

Add E-Commerce to Your Website in Less Than One Week Using ActiveMerchant

Chris Hobbs
CTO, Spongecell

4 September 2008
Berlin, Germany

Add E-Commerce to Your Website in One Day Using PayPal

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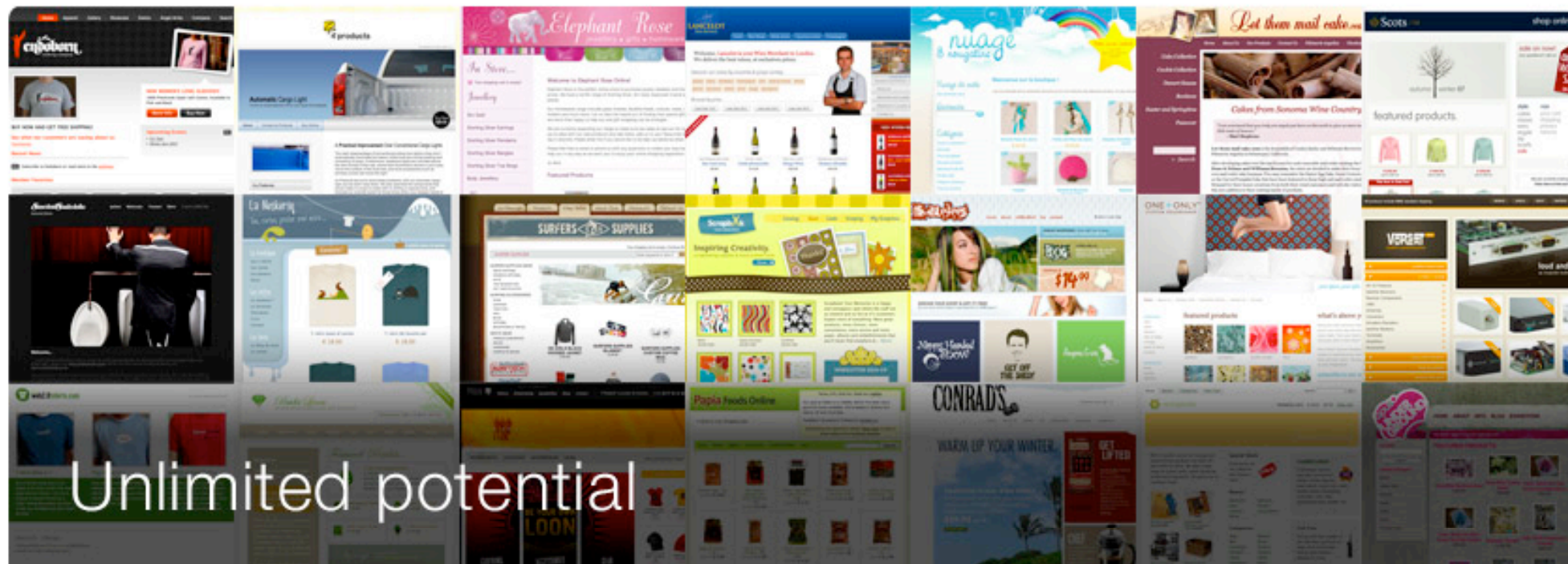
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Berlin, Germany

- Buyer pays online
- Goods are delivered
- Cash is received

- Products
- Services
- Subscription
- Third Party

shopify

a shop in minutes, a business for life.



Overview

Tour

Design

Features

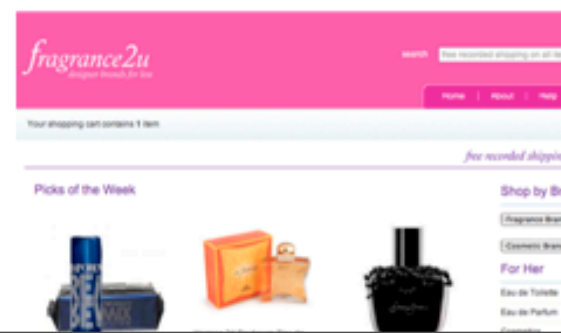
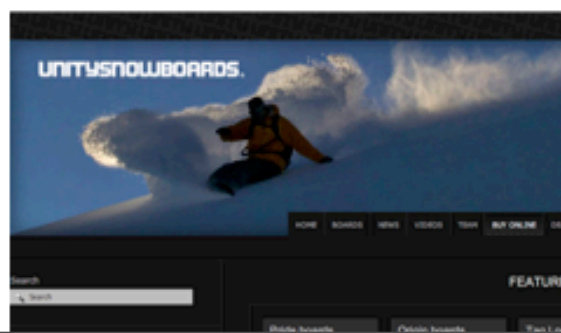
Screenshots

