



METACERT

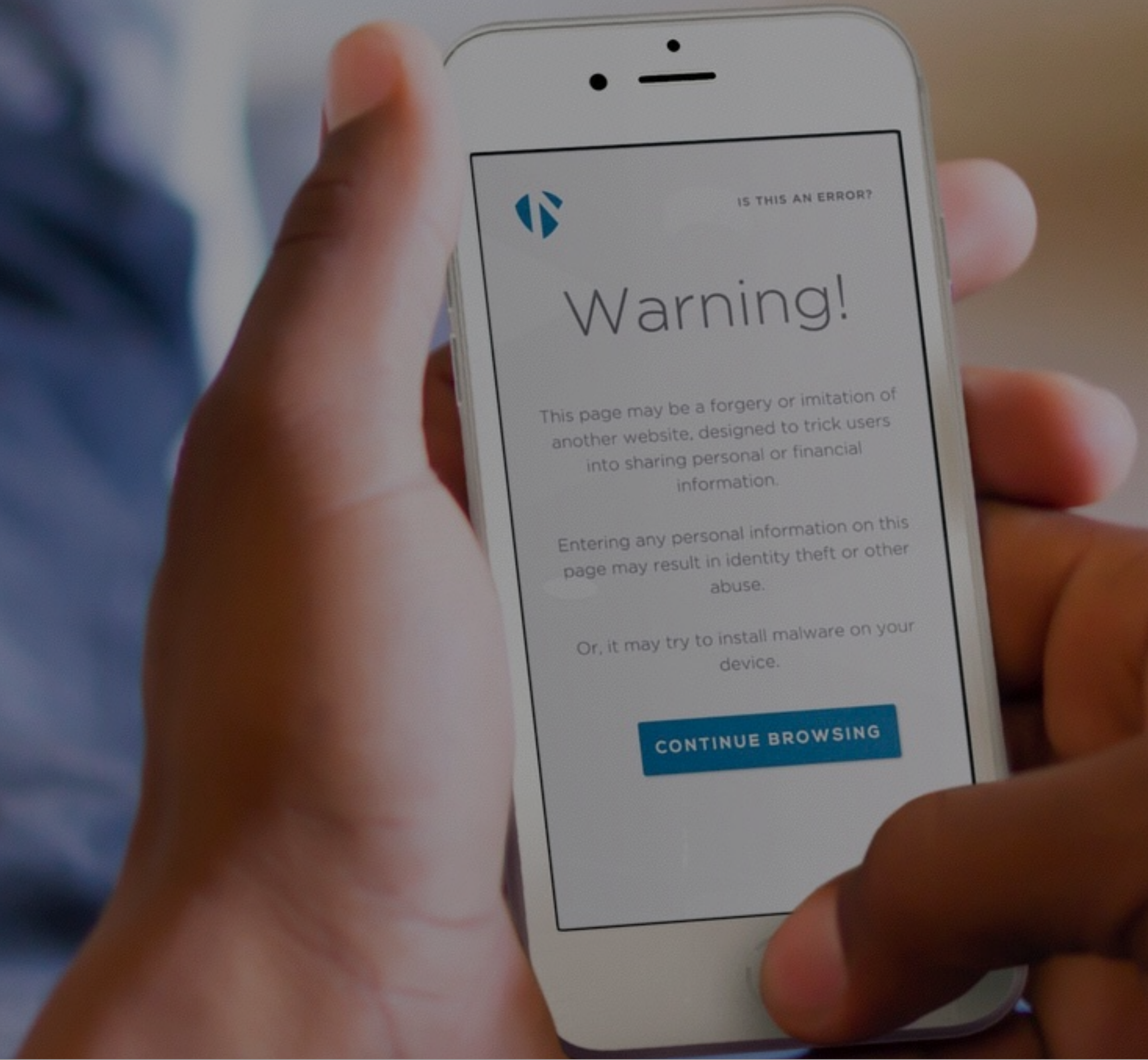
# Security for Mobile Apps

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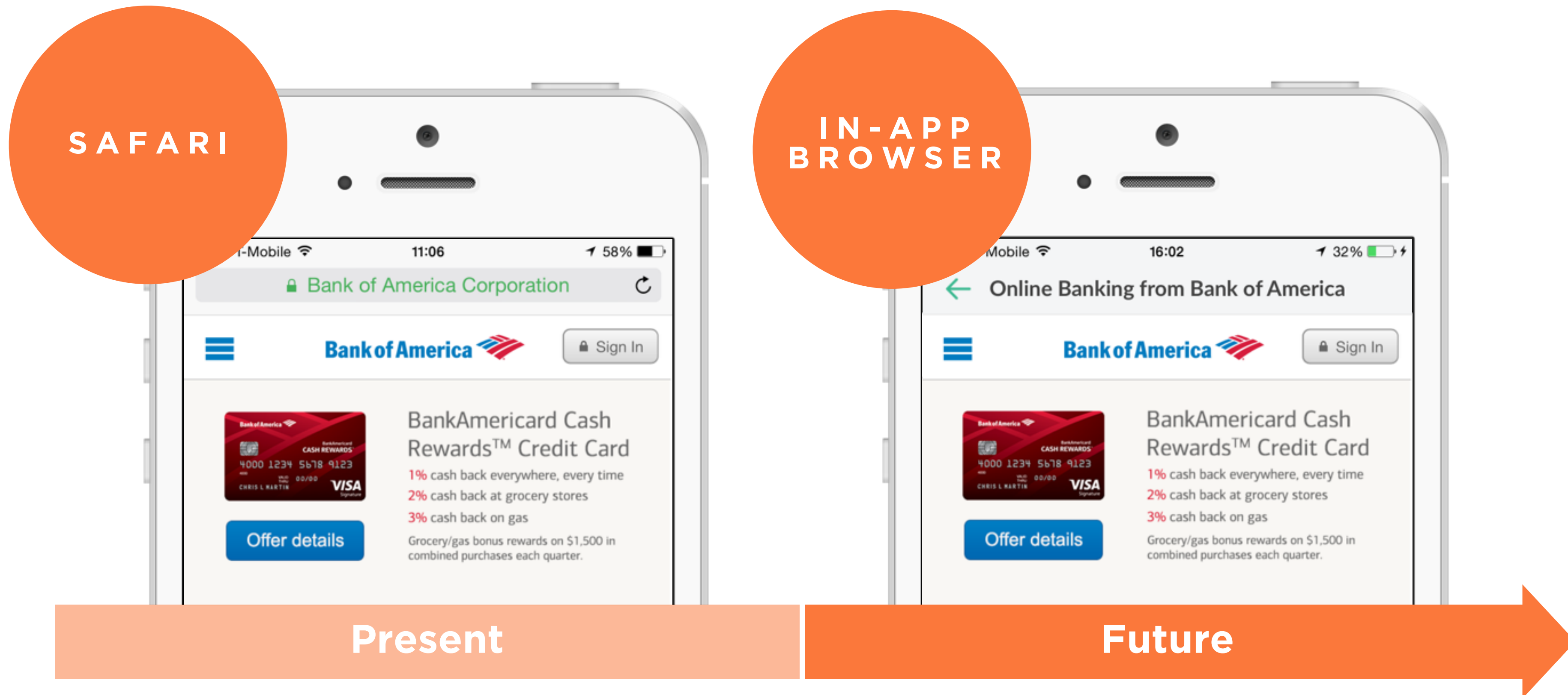
**M E T A C E R T**

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Our mission is to provide the invisible security layer for every URL and IP address that connects devices, APIs, apps and websites - protecting business from cyberattacks via malicious links.

