

# Is 3D-SECURE Still Kill Your Conversion Rate?



Analysis of millions of payments transactions reveals that although the lost of 6% - 9% of payments when authenticated using 3D-Secure, Merchant can keep calm knowing - **3D Secure can increase conversion rates.**





## How much does **3D SECURE** really impact online payments?



We looked at 3D Secure data behind  
Millions of payments transactions  
through Credorax between  
01 Jan - 01 Jul 2018



3D Secure acceptance  
rate is : 75%



Transaction lost : 25%



## Acceptance rates for the top cards schemes by volume for 3D Secure



MasterCard



69%



31%



Visa



71%



29%



## Acceptance rates for the top cards schemes by volume for Regular Transactions



MasterCard



43%



57%



Visa



44%



56%

# Currency **Acceptance Rates** by volume transactions



€

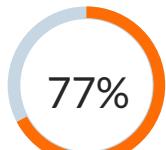
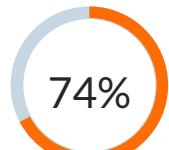
EUR

£

GBP

\$

USD



# Average Approved Amount by Currency

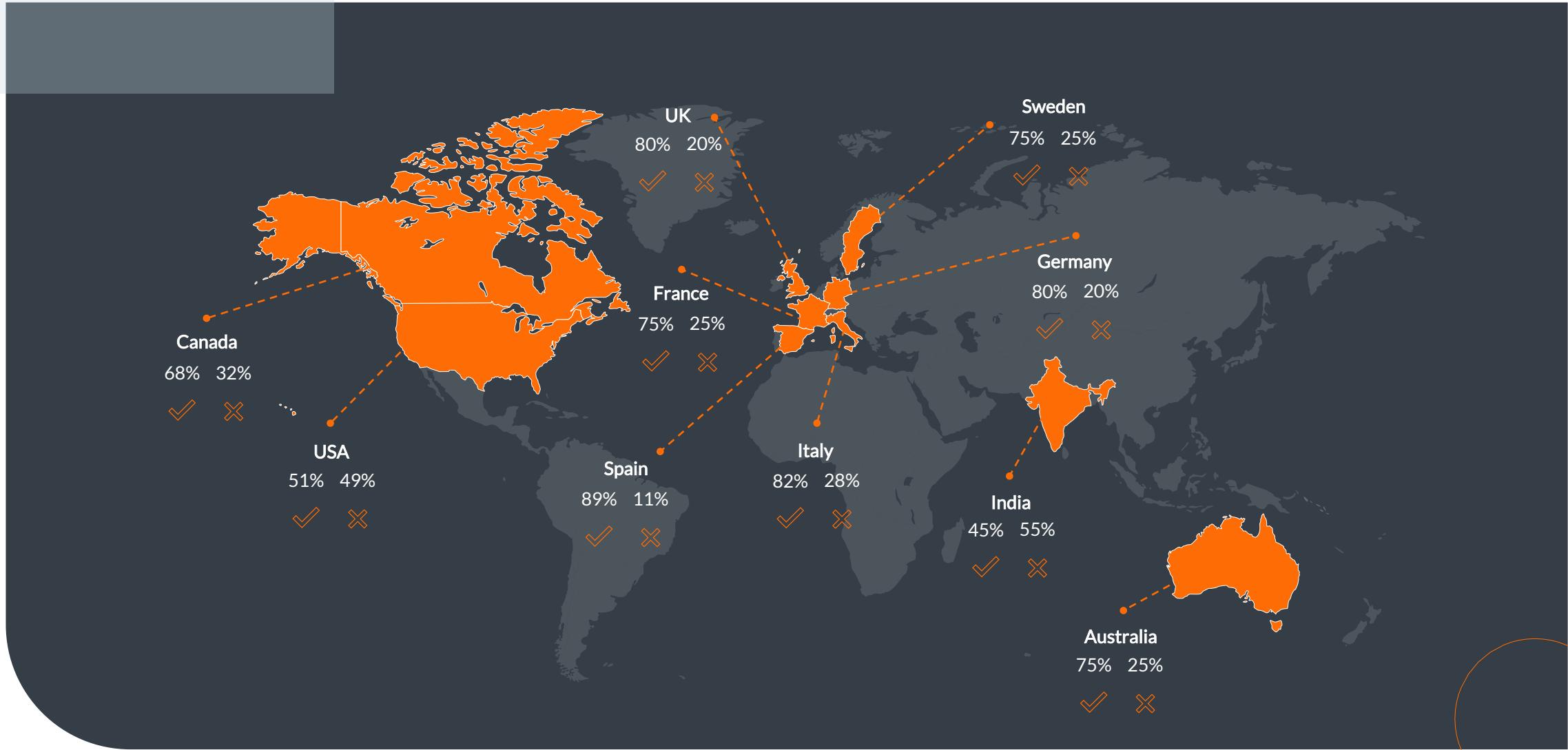
## 3D Secure Vs Regular Transaction

\$	3D Secure	Regular Transaction
AVG	44	23
MED	280	138

€	3D Secure	Regular Transaction
AVG	54	57
MED	265	281

£	3D Secure	Regular Transaction
AVG	51	8
MED	673	163

# Acceptance rates by Country

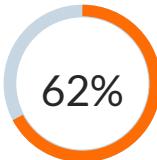


# Top 3 Approval Purchase by volume

## 3D Secure Vs Regular Transaction



Lottery & Betting



3D  
Secure



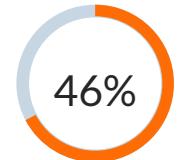