Contact

FAQ

Pricing & Sign-up

Recently launched stores



[Check out the administration interface](#)



Need help? **ASK LIVE!** ONLINE

Service: 1-877-WWW-SAUCE
Email: Service@hotsauce.com
Free Webmail

to check out

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Serving Chili Heads Worldwide since 1995

Welcome to HotSauce.com
The Hottest Byte On Earth™

Experience a fiery journey through the largest online selection of Hot Sauces, Hot Sauce Gifts and Extreme Foods. Dedicated to all Chili Heads & Hot Sauce Enthusiasts Worldwide!

SOCIALIZE IT

STUMBLEUPON

HOT SAUCE

Sauce Search:

Go!

Shop By Price

Shop By Brand

US Dollar

Shop Sauces:

- New Arrivals
- By Sauce Category
- By Sauce Brands
- By Pepper Type
- By Country Origin
- By Heat Units (SHU)
- By The Case
- OverStock & Sales

YOUR CART 1 PAGE CHECKOUT RECEIPT

1 billing information

First Name*:

Last Name*:

Company:

Address*:

City*:

Country*:

State*:

Zip/Postal Code*:

Phone*:

Email Address*:

2 shipping information

First Name*:

Last Name*:

Company:

Address*:

City*:

Country*:

State*:

Zip/Postal Code*:

Phone*:

Fax:





First Name:
Last Name:

Address:
City:

State:
Postal Code:

Country:

Payment Options:

Select Currency

\$
 €
 £
 \$
 \$
 ¥

Credit Card #
CVV2 Number: [Explanation](#)

Expires:

Name On Card:
Email Address:

Username:
Password:

I certify that I am 18 years of age or older and agree to CCBill's [Terms and Conditions](#) of this purchase and have read CCBill's [Privacy Policy](#).

- Service Considerations
- Implementation
- Security
- Examples: Gateway API, Google, Amazon, PayPal

- Price
- Regulations
- Branding
- Usability
- Banking
- Accounting

Service	Transaction	Monthly	Setup
Trust Commerce + BofA (ActiveMerchant)	2.54% + \$0.25	\$30	\$190
PayPal Website Standard	4.9% + \$0.30	\$0	\$0
Google Checkout (US & GB only)	2% + \$0.20	\$0	\$0
Amazon Checkout	2.9% + \$0.30	\$0	\$0

- High profile payment services have more rules
 - Limit products offered
 - Restrict content on page
- National banking laws

- Implementing a gateway API solution allows you to keep your branding
- HTML checkout button solutions require offsite navigation
- Adding your logo or colors to the payment site may be possible

PayPal

gateway A

amazonpayments™
A-to-z Guarantee

you

- HTML (or other) solutions require offsite

- Addir site r payment

Google™
Checkout

- Offsite navigation may confuse or decrease trust
- Allowing the use of existing financial accounts may ease payment

- Reputable payment solutions require bank accounts
 - Verification
 - Payment
- Gateway solutions require merchant accounts
- Setting up bank accounts takes time

- Merchant accounts provide a line of credit so credit card payments can be accepted
- **Many** banks provide merchant accounts

Gateways to use with merchant accounts

Authorize.net (US)	USA ePay (US)
LinkPoint (US)	Protx (GB)
TrustCommerce (US)	WorldPay (World)

- Larger payment services offer accounting
 - Shipping
 - Taxes

- HTML solutions are easy to implement
 - PayPal Website Standard
 - Google Checkout
- Callbacks are difficult to test
- ActiveMerchant gateway solutions are well tested
- Gateways may require additional libraries

- All gateways or other payment solutions should have a **sandbox** or other test environment

- You want experience, testing, fun
- Shovel + sand = sand castles

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- In reality sandboxes are not good schools
- Rocks + turds = no fun

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*Implementation sandboxes
brought to you by*

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*Implementation sandboxes
brought to you by*

Mr. Hankey



- SSL
- Escape log files
- API callbacks
- Don't store credit card numbers

- Don't do it!

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- Pay someone else to do it (e.g. Citadel)

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- Don't do it!