Our go-to-market strategy starts with in-app security focussing on team collaboration because it is a vertical that is currently going through exponential growth.

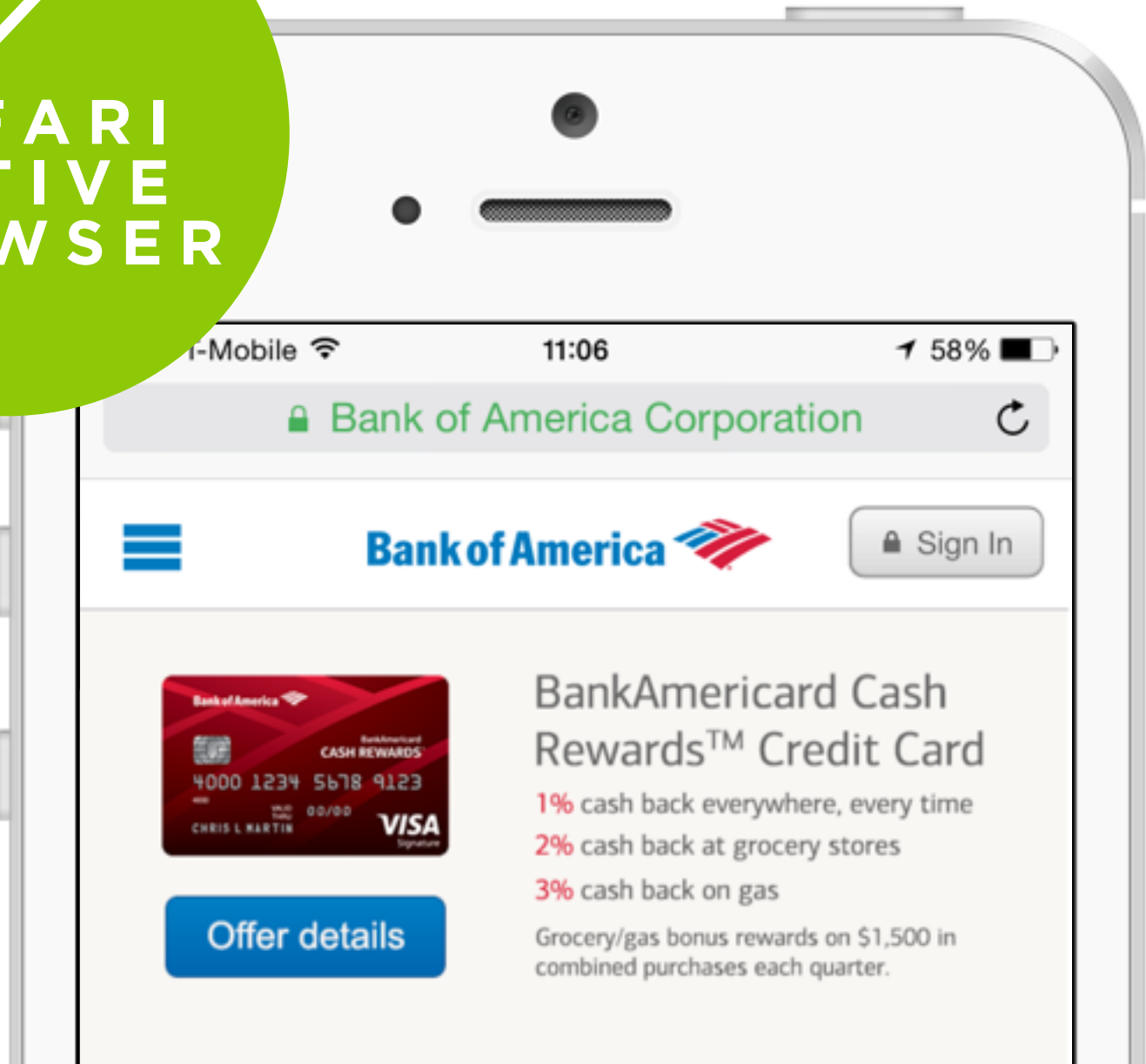
# MORE PEOPLE ARE OPENING WEB LINKS INSIDE APPS INSTEAD OF MOBILE BROWSERS



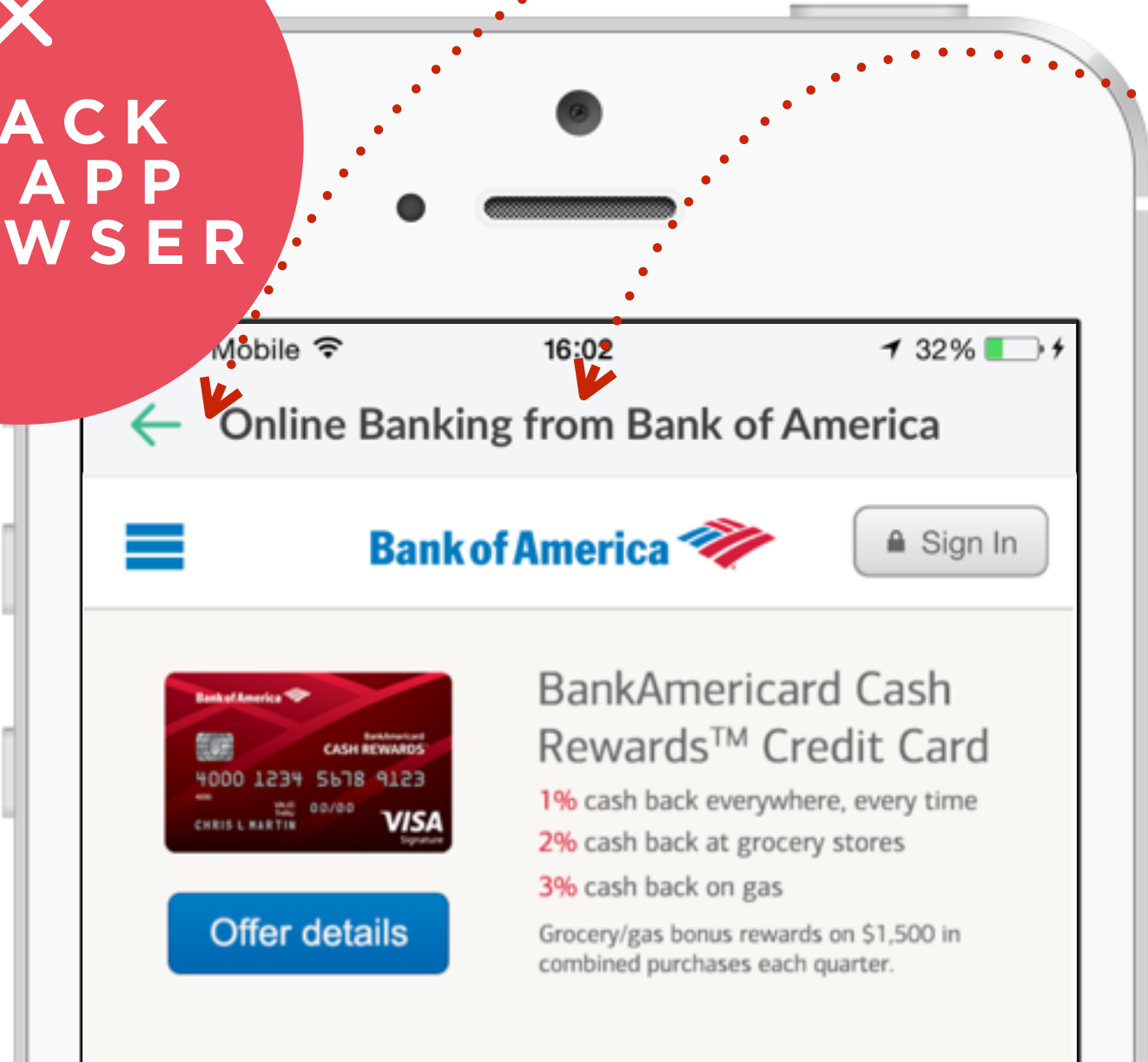
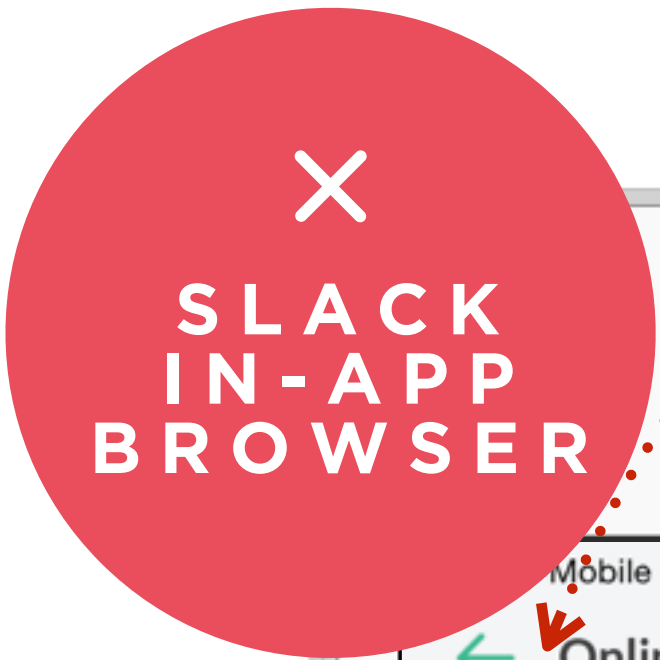
Users have come to expect security from browsers.  
So they assume they're safe when opening links inside apps.



