

Payment Processing with **ActiveMerchant**

Cody Fauser



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http://www.flickr.com/photos/tracy_olson/61056391

Background



shopify

The perfect online store

hosted e-commerce. mere minutes to set up



Snowdevil - Your Shopping Cart



http://www.snowdevil.ca/cart

Q Google

Pivotal Tracker Read Later Shopify New Relic Shopify Backpack Easynews Shopify Dashboard Shopify Forums Rails Docs Inspect Store Shows Strange Maps

This is a **Shopify** demo store. We do not have the products advertised here and we don't really charge money upon order completion.

Search About Us Shopping Cart (1 item)



- Home
- Snowboards
- Bindings
- Goggles
- All
- Blog

Search...

Blowout Deals
Arbor: A-Frame 250\$
Arbor: Legacy 199\$
Carbon 900 bindings 180\$

Shopping Cart
Review the items in your cart, make any changes, then proceed to the checkout, or continue shopping for more products.


Check out with **PayPal**
The safer, easier way to pay

Proceed to Checkout

Product	Price	Quantity	Extension
Never Summer: Premier	\$399.00	1	\$399.00 remove
Subtotal: \$399.00 USD			

Update Cart

You may also like...



This store is only for demonstration purposes. No items will be shipped

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Please visit our partner pages: [Windsurf & Kitesurf Shop](#) [Funsport Photo Community](#)