- Implemented by gateway
- Seller decides what information to verify
 - Address
 - Zip code
 - CVV
 - Expiration date
- Shoddy sites can have shoddy verification

<http://RailsVendor.com>

- ActiveMerchant Gateway
- PayPal Website Standard
- Google Checkout
- Amazon Checkout

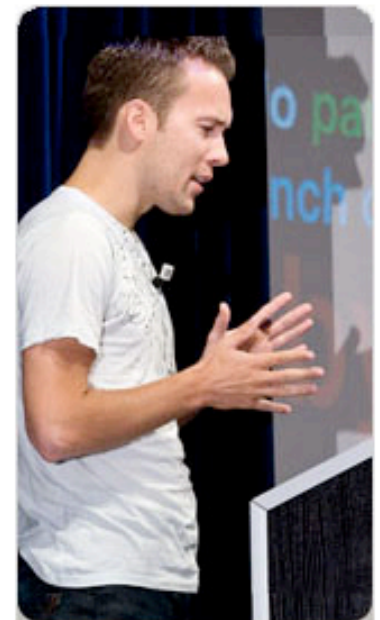
RailsVendor

A limited selection of medium quality photographs at bargain prices

First Name	Last Name
<input type="text"/>	<input type="text"/>
Daytime phone	Email address
<input type="text"/>	<input type="text"/>
Credit Card Type	Credit Card Number
<input type="text" value="Visa"/>	<input type="text"/>
Expires on	CVV
<input type="text" value="8"/> <input type="text" value="2008"/>	<input type="text"/>
Street	
<input type="text"/>	
City	State
<input type="text"/>	<input type="text"/>
Postal Code (Zip)	Country
<input type="text"/>	<input type="text" value="United States"/>
<input type="button" value="Submit"/>	

[populate form with dummy data](#)






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Register Now

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-  [Add to Calendar](#) ▶
-  [Set a Reminder](#) ▶
-  [Invite Friends](#)
-  [Add to Facebook](#)
-  [Buy Tickets](#)

[Spongecell Rich Media](#)

This is
your
site!

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A limited selection of medium quality photographs at bargain prices

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[Spongecell Rich Media](#)

This is
your
site!

OMG
DHH!

RailsVendor

A limited selection of medium quality photographs at bargain prices

First Name

Last Name

Daytime phone

Email address

Credit Card Type

Visa

Credit Card Number

Expires on

8

2008

CVV

Street

City

State

Postal Code (Zip)

Country

United States

Submit

[populate form with dummy data](#)

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[Spongecell Rich Media](#)

RailsVendor is open source at [GitHub](#) • Your cart currently has 4 items. [View Cart](#)

RailsVendor

Hand Rail

Total: \$4.14 USD

Pay with Credit Card or Log In

  [Secure Payments](#)

[Learn more](#) about PayPal - the safer, easier way to pay.





Enter your billing information

Country:

First Name:

Last Name:

Credit Card Number:

Payment Type:    

Expiration Date: / CSC: [What's this?](#)

Billing Address Line 1:

Billing Address Line 2:

(optional)

City:

State:

ZIP Code:

Home Telephone:

555-555-1234

Email:

[Review Order and Continue](#)

Already have a PayPal account?

Please log in

Email:

Password:

[Log In](#)

Forgot [email](#) or [password](#)?

Return to [RailsVendor](#).

RailsVendor

Hand Rail

Total: \$4.14 USD

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Credit Card Number:

Payment Type

☐ VISA ☐ MasterCard ☐ DISCOVER ☐ AMEX

Expiration Date: / CSC: [What's this?](#)

Billing Address Line 1:

Billing Address Line 2:

(optional)

City:

State:

ZIP Code:

Home Telephone:

555-555-1234

Email:

Review Order and Continue

Already have a PayPal account?

Please log in

Email:

Password:

Log In

Forgot [email](#) or [password](#)?

Return to [RailsVendor](#).

This is
not your
site.


[Help](#)

Change Language English (US)

Order Details - Rails Vendor, 5 Lucerne Street, San Francisco, CA 94103 US

Qty	Item	Price
4	Hand Rail - Helps with balance while navigating stairs	\$2.28
2	Trolley Rail - Serves light trains and street cars	\$1.86

Subtotal: \$4.14

Shipping and Tax calculated on next page

Create a Google Account to complete this purchase

Shop faster with Google Checkout

Sign up now to buy quickly and easily from stores across the web, and track all your orders in one place.

Your current email address:

Choose a password:
Minimum of 8 characters in length. [?]

Re-enter password:

Location: United States

Card number:



Expiration date: / CVC: [What's this?](#)

Cardholder name:

Billing Address:

City/Town State Zip [?]

Phone number:
Required for account verification.