# HOW DO YOU KNOW THIS REALLY IS BANK OF AMERICA?



Present



Future

Millions of people now browse the web inside apps like Slack, HipChat, LinkedIn, Facebook, Messenger, Twitter et al.



## THE PROBLEM

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In-app browsing doesn't have built-in security like native browsers; Safari and Chrome.

Millions of apps built by SMEs have no easy reliable way to protect users from malicious and inappropriate web links.

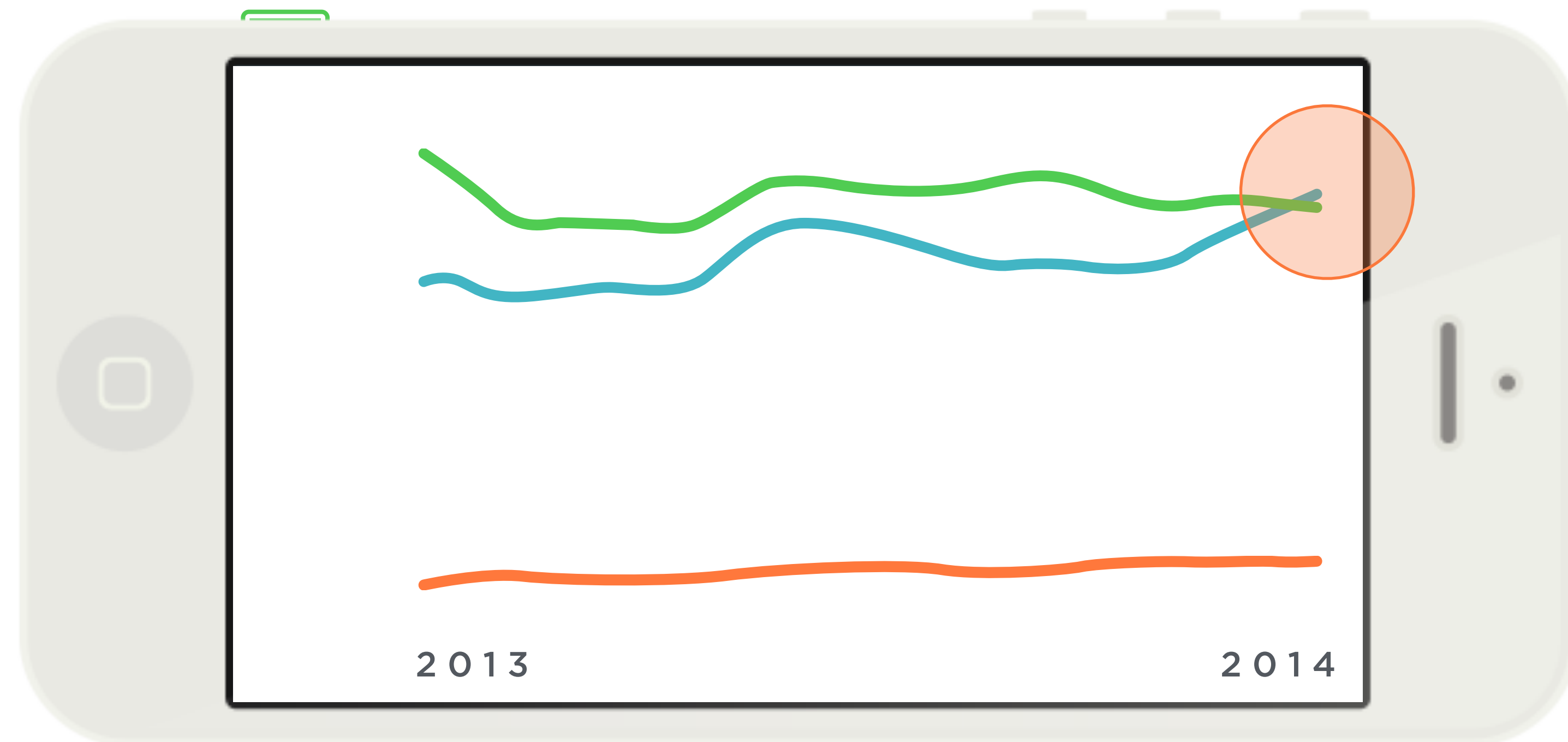
and...

Businesses that use Team Collaboration apps to share sensitive information are most vulnerable because of an exponentially increased user base - and security hasn't had time to keep up.

# WHY NOW FOR IN-APP SECURITY?

Thanks to DIY app making platforms app creation by SMEs is **EXPLODING** and will surpass that of Internet domain names in 2016

TOTAL MINUTES PER MONTH IN THE US:

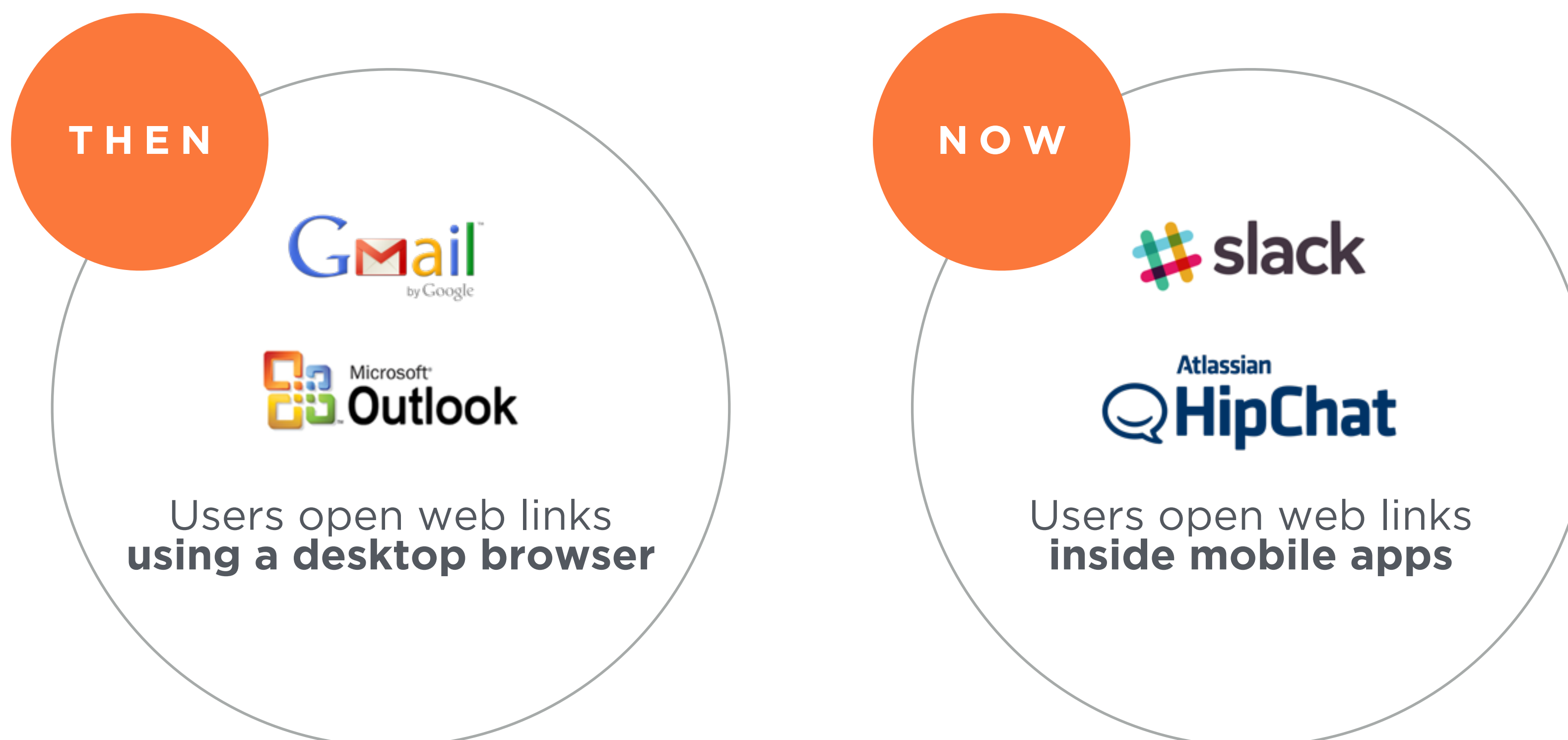


Time spent within mobile apps now **EXCEEDS** desktop web access



# WHY NOW FOR TEAM COLLABORATION SECURITY?

Millions of staff who work for businesses like Bank of America, Uber, Capital One and Intuit open web links inside team collaboration apps every day - with no protection against malicious links & inappropriate content.



In the last two years, 21% of mobile web traffic came from in-app browsers





## THE SOLUTION FOR SMES ON APP MAKING PLATFORMS

It takes a Channel Partner 60mins  
to integrate the Security API.

It takes 30 seconds for an SME to  
select and pay for MetaCert's  
security services.

Integration for SMEs is automated  
and easier than buying an SSL  
certificate for a website.

Subscription package.

Final Review

Packages

Add-Ons

Confirmation

### ADD-ONS

Would you like to add any of these services or features to your package?



#### Secure Your App - Malware

Keep your app's users safe by preventing them from unintentionally accessing sites known for phishing, malware or viruses. (including links from pages that your app links to)



\$5/month  
(\$60/year)



#### Secure Your App - Pornography

Added protection to ensure that known pornographic pages / images are never displayed in your app by any websites that you link to. (or secondary pages that THEY link to)



\$5/month  
(\$60/year)





# THE SOLUTION FOR TEAM COLLABORATION

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No hardware or software required.

It takes 30 seconds for an Enterprise customer to add MetaCert to HipChat.

Only one person is required to install our integration for it to work across every device in the organization.



METACERT

## Enterprise Security Integration

We see a world where your users aren't afraid of clicking on the wrong link.

Protect your business from malicious and inappropriate web links.

Settings

FAQ

Support



### Phishing and Malware Protection

Get built-in Phishing and Malware Protection to help keep your rooms safe from dangerous web links. This feature will warn you when a web link has been reported as a Web Forgery of a legitimate site, as a source of Unwanted Software or as an Attack Site designed to harm your phone or computer.



### Stop Pornography Websites

This feature will warn you before it's too late. MetaCert has classified over 10 billion URLs that your team should probably avoid. Pornography isn't appropriate for work and it could harm your phone or computer, or compromise your corporate network with malware, spyware and other forms of malicious software.



### Join the HipChat Community

Add this feature if you would like to benefit from our HipChat community submissions. We will warn you about Phishing and Malware links that have been reported by other HipChat customers in real time.

Add Integration



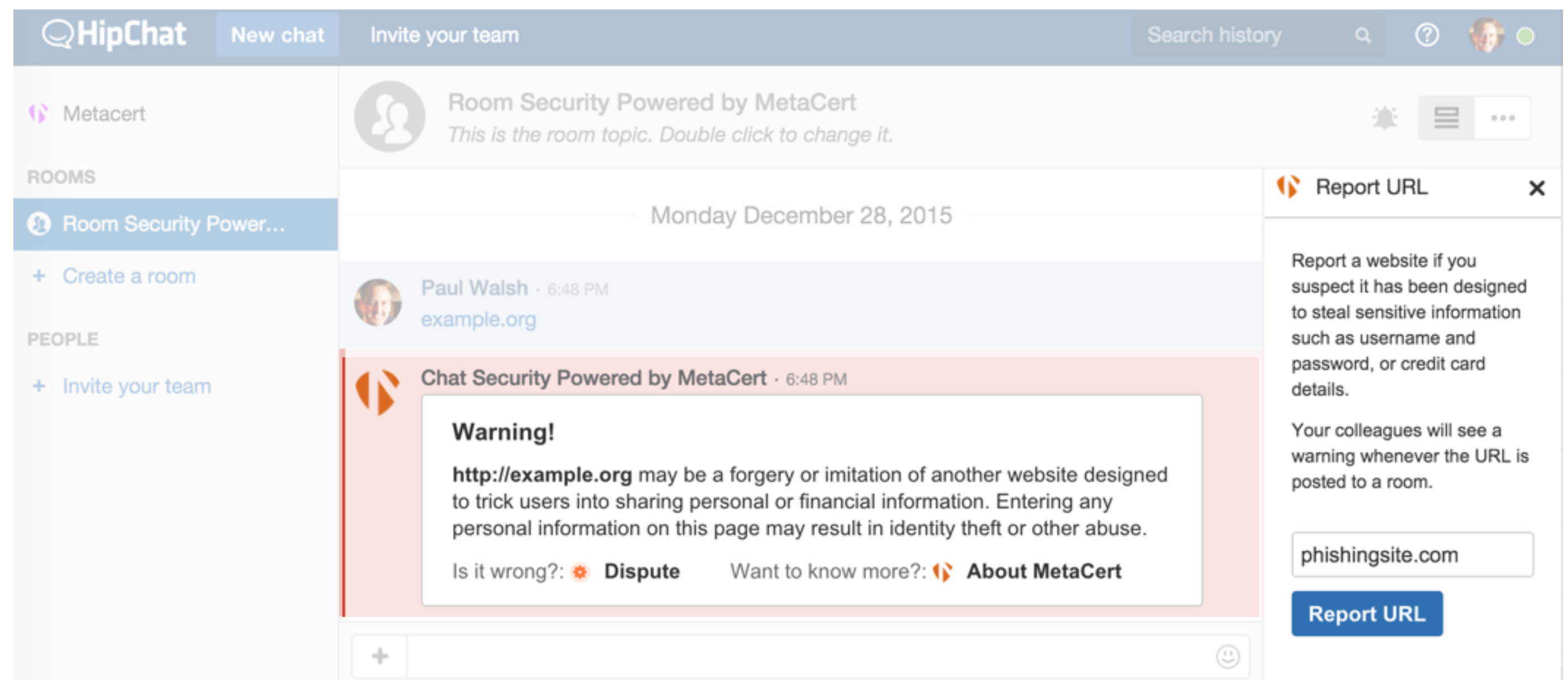
## THE SOLUTION FOR TEAM COLLABORATION

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MetaCert monitors every message, alerting users when a malicious link has been detected.

