Nominee Showcase Presentation

ISE® Northeast Executive Forum and Awards 2012

JP Morgan Chase

Trusted Email Registry

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Company Overview

J.P.Morgan

- JPMorgan Chase (NYSE: JPM) is one of the oldest financial institutions in the United States. With a history dating back over 200 years, here's where we stand today:
- We are a leading global financial services firm with assets of $2.3 trillion.
- We operate in more than 60 countries.
- We have more than 240,000 employees.
- We serve millions of consumers, small businesses and many of the world's most prominent corporate, institutional and government clients.
- We are a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management and private equity.
- Our stock is a component of the Dow Jones Industrial Average.

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Presentation/Project Overview

- Business Case for the Trusted Email Registry
- Implementation Approach
- Lessons Learned
- Results

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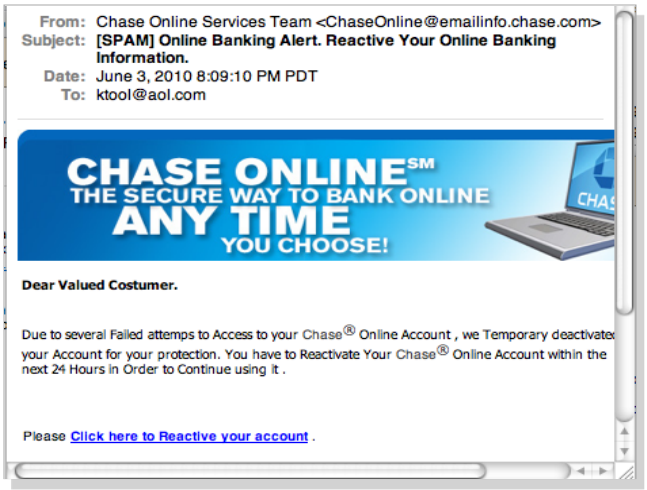
- JPMorgan Chase sends 4 billion emails per year to its customers
- 600,000,000 emails are sent annually to JPMC customers that are *FRAUDULENT* and not from JPMC domains
    - 15% of emails going to JPMC customers are fraudulent and potentially malicious resulting in:
        - Customer fraud
        - Brand erosion
        - Dilution of legitimate email effectiveness and the corresponding loss in sales/service opportunities


From: Chase Online Services Team <ChaseOnline@emailinfo.chase.com>
Subject: [SPAM] Online Banking Alert. Reactive Your Online Banking Information.
Date: June 3, 2010 8:09:10 PM PDT
To: ktool@aol.com

CHASE ONLINE℠
THE SECURE WAY TO BANK ONLINE
ANY TIME
YOU CHOOSE!

Dear Valued Costumer.

Due to several Failed attemps to Access to your Chase® Online Account , we Temporary deactivate your Account for your protection. You have to Reactivate Your Chase® Online Account within the next 24 Hours in Order to Continue using it .

Please Click here to Reactive your account .

One of over 100 Million JPMC **Exact-Domain Match Phish** Messages Delivered per Year **at Google and Yahoo alone!**

Each Message Purports to be From a JPMC Domain

Many are phishing emails…

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Phishing Attacks Number 33 Million Each We
By Jennifer LeClaire
E-Commerce Times
Part of the ECT News Network
03/22/05 8:24 AM PT
"Offline retailers worked together to reduce fr
the years and have cut it down to under 1 perc
retail sales," said Jupiter Research retail analy
Freeman Evans. "Now online retailers have to
together to make sure phishing doesn't continue at this rapid growth

Gartner Survey Shows Phishing Attacks Escalated in 2007; More than $3 Billion Lost to These Attacks

Debit Cards Emerged as the Financial Instrument Targeted Most by Fraudsters

STAMFORD, Conn., December 17, 2007— Phishing attacks in the United States soared in 2007 as $3.2 billion was lost to these attacks, accordin
Inc. The survey found that 3.6 million adults lost mc
months ending in August 2007, as compared with th
before.