My shipping address is: ☒ My billing address
☐ A different address

I agree to the [Terms of Service](#).

Agree and Continue

You can still make changes to your order on the next page.

Or sign in

If you already have a Google Account

Email:

Password:

Sign in and continue

[I cannot access my account](#)


[Help](#)

Change Language English (US)

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Your current email address:

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Re-enter password:

Location: United States

Card number:



Expiration date: / CVC: [What's this?](#)

Cardholder name:

Billing Address:

City/Town State Zip [\[?\]](#)

Phone number:

Required for account verification.

My shipping address is:
☒ My billing address
☐ A different address

I agree to the [Terms of Service](#).

Agree and Continue

You can still make changes to your order on the next page.

Or sign in

If you already have a Google Account

Email:

Password:

Sign in and continue

[I cannot access my account](#)

This is
not your
site.



Important Message

We're sorry, but there's a problem with this order. Please contact the merchant directly for assistance in completing this order.



❗ Important Message

We're sorry, but there's a problem with this order. Please contact the merchant directly for assistance in completing this order.

[User Agreement](#) | [Amazon Payments Privacy Notice](#) | [Amazon Payments A-to-z Guarantee](#)
©2008 Amazon.com, Inc. or its affiliates

This should not be anyone's site.


```
gateway = ActiveMerchant::Billing::TrustCommerceGateway.new :login, :password  