MetaCert has built the world's first anti-spear phishing solution for Team Collaboration.

Users can flag and immediately warn IT about new malicious links before harm is done.





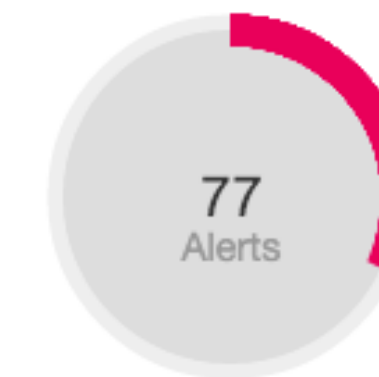


# THE SOLUTION FOR TEAM COLLABORATION

We make MetaCert more sticky by providing message analytics for Management.

Management can monitor the type of websites that staff share across all messages.

Management can easily find out which websites are mostly accessed across the organization.



| Links   | Category           | Name       | Room                         | Date              |
|---|--------------------|------------|------------------------------|-------------------|
| <a href="http://angelousmexicangrill.com/migration/css/yahoo/1/yahoo/yahoo.html">http://angelousmexicangrill.com/migration/css/yahoo/1/yahoo/yahoo.html</a> | Malware & Phishing | Paul Walsh | testing2                     | Dec 22 2015 18:14 |
| <a href="http://badsite3.com/">http://badsite3.com/</a>   | Spear Phishing     | Paul Walsh | Secure Chat                  | Dec 23 2015 19:54 |
| <a href="http://badurl.com/bad.html">http://badurl.com/bad.html</a>   | Malware & Phishing | Paul Walsh | testing2                     | Dec 15 2015 18:57 |
| <a href="http://badurl3.com/">http://badurl3.com/</a>   | Spear Phishing     | Paul Walsh | Capital One                  | Dec 23 2015 20:11 |
| <a href="http://badurlsite.com/">http://badurlsite.com/</a>   | Spear Phishing     | Paul Walsh | First Bank                   | Dec 23 2015 20:15 |
| <a href="http://dangerousite.com/">http://dangerousite.com/</a>   | Spear Phishing     | Paul Walsh | Better Security              | Dec 23 2015 19:59 |
| <a href="http://dangerousurl.com/bad.html">http://dangerousurl.com/bad.html</a>   | Spear Phishing     | Paul Walsh | test4                        | Dec 22 2015 19:38 |
| <a href="http://ertete.org/xyzj.html">http://ertete.org/xyzj.html</a>   | Spear Phishing     | Paul Walsh | TestRoom                     | Dec 15 2015 18:55 |
| <a href="http://example.com/">http://example.com/</a>   | XXX                | Paul Walsh | Security Powered by MetaCert | Dec 18 2015 21:10 |



# HOW IT WORKS



Adrian works for Intuit. He’s working from home and about to open a link inside HipChat

Every link is checked against MetaCert’s treat intelligence system in the cloud

Adrian is warned that this is a phishing site & he should proceed with caution





# REVENUE MODEL

## We sell the following services

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Anti-Phishing & Malware Protection  
Pornography-blocking

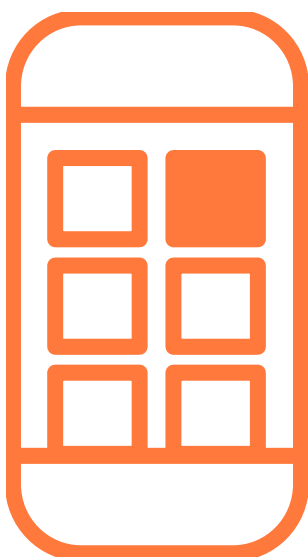
Future services include App Identity Verification to help businesses differentiate their app from malicious/clone apps

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Enterprise customers that use  
Team Collaboration Services

**\$ 1.50** per user/ per month  
Fixed for all services



SMEs that build Apps using  
App Making Platforms

**\$5** per app/ per month  
Each service is paid for separately



# BUSINESS MODEL

## SMEs that build apps using an App Making Platform (Channel Reseller)

MetaCert Platform Partners benefit by promoting their apps as more secure than those built on other platforms.

**50%** of apps built on AppMakr last month subscribed to at least one service.

SMEs are offered MetaCert before checkout.

**85%** of those subscribed to 'Malware & Phishing' & 'XXX-Blocking'.

SMEs pay for MetaCert to help differentiate their app in an increasingly busy search and discovery ecosystem.



2 Million Apps



M E T A C E R T

1 Platform

1.5 Million App Publishers

SME pays \$5 /m for each service

\$10 Million Annual RR





# BUSINESS MODEL

## Enterprises - Team Collaboration

Team Collaboration companies benefit from offering MetaCert to their Enterprise customers, by promoting their service as more secure than corporate email.

Partners like HipChat will promote and market MetaCert, making it easy for us to scale quickly.



1 Channel Partner

1 Enterprise Customer

Customer pays \$1.50 /m per user

\$18,000 Annual RR



# STRATEGIC PARTNERSHIPS / INTEGRATIONS

## Team Collaboration

**HipChat** has committed to marketing MetaCert to its **50,000** enterprise customers in 2016.

**Slack** reached out to us in December 2015 about a “deep and meaningful” partnership. They have **2 million** daily active users.

## App Making Platforms

Our live platform integrations with **AppMakr** and **appery.io** will be leveraged to attract other app making platforms in 2016.

We are in discussion with **Ionic** and **Appcelerator**.