shopify

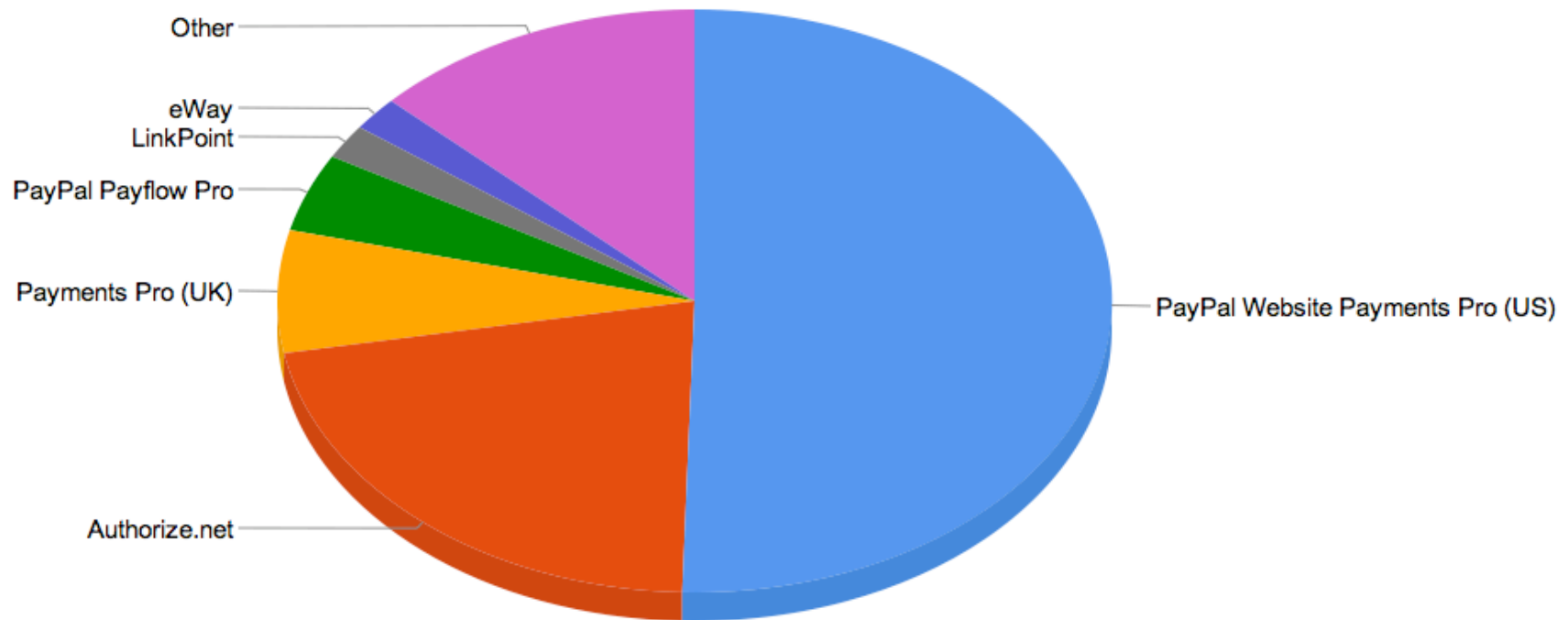
The perfect online store

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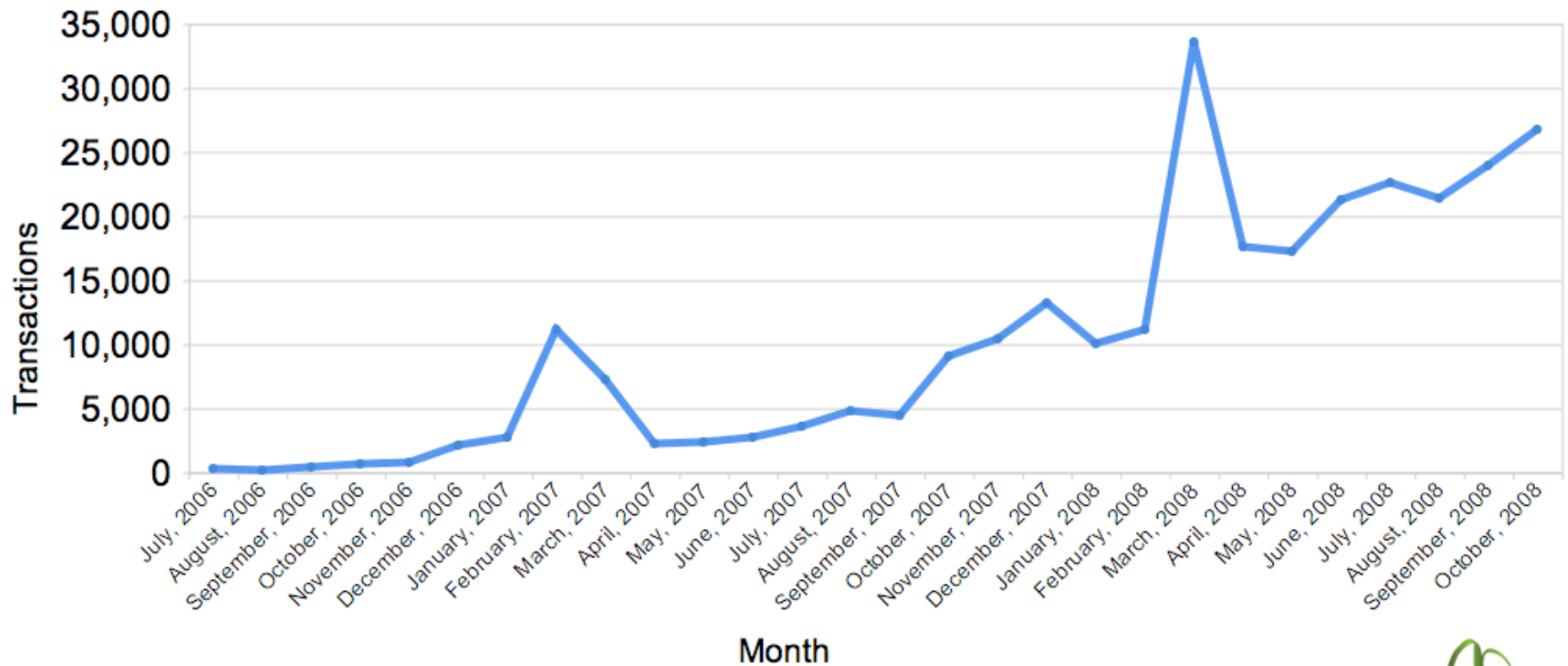