authorize_response = gateway.authorize(cents, active_merchant_credit_card)  
capture_response = gateway.capture(cents, authorize_response.authorization)
```

Trust Commerce Specific Responses

- `response.params['offenders']`
 - “cc” means invalid credit card
- `response.params['declinetype']`
 - “cvv” means invalid CVV or expiration date
- `response.params['avs']`
 - “A” means invalid zip code, street match only
 - “Z” means zip code match only
 - etc.

Trust Commerce Specific Functions

- `recurring(money, credit_card, options)`
 - make a recurring payment
- `store(credit_card)`
 - store a credit card for future transactions
 - can use authorization in `capture()`

HAML for generating HTML Checkout Button

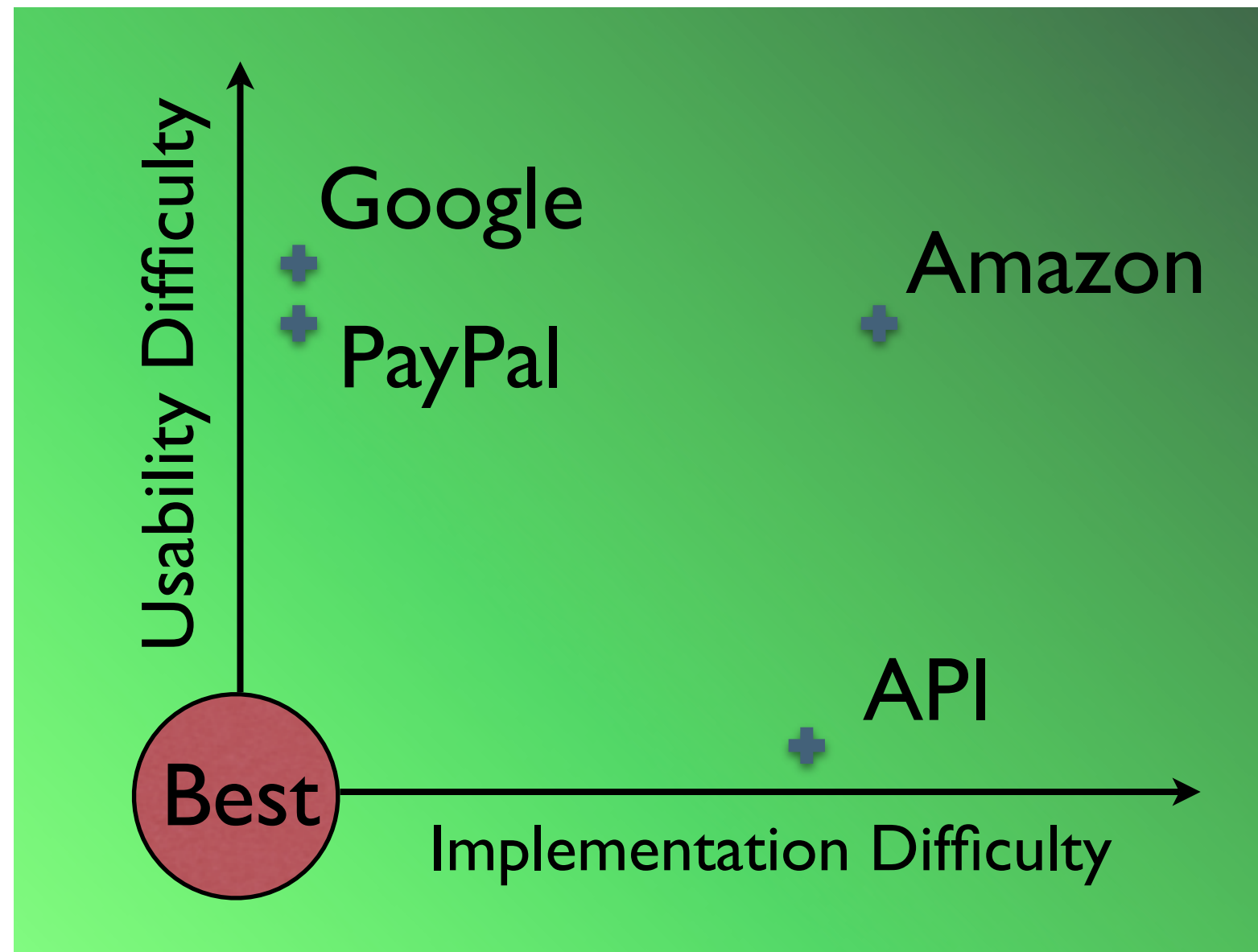
```
%form{:action => PaypalController::FORM_URL, :method => "post"}
  = hidden_field_tag :cmd, "_cart"
  = hidden_field_tag :upload, 1
  = hidden_field_tag :business, PaypalController::ACCOUNT
  = hidden_field_tag :currency_code, "USD"
  = hidden_field_tag :no_shipping, 1
  - #iterate across all items in the cart
  - i = 1
  - for purchasable in @cart.to_a
    = hidden_field_tag "item_name_#{i}", purchasable.human_name
    = hidden_field_tag "amount_#{i}", fmt_money(purchasable.unit_price)
    = hidden_field_tag "quantity_#{i}", purchasable.quantity
    - i += 1
  = hidden_field_tag :notify_url, notify_url
  = hidden_field_tag :cancel_return, url_for(:action=>"checkout", :only_path=>false)
  = hidden_field_tag :return, url_for(:action=>"purchase_success", :only_path=>false)
  = paypal_submit #the submit button generated from PaypalHelper
```