Gartner Says Number of Phishing Attacks on U.S. Consumers Increased 40 Percent in 2008

Fraudsters Focus on Higher-Volume and Lower-Value Phishing Attacks

STAMFORD, Conn., April 14, 2009—

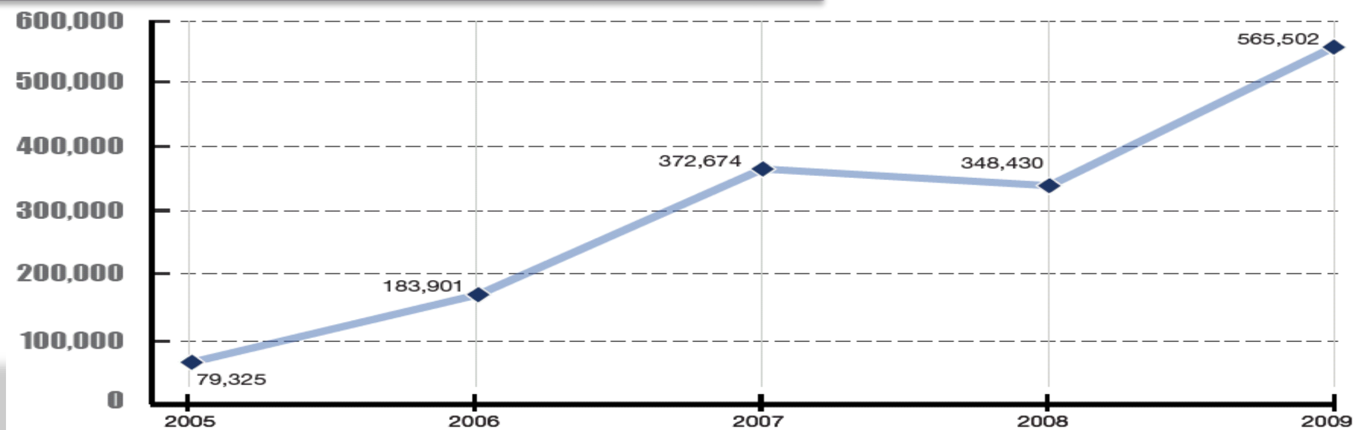
More than 5 million U.S. consumers lost money to phishing attacks in the 12 months ending in September 2008, a 39.8 percent increase over the number of victims a year earlier, according to Gartner, Inc.

> $3M cost per attack to brand-owner

> 2000 brands phished per year

57,000 phish websites per week

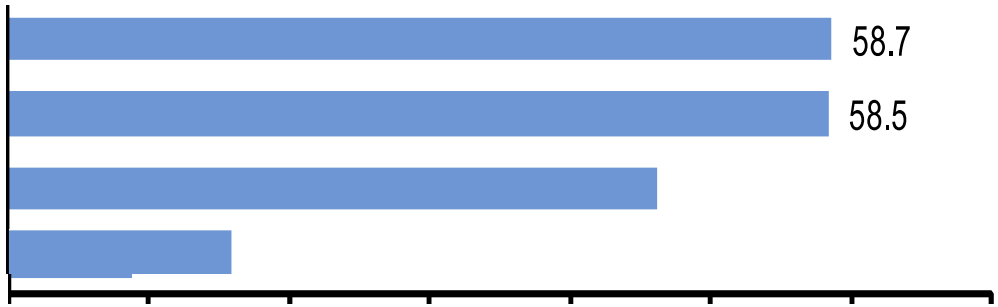
700% Increase In Phishing Attacks In 4 Years