Shopify Gateway Use



Authorizations per Month



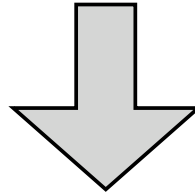
Goal



Simple uniform API



Shopify



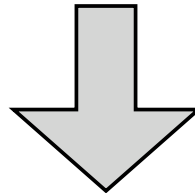
ActiveMerchant

Gateway

Payflow

PayPal

Braintree



Payment Gateways





The universal translator (also referred to as a "U.T." or translator circuit) is a device used to decipher and interpret alien languages into the native language of the user

- http://memory-alpha.org/en/wiki/Universal_translator

Terminology



Cardholder

Person you want to get money from

Authorization

Verifies and reserves funds on card

Capture

Marks authorization for settlement

Settlement

Transfers authorized amount to your bank

Sale or Purchase

Authorization and capture combined



Address Verification Service (AVS)

Matches street number and zip code to info on file at issuing bank

Card Security Code (CID, CVC, CVV2)

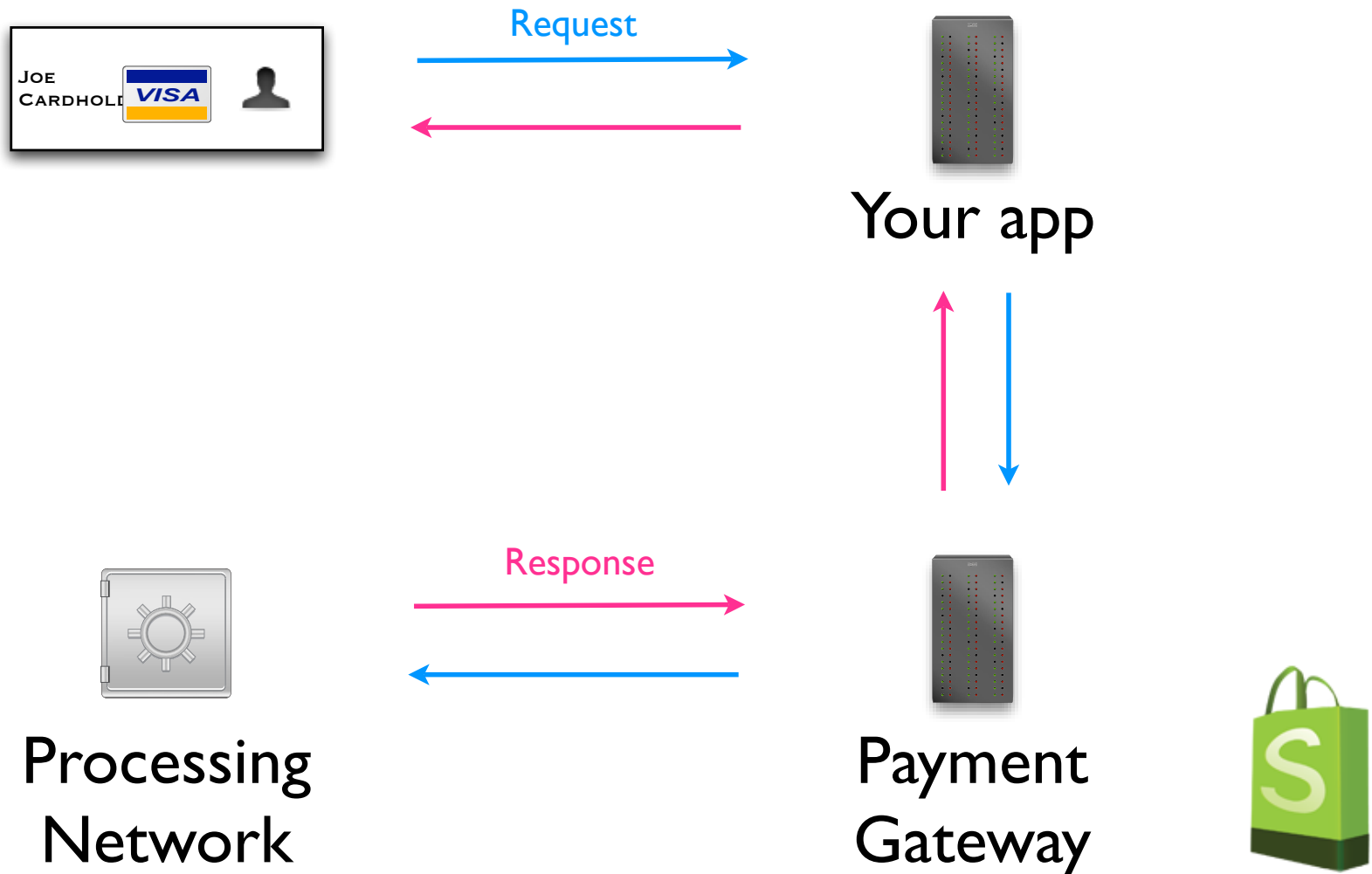
3 or 4 digit security code printed on the back of the card



