



# 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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# E-Commerce



- Buyer pays <u>online</u>
- Goods are delivered
- Cash is received



# Types of Transactions

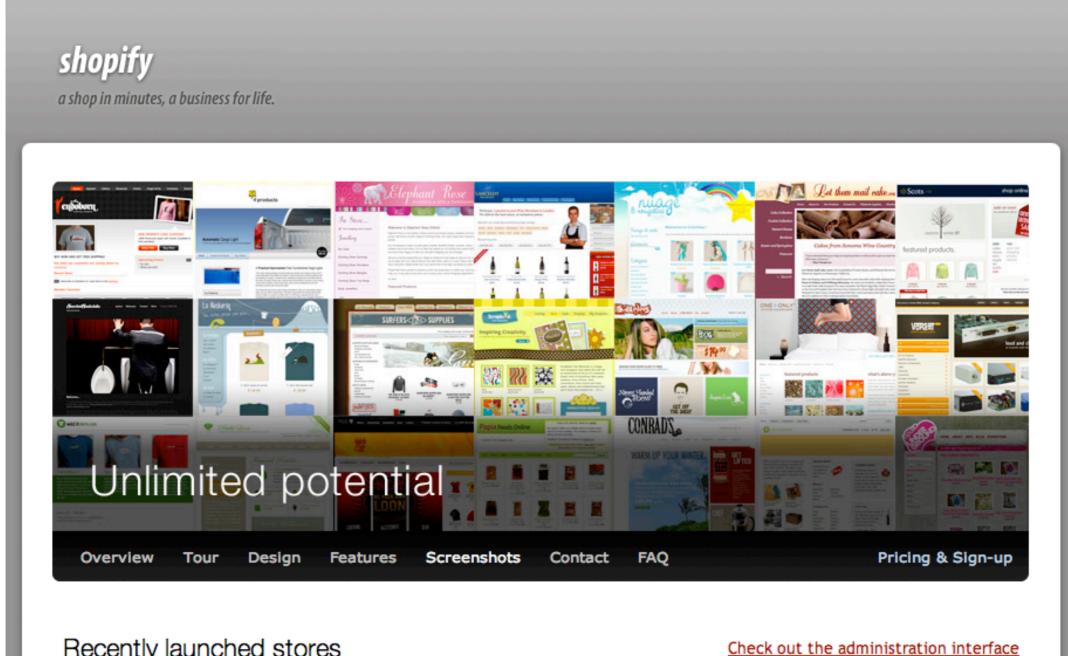


- Products
- Services
- Subscription
- Third Party

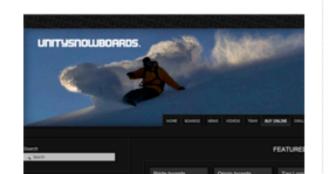


# Shopify





# Recently launched stores



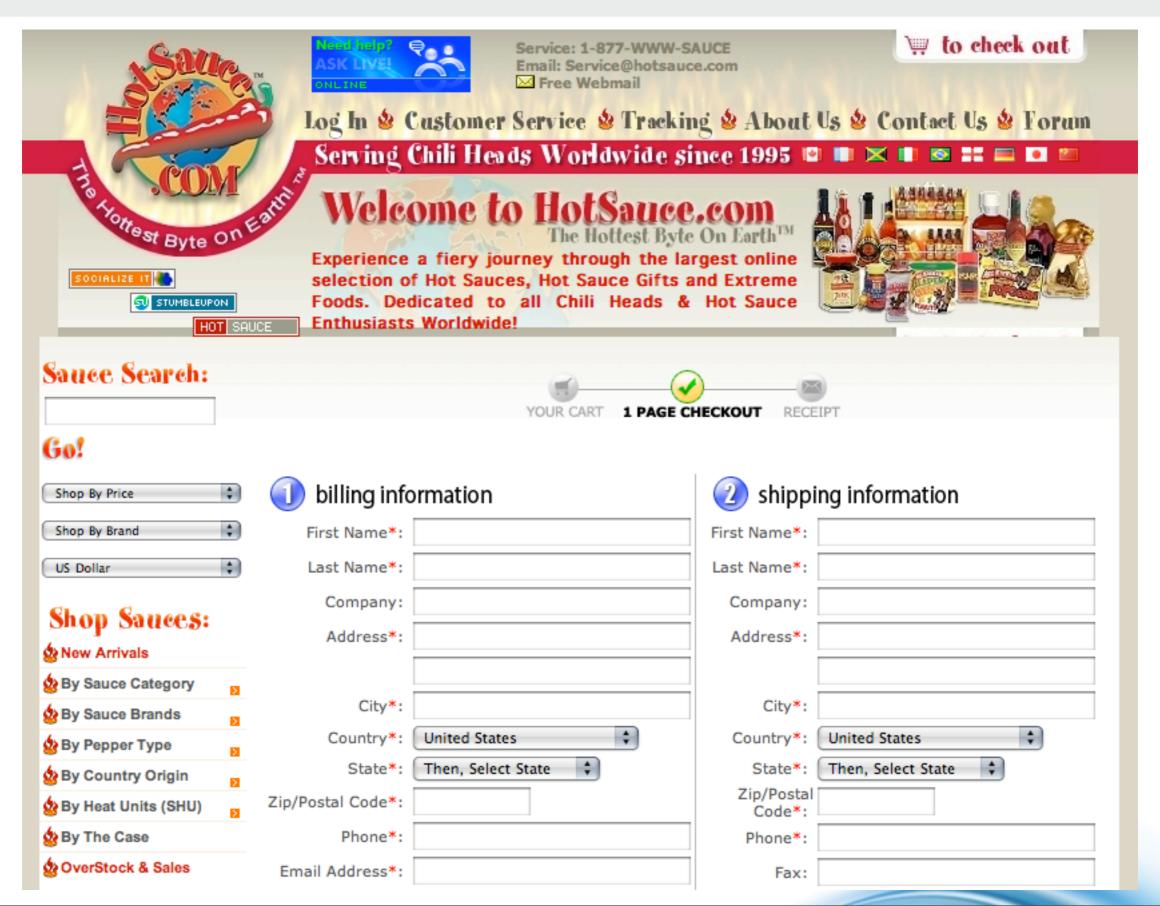






# **Products**







# Services



Club Kay	lani Lei	
	First Name: Address:  State: Pick One  Country: United States  Payment Options: Select Currency  \$19.95(USD) for 30 days then \$19.95(USD) recur  Credit Card #  Expires: Name On Card: Username:	
No		



# Outline



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



# Service Considerations



- Price
- Branding
- Usability
- Banking

# Credit Card Processing Price



	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



# Branding



- 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



# Usability



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



# Banking



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

# Merchant Account



- 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)	Protx (GB)
TrustCommerce (US)	WorldPay (World)



# Implementation



- 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



# Learning the Ropes



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



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



- You want experience, testing, fun
- Shovel + sand = sand castles
- 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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- In reality sandboxes are not good schools
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Implementation sandboxes brought to you by

# Mr. Hankey





# Security



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





Don't do it!



- Don't do it!
- Pay someone else to do it (e.g. Citadel)



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- Payment Card Industry Data Security
   Standard (PCI DSS)



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- \$25,000 fine or liability



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- Payment Card Industry Data Security Standard (PCI DSS)
- 12 Step policy for data security
- \$25,000 fine or liability
- Don't do it!

