerce and financial services sectors are getting hit somewhat harder.**

- Organizations in these two industries represent the higher range of fraud costs as a percent of annual revenues.

- Some of that can relate to relying more on manual review efforts than others, which drives up direct expenses in labor (either internally or outsourced). They are also declining more transactions, which lowers potential revenue levels from which the impact of fraud costs are measured.

- eCommerce also experiences more fraud attempts than others per month (43%). This coincides with a rise in online purchasing during the past year and the trend of fraudsters targeting the anonymous channel.

**3**

**The digital space, either as a transaction channel or type of good/service being sold, is a high risk for even more negative fraud impact.**

- Regardless of industry segment, the percent of average monthly fraud attempts is higher for these types of organizations.

  - For those using the digital (online) channel, this is the result of more fraudster focus on the anonymous purchasing environment, particularly leveraging the no-card-present opportunities compared to EMV chip barriers at physical points of sale. This has also given rise to Botnet fraud.

  - For digital goods sellers, there has been a rise in e-gift card volume and fraud. This type of good/service can often be distributed / obtain / downloaded quickly, leaving less time for risk verification – particularly among those conducting manual reviews.

- These organizations also have higher fraud costs, with tracked costs for retailers selling digital goods rising significantly over 2016.

- And, in a number of cases, the above is heightened among mid and larger organizations.

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# Key findings (continued)

**④**

**Yet, digital channel / digital goods selling organizations are not fully leveraging the value of risk mitigation solutions.**

- While they are likely to use more risk mitigation solutions than others, these are not always being complimented by an automated flagging system.

- And, while identify verification is a challenge and/or common type of fraud, there is only moderate use of advanced identity verification solutions among these organizations.

- Being "digitally" focused does not mean the exclusion of traditional non-digital products or channels. It appears that some of these companies are applying a one-size fits all approach to fighting both types of products and channels – yet fighting different types of challenges.

**⑤**

**These issues will only increase as more firms adopt the mobile channel.**

- Larger merchants / firms tend to be the pioneers of the mobile channel. Based on their experiences, identity verification, new payment/transaction methods and delayed confirmation are key challenges.

- They are also most likely to express concerns about the risk and security of conducting transactions via this channel – again, based on experience.

**⑥**

**While much is spoken about mid/large fraud challenges, small organizations are also at risk.**

- They are less vigilant in tracking fraud. This weakens their ability to identify and fight it.

- And, they are less protected in using fraud prevention solutions.

**⑦**

**Findings show that retailers, eCommerce merchants and financial services & lending firms which layer solutions by identity and fraud transaction solutions experience fewer issues and cost of fraud.**

- They experience less successful fraud.

- There are fewer manual reviews required.

- The cost of fraud is less.

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Fraud is a threat, particularly for merchants and firms using remote channels

# There is a sizeable percent of fraud as a percent of average monthly transactions across study industries, though this is significantly higher for eCommerce.

Based on self-reported figures for average monthly transactions and fraud attempts, it is possible that up to one-third of monthly transactions are fraudulent. This can of course vary, with holiday seasons expected to experience the highest fraud attempts.

The higher degree of fraud attempts as a percent of monthly transactions underscores how fraudsters have targeted more of the remote and anonymous channel.

**Average Reported Fraud Transactions per Month ***

**(%)** = % of fraud attempt successful / month

■ Average Monthly Fraud Attempts  ■ Average Monthly Transactions

| | Retail | eCommerce | Financial Services | Lending |
|---|---|---|---|---|
| Average Monthly Transactions | 1610 | 1159 | 1672 | 2457 |
| Average Monthly Fraud Attempts | 495 | 495 | 519 | 877 |
| (%) | (31%) | (43%) | (31%) | (36%) |

□ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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# Looking deeper, we see that the higher fraud as a percent of average monthly transactions is being driven by digital channels and/or selling of digital goods, particularly from mid/larger businesses.

Digital goods selling occurs rather quickly; digital fraud is often referred to as "fast fraud", with little time to verify a transaction – particularly if doing so manually. While the reported number of fraudulent attempts is high for lenders and mid/large financial services firms with fewer digital transactions, these represent somewhat less of overall transactions when compared to digital channel firms / goods sellers.

**Average Reported Total and Fraudulent Transactions per Month ***

■ Average Monthly Fraud Attempts    ■ Average Monthly Transactions

**(%)** = Fraud attempts as a % of total average transactions / mo.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1945 | 3046 | 795 | 1345 | 4540 | 1705 | 3510 | 2890 |
| 276 | 1193 | 334 | 556 | 780 | 605 | 1034 | 997 |
| (14%) | (39%) | (42%) | (41%) | (17%) | (35%) | (29%) | (34%) |
| Retail Physical Goods Only | Retail with Digital Goods | eCommerce Physical Goods Only | eCommerce with Digital Goods | Mid Large Financial Services with Some or No Digital Transactions | Mid Large Financial Services with Majority Digital Transactions | Lending with Some or No Digital Transactions | Lending with Majority Digital Transactions |

42% mid/large digital sellers
28% for small retail with online

*Based on self-reported numbers and likely recall; not meant to be exact; may increase or decrease based on seasonality
Q21: In a typical month, what is the average number of transactions completed by your company?
Q22: In a typical month, approximately how many fraudulent transactions are prevented by your company?
Q24: In a typical month, approximately how many fraudulent transactions are successfully completed (not prevented) at your company?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

# As expected, while the cost of fraud is high across study industries, it's particularly higher for organizations that are digital in one form or another.

It is highest for merchants selling digital goods. In fact, digital goods sales have driven higher year-over-year retail fraud, in line with a rise in e-gift card volume and fraud, as well as Botnet activity during 2016 [1,2]. Additionally, the volume of eCommerce sales has grown sharply (16%) during the past year, which creates an opportunity for fraudsters – particularly for these types of goods [3].

But its not just with retail; larger financial services and lending firms which generate a majority of revenues via online or mobile channels also get hit with higher fraud costs than those that are less digital.

[1] https://www.finextra.com/blogposting/13867/attack-of-the-bots
[2] https://cardnotpresent.com/fraud-and-e-gift-cards-what-you-can-do-in-november-and-december-to-avoid-a-chargeback-hangover-in-january/
[3] Statistics from US Department of Commerce;
https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf;
https://www.digitalcommerce360.com/2017/02/17/us-e-commerce-sales-grow-156-2016/

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Bar chart values:
- Retail: $2.77
- eCommerce: $2.48
- Financial Services: $2.67
- Lending: $2.82

| Retail | | eCommerce | | Financial Services | | Lending | |
|---|---|---|---|---|---|---|---|
| Small (<$10M) | $2.66 | Small (<$10M) | $2.38 | Small (<$10M) | $3.08 | Small (<$10M) | $2.74 |
| Mid/Large ($10M+) | $2.93 | Mid/Large ($10M+)* | $3.37 ↑ | Mid/Large ($10M+) | $2.12 | Mid/Large ($10M+) | $2.86 |
| Physical Goods only | $2.60 | Physical Goods only | $2.20 | M/L Some or No Digital Trans. | $2.35 | Lg. Some or No Digital Trans. | $2.81 |
| Digital & Physical Goods | $3.56 ↑ | Digital & Physical Goods | $3.40 ↑ | M/L Primarily Digital Trans | $3.04 ↑ | Large Primarily Digital Trans | $3.07 |
| Large w/ online Channel | $2.62 | | | | | | |

Retail Digital with Physical Goods $2.18 in 2016*

\* Findings tracked from 2016 for Retail only; 2017 represents the first year for measuring fraud in eCommerce, financial services and lending

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Q10: What is the approximate value of your company's total fraud losses over the past 12 months, as a % of total revenues?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

**13**

# And, fraud cost as a percent of revenues is highest among organizations that sell digital goods and / or conduct a majority of business through remote channels.

This is most prominent among eCommerce and Financial Services firms, but also occurs with retailers selling digital goods and lenders generating a majority of revenues remotely.
costs.

In fact, it has risen significantly from 2016 for traditional retailers selling physical and digital goods through an online channel.

That said, it should still be noted that fraud takes a sizeable bite out of the bottom line revenues of retail and lending firms.

**Fraud Costs as a % of Revenues**

| Retail | eCommerce | Financial Services | Lending |
|--------|-----------|--------------------|---------|
| 1.58% | 2.17% | 2.39% | 1.61% |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Small (<$10M) | 1.55% | Small (<$10M) | 1.82% | Small (<$10M) | 2.34% | Small (<$10M) | 2.46% |
| Mid/Large ($10M+) | 1.45% | Mid/Large ($10M+)* | 2.71% | Mid/Large ($10M+) | 2.42% | Mid/Large ($10M+) | 2.50% |
| Physical Goods only | 1.44% | Physical Goods only | 1.79% | M/L Some or No Digital Trans. | 2.04% | Lg. Some or No Digital Trans. | 1.91% |
| Digital & Physical Goods | 2.11% | Digital & Physical Goods | 2.88% | M/L Primarily Digital Trans | 2.73% | Large Primarily Digital Trans | 2.24% |
| Large w/ online Channel | 1.60% | | | | | | |

Retail Digital with Physical Goods 1.19% in 2016*

* Findings tracked from 2016 for Retail only; 2017 represents the first year for measuring fraud in eCommerce, financial services and lending

Q10: What is the approximate value of your company's total fraud losses over the past 12 months, as a % of total revenues?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

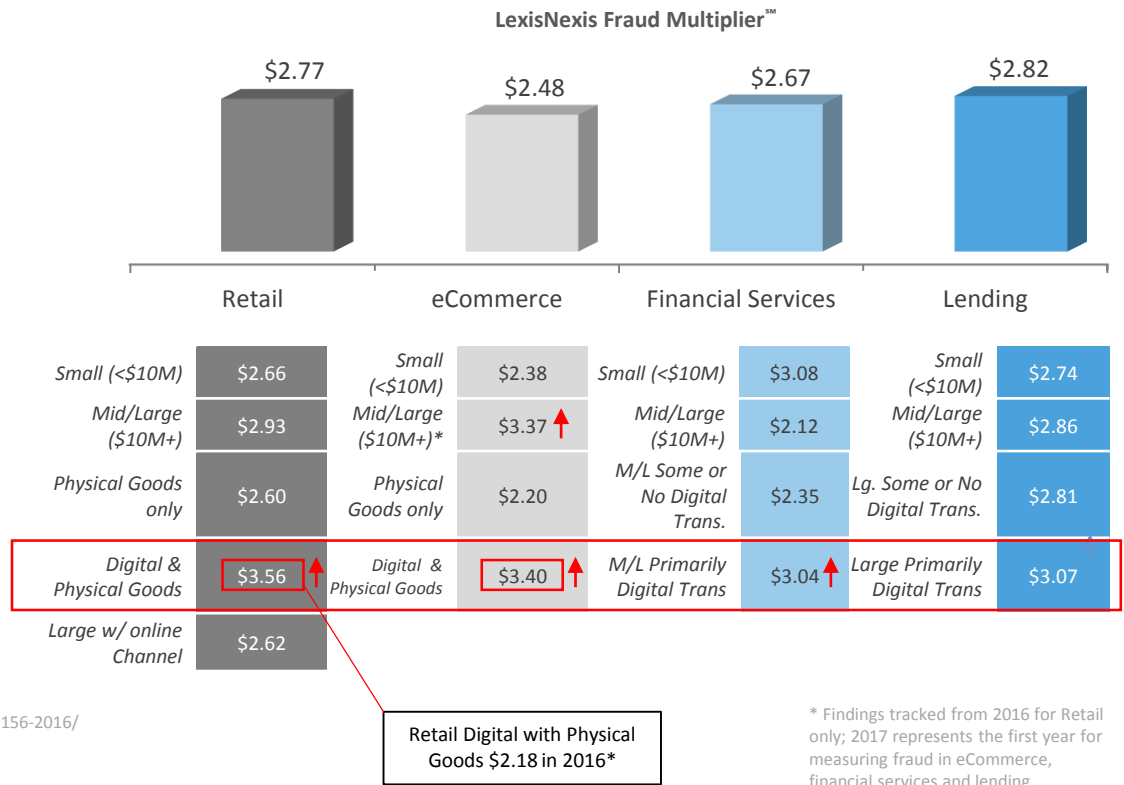↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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# Identity verification is a top online fraud concern, but significantly so for mid/large financial services firms conducting digital transactions.