### Team Collaboration



### Operating Systems



### Frameworks & Platforms





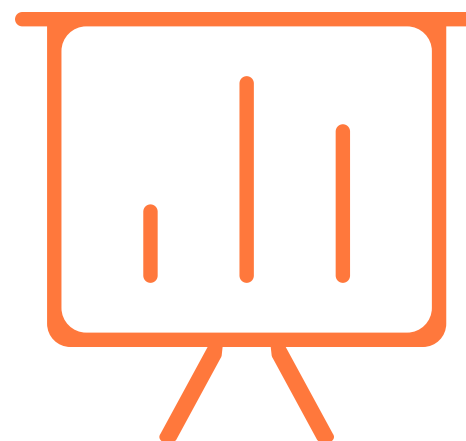


# GO-TO-MARKET STRATEGY



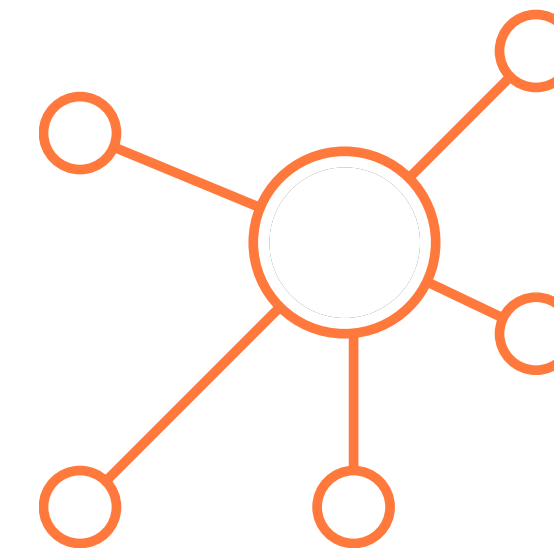
## Tactics: Drive Awareness of Problem

- TechCrunch and BI articles; blog posts
- Speak at mobile security conferences
- Promote with strategic partners e.g. HipChat



## Tactics: Demonstrate Solving Problem

- Drive successful Proof of Concept
- (POC) trials with partners and pilots e.g. HipChat will help with PR
- Gather quantitative and qualitative data through POC; e.g. blocked x number of suspicious links
- Customer case studies with testimonials



## Tactics: Drive Reach Through Strategic Partnerships & Distribution

- We will go after distribution partnerships that will give us wide reach i.e. bottom of the pyramid - app making platforms e.g. AppMakr
- Go after strategic partnerships with long term growth potential e.g. HipChat - 49K+ customers
- Embed at the OS level e.g. Android - long term roadmap
- HipChat is actively helping MetaCert go-to-market with pilot customers - approaching Twitter and other large customers



The Global  
Cybersecurity  
market is expected  
to grow **from  
\$86B to \$155.74B  
by 2019**

# OUR ADDRESSABLE MARKET

United States Only

|  |                 |
|--|-----------------|
| # of HipChat Enterprise Customers (Enterprise Communication) | 49,000          |
| Avg number of users per customer                             | 250             |
| Total number of users  | 12,250,000      |
| Monthly price per user                                       | \$1.50          |
| Monthly Revenue  | \$18,375,000    |
| Annual RR  | \$220,500,000   |
| Total # of Enterprise Customers (Enterprise Communication)   | 595,812         |
| Number of employees  | 95,529,679      |
| Annual RR  | \$1,719,534,222 |
| # of MSMEs that will build long tail apps                    | 5,707,941       |
| Monthly price of each Security Service                       | \$5             |
| Avg Services per company                                     | 1.3             |
| Total Potential Subscriptions                                | 7,420,323       |
| Annual RR  | \$445,219,398   |
| # of companies that will pay for ID Verification             | 400,000         |
| Avg Annual price per app                                     | \$450           |
| Annual RR  | \$270,000,000   |
| TOTAL ANNUAL RR (US Only)                                    | \$2,655,253,620 |





# CORE BACKEND TECHNOLOGY

## One API:

It takes a developer less than an hour to integrate. Adding six lines of code can lookup 10 billion URLs across 60 categories of sites 250ms.

## API Server:

We can turn on new services in less than 60 seconds e.g. block gambling, social networks.

## Index:

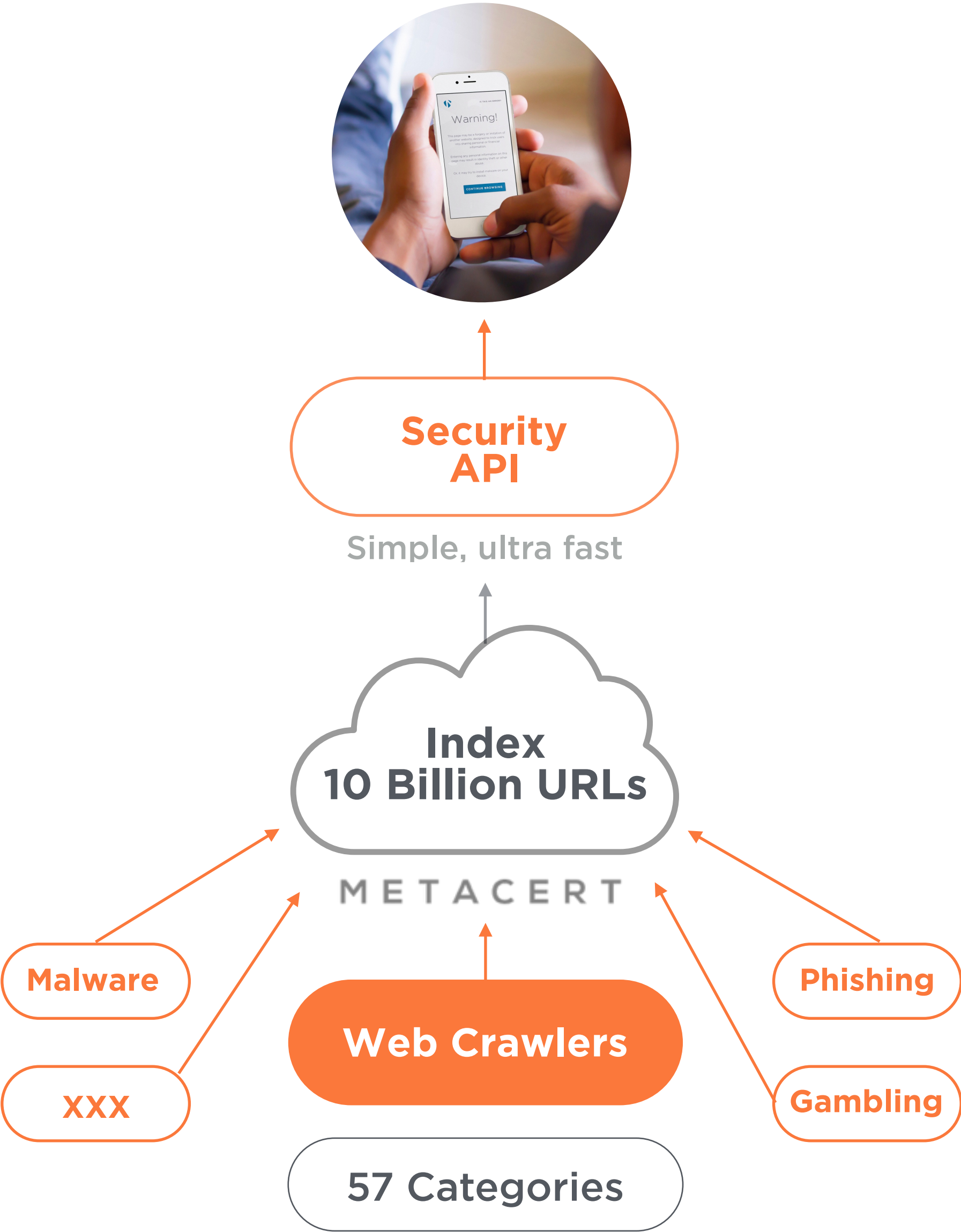
World's biggest database of categorized websites by an order of magnitude. Growing hourly.

## Patent:

Application has been filed. It will prevent other companies from checking the security level of links inside apps.

## Crawlers:

The secret sauce: The world's most advanced Categorization Platform. It's magical.





# COMPETITION

## Network & Device Security

## In-App Browsing Security

Next-Gen



Incumbents





## TEAM



PAUL WALSH

Founder & CEO

Paul co-instigated the creation of the W3C Standard for Web/URL categorization. He is one of the seven original founders of the W3C Mobile Web Initiative and has presented on the same stage as Tim Berners-Lee on these topics. Other W3C Standards include HTML.