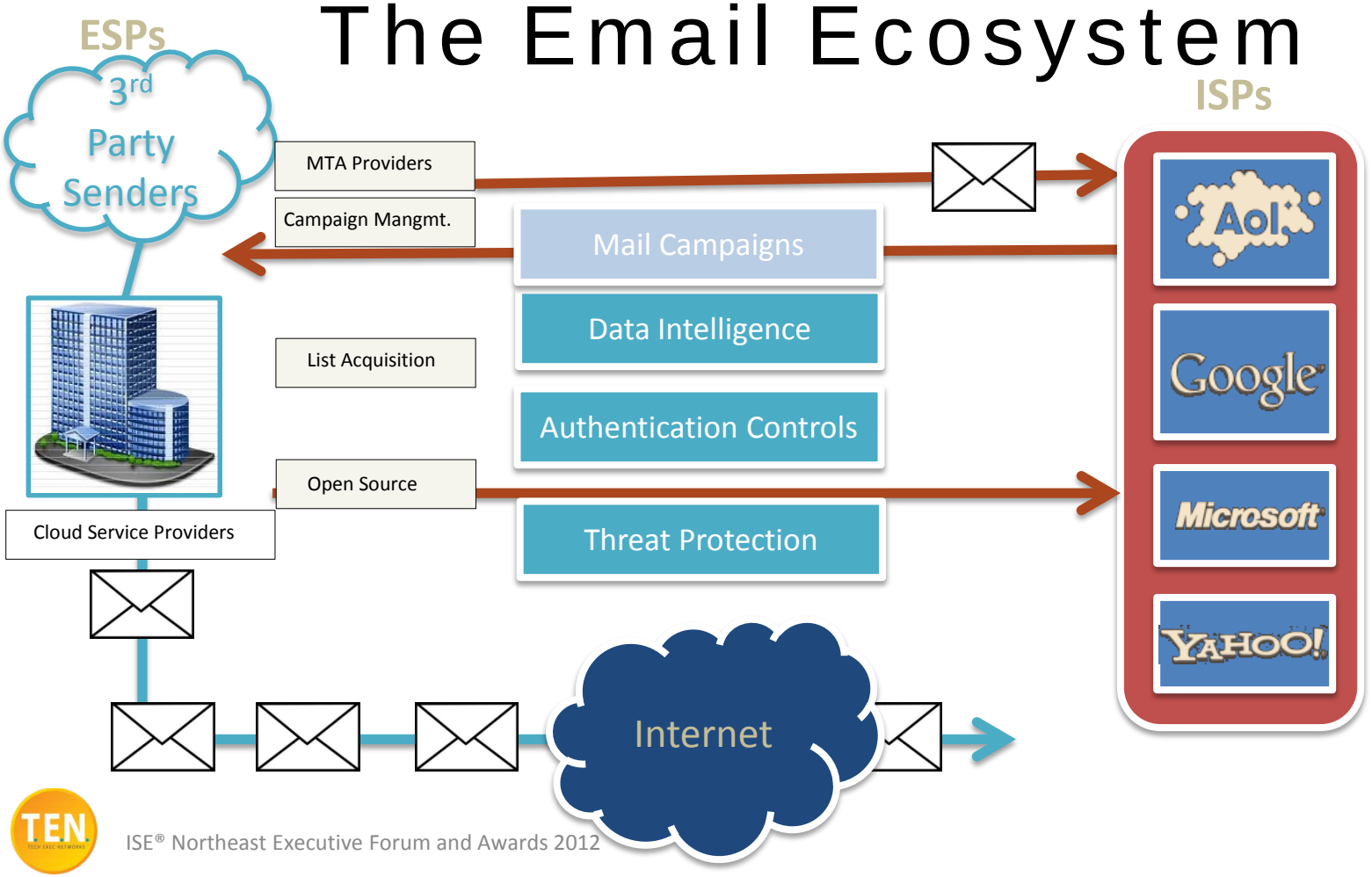
Phishing attacks per year for 2005 – 2009.