Coinciding with this is that they are struggle with excessive manual reviews. Identity and / or address verification are also significant challenges for merchants selling only physical goods online, reminding us that while fraud costs are higher for digital goods, fraud is still an issue for other types of products as well. Retail and eCommerce are also concerned with delayed confirmation, which can increase risk as well as customer friction.

**Among Top 3 Ranked Online Fraud Challenges**



| | | Verification of customer identity | Address verification | Email or device verification | Confirmation of package delivery | Delay in transaction confirmation | Emergence of new transaction methods | Excessive manual order reviews | Lack specialized international fraud tools |
|---|---|---|---|---|---|---|---|---|---|
| **Retail** | Large w/ Online Channel | 41% | 46% | 27% | 25% | 22% | 13% | 31% ↑ | 22% |
| | Physical Goods Only | 60% ↑ | 44% | 25% | 29% | 42% | 32% | 12% | 8% |
| | Dig. & Phys. Goods | 39% | 34% | 29% | 28% | 34% | 28% | 16% | 26% |
| **eCommerce** | Physical Goods only | 46% | 55% ↑ | 24% | 54% ↑ | 27% | 12% | 11% | 17% |
| | Digital & Physical Goods | 49% | 28% | 39% | 20% | 32% | 26% | 11% | 24% |
| **Financial Services** | M/L Some or No Digital Trans. | 57% ↑ | 32% | 31% | NA | 16% | 45% | 20% | 12% |
| | M/L Primarily Digital Trans. | 75% | 32% | 43% | NA | 20% | 47% | 35% ↑ | 6% |
| **Lending** | Some or No Digital Trans. | 38% | 30% | 30% | NA | 29% | 25% | 19% | 34% |
| | Primarily Digital Trans. | 36% | 22% | 16% | NA | 35% | 34% | 32% ↑ | 35% |

> Sm/Mid Digital than Lg. (41% vs. 19%)

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**15**

# Identity fraud is directionally more prevalent among large e-commerce that sell digital goods and among financial services and lending firms.

Synthetic identity fraud is significantly more prevalent among lending than even financial services firms.

**% Distribution of Losses by Type of Fraud**
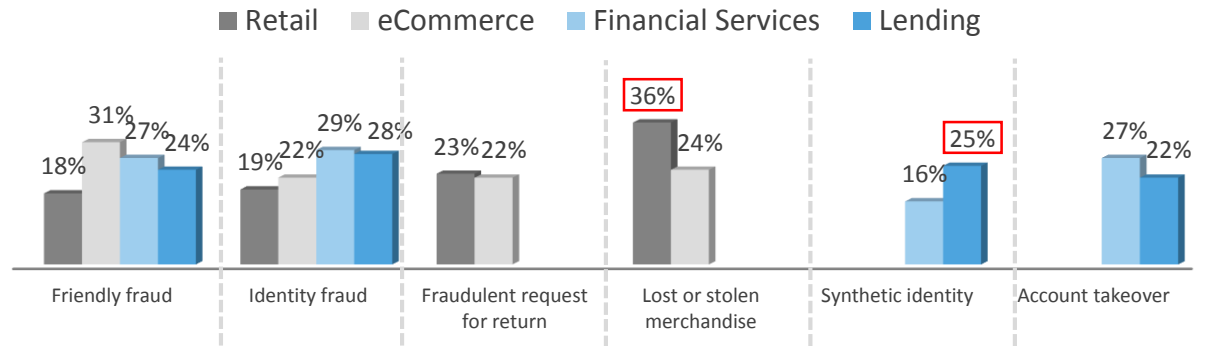
- ■ Retail
- ■ eCommerce
- ■ Financial Services
- ■ Lending



| | | Friendly fraud | Identity fraud | Fraudulent request for return | Lost or stolen merchandise | Synthetic identity | Account takeover |
|---|---|---|---|---|---|---|---|
| **Retail** | Physical Goods only | 14% | 18% | 25% | 38% | | |
| | Digital & Physical Goods | 24% | 20% | 19% | 37% | | |
| | Large w/ Online Channel | 29% | 21% | 23% | 27% | | |
| **eCommerce** | Physical Goods only | 32% | 18% | 25% | 23% | | |
| | Digital & Physical Goods | 28% | 29% | 15% | 27% | | |
| | Mid/Large ($10M+)* | 27% | 42% | 14% | 16% | | |
| **Financial Services** | M/L Some or No Digital Trans. | 16% | 32% | | | 12% | 41% |
| | M/L Primarily Digital Trans. | 20% | 30% | | | 17% | 30% |
| **Lending** | Some or No Digital Trans. | 25% | 26% | | | 25% | 23% |
| | Primarily Digital Trans. | 24% | 32% | | | 24% | 19% |

*CAUTION: Small sample size; use directionally

Q12: Please indicate the percentage distribution of the following fraud methods as attributed to your total annual fraud loss over the past 12 months.
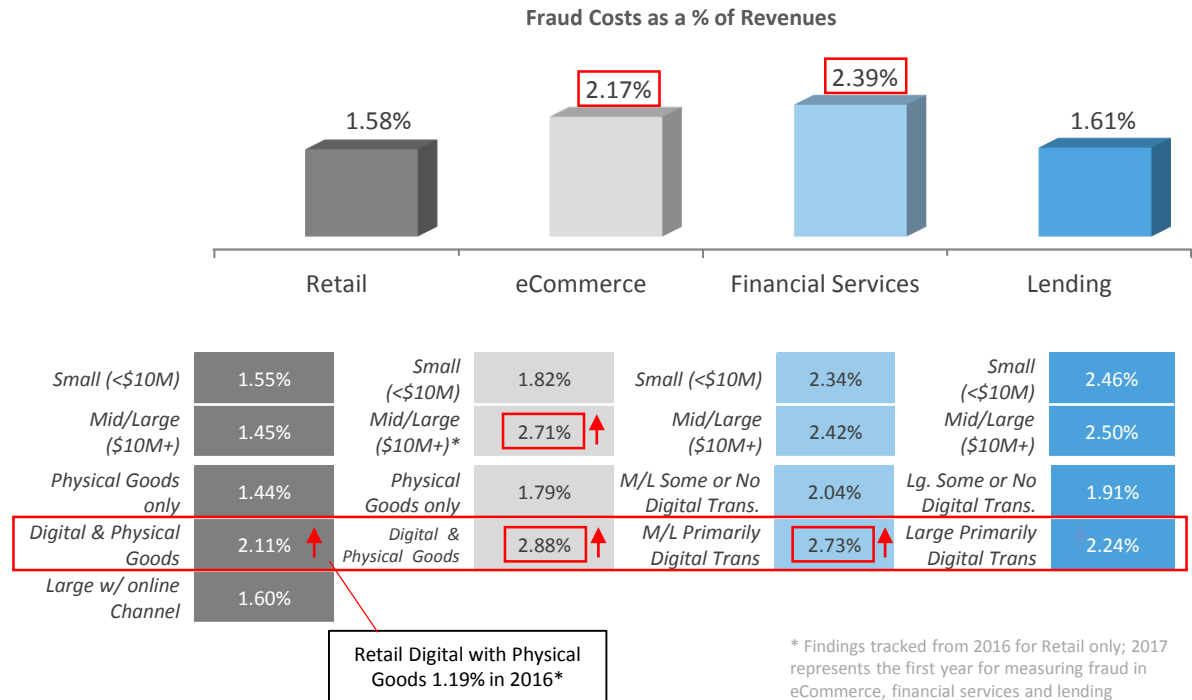
☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

16

# Credit card fraud is significantly more prevalent for eCommerce merchants, particularly among smaller ones.

But it's also sizeable for mid/large retailers which sell digital goods.

While there is focus on digital payment fraud, perpetrators still look for vulnerabilities and opportunities. Hence, traditional paper check payment methods still account for sizeable levels of successful fraud among smaller retailers and financial services firms.

**Average % of Successful Fraud Transactions by Payment / Disbursement Method ***

Legend: ■ Retail  ■ eCommerce  ■ Financial Services  ■ Lending

Chart values:

- Credit transaction: Retail 32%, eCommerce 60%, Financial Services 24%, Lending 17%
- Debit transaction: Retail 20%, eCommerce 21%, Financial Services 25%, Lending 14%
- Alternative transaction methods (PayPal,…): Retail 24%, eCommerce 35%, Financial Services 16%, Lending 14%
- Paper check: Retail 35%, Financial Services 54%, Lending 8%
- Direct deposit: Financial Services 19%, Lending 13%

| | | Credit transaction | Debit transaction | Alternative transaction methods (PayPal,…) | Paper check | Direct deposit |
|---|---|---|---|---|---|---|
| **Retail** | Small (<$10M) | 30% | 19% | 25% | 38% | |
| | Mid/Large ($10M+) | 43% | 21% | 18% | 18% | |
| | Digital & Physical Goods | 41% | 25% | 22% | 47% | |
| **eCommerce** | Small (<$10M)* | 65% | 20% | 29% | Base size too low | |
| | Mid/Large ($10M+)* | 41% | 23% | 60% | Base size too low | |
| **Financial Services** | Small (<$10M)* | 24% | 11% | 16% | 63% | 13% |
| | Mid/Large ($10M+)* | 24% | 37% | 15% | 34% | 26% |
| **Lending** | Small (<$10M)* | 12% | 10% | 16% | 4% | 5% |
| | Mid/Large ($10M+)* | 21% | 17% | 13% | 11% | 17% |

*CAUTION: Small sample size; use directionally

**% can add to more than 100% since answers based on using a channel, which differs by firm and in which case the base size changes per channel

Q26b: Please indicate the percent of successful fraudulent transactions by the following methods (Asked only of those who track successful fraud)

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

**17**

# However, a sizeable number of smaller businesses, particularly retail and eCommerce, are not tracking successful or prevented fraud by transaction type.

A sizeable minority of financial services firms also do not track fraud costs.

And while financial services and lending firms are likely to track prevented fraud, fewer of them are tracking where fraud has succeeded by payment type.

Fraudsters move to the path of least resistance – away from where their efforts are thwarted to areas where they can succeed. As a result, businesses which don't track both prevented and successful fraud are more exposed to ongoing risks and losses.