MetaCert's patent-pending app security solution is based on his unique knowledge and expertise in this field.

Paul started his first mobile testing company Segala, in 2003, bootstrapped the company to \$2M + in revenue. Opened an Indian restaurant when he was 29 - it now has a Michelin Star.

AOL '95 - '98 First Technical Accounts Manager and Intl Beta Coordinator in Europe.



DAVID ROOKS

Head of Data & Frontend Developer

David has held senior development positions at Telefonica and BSkyB. He has contributed to more W3C Technical Specifications than mos, including co-authoring the W3C Standard for Web/URL Categorization and Mobile Web Best Practice Specifications.

David holds a Degree in Software Engineering from Queensland University of Technology.

David worked as General Manager at Paul's last company Segala, for 8 years.



ALFONSO VALDES

DevOps & Full Stack Engineer

Alfonso is a certified Ethical Hacker and has worked in Senior Engineering and Network Management positions for Sprint, Texas Instruments and Affiliated Computer Services.

Alfonso holds a degree in Computer Engineering from Tecnológico de Monterrey.





# INVESTMENT OPPORTUNITY

CURRENTLY  
RAISING

**\$750K to \$1M** on a \$5.9M Pre (equity)  
14 to 18 months runway

**\$350K Committed:** TiE Angels, Monta  
Vista Capital and TiE LaunchPad

**\$400K** required to fill the round. An  
additional \$250K will provide buffer /  
longer runway.

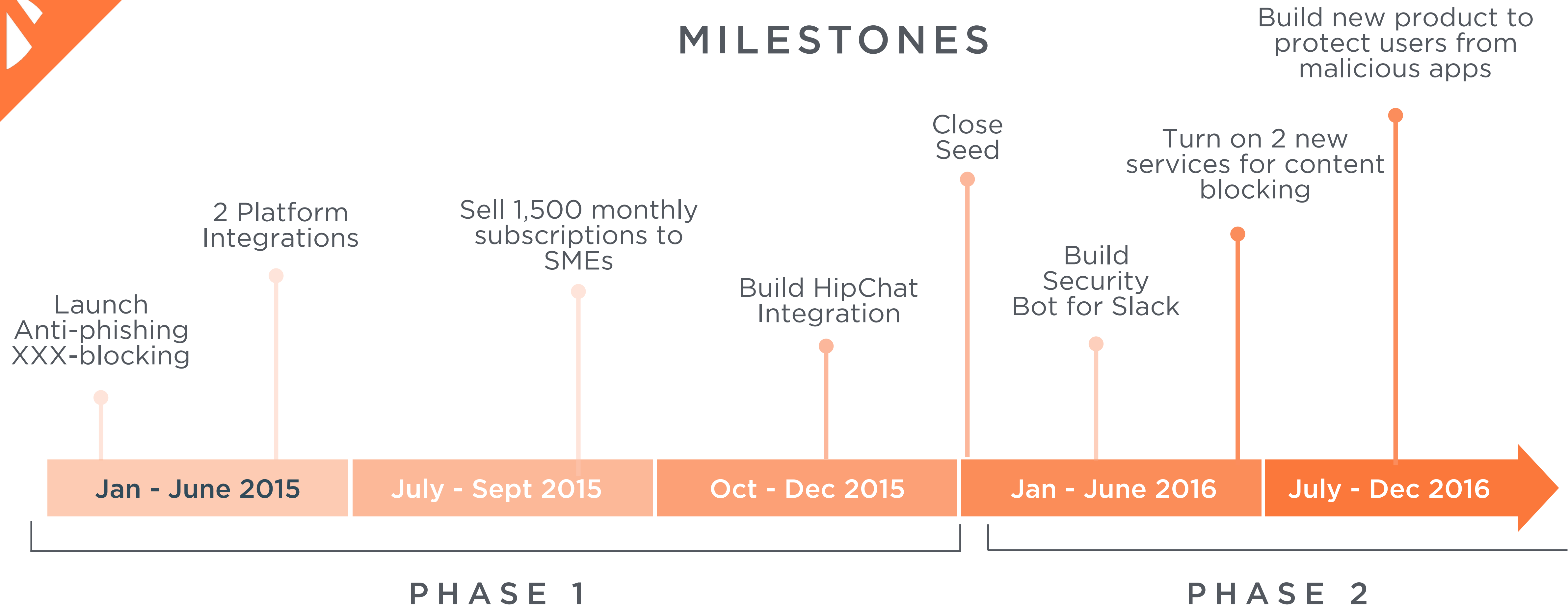
FUNDING  
WILL BE  
USED TO

Full time Business  
Development / Senior  
Engineer to help with the  
demand we are seeing

Both positions have been  
filled by excellent  
candidates. The engineer has  
already started.



# MILESTONES



- Better understand MAU & optimize
- Close 5+ Major Platform Integrations
- Close 2+ major Team Collaboration / Messaging Services
- Launch a new category every 3 months
- Close at least 20 Enterprise Customers using HipChat

- Launch App Owner ID Verification to combat malicious/cloned apps
- Trustmark for apps
- Extend our threat intelligence platform to support IoT mac address classification / lookup



METACERT

# APPENDIX





## COMPANY HISTORY

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Our original mission was to secure integrations with every smart phone and tablet in the world, to solve the problem of Internet Safety for kids.

Between 2011 - 2014 we raised \$1.2M to build crawling technology, a content classification platform (threat intelligence system) and consumer products to show potential partners how to make use of our data.

After winning a competitive pitch with Samsung and Apple for integration with over 1.3 BILLION devices, both companies decided that the timing wasn't right for them. So they decided not to proceed with the integrations.

Due to a reduced market size, we decided to build a new Security API and change our business model to Mobile Security, which is now a bigger opportunity.



M E T A C E R T

# COMPETITIVE ADVANTAGE

MetaCert's patent application will prevent other companies from checking the security level of URLs inside apps.

MetaCert has the full support of HipChat - they will help sell our Security Integration - this will make it difficult for a competing service to win enterprise customers in this space.

MetaCert is being integrated with the world's biggest app making platforms - once integrated, it's extremely unlikely that a platform reseller would want to offer a competing service.

Google has a similar API service for desktop browsers, but it's extremely complicated when compared with MetaCert's. Google doesn't have any Developer Tools or Platform integrations. Our patent application will prevent Google from offering their service to app publishers.

MetaCert has built the world's most advanced threat intelligence platform. We have crawled and classified the largest dataset of categorized URLs and IP addresses - with the world's lowest error rate of false positives at 0.3%.

Our technology can be used to classify IoT devices.