Consumers are Losing Confidence

Figure 2. Security Concerns Have Affected Behaviors



The Email Ecosystem



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Implementation

1. Implement Sender Policy Framework (SPF) and Domain Keys Identified Mail (DKIM)

J.P.Morgan CHASE

JPMC Registered Domains	ESPs 3rd Party Domains
Chase.com Jpmchase.com	Epsilon.com Emailsender.com

2. Enable email Intelligence

- Implement email authentication monitoring
- Identify 3rd party mailers
- Integrate Malicious URL Takedown
- Implement domain monitoring & alerting

3. Apply Controls to 3rd Party Management Practices

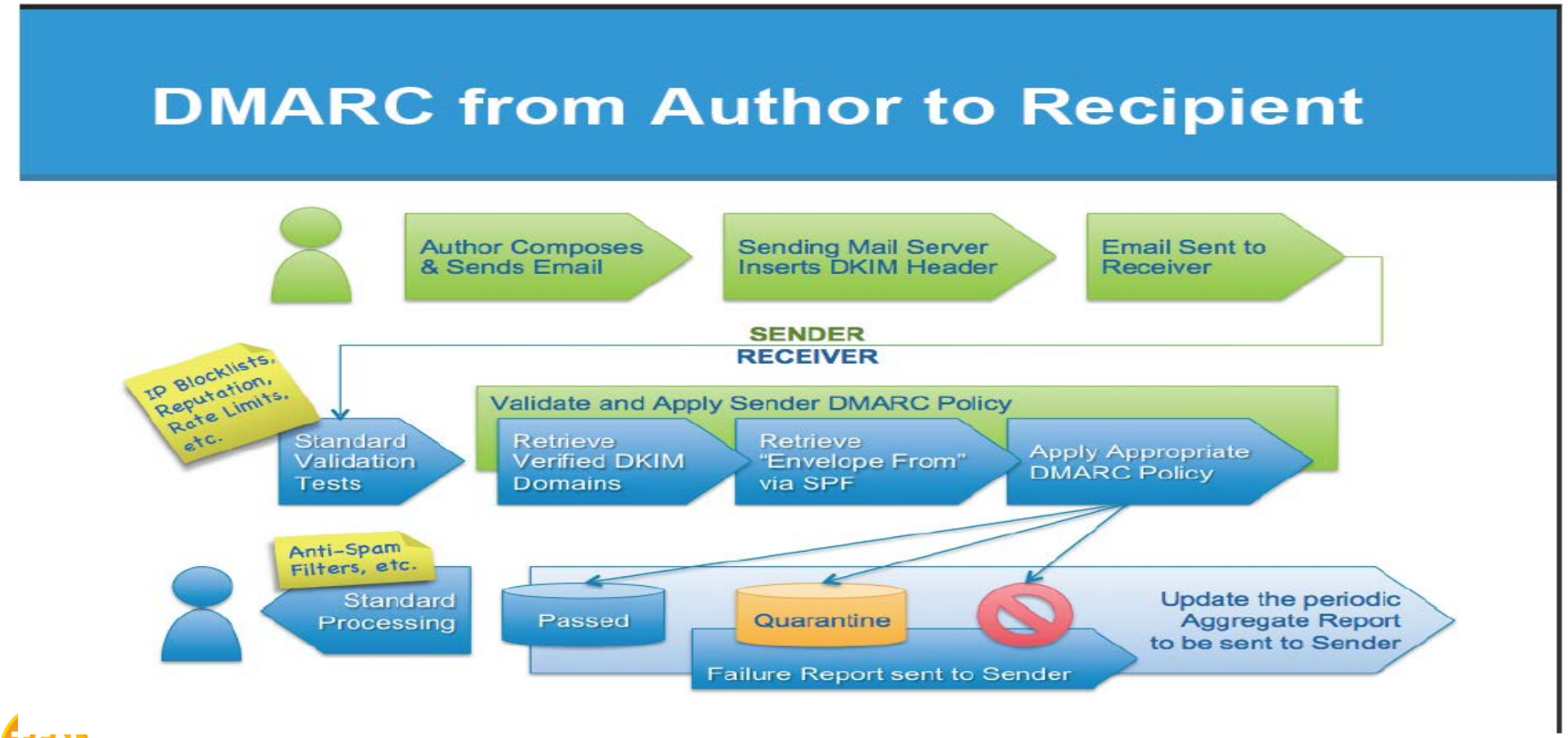
- Document 3rd Party E-Mail Requirements
- Implement through TPO
- Obtain Listing of Delegated sub-domains from DNS
- Deliver email authentication FAQs
- Enforce DMARC for 3rd parties