**% Tracking Prevented & Successful Fraud by Transaction Type (credit/debit card, check, etc)**

■ Track Prevented  ■ Track Successful  ■ Do Not Track



Retail: 44% / 33% / 42%
eCommerce: 41% / 38% / 50%
Financial Services: 62% / 49% / 25%
Lending: 71% / 47% / 13%

| Tracks Both | 46% | 19% | 41% | 35% |

**Retail**

| | Track Prevented | Track Successful | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 42% | 32% | 45% ↑ |
| Mid/Large ($10M+) | 72% ↑ | 35% | 20% |
| Physical Goods only | 38% | 25% | 54% ↑ |
| Physical & Digital Goods | 52% | 52% | 28% |
| Large w/ online channel | 80% ↑ | 47% | 15% |

**eCommerce**

| | Track Prevented | Track Successful | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 39% | 36% | 52% ↑ |
| Mid/Large ($10M+)* | 52% | 49% | 38% |
| Physical Goods only | 41% | 30% | 55% ↑ |
| Digital & Physical Goods | 41% | 52% | 41% |

**Financial Services**

| | Track Prevented | Track Successful | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 53% | 40% | 30% |
| Mid/Large ($10M+) | 77% ↑ | 62% ↑ | 17% |
| M/L Some or No Digital Trans. | 77% ↑ | 63% ↑ | 31% |
| M/L Primarily Digital Trans. | 44% | 16% | 39% |

**Lending**

| | Track Prevented | Track Successful | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 64% | 34% | 23% ↑ |
| Mid/Large ($10M+) | 75% | 54% ↑ | 8% |
| Small/Mid Primarily Digital Trans.. | 57% | 45% | 36% ↑ |
| Large Primarily Digital Trans. | 89% ↑ | 65% | 0% |

Q26a: Does your company track prevented vs. successful transactions by payment type?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval
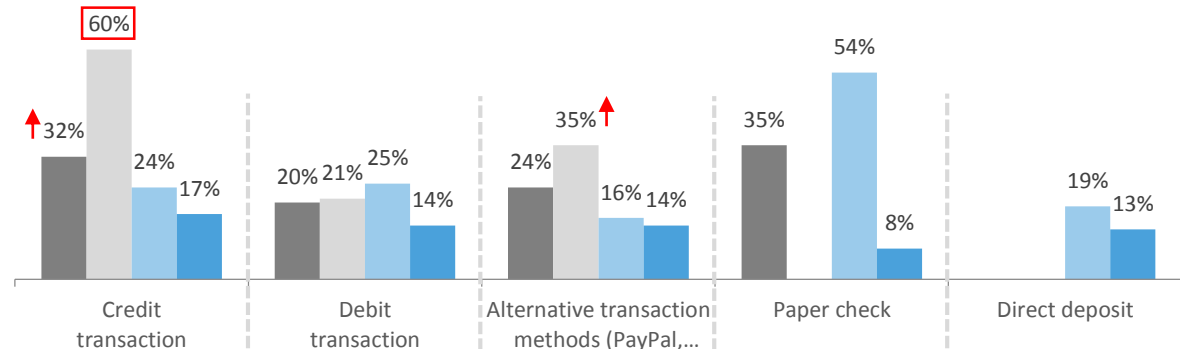
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**18**

# And, a sizeable number of smaller eCommerce businesses do not track prevented and successful fraud by channel.

There's also a sizeable portion of financial services firms and retailers which don't track these either. This includes those with digital goods or transactions, which we've seen as higher risk and cost of fraud.

And while many lending firms track successful fraud by channel, they are not tracking prevented.

Tracking fraud should include successful and prevented transactions AND by channel and payment method. Otherwise, there are gaps in the protection from and management of fraud.

**% Tracking Prevented and Successful Fraud by Channel**

■ Track PREVENTED  ■ Track SUCCESSFUL  ■ Do Not Track



Retail: 31% / 42% / 46%
eCommerce: 20% / 33% / 65%
Financial Services: 31% / 38% / 44%
Lending: 40% / 64% / 18%

## Retail

| | Track PREVENTED | Track SUCCESSFUL | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 31% | 40% | 48% |
| Mid/Large ($10M+) | 30% | 57% | 35% |
| Physical Goods only | 29% | 34% | 58% |
| Digital Physical Goods | 35% | 56% | 32% |
| Large w/ online channel. | 42% | 65% ↑ | 30% |

## eCommerce

| | Track PREVENTED | Track SUCCESSFUL | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 17% | 26% | 71% ↑ |
| Mid/Large ($10M+)* | 42% | 76% ↑ | 20% |
| Physical Goods only | 15% | 26% | 72% ↑ |
| Digital & Physical Goods | 30% | 44% | 52% |

## Financial Services

| | Track PREVENTED | Track SUCCESSFUL | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 30% | 31% | 45% |
| Mid/Large ($10M+) | 32% | 51% | 42% |
| M/L Some or No Digital Trans. | 36% | 47% | 45% |
| M/L Primarily Digital Trans. | 11% | 49% | 50% |

## Lending

| | Track PREVENTED | Track SUCCESSFUL | Do Not Track |
|---|---|---|---|
| Small (<$10M) | 27% | 57% | 28% |
| Mid/Large ($10M+) | 48% ↑ | 68% ↑ | 12% |
| Small/Mid Primarily Digital Trans.. | 32% | 39% | 41% ↑ |
| Large Primarily Digital Trans. | 49% | 77% | 8% |

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The mobile channel causes particular concern

# Lending firms and large retailers with an online channel are most prevalent mobile channels users today. Near-term growth is likely to come from mid/large eCommerce and financial services firms.

**% Currently Allowing & Considering *mCommerce***



*Not all who say "likely in next 12 months" may actually be able to do so in that timeline. Budgets and other unforeseen factors could delay adoptio

Q4: Please indicate the percentage of transactions completed (over the past 12 months) for each of the following payment channels currently accepted by your company.
Q6: Is your company considering accepting payments by mobile device over the next 12 months?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

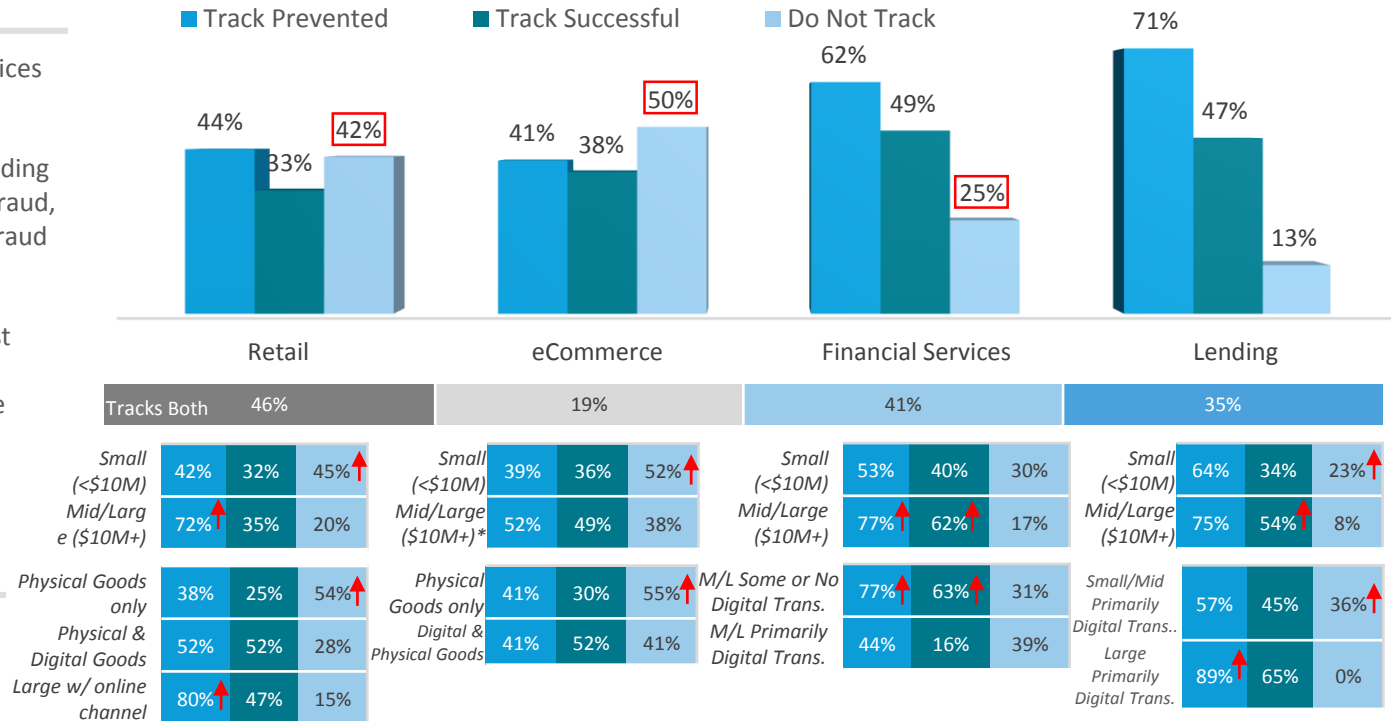21

# That said, only a small percentage of transactions are actually going through the mobile channel.

The exception is with lending firms that primarily use the digital channel.

The minority of eCommerce merchants currently allowing mobile transactions are seeing a sizeable percent of fraud costs from a mobile browser, mobile apps and bill-to-mobile payment methods.

## % Currently Allowing & Considering *mCommerce*

| | Retail Overall | Retail - Large w/ Online Channel | Retail - Digital + Physical Goods | eCommerce Overall | eCommerce - Mid/Large | eCommerce - Digital + Physical Goods | Financial Services Overall | Financial Services - Mid/Large | Financial Services - Some or No Digital Trans. | Financial Services - Primarily Digital | Lending Overall | Lending - Some or No Digital Trans. | Lending - Primarily Digital |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Currently Allowing & Considering | 32% | 72% | 50% | 19% | 24% | 28% | 32% | 56% | 41% | 35% | 73% | 70% | 84% |
| Avg. % of transactions through **mobile channel** | 5% | 10% | 6% | 8% | 10% | 11% | 10% | 11% | 10% | 16% | 15% | 12% | 22% |
| Avg. % of fraud costs through **mobile channel*** | 20% | 12% | 21% | 41% | 51% | 41% | 20% | 26% | 19% | 19% | 21% | 20% | 20% |

64% via mobile browser;
40% via mobile apps;  42% via bill-to-mobile phone

*Among those using the mobile channel

Q2: Please indicate the percentage of accounts or transactions that were originated through each of the following channels used by your company (over the past 12 months)
Q4: % of companies with >0% of transactions through the mobile channel

□ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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# Verification (ID, address or device), confirmation and new payment methods are common mobile fraud concerns.

Challenges with quickly verifying identities and getting / providing transaction confirmation can delay transactions and increase customer friction. This leads to increased fraud risk and potential loss of business.

**Among Top 3 Ranked Mobile Fraud Challenges**

Legend: ■ Retail  ■ eCommerce  ■ Financial Services  ■ Lending



Chart values by category:

- **Verification of customer identity:** Retail 38%, eCommerce 41%, Financial Services 53%, Lending 38%
- **Address verification:** Retail 38%, eCommerce 44%, Financial Services 20%, Lending 33%
- **Email or device verification:** Retail 34%, eCommerce 38%, Financial Services 32%, Lending 27%
- **Confirmation of package delivery:** Retail 34%, eCommerce 29%
- **Delay in transaction confirmation:** Retail 29%, eCommerce 37%, Financial Services 35%, Lending 28%
- **Emergence of new transaction methods:** Retail 26%, eCommerce 33%, Financial Services 37%, Lending 23%
- **Excessive manual order reviews:** Retail 21%, eCommerce 17%, Financial Services 10%, Lending 25%
- **Lack specialized international fraud tools:** Retail 17%, eCommerce 10%, Financial Services 7%, Lending 31%

| | | Verification of customer identity | Address verification | Email or device verification | Confirmation of package delivery | Delay in transaction confirmation | Emergence of new transaction methods | Excessive manual order reviews | Lack specialized international fraud tools |
|---|---|---|---|---|---|---|---|---|---|
| **Retail** | Large w/ Online Channel | 41% | 22% | 36% | 29% | 35% | 25% | 22% | 34% |
| | Dig. & Phys. Goods | 22% | 47% | 48% | 44% | 31% | 23% | 17% | 10% |
| **Financial Services** | M/L Some or No Digital Trans. | 59% | 31% | 35% | | 34% | 30% | 14% | 9% |
| | M/L Primarily Digital Trans. | 24% | 48% | 24% | | 11% | 39% | 15% | 3% |
| **Lending** | Some or No Digital Trans. | 40% | 35% | 27% | | 29% | 21% | 20% | 30% |
| | Primarily Digital Trans. | 35% | 30% | 27% | | 26% | 29% | 35% | 34% |

> Lg. Digital (49%)

> Lg. Digital (39%)

Excludes eCommerce segments given low incidence of current use and experience with mobile channel

Q20: Please rank the top 3 challenges related to fraud faced by your company when serving customers in the Moble Channel.