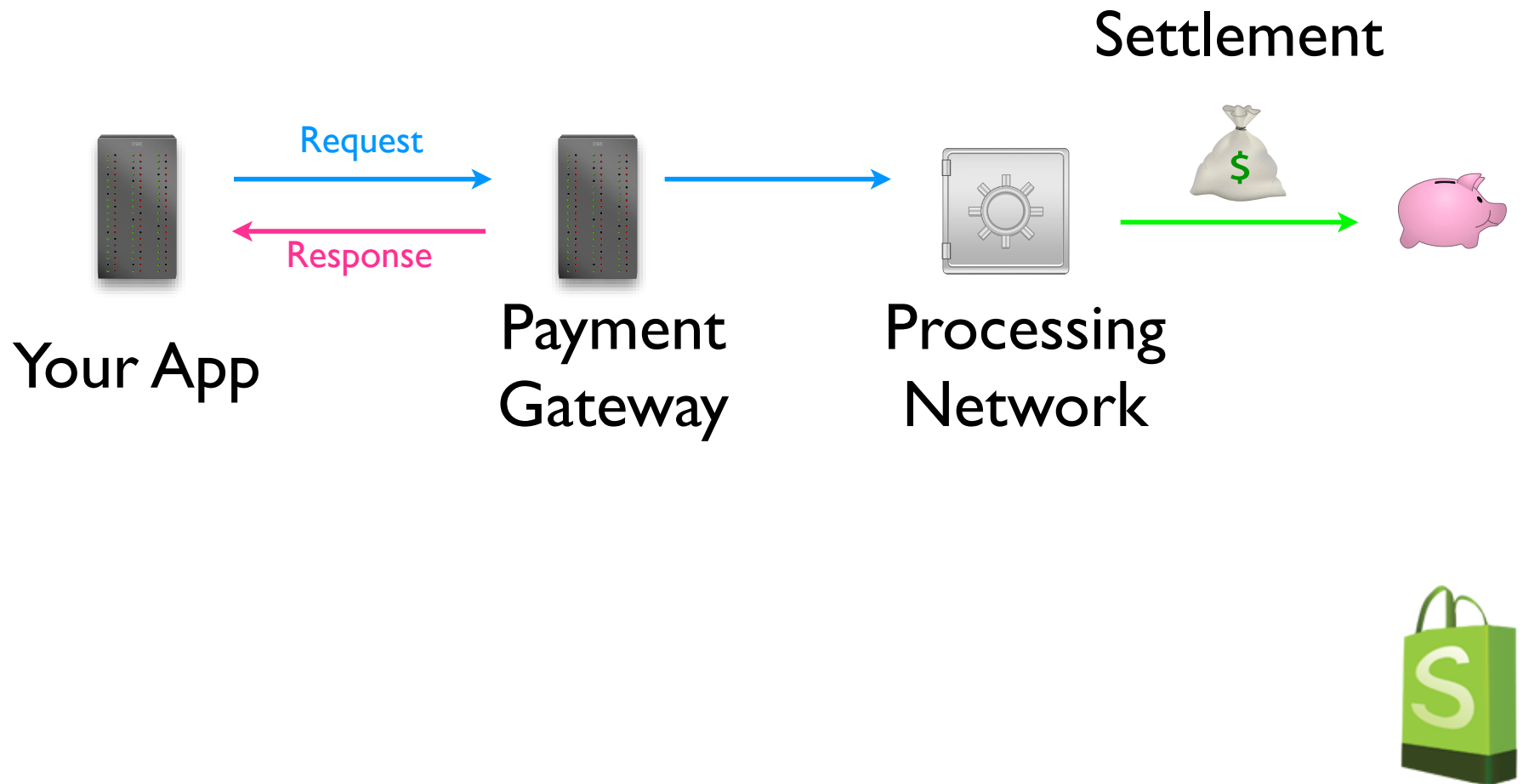
How?



