SisterWorks Publishing, LLC



DENITA S.B. MORRIS, PRESIDENT & CEO, SISTERWORKS PUBLISHING, LLC

## Marketing Plan: Phase 1 Background Research

Prepared for Open Web Application Security Project Proprietary and Confidential December 18, 2012

### Overview

The Open Web Application Security Project (OWASP) can be positioned for increased membership and organizational growth per the background research (phase 1) conducted by SisterWorks Publishing, LLC, (Sworks).

Know that the recommendations that will be presented at the end of phase 2 will be centered around the findings gathered during this initial information-gathering phase. We appreciate your patience, guidance and support. It was critical that our planning be based on a deeper understanding of the organization's current state and future vision of itself (meetings with OWASP's decision-makers were key); grounded on as many facts as possible (setup of analytics on wiki); and, of course, informed by the needs and wants of existing members, constituents, etc. (dissemination of several surveys).

Sworks will remain flexible, nimble and open to new ideas, continuing to learn about this emerging market, the organization and its members, volunteers and staff. We've discovered many valuable insights about OWASP. And, we look forward to sharing what we've learned so far, as well as finalizing a doable, action-oriented marketing strategy by project's end.

## Target Audience

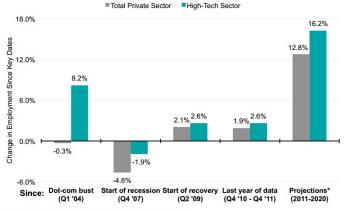
#### **Key Takeaways:**

- Highly-engaged security professionals who are interested in growing and/or nurturing their skills, staying engaged in the web security and programming community and being able to access relevant, timely and educational tools and resources easily and "free," preferably.
- There's projected growth in high-tech jobs, meaning more potential members for OWASP.
   Most jobs center around information security and online web application security. This growth will see an increase in entry-level positions.
- Members are needed at all stages of their career; however, the organization seems to be of most interest to entry-level to mid-level professionals who are looking to network and share with others, expanding the field.
- OWASP doesn't view other organizations with similar missions as competitors but as valued "partners" in the "community" work.
- This audience prefers a direct, in-your-face approach rather than "fluff" and/or "cutesy" marketing efforts.



#### ECONOMIC INSTITUTE

#### High-Tech Job Growth Outpaces Private Sector



## Industries to Target

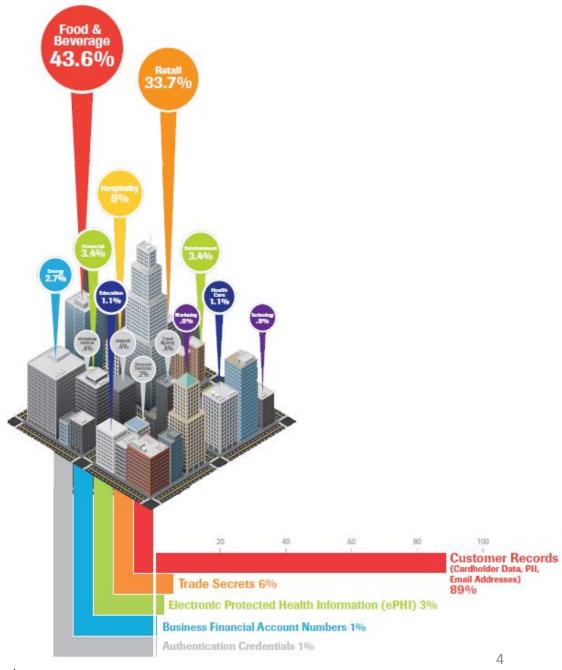
#### **Key Takeaways:**

#### **Corporations**

- Approximately 85% of data breach investigations exist in Food & Beverage, Retail and Hospitality industries.
- Data security is a top priority for corporations (both for-profit and non-profit), commanding a sizable chunk of their budgets and resources (Fig 1, Appendix 1).
- A majority of organizations (91%) cite data security as a critical or high priority issue, as a result they allocate, on average, 16% of security technology budget to this area (Fig 2, Appendix 1).
- Data loss and data protection are top mobile security concerns; 23% of corporations are concerned about mobile malware, as well (Fig 3, Appendix 1).