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

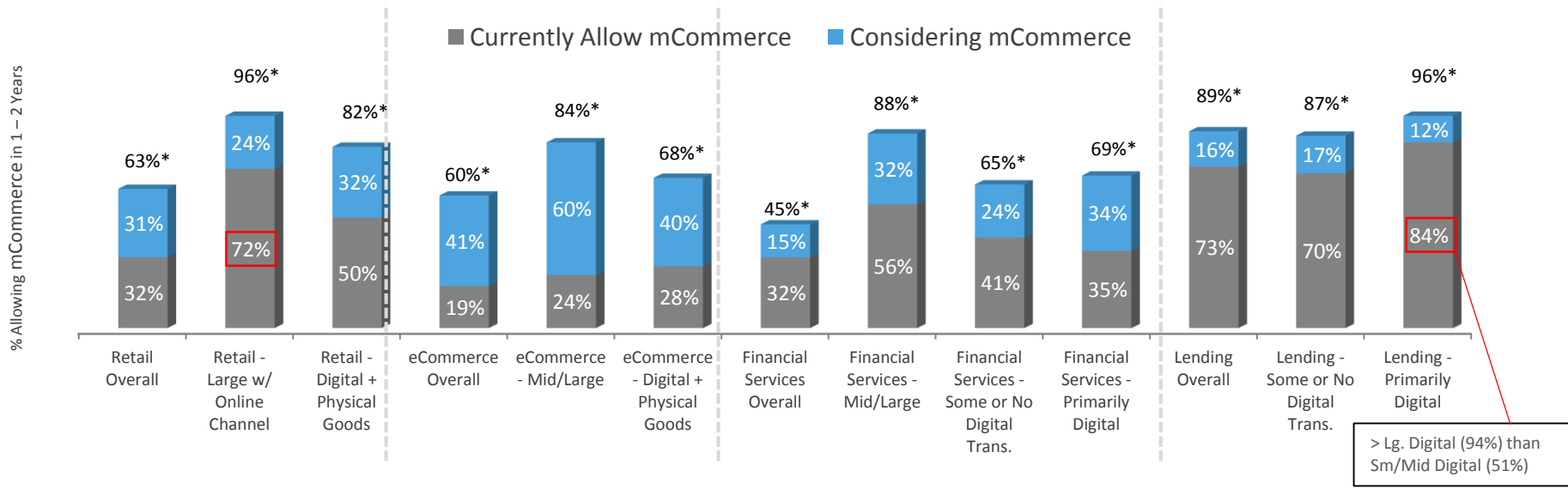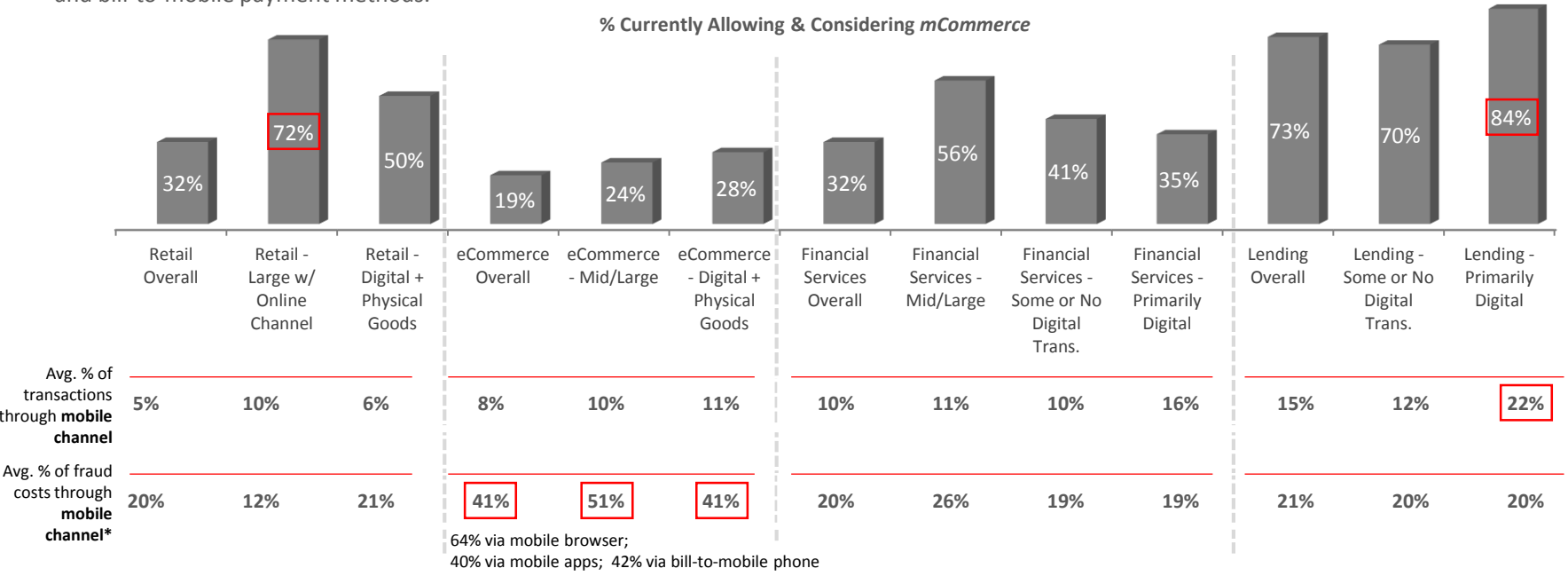↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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**23**

# Therefore, it's not surprising that this channel is of concern, with greatest sensitivity among those which have a portion of their business through remote channels.

Across retail, eCommerce, financial services and lending, it is recognized that mobile payments and channel transactions add to the risk of fraud.

That said, lending, financial services and retail organizations with an online channel or primarily digital business model have significantly higher concerns about mobile risk.

**Fraud Perceptions (% Agree)**

■ Retail    ■ eCommerce    ■ Financial Services    ■ Lending
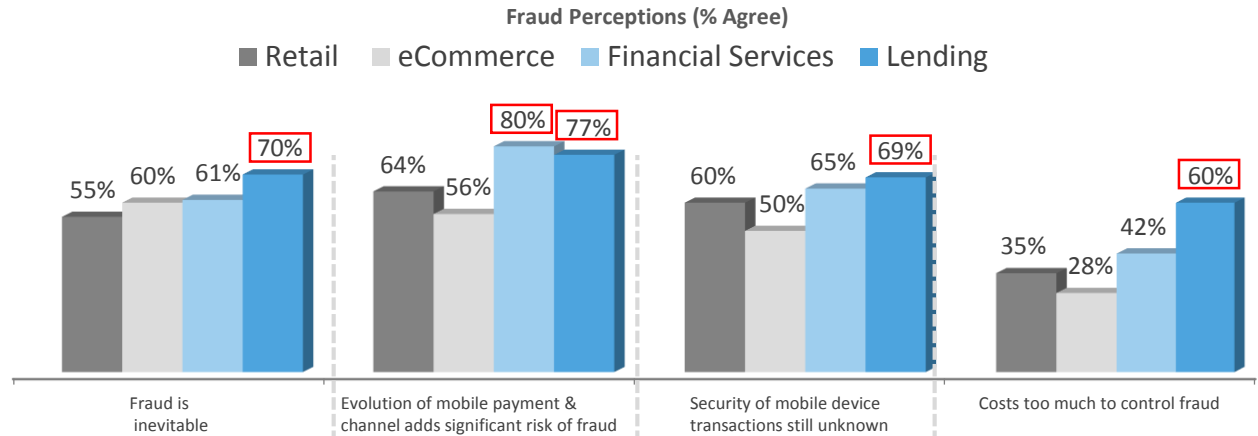


| | | Fraud is inevitable | Evolution of mobile payment & channel adds significant risk of fraud | Security of mobile device transactions still unknown | Costs too much to control fraud |
|---|---|---|---|---|---|
| Retail | Physical Goods only | 49% | 64% | 54% | 30% |
| | Digital & Physical Goods | 77% | 68% | 68% | 46% |
| | Large w/ Online Channel | 81% | 89% | 70% | 56% |
| eCommerce | Physical Goods only | 58% | 56% | 51% | 23% |
| | Digital & Physical Goods | 63% | 55% | 49% | 37% |
| Financial Services | M/L Some or No Digital Trans. | 41% | 66% | 72% | 36% |
| | M/L Primarily Digital Trans. | 92% | 86% | 74% | 48% |
| Lending | Some or No Digital Trans. | 70% | 74% | 70% | 58% |
| | Primarily Digital Trans. | 70% | 88% | 68% | 66% |

Q33: Using a 5-point scale, where "5" is "agree completely" and "1" is "do not agree at all", please rate the extent to which you agree or disagree with the statements below.
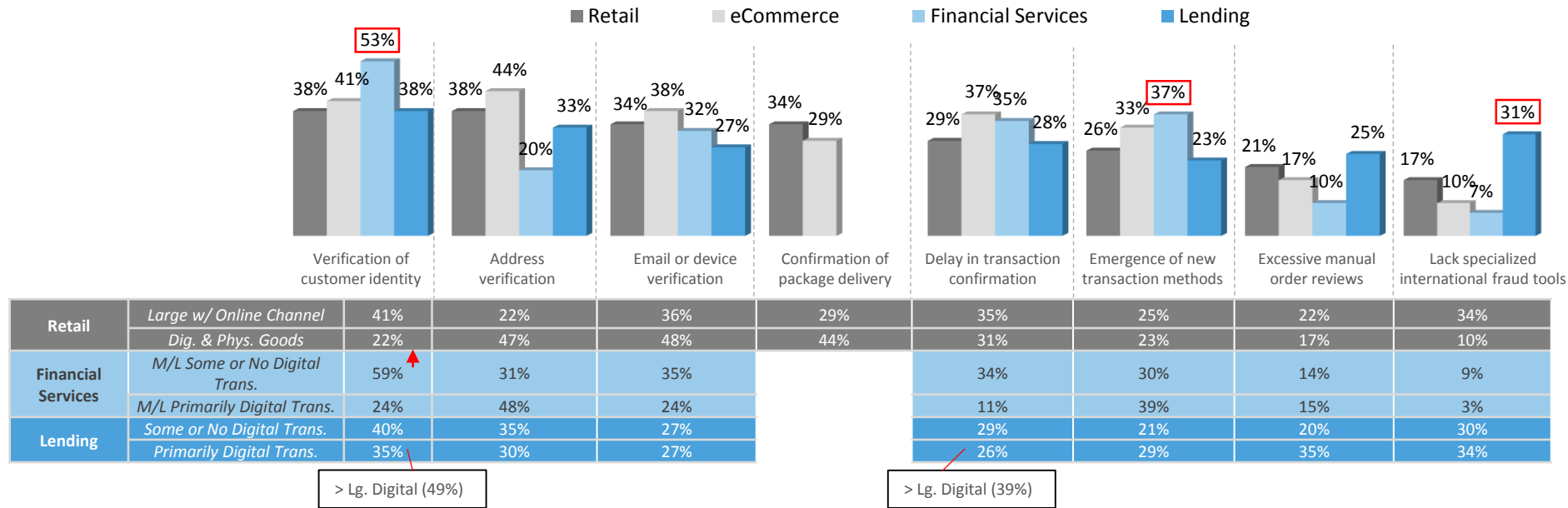
☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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Ineffective fraud prevention can lead to more work and wrong decisions

# A sizeable portion of flagged transactions are handled manually.

eCommerce merchants, financial services firms and small/mid digital lenders have significantly higher levels of manual reviews than others. This slows the confirmation process, causes friction and can result in lost customers.

For those with digital good sales, "fast fraud" may succeed before merchants can react.