Authorization



Capture




```
card = CreditCard.new(  
  :first_name      => 'Tobias',  
  :last_name       => 'Luetke',  
  :number          => '5473000000000007',  
  :month           => '11',  
  :year            => '2009',  
  :verification_value => '234'  
)
```



```
gateway = MonerisGateway.new(  
  :login    => 'store1',  
  :password => 'yesguy'  
)  
  
response = gateway.purchase(1000, card, :order_id => 'voices-1000')  
  
response.success?      # => true  
response.message       # => "Approved"  
response.authorization # => "451477-0_7;voices-1000"
```



```
gateway = BraintreeGateway.new(  
  :login    => 'demo',  
  :password => 'password'  
)  
  
response = gateway.purchase(1000, card, :order_id => 'voices-1000')  
  
response.success?      # => true  
response.message       # => "This transaction has been approved"  
response.authorization # => "854203517"
```



```
gateway = TrustCommerceGateway.new(  
  :login    => 'TestMerchant',  
  :password => 'password'  
)  
  
response = gateway.purchase(1000, card, :order_id => 'voices-1000')  
  
response.success?      # => true  
response.message       # => "The transaction was successful"  
response.authorization # => "025-0013788895"
```




```
gateway = VerifiGateway.new(  
  :login    => 'demo',  
  :password => 'password'  
)  
  
response = gateway.purchase(1000, card, :order_id => 'voices-1000')  
  
response.success?      # => true  
response.message       # => "Transaction was Approved"  
response.authorization # => "854207614"
```



```
auth = gateway.authorize(1000, card, :order_id => 'voices-1001')  
  
if auth.success?  
  gateway.capture(1000, auth.authorization)  
else  
  raise "hell"  
end
```



Complete my purchase

All transactions are secure and encrypted, and we never store your credit card information. To learn more, please view our [privacy policy](#).



First Name

Cody

Last Name

Fauser

Credit Card Number ✓

5473000000000007

Expiration Date

1 - January

2013

Card Security Code 213 [what is this?](#)



```
def pay
  @credit_card = CreditCard.new(params[:credit_card])

  if @credit_card.valid?
    @purchase = gateway.purchase(@amount, @credit_card)

    if @purchase.success?
      redirect_to :action => "confirmation"
    else
      render :action => "pay"
    end
  else
    render :action => "pay"
  end
end
```



Benefits



Rich credit card object



```
card = CreditCard.new(  
  :first_name    => 'Tobias',  
  :last_name     => 'Luetke',  
  :number        => '4242424242424242',  
  :month         => '11',  
  :year          => '2006',  
  :verification_value => '234'  
)  
  
card.name          # => "Tobias Luetke"  
card.display_number # => "XXXX-XXXX-XXXX-4242"  
card.valid?        # => false  
card.type           # => "visa"  
card.errors.on(:year) # => "expired"  
card.errors.full_messages # => ["Year expired"]  
card.expired?       # => true
```



Uniform AVS & CVV responses



Risk Assessment

Credit card



Street address



Zip code



IP Address



Payment Method

 XXXX-XXXX-XXXX-6062

Processed by Authorize.net



```
response = gateway.purchase(1000, card)

response.avs_result["message"]
# => "Street address and 9-digit postal code match."
response.avs_result["code"]           # => "X"
response.avs_result["street_match"]   # => "Y"
response.avs_result["postal_match"]   # => "Y"

response.cvv_result["message"]         # => "Match"
response.cvv_result["code"]            # => "M"
```



Community



Extensible



Production Level Code



Thank You!



Questions?



Resources



<http://activemerchant.org>