HAML for generating HTML Checkout Button

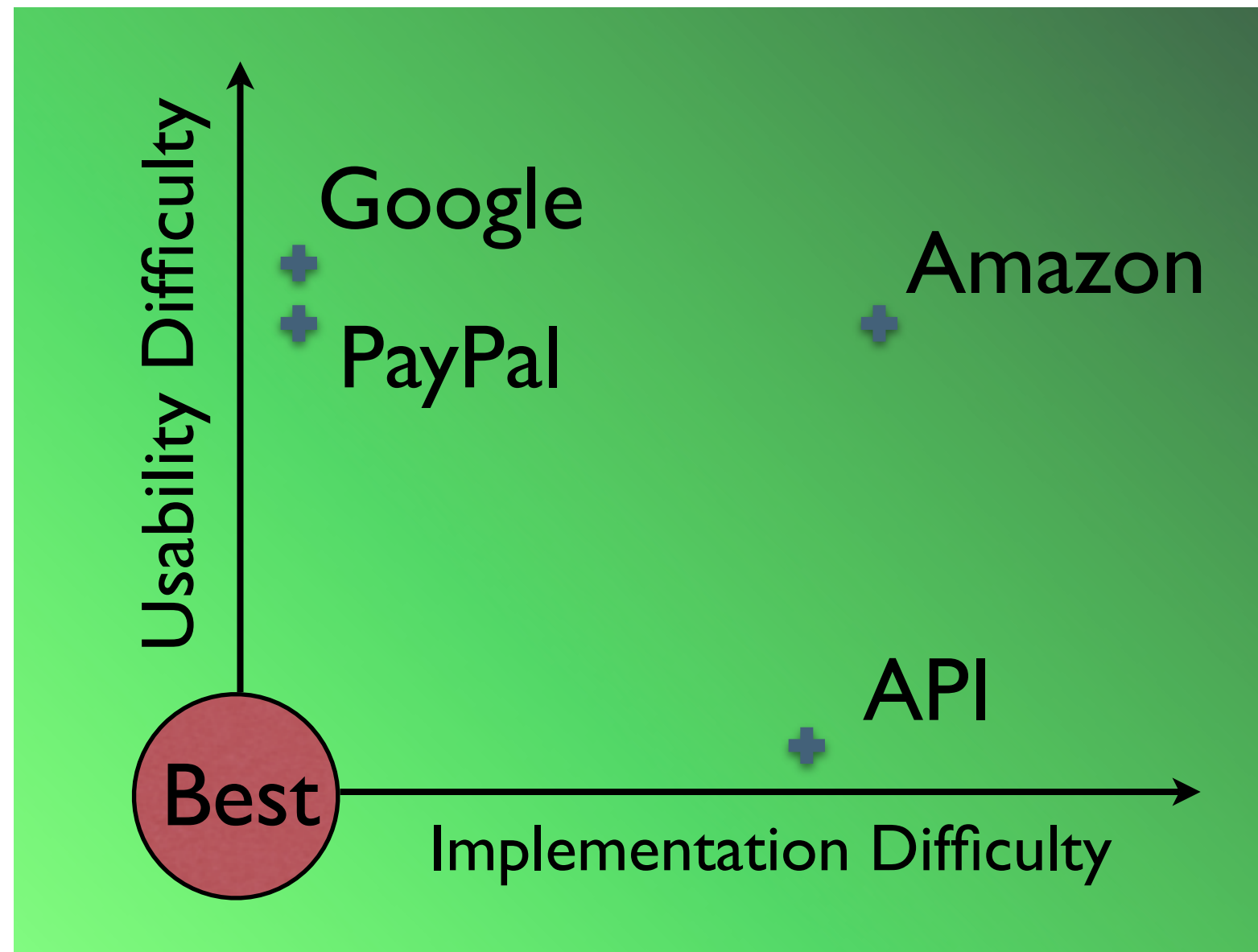
```
%form{:action => "https://checkout.google.com/api/checkout/v2/checkoutForm/Merchant/  
#{ENV['GOOGLE_CHECKOUT_MERCHANT_ID']}", :method => "post", :accept_charset => "utf-8"}  
  - i = 1  
  - for purchasable in @cart.to_a  
    = hidden_field_tag "item_name_#{i}", purchasable.human_name  
    = hidden_field_tag "item_description_#{i}", purchasable.short_description  
    = hidden_field_tag "item_price_#{i}", fmt_money(purchasable.unit_price)  
    = hidden_field_tag "item_quantity_#{i}", purchasable.quantity  
    - i += 1  
  = hidden_field_tag "_charset_"  
  - image_src = "http://checkout.google.com/buttons/checkout.gif?  
merchant_id=#{ENV['GOOGLE_CHECKOUT_MERCHANT_ID']}&w=180&h=46&style=white&variant=text&  
loc=en_US"  
  %input{:type=>"image", :name=>"Google Checkout", :alt=>"Fast checkout through  
Google", :src=>image_src, :height=>"46", :width=>"180" }
```

HAML for generating HTML Checkout Button

```
%form{:action => "http://payments.amazon.com/checkout/", :method =>
"post", :enctype => "multipart/form-data"}
  - i = 1
  - for purchasable in @cart.to_a
    = hidden_field_tag "item_merchant_id_#{i}", "A1TDXY6XJ7JAMX"
    = hidden_field_tag "item_title_#{i}", purchasable.human_name
    = hidden_field_tag "item_price_#{i}", fmt_money(purchasable.unit_price)
    = hidden_field_tag "item_quantity_#{i}", purchasable.quantity
    /= hidden_field_tag "item_description_#{i}", purchasable.short_description
    - i += 1
  = hidden_field_tag "currency_code", "USD"
  %input{:alt=>"Checkout with Amazon Payments", :src=>"https://
payments.amazon.com/gp/cba/button?
ie=UTF8&color=orange&background=white&size=medium", :type=>"image"}
```

- Usability is scored lower for offsite navigation
- Google requires account creation
- An API implementation requires more work



	Branding	No Merchant Account	Secure Callback	Third Party Billing	Recurring
ActiveMerchant Gateway	X		X		X
PayPal Website Standard		X	X		X
Google Checkout		X	X		
Amazon FPS		X	X	X	X
Amazon Checkout		X	X		

- ActiveMerchant support? No. Except for PayPal
- Protix supported in Great Britain
- Challenge: create WorldPay support in ActiveMerchant

Thank you!

<http://activemerchant.org>

Examples: <http://railsvendor.com>

Rich Media Ads: <http://spongecell.com>