**Legend:**
- Flagged by automated system
- Not sent for manual review
- Flagged by some other means
- Sent for manual review

| | % Flagged | % Manual |
|---|---|---|
| **Retail** | | |
| Small (<$10M) | 50% | 37% |
| Mid/Large ($10M+) | 48% | 38% |
| Large w/ Online Channel | 61% | 27% |
| Physical Goods Only | 47% | 36% |
| Dig. & Phys. Goods | 51% | 35% |
| **eCommerce** | | |
| Small (<$10M) | 60% | 53% |
| Mid/Large ($10M+) | 79% | 46% |
| Physical Goods only | 59% | 50% |
| Digital & Physical Goods | 69% | 54% |
| **Financial Services** | | |
| Small (<$10M) | 55% | 58% |
| Mid/Large ($10M+) | 77% | 43% |
| M/L Some or No Digital Trans. | 79% | 52% |
| M/L Primarily Digital Trans. | 73% | 44% |
| **Lending** | | |
| Small (<$10M) | 38% | 38% |
| Mid/Large ($10M+) | 69% | 37% |
| Small/Mid Primarily Digital | 66% | 68% |
| Large Primarily Digital | 54% | 38% |

**Retail pie charts:** 51% / 49% ; 37% / 63%
**eCommerce pie charts:** 36% / 64% ; 52% / 48%
**Financial Services pie charts:** 35% / 65% ; 52% / 48%
**Lending pie charts:** 42% / 58% ; 37% / 63%

Q36: Of all the transactions your company flagged as potentially fraudulent in the past 12 months, what percentage was flagged by your automated system?
Q37: Of this (…), what proportion are sent for manual review?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

# eCommerce and financial services decline more transactions than do others.

Small/mid digital lenders experience more false positives than others.

That said, the percentage of declined transactions that turn out to be false positives is not insignificant among other segments.

**Legend:** % Transactions Declined ▪ Positives ▪ % Transactions Not Declined ▪ False Positives

| | % Declined | % FP |
|---|---|---|
| **Retail** | | |
| Small (<$10M) | 33% | 23% |
| Mid/Large ($10M+) | 37% | 18% |
| Large w/ Online Channel | 47% | 27% |
| Physical Goods Only | 30% | 17% |
| Dig. & Phys. Goods | 40% | 22% |

Retail: 34% declined, 66% not declined; 23% False Positives, 77% Positives

| | % Declined | % FP |
|---|---|---|
| **eCommerce** | | |
| Small (<$10M) | 46% | 22% |
| Mid/Large ($10M+) | 43% | 23% |
| Physical Goods only | 42% | 20% |
| Digital & Physical Goods | 48% | 25% |

eCommerce: 45% declined, 55% not declined; 22% False Positives, 78% Positives

| | % Declined | % FP |
|---|---|---|
| **Financial Services** | | |
| Small (<$10M) | 42% | 14% |
| Mid/Large ($10M+) | 38% | 23% |
| M/L Some or No Digital Trans. | 39% | 19% |
| M/L Primarily Digital Trans. | 41% | 20% |

Financial Services: 40% declined, 60% not declined; 17% False Positives, 83% Positives

| | % Declined | % FP |
|---|---|---|
| **Lending** | | |
| Small (<$10M) | 33% | 21% |
| Mid/Large ($10M+) | 23% | 26% |
| Small/Mid Primarily Digital | 36% | 33% |
| Large Primarily Digital | 21% | 13% |

Lending: 27% declined, 73% not declined; 24% False Positives, 74% Positives

Q38: What percentage of transactions that your company initially flags as potentially fraudulent are ultimately declined?
Q39: What percentage of declined transactions turned out to be false positives?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval
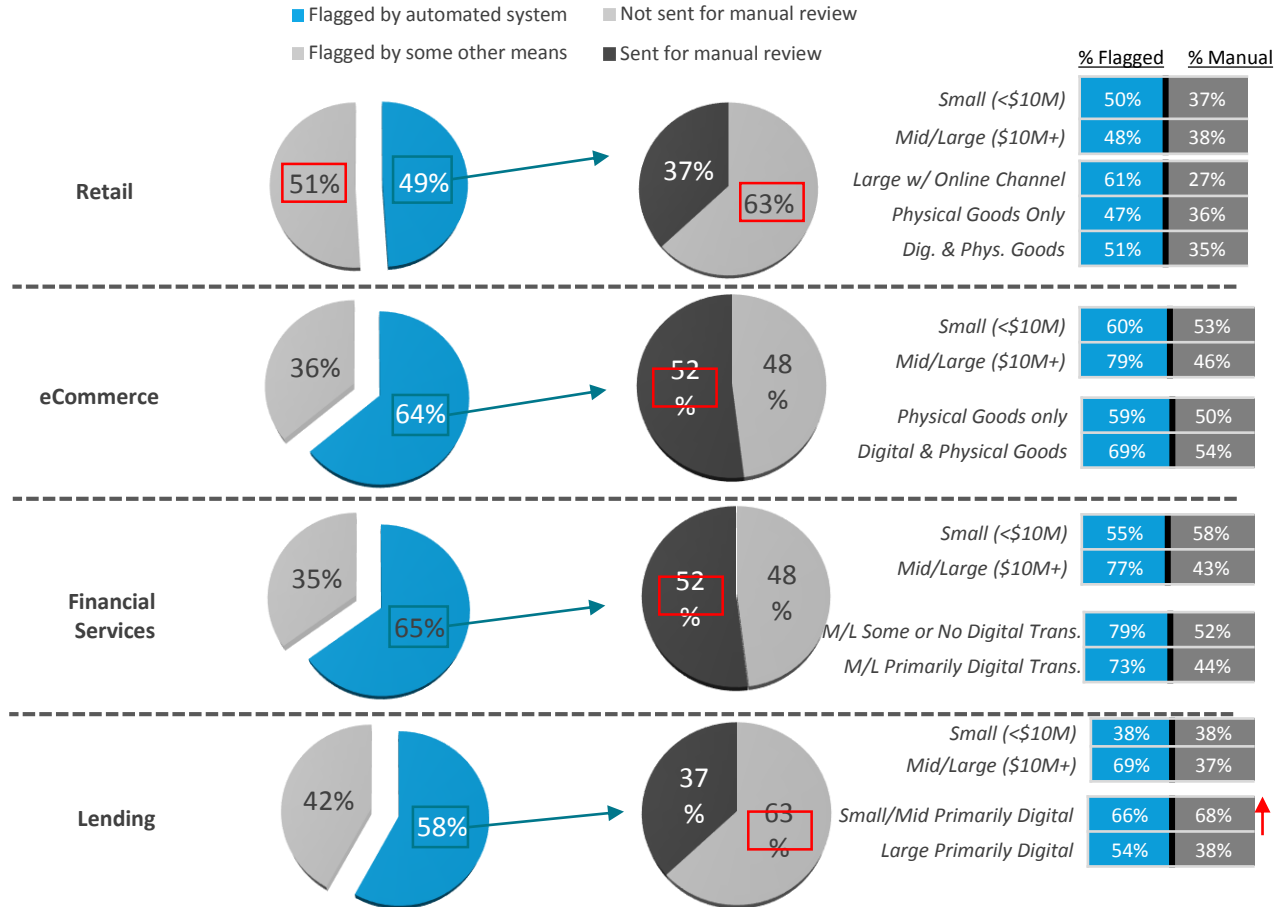
# Solutions represent a significantly higher percentage of fraud mitigation budgets among eCommerce firms selling digital goods, even though this segment gets hit harder by fraud.

This suggests that eCommerce firms are not using the most effective mix of risk mitigation solutions.

Solutions also comprise a sizeable percentage of financial services and lending firms' fraud mitigation budgets.

**Distribution of Fraud Mitigation Costs (by % of Spend)**

Legend: ■ Retail  ■ eCommerce  ■ Financial Services  ■ Lending

Cost of fraud prevention solutions: Retail 33%, eCommerce 60%, Financial Services 43%, Lending 41%

Cost of manual reviews: Retail 34%, eCommerce 23%, Financial Services 23%, Lending 28%

Cost of physical security: Retail 28%, eCommerce 17%, Financial Services 34%, Lending 31%

| | | Cost of fraud prevention solutions | Cost of manual reviews | Cost of physical security |
|---|---|---|---|---|
| **Retail** | Large w/ Online Channel | 58% | 20% | 21% |
| | Physical Goods Only | 33% | 35% | 32% |
| | Dig. & Phys. Goods | 43% | 38% | 18% |
| **eCommerce** | Physical Goods only | 54% | 23% | 23% |
| | Digital & Physical Goods | 67% | 23% | 11% |
| **Financial Services** | M/L Some or No Digital Trans. | 52% | 26% | 22% |
| | M/L Primarily Digital Trans. | 49% | 24% | 27% |
| **Lending** | Some or No Digital Trans. | 41% | 28% | 31% |
| | Primarily Digital Trans. | 43% | 27% | 30% |

Q41b: What is the percentage distribution of mitigation costs across the following areas in the past 12 months?

□ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

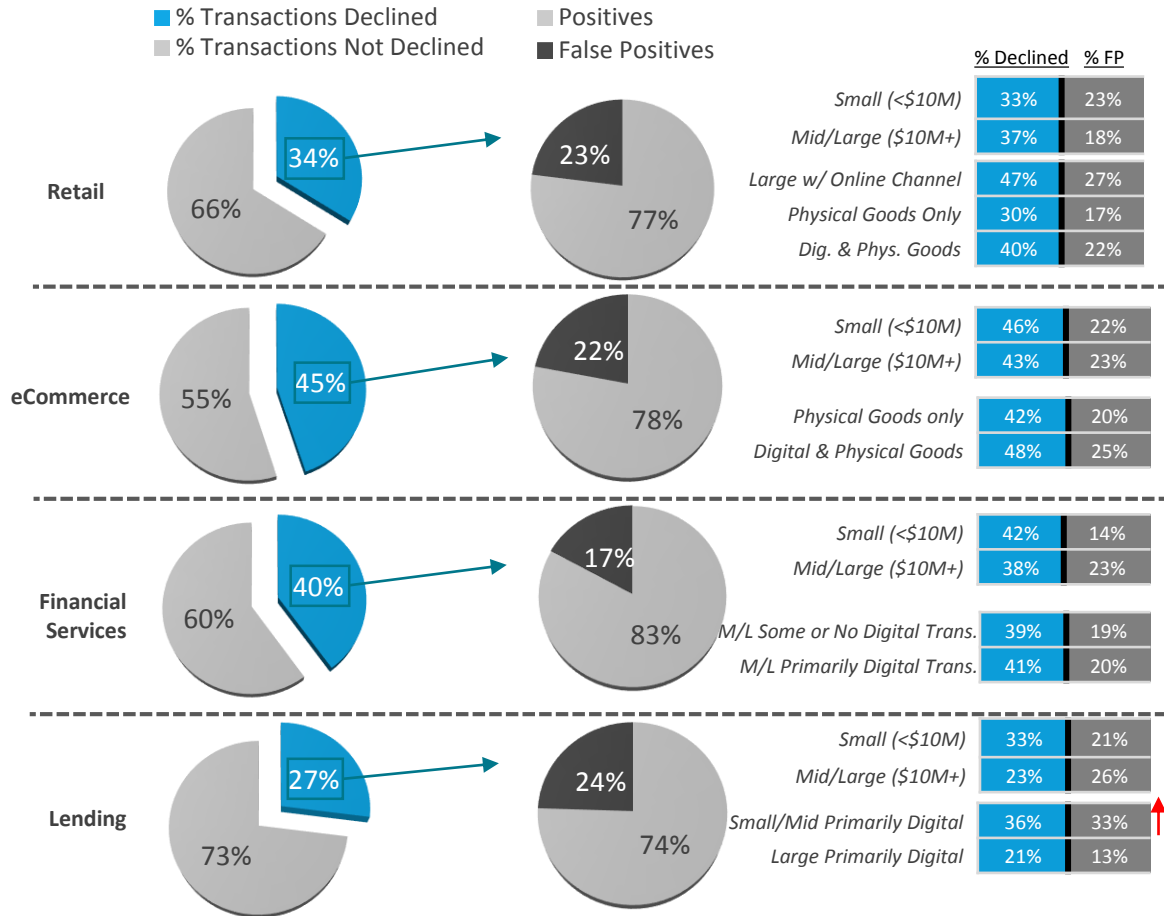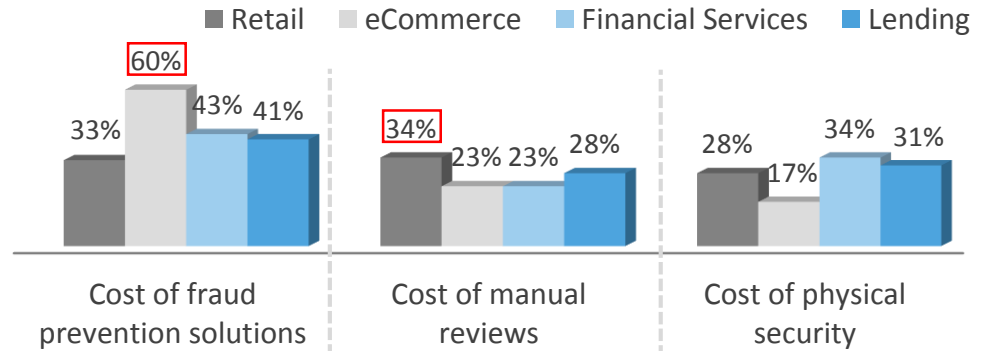↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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Some are not using the RIGHT mix to successfully prevent fraud