# **Ospongecell** Address Verification System (AVS)



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



# Examples



# http://RailsVendor.com

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

# Ospongecell Active Merchant Gateway Look

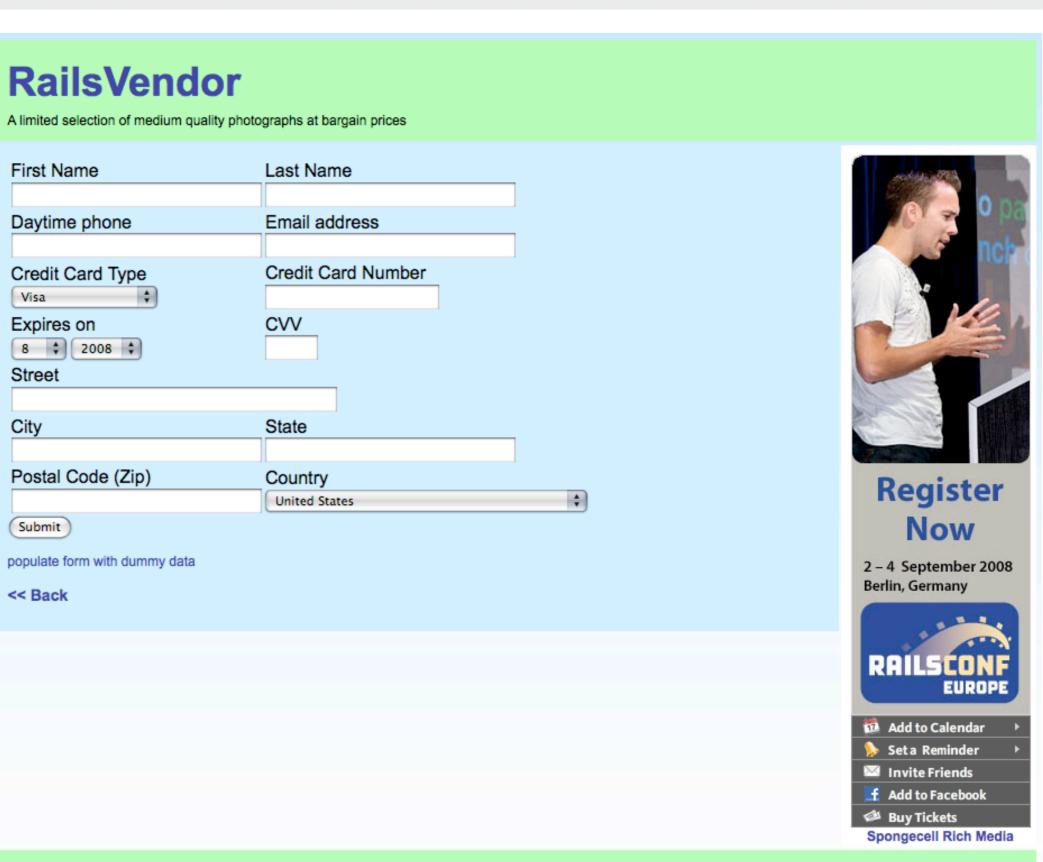


RailsVendor A limited selection of medium quality pho	otographs at bargain prices		
First Name	Last Name		
Daytime phone	Email address		e e o pa
Credit Card Type	Credit Card Number		
Expires on 8 \$ 2008 \$	CVV		一道《
Street			
City	State		
Postal Code (Zip)	Country United States	<b>*</b>	Register
Submit			Now
populate form with dummy data			2 – 4 September 2008 Berlin, Germany
<< Back			
			RAILSCONF
			Add to Calendar >  Set a Reminder >
			Invite Friends  ☐ Add to Facebook
			Buy Tickets Spongecell Rich Media

# Ospongecell Active Merchant Gateway Look



This is your site!



# **Ospongecell** Active Merchant Gateway Look



This is your site!

OMG DHH!

D !! \/ !			
RailsVendor			
A limited selection of medium quality phot	ographs at bargain prices		
First Name	Last Name		
Daytime phone	Email address		Gr & o ba
			nch
Credit Card Type	Credit Card Number		
Expires on	CVV		
8 \$ 2008 \$			
Street			
City	State		
Postal Code (Zip)	Country		Register
	United States	÷	
Submit			Now
populate form with dummy data			2 – 4 September 2008 Berlin, Germany
<< Back			
			200
			RAILSCONF
			Add to Calendar >
			Set a Reminder ► Invite Friends
			Add to Facebook
			Buy Tickets
			Spongecell Rich Media