# MOBILE SECURITY LANDSCAPE

|                    | Mobile Security Stack |           |                  |        |         | Non-Mobile |
|--------------------|-----------------------|-----------|------------------|--------|---------|------------|
|                    | In-App (NEW)          | App Layer | Operating System | Device | Network | Computer   |
| MetaCert           |                       |           |                  |        |         |            |
| Area1 Security     |                       |           |                  |        |         |            |
| AVAST Software     |                       |           |                  |        |         |            |
| AVG                |                       |           |                  |        |         |            |
| Barracuda Networks |                       |           |                  |        |         |            |
| Bit9               |                       |           |                  |        |         |            |
| BullGuard          |                       |           |                  |        |         |            |
| Bromium            |                       |           |                  |        |         |            |
| ESET               |                       |           |                  |        |         |            |
| FireEye            |                       |           |                  |        |         |            |
| F-Secure           |                       |           |                  |        |         |            |
| Good Technology    |                       |           |                  |        |         |            |
| Google             |                       |           |                  |        |         |            |
| IBM                |                       |           |                  |        |         |            |
| Ionic Security     |                       |           |                  |        |         |            |
| Kaspersky          |                       |           |                  |        |         |            |
| Lookout            |                       |           |                  |        |         |            |
| McAfee             |                       |           |                  |        |         |            |
| MobileIron         |                       |           |                  |        |         |            |
| NQ Mobile          |                       |           |                  |        |         |            |
| Okta               |                       |           |                  |        |         |            |
| OpenPeak           |                       |           |                  |        |         |            |
| Palo Alto Networks |                       |           |                  |        |         |            |
| Samsung            |                       |           |                  |        |         |            |
| SAP                |                       |           |                  |        |         |            |
| Sophos             |                       |           |                  |        |         |            |
| SonicWALL          |                       |           |                  |        |         |            |
| Symantec           |                       |           |                  |        |         |            |
| Trend Micro        |                       |           |                  |        |         |            |
| Veracode           |                       |           |                  |        |         |            |
| VMWare             |                       |           |                  |        |         |            |
| Websense           |                       |           |                  |        |         |            |





# MOBILE SECURITY LANDSCAPE



M E T A C E R T

## MetaCert

is the 1st to defend apps from malware & phishing URLs. And the only company in the world, to defend applications from pornography + 59 additional categories of web content.

The MetaCert API is designed with developers in mind, with a distribution model that hasn't been addressed before now.

Patent application pending.



## Good Technology

does not offer a service that defends applications from malicious URLs or unwanted content.



## Google

is MetaCert's only competitor to defend apps from malware & phishing URLs. But it does not support any other category. And their Safe Browser API is much more complicated than MetaCert's. Google has no platform integrations at this time so MetaCert benefits from faster adoption.

Google will be infringing on MetaCert's patent should it be approved in February 2016.

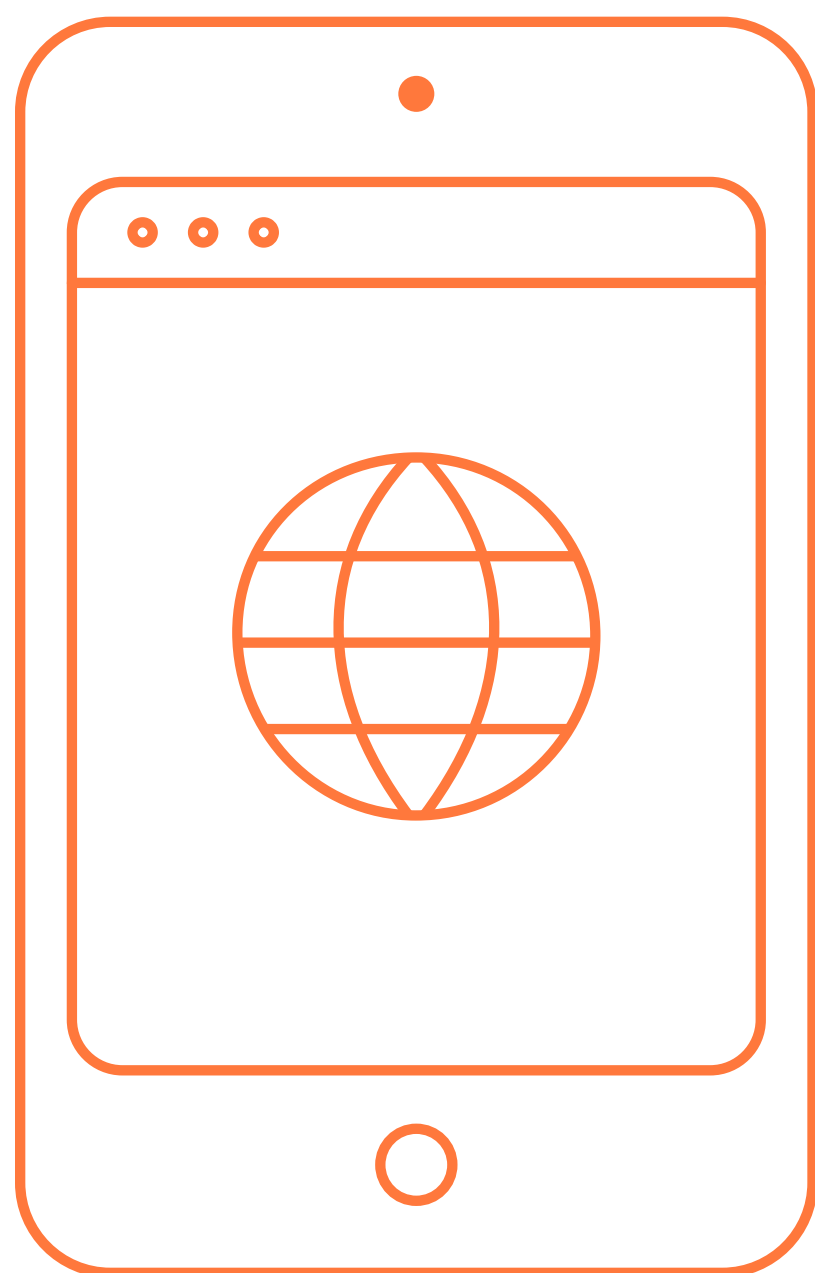


## Veracode

does not offer a service that defends applications from malicious URLs or unwanted content.



# WHAT IS AN IN-APP BROWSER (‘WEBVIEW’) IN PLAIN ENGLISH?



‘WebView’ is a code library provided Apple & Google to help developers display web content inside iOS and Android apps.

Developers use a WebView to give apps browser-like capability so end-users don’t need to close the app to open links using a native browser.

When the app ecosystems were first launched, Google & Apple couldn’t have known the extent to which their WebViews would be used today - especially with ‘hybrid’ apps being built entirely around a WebView. Hence the lack of security today.

HTML5 was only released as a W3C Full Recommendation in 2014, making it possible for virtually anyone to publish ‘hybrid’ apps using a DIY App Making Platform.



# METACERT'S WEB CATEGORIZATION PLATFORM IS PURE MAGIC!

When an end-user tries to share or open the image <http://imgur.com/r/sex/sex.html> MetaCert's API sends a request to MetaCert's trusted database 'TrustServ', to see if it is safe to open or not. The syntax on the right is the response given to the API call.

[imgur.com](http://imgur.com) is a reputable image sharing website used by millions of people. It would be wrong to categorize the entire site as 'XXX' even though there is a large number of images that are nsfw uploaded on a regular basis.

It is technically impossible for any company to classify images the minute they are uploaded - or even soon afterwards. So across the web, tens of millions of URLs go unclassified by MetaCert's competitors.

MetaCert's unique system has classified [imgur.com](http://imgur.com) as 'image sharing' and [imgur.com/r/sex/](http://imgur.com/r/sex/) as 'XXX'. This means every image uploaded to that folder will be automatically classified and therefore, detected by our Security API. This is pure magic. And it's the reason MetaCert Founder Paul Walsh co-instigated the creation of the W3C Standard for web categorization, replacing PICS in 2009!

```
{
  "status": {
    "code": 200,
    "message": "OK"
  },
  "data": {
    "URLs": [
      {
        "url": "http://imgur.com/r/sex/sexy.html",
        "type": "xxx"
      }
    ],
    "Folders": [
      {
        "folder": "/r/sex/",
        "type": "xxx",
      }
    ],
    "Domains": [
      {
        "domain": "imgur.com",
        "type": "image-sharing"
      }
    ]
  }
}
```





METACERT

# THANK YOU

**Paul Walsh**

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**Founder & CEO**

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