# Mid/large businesses / firms tend to use more fraud mitigation solutions.

**Average Number of Fraud Mitigation Solutions Currently Used**



| | Retail | | eCommerce | | Financial Services | | Lending |
|---|---|---|---|---|---|---|---|
| Bar value | 3.0 | | 3.8 | | 2.8 | | 5.1 |

| Retail | | eCommerce | | Financial Services | | Lending | |
|---|---|---|---|---|---|---|---|
| Small (<$10M) | 2.8 | Small (<$10M) | 2.8 | Small (<$10M) | 2.2 | Small (<$10M) | 3.4 |
| Mid/Large ($10M+) | 5.7 ↑ | Mid/Large ($10M+)* | 6.4 ↑ | Mid/Large ($10M+) | 5.5 ↑ | Mid/Large ($10M+) | 6.1 ↑ |
| Large w/ Online Channel | 5.6 ↑ | Physical Goods only | 2.7 | M/L Some or No Digital Trans. | 3.5 | Small/Mid Primarily Digital | 4.1 |
| Physical Goods Only | 2.5 | Digital & Physical Goods | 3.8 | M/L Primarily Digital Trans. | 6.3 ↑ | Large Primarily Digital | 6.5 ↑ |
| Dig. & Phys. Goods | 4.0 ↑ | | | | | | |

Q27: Which of the following best describes your awareness and use of the fraud solutions listed below? Number of solutions being used.

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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# The use an automated flagging system is more limited to lending firms and larger merchants / financial services organizations.

**% Who Use an Automated Flagging System or Fraud Mitigation Solution**

■ Automated Flagging System



| | Retail | eCommerce | Financial Services | Lending |
|---|---|---|---|---|
| Automated Flagging System (grey) | 35% | 29% | 39% | 63% |
| (blue) | 73% | 65% | 64% | 84% |

**Retail**

| | | |
|---|---|---|
| Small (<$10M) | 32% | 72% |
| Mid/Large ($10M+) | 72% | 86% |
| Large w/ Online Channel | 83% | 96% |
| Physical Goods Only | 26% | 69% |
| Dig. & Phys. Goods | 45% | 76% |

**eCommerce**

| | | |
|---|---|---|
| Small (<$10M) | 25% | 64% |
| Mid/Large ($10M+)* | 82% | 84% |
| Physical Goods only | 21% | 66% |
| Digital & Physical Goods | 44% | 64% |

**Financial Services**

| | | |
|---|---|---|
| Small (<$10M) | 35% | 61% |
| Mid/Large ($10M+) | 55% | 74% |
| M/L Some or No Digital Trans. | 45% | 52% |
| M/L Primarily Digital Trans. | 29% | 87% |

**Lending**

| | | |
|---|---|---|
| Small (<$10M) | 57% | 76% |
| Mid/Large ($10M+) | 67% | 89% |
| Small/Mid Primarily Digital | 33% | 77% |
| Large Primarily Digital | 66% | 92% |

Q27: Which of the following best describes your awareness and use of the fraud solutions listed below?
Q35: Does your company use an automated system to flag potentially fraudulent transactions?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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# The limited solutions use among smaller merchants / firms tends to focus on basic verification.
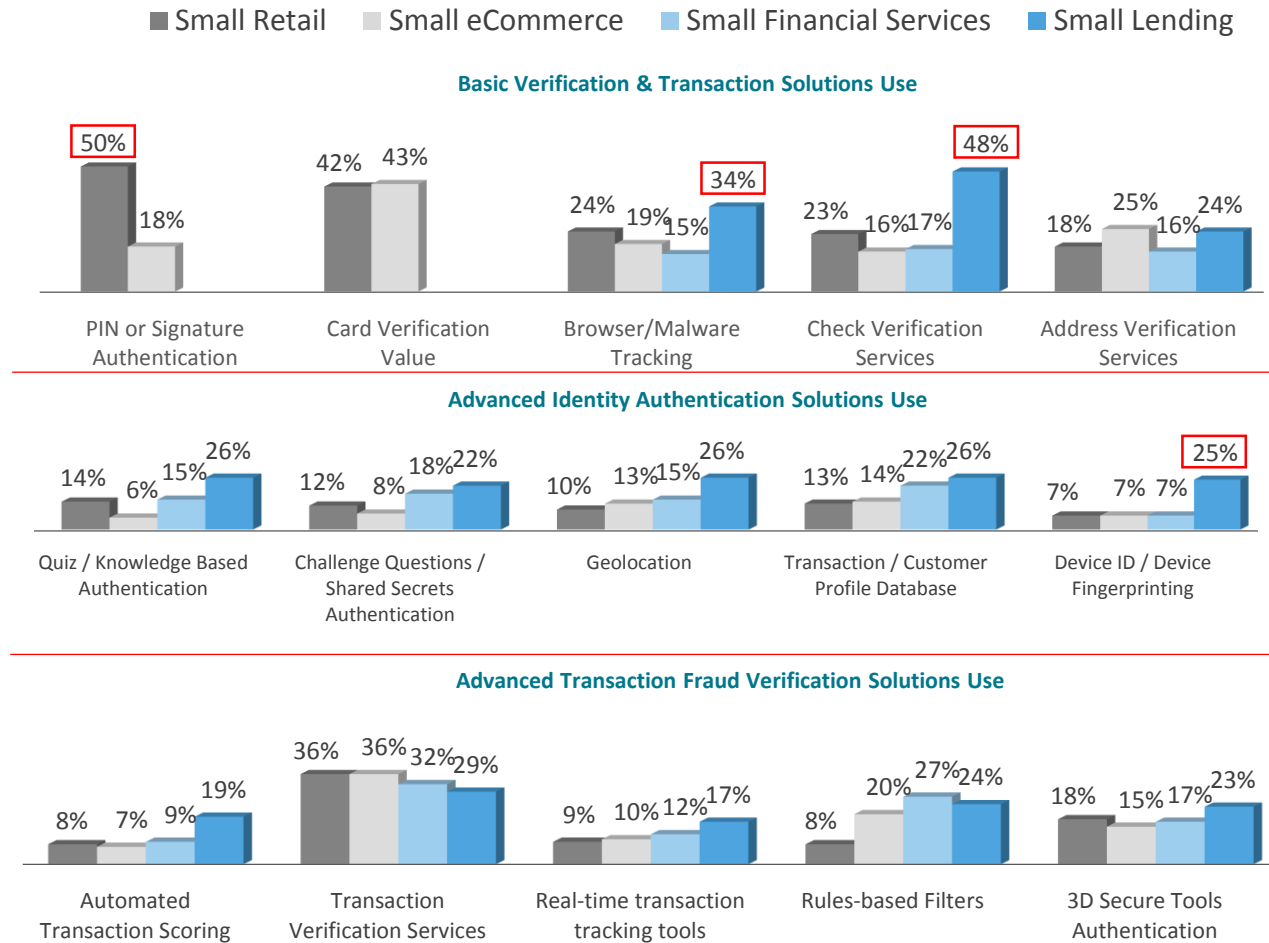
There is some limited use of advanced transaction verification services as well.

Directionally, there is somewhat more use of some identity verification solutions among lenders, though that remains limited to a small portion of firms.
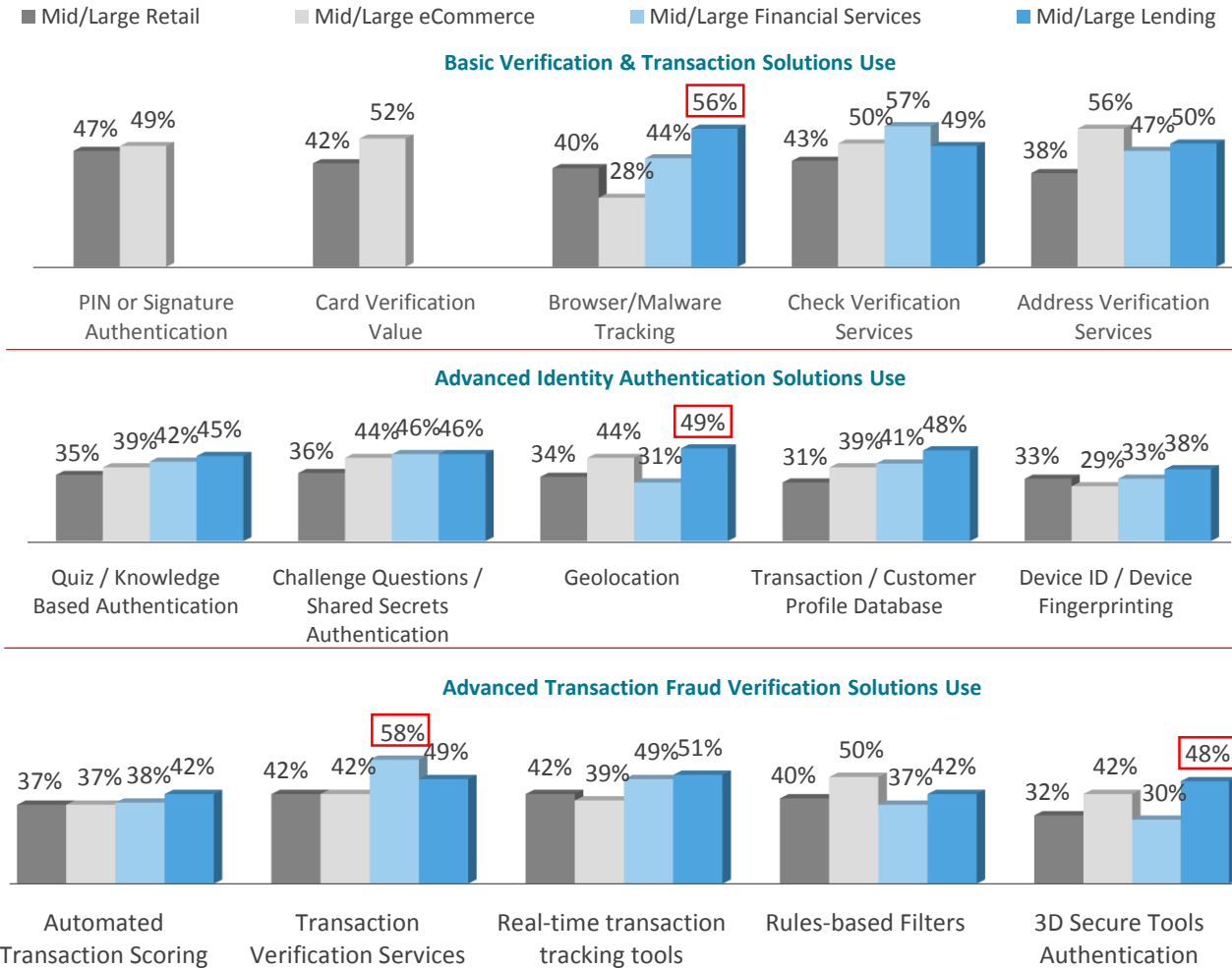