RailsVendor is open source at GitHub • Your cart currently has 4 items. View Cart

# ©spongecell PayPal Website Standard Look



## RailsVendor

Hand Rail		Total: \$4.14 USD
Pay with Credit Card	d or Log In	PayPal Secure Payments
Learn more about PayPal -	the safer, easier way to pay.	
Enter your billing informati	ion	Already have a PayPal account?
Country:	United States ▼	
First Name:		Please log in
Last Name:		Email:
Credit Card Number:		Password:
Payment Type	VISA DISCOVER AMEX	
Expiration Date:	mm / yy CSC: What's this?	Log In
Billing Address Line 1:		Forgot email or password?
Billing Address Line 2: (optional) City:		Polyde email of password?
State:		
ZIP Code:		
Home Telephone:	555-555-1234	
Email:	333-333-1234	
	Review Order and Continue	

Return to RailsVendor.

# **Ospongecell** PayPal Website Standard Look



### RailsVendor

This is

not your

site.

Hand Rail		Total: \$4.14 USI
Pay with Credit Car	d or Log In	PayPal
Learn more about PayPal -	the safer, easier way to pay.	
Enter your billing informat	tion	Already have a PayPal account?
Country:	United States ▼	
First Name:		Please log in
Last Name:		Email:
Credit Card Number:		Password:
Payment Type	VISA DISCOVER AMEX	
Expiration Date:	mm / yy CSC: What's this?	Log In
Billing Address Line 1:		Forgot email or password?
Billing Address Line 2: (optional) City:		rolgot email or password?
State:	▼	
ZIP Code:		
Home Telephone:	555-555-1234	
	555-555-1234	

Return to RailsVendor.



# Google Checkout Look



kout S		
tout — 47.		Change Language English (US)
Order Details - Rails Vendo	or, 5 Lucerne Street, San Francisco, CA 94103 US	
Qty Item	.,	Price
	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
op faster with Google C		Or sign in  If you already have a Google Account
gn up now to buy quickly a ur orders in one place.	and easily from stores across the web, and track all	Email:
our current email address:		Password:
oose a password:		Sign in and continue
enter password:	Minimum of 8 characters in length. [?]	
cation:	United States ▼	
ard number:	_	
piration date:	mm / yyyy CVC: What's this?	
rdholder name:		
ling Address:		
none number:	City/Town State Zip [?]  Required for account verification.	
shipping address is:	<ul><li>My billing address</li><li>A different address</li></ul>	
	I agree to the <u>Terms of Service</u> .	
	Agree and Continue	

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



# Google Checkout Look



Che	OO eckout	3le ·		<u>elp</u>
			Change Language English (US)	
	Order De	etails - 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	

This is not your site.

Shop faster with Google C Sign up now to buy quickly a your orders in one place.	heckout and easily from stores across the web, and track all
Your current email address:	
Choose a password:	
Re-enter password:	Minimum of 8 characters in length. [?]
Location:	United States
Card number:	VISA DISCOVER
Expiration date:	mm / yyyy CVC: What's this?
Cardholder name:	
Billing Address:	
	City/Town State Zip [?]
Phone number:	Required for account verification.
My shipping address is:	<ul><li>My billing address</li><li>A different address</li></ul>
	I agree to the <u>Terms of Service</u> .



### **Ospongecell** Amazon Checkout Look





#### • 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

### **Ospongecell** Amazon Checkout Look







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

<u>User Agreement | Amazon Payments Privacy Notice | Amazon Payments A-to-z Guarantee</u>

© 2008 Amazon.com, Inc. or its affiliates

This should not be anyone's site.