4. Communicate to Internal Marketing teams

5. Enforce Policies with ISPs

- Notify ISPs on which domains to block mail from
- Enforce policies for exact domains and defensive domains through domain management

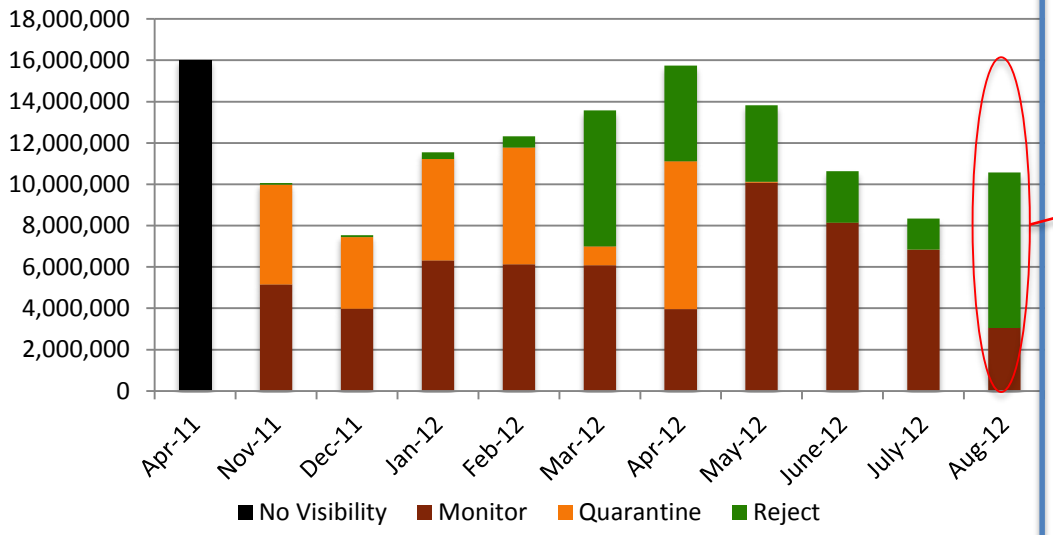
Industry Standard



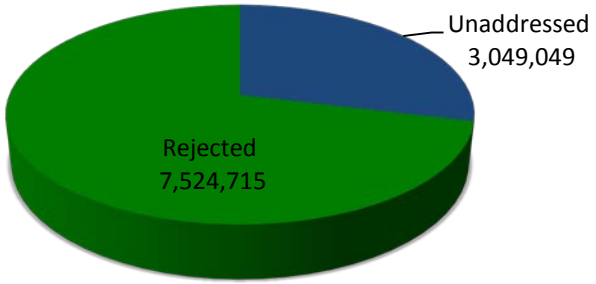
Implementation Status

May 2011 – August 2012	Legitimate Messages	Malicious Attempted	Malicious URLS Submitted for Takedown
Messages Purporting to be one of JPMCs domains @ Gmail, Yahoo!, AT&T, British Telecom and Rogers Communications	1.212 Billion	194 Million	1.25 Million

Policies Applied to Malicious Attempted *(April 2011 – Aug 2012)*



Policies Applied to Malicious Threats *(Aug 2012)*



% Change Compared to July2012

400.3%
Reject Policy

-55.4%
Unaddressed

1. Identification of fraudulent email
2. Implementation of DMARC standard
3. Policy enforcement with ISPs

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Lessons Learned/Best Practices

- Implementation requires a cross-functional program
- Means changes in vendor management practices
- This can provide a compelling story for customers