■ Small Retail ■ Small eCommerce ■ Small Financial Services ■ Small Lending

**Basic Verification & Transaction Solutions Use**

| | PIN or Signature Authentication | Card Verification Value | Browser/Malware Tracking | Check Verification Services | Address Verification Services |
|---|---|---|---|---|---|
| Small Retail | 50% | 42% | 24% | 23% | 18% |
| Small eCommerce | 18% | 43% | 19% | 16% | 25% |
| Small Financial Services | | | 15% | 17% | 16% |
| Small Lending | | | 34% | 48% | 24% |

**Advanced Identity Authentication Solutions Use**

| | Quiz / Knowledge Based Authentication | Challenge Questions / Shared Secrets Authentication | Geolocation | Transaction / Customer Profile Database | Device ID / Device Fingerprinting |
|---|---|---|---|---|---|
| Small Retail | 14% | 12% | 10% | 13% | 7% |
| Small eCommerce | 6% | 8% | 13% | 14% | 7% |
| Small Financial Services | 15% | 18% | 15% | 22% | 7% |
| Small Lending | 26% | 22% | 26% | 26% | 25% |

**Advanced Transaction Fraud Verification Solutions Use**

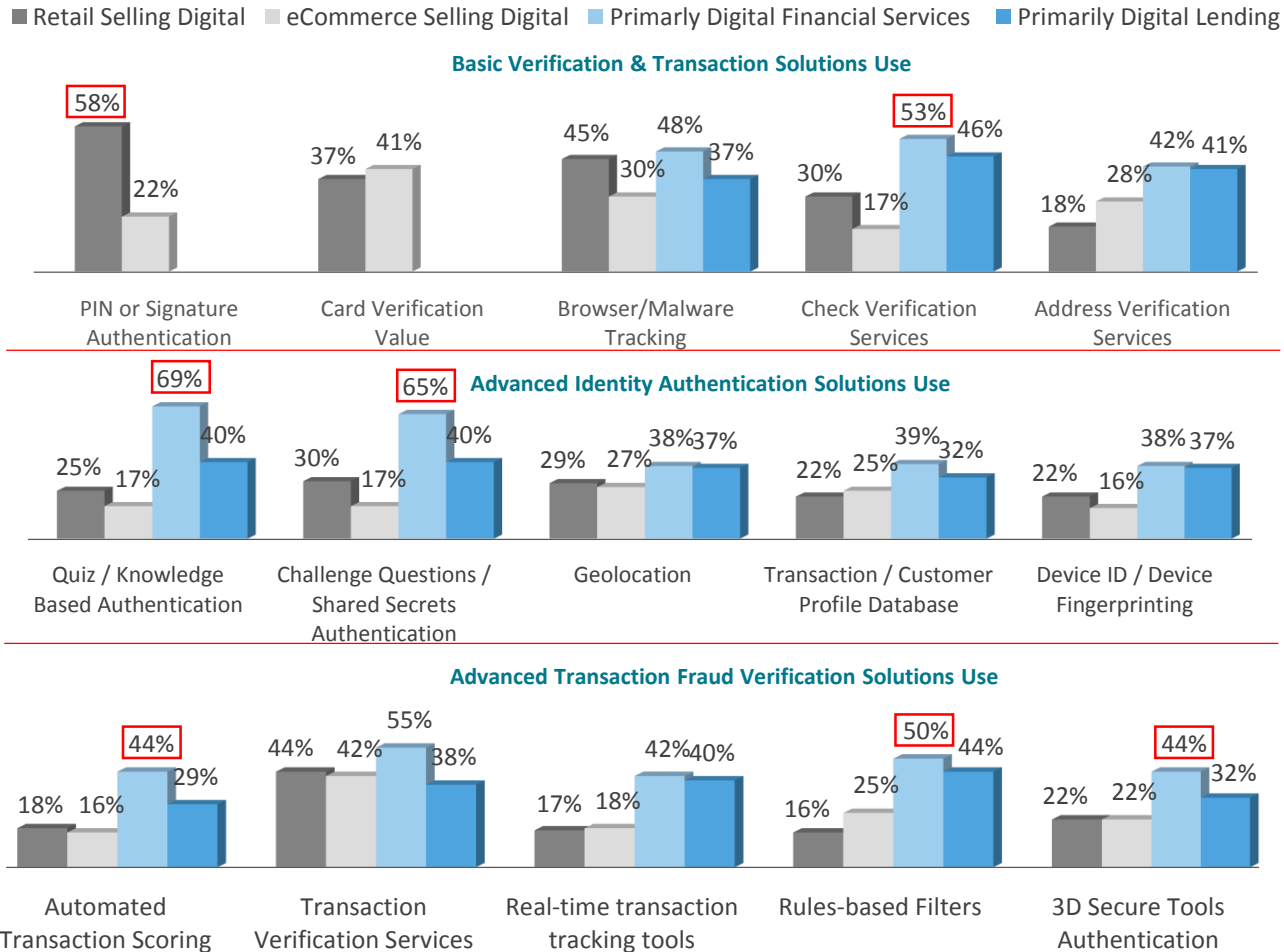| | Automated Transaction Scoring | Transaction Verification Services | Real-time transaction tracking tools | Rules-based Filters | 3D Secure Tools Authentication |
|---|---|---|---|---|---|
| Small Retail | 8% | 36% | 9% | 8% | 18% |
| Small eCommerce | 7% | 36% | 10% | 20% | 15% |
| Small Financial Services | 9% | 32% | 12% | 27% | 17% |
| Small Lending | 19% | 29% | 17% | 24% | 23% |

Q27: Which of the following best describes your awareness and use of the fraud solutions listed?

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

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But while using more solutions, mid/large merchants & firms report only modest use of advanced identity and transaction verification solutions.

This is fairly consistent across industry segments.



**Basic Verification & Transaction Solutions Use**

Mid/Large Retail | Mid/Large eCommerce | Mid/Large Financial Services | Mid/Large Lending

PIN or Signature Authentication: 47%, 49%
Card Verification Value: 42%, 52%
Browser/Malware Tracking: 40%, 28%, 44%, 56%
Check Verification Services: 43%, 50%, 57%, 49%
Address Verification Services: 38%, 56%, 47%, 50%

**Advanced Identity Authentication Solutions Use**

Quiz / Knowledge Based Authentication: 35%, 39%, 42%, 45%
Challenge Questions / Shared Secrets Authentication: 36%, 44%, 46%, 46%
Geolocation: 34%, 44%, 31%, 49%
Transaction / Customer Profile Database: 31%, 39%, 41%, 48%
Device ID / Device Fingerprinting: 33%, 29%, 33%, 38%

**Advanced Transaction Fraud Verification Solutions Use**

Automated Transaction Scoring: 37%, 37%, 38%, 42%
Transaction Verification Services: 42%, 42%, 58%, 49%
Real-time transaction tracking tools: 42%, 39%, 49%, 51%
Rules-based Filters: 40%, 50%, 37%, 42%
3D Secure Tools Authentication: 32%, 42%, 30%, 48%

*CAUTION: Small sample size; use directionally*
Q27: Which of the following best describes your awareness and use of the fraud solutions listed?

Significantly different from all or most industry segments within response category at the 95% Confidence Interval

Significantly different from all or most segments within response category at the 95% Confidence Interval

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And, while identity verification is a key challenge for those with a digital focus –few are using advanced solutions to address this.

As digital financial services firms are significantly more likely to have a quiz or challenge-based identity authentication solution, their use of other identity-related ones remains limited as is similar with other industry segments.

Further, for those selling digital goods/services, there is very low use of real-time transaction tracking which is essential when dealing with "fast fraud".

**Legend:** ■ Retail Selling Digital ■ eCommerce Selling Digital ■ Primarily Digital Financial Services ■ Primarily Digital Lending

**Basic Verification & Transaction Solutions Use**

| | Retail Selling Digital | eCommerce Selling Digital | Primarily Digital Financial Services | Primarily Digital Lending |
|---|---|---|---|---|
| PIN or Signature Authentication | 58% | 22% | | |
| Card Verification Value | 37% | 41% | | |
| Browser/Malware Tracking | 45% | 30% | 48% | 37% |
| Check Verification Services | 30% | 17% | 53% | 46% |
| Address Verification Services | 18% | 28% | 42% | 41% |

**Advanced Identity Authentication Solutions Use**

| | Retail Selling Digital | eCommerce Selling Digital | Primarily Digital Financial Services | Primarily Digital Lending |
|---|---|---|---|---|
| Quiz / Knowledge Based Authentication | 25% | 17% | 69% | 40% |
| Challenge Questions / Shared Secrets Authentication | 30% | 17% | 65% | 40% |
| Geolocation | 29% | 27% | 38% | 37% |
| Transaction / Customer Profile Database | 22% | 25% | 39% | 32% |
| Device ID / Device Fingerprinting | 22% | 16% | 38% | 37% |

**Advanced Transaction Fraud Verification Solutions Use**

| | Retail Selling Digital | eCommerce Selling Digital | Primarily Digital Financial Services | Primarily Digital Lending |
|---|---|---|---|---|
| Automated Transaction Scoring | 18% | 16% | 44% | 29% |
| Transaction Verification Services | 44% | 42% | 55% | 38% |
| Real-time transaction tracking tools | 17% | 18% | 42% | 40% |
| Rules-based Filters | 16% | 25% | 50% | 44% |
| 3D Secure Tools Authentication | 22% | 22% | 44% | 32% |

☐ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

34

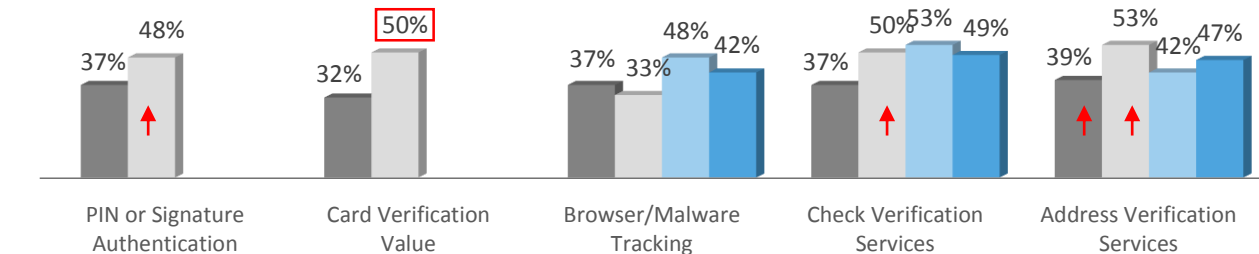# But when looking at larger companies selling digital goods or primarily using digital transactions . . .

We see that advanced identity authentication solutions are used somewhat more than among smaller digitally-focused companies.

eCommerce and lending firms are particularly using these more than smaller digital companies and sometimes more than mid/large non-digitally focused ones.
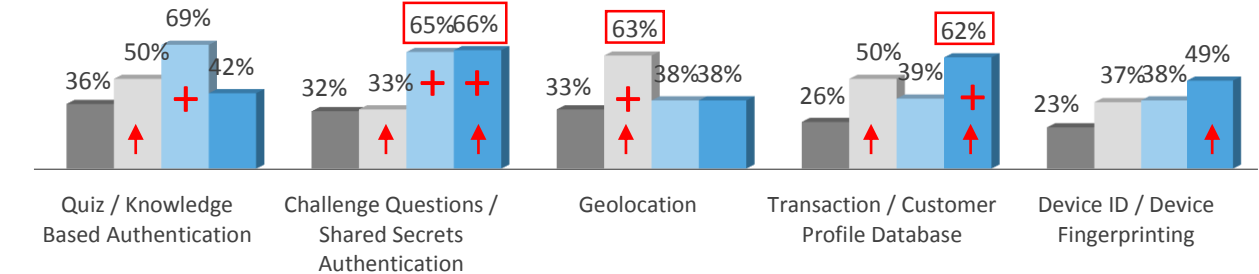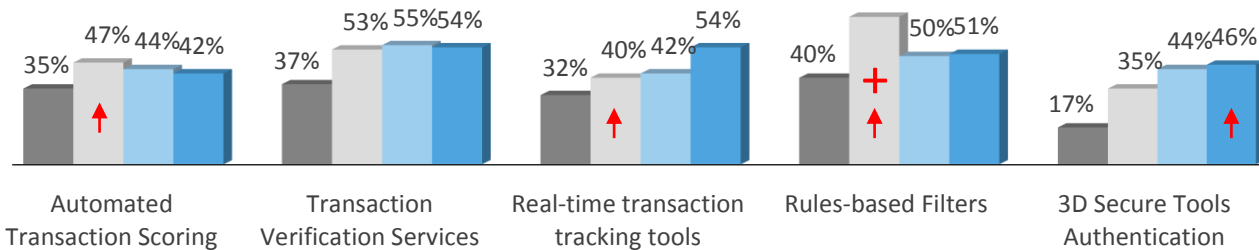
That said, these digitally-focused firms still experience negative affects from fraud.