### Ospongecell Active Merchant Gateway Code



### Ospongecell PayPal Website Standard Code



#### 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
```

#### **Ospongecell**

# Google Checkout Code



#### HAML for generating HTML Checkout Button

### **Ospongecell** Amazon Checkout Code



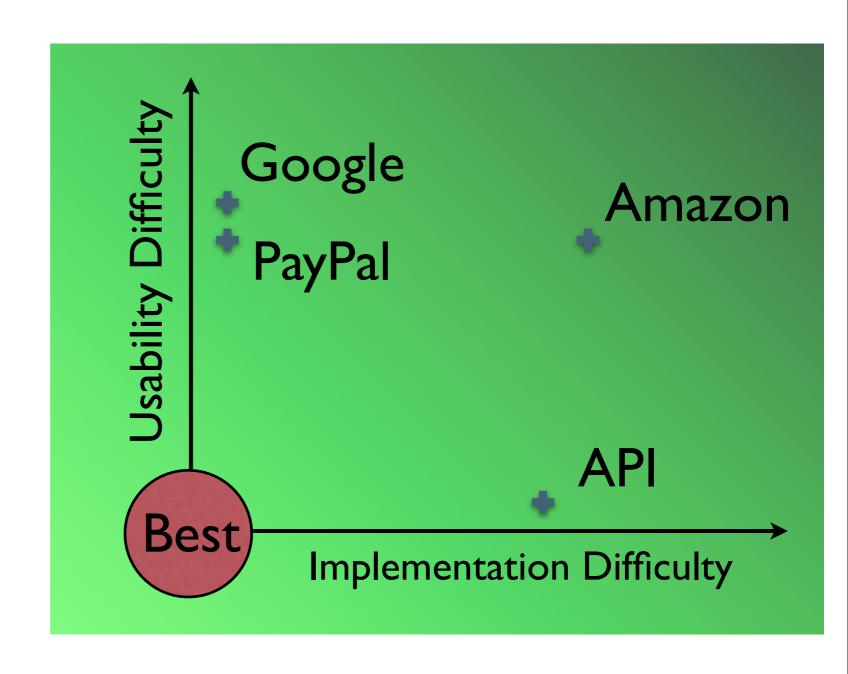
#### HAML for generating HTML Checkout Button

```
%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"}
```



# Magic Quadrant

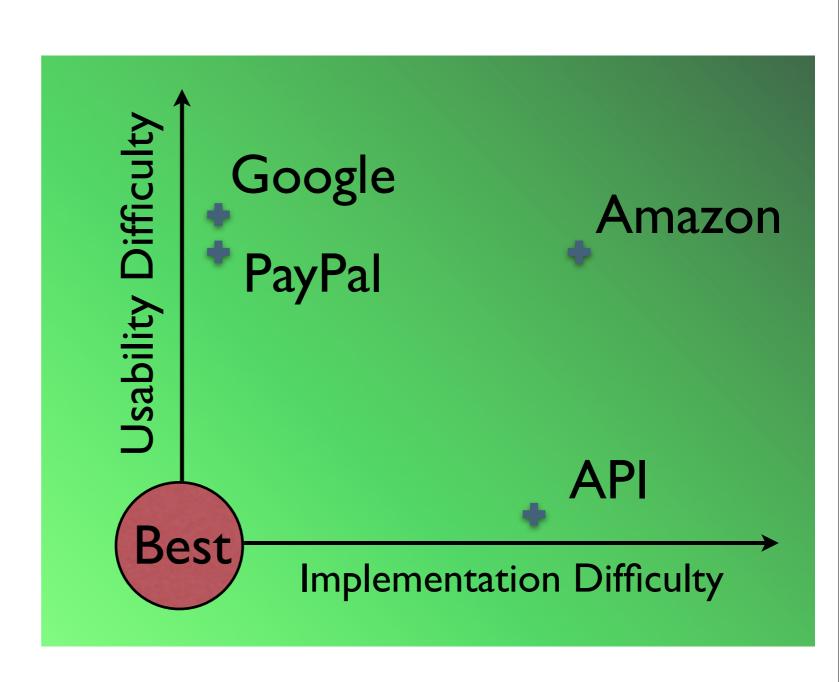




# Magic Quadrant



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





## Feature Grid



	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		





# Thank you!

http://activemerchant.org

Examples: <a href="http://railsvendor.com">http://railsvendor.com</a>

Rich Media Ads: http://spongecell.com

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