Regular  
Transaction



Merchandise & Services



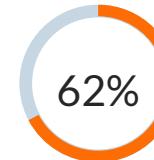
3D  
Secure



Regular  
Transaction



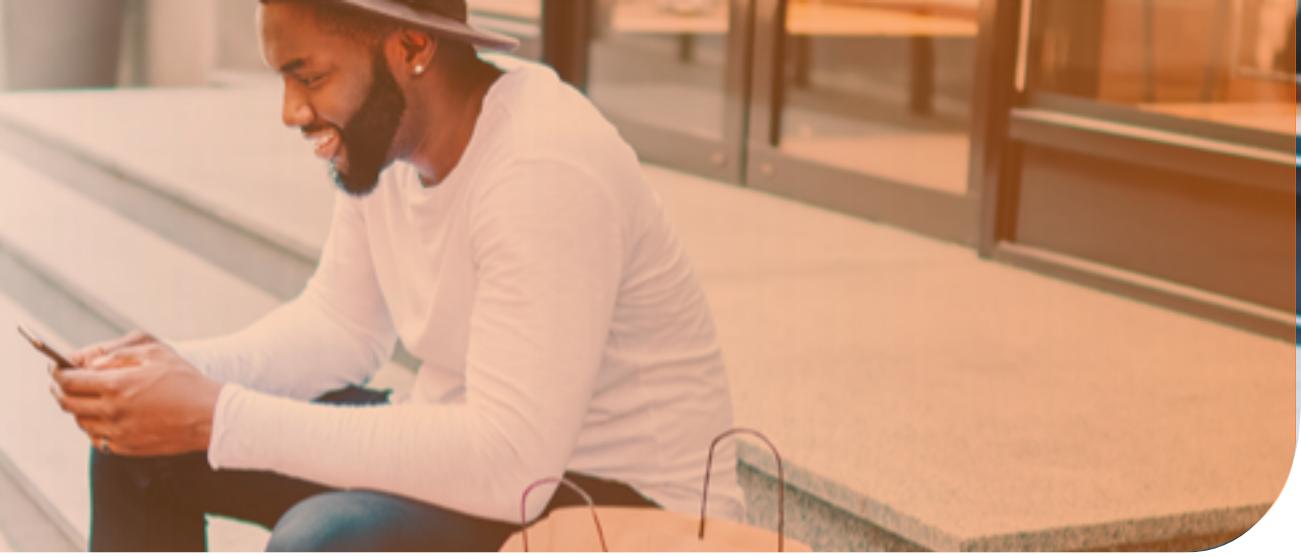
Funding Transaction



3D  
Secure



Regular  
Transaction



-  For all its good intentions, 3DS is notorious for bad user experience and the clunky interface can even make customers feel less secure paying online.
-  The frustration of an extra password carries dangerous risks of customer drop off and lost revenue for online sellers.
-  However, in the long run, it can be seen that the approved amounts (in some transactions) bridges the gap created and even increase revenue due to the loss in question.
-  Of course, the use of 3DS is not necessary in every transaction level and country, such as India holding the "doubtable" title of the highest drop-rate with 25% and would not rush to use 3ds on them.
-  Highly correlated features was found, For instance, correlation between approved transactions to amount sum and card-level.
-  In conclusion, using the extra layer of 3DS is often preferable, although you should know when and what for.



# Tools Documentation



**Raw data** - credorax dataset



**Python** - jupyter lab / notebook



Pandas, Scikit-learn, NumPy  
matplotlib libraries and more.



We integrate an bin api for feature engineering such  
as 'card-level\_app\_Transaction' and more api:  
<https://www.neutrinoapi.com/api/api-basics/>  
using java & python