Legend: ■ Mid/Large Retail Selling Digital  ■ Mid/Large eCommerce Selling Digital  ■ Mid/Large Primarily Digital Financial Services  ■ Large Primarily Digital Lending

**Basic Verification & Transaction Solutions Use**

- PIN or Signature Authentication: 37%, 48%
- Card Verification Value: 32%, 50%
- Browser/Malware Tracking: 37%, 33%, 48%, 42%
- Check Verification Services: 37%, 50%, 53%, 49%
- Address Verification Services: 39%, 53%, 42%, 47%

**Advanced Identity Authentication Solutions Use**

- Quiz / Knowledge Based Authentication: 36%, 50%, 69%, 42%
- Challenge Questions / Shared Secrets Authentication: 32%, 33%, 65%, 66%
- Geolocation: 33%, 63%, 38%, 38%
- Transaction / Customer Profile Database: 26%, 50%, 39%, 62%
- Device ID / Device Fingerprinting: 23%, 37%, 38%, 49%

**Advanced Transaction Fraud Verification Solutions Use**

- Automated Transaction Scoring: 35%, 47%, 44%, 42%
- Transaction Verification Services: 37%, 53%, 55%, 54%
- Real-time transaction tracking tools: 32%, 40%, 42%, 54%
- Rules-based Filters: 40%, 68%, 50%, 51%
- 3D Secure Tools Authentication: 17%, 35%, 44%, 46%

**+** Significantly higher than **NON DIGITAL MID / LARGE**

Q27: Which of the following best describes your awareness and use of the fraud solutions listed?

□ Significantly different from all or most industry segments within response category at the 95% Confidence Interval

↑ Significantly different from all or most segments within response category at the 95% Confidence Interval

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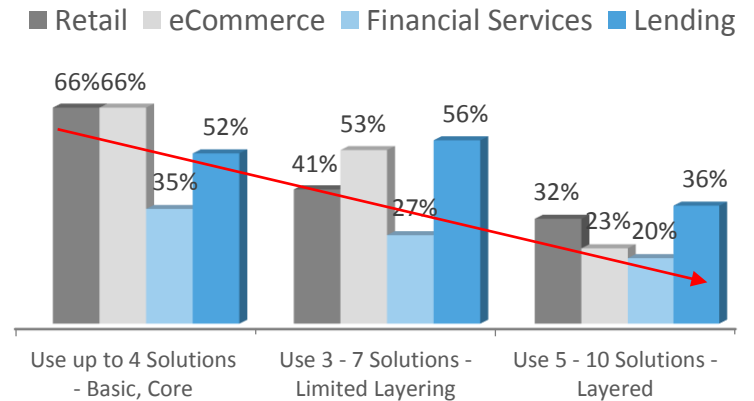
35

Using the right combination of tools is crucial

# It's not just about the number of solutions but rather the right ones based on layering identity & fraud transaction-based protection.

Survey findings show that companies, across the industries targeted for this research, which invest in a multi-layered approach including advanced identity and fraud transaction verification & authentication experience a smaller percentage of successful fraud attempts than do others.

Even companies which invest in multiple solutions, but not a multi-layered approach, experience more successful fraud attempts.

**% Successful Fraud Attempts by Number & Layering of Fraud Mitigation Solutions**

■ Retail ■ eCommerce ■ Financial Services ■ Lending



| Use up to 4 Solutions - Basic, Core | Use 3 - 7 Solutions - Limited Layering | Use 5 - 10 Solutions - Layered |
|---|---|---|
| 66% 66% 35% 52% | 41% 53% 27% 56% | 32% 23% 20% 36% |

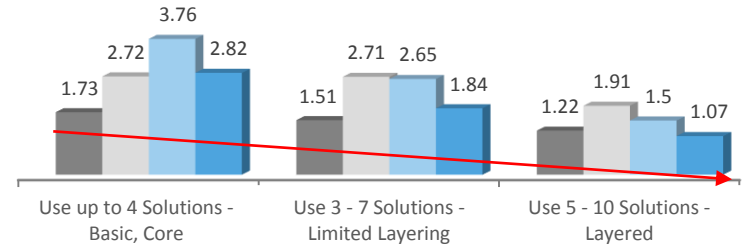| | Layers of Protection | Basic | Some Layering | Multi-Layered |
|---|---|---|---|---|
| Common Core Solutions Used Most Often | CVV, PIN/Signature, Check Verification, Browser Malware, Address Verification | Mostly | Many | Many |
| Layering of Advanced Identity Solutions | Device ID Fingerprinting, Geolocation, Authentication by Quizzes, Customer Profile Dbase | Few if any | Minimal/Some | Many |
| Layering of Fraud Transaction Risk Assessment Solutions | Automated Transaction Scoring, Real-Time Transaction Tracking, Transaction Verification, Rules-Based Filters, Authentication of Transaction by 3D Tools | Few if any | Some | Many |

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# And, there is less cost of fraud for those who layer identity & fraud transaction-based protection.

Across industry segments, companies which layer core + identity + fraud transaction solutions have lower fraud costs and, therefore, a lower degree to which fraud reduces the bottom line.

■ Retail ■ eCommerce ■ Financial Services ■ Lending

**LexisNexis Fraud Multiplier℠ by Number & Layering of Fraud Mitigation Solutions**

| | Use up to 4 Solutions - Basic, Core | Use 3 - 7 Solutions - Limited Layering | Use 5 - 10 Solutions - Layered |
|---|---|---|---|
| Retail | $4.71 | $2.85 | $2.43 |
| eCommerce | $4.64 | $2.63 | $2.38 |
| Financial Services | $2.80 | $2.35 | $2.18 |
| Lending | $3.38 | $2.69 | $2.39 |
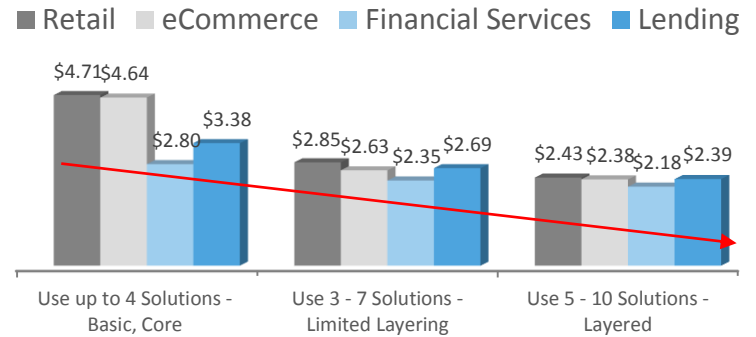
**Avg. Fraud Cost as % of Revenue by Number & Layering of Fraud Mitigation Solutions**

| | Use up to 4 Solutions - Basic, Core | Use 3 - 7 Solutions - Limited Layering | Use 5 - 10 Solutions - Layered |
|---|---|---|---|
| Retail | 1.73 | 1.51 | 1.22 |
| eCommerce | 2.72 | 2.71 | 1.91 |
| Financial Services | 3.76 | 2.65 | 1.5 |
| Lending | 2.82 | 1.84 | 1.07 |

| | Layers of Protection | Basic | Some Layering | Multi-Layered |
|---|---|---|---|---|
| Common Core Solutions Used Most Often | CVV, PIN/Signature, Check Verification, Browser Malware, Address Verification | Mostly | Many | Many |
| Layering of Advanced Identity Solutions | Device ID Fingerprinting, Geolocation, Authentication by Quizzes, Customer Profile Dbase | Few if any | Minimal/Some | Many |
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# Recommendations

# Recommendations

**1**

**Retailers, eCommerce merchants, financial services firms and lending institutions should implement different risk mitigation solutions to address unique risks from different channels and sales models. There is no one-size-fits-all solution.**

- Solutions used to mitigate risk with physical goods or non-digital channel transactions won't fully mitigate those generated from digital goods and transaction channels.

  - Digital goods sellers require more real time transactions and verification given the faster transaction pace.

  - Digital channels are more anonymous and difficult with regard to identity verification.

  - With the mobile channel, the very nature of mobility means that mobile-based payment transactions and devices carry different levels of risk and challenges regarding identity and device verification than with online / Internet browser transactions

**2**

**It's not just about the number of risk mitigation solutions, but rather the most effective multi-layered approach that attacks different types of fraud.**

- It is critical for companies to address both identity and transaction-related fraud. These are two different perspectives.

  - Identity verification / authentication is important for "letting your customers in" with the least amount of friction and risk.

  - Transaction-related fraud is about keeping the "bad guys out".

- A layered approach can reduce costs associated with manual reviews, successful fraud attempts and fewer false positives.

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# Recommendations (cont.)

**3**

**Mid/large companies that focus on selling digital goods or conduct a majority of transactions through digital channels need to remain particularly vigilant and open to a wider variety of risk mitigation solutions – sooner rather than later.**

- Fraud and its associated costs are already more of an issue for these companies. This will become more heightened as they adopt the mobile channel in the near-term – and as the volume of these transactions grow (which retail shows us by example as being fairly quickly).

- A layered solution approach should particularly consider those which support faster / real-time identity and transaction verification decision making.

- The above is particularly important to eCommerce and financial services firms.

**4**

**But fraud isn't just occurring among mid/large digital. Smaller merchants and financial/lending firms are experiencing it as well.**

- While volumes and costs are not as high as mid/large digital, they are nonetheless taking a sizeable bit out of the bottom line.

- Over time, the cost of risk mitigation solutions should provide a justifiable ROI compared to the dollars that are continually lost on an ongoing basis – which adds up to unnecessary significant losses over time.

**5**

**In addition to solutions investments, companies also need to be efficient with fraud management.**

- Fraud occurs in multiple ways depending on the type of goods/services, channel and payment method.

- Different technology drives different payment methods, channels and even the nature of goods purchasing. Therefore, fraudsters have many attack points.

- Without tracking both successful and prevented fraud by both channel and payment method, companies efforts at fighting fraud are weakened.

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LexisNexis® Risk Solutions can help



**LexisNexis®**
RISK SOLUTIONS

# LexisNexis® Risk Solutions provides powerful identity verification, identity authentication and transaction scoring tools to combat fraud.

## LexisNexis® Risk Solutions:

**Vast Data Resources**

**Big Data Technology**

**Linking & Analytics**

**Industry-Specific Expertise & Delivery**

## Customer-Focused Solutions

**Identity Verification**
- Validate name, address and phone information
- Reconcile name variations, duplicates, multiple addresses, and myriad other inconsistencies and linkages
- Perform global identity checks with seamless integration and reporting capabilities

**Transaction Risk Scoring**
- Identify risks associated with bill-to and ship-to identities with a single numeric risk score
- Quickly detect fraud patterns and isolate high-risk transactions
- Resolve false-positive and Address Verification Systems failures

**Manual Research Support**
- Access billions of data records on consumers and businesses
- Discover linkages between people, businesses and assets
- Leverage specialized tools for due diligence, account management and compliance

**Identity Authentication**
- Authenticate identities on the spot using knowledge-based quizzes
- Dynamically adjust security level to suit risk scenario
- Receive real-time pass/fail results

For more information:
visit http://www.lexisnexis.com/risk/financial/fs-fraud-detection-prevention.aspx or call 800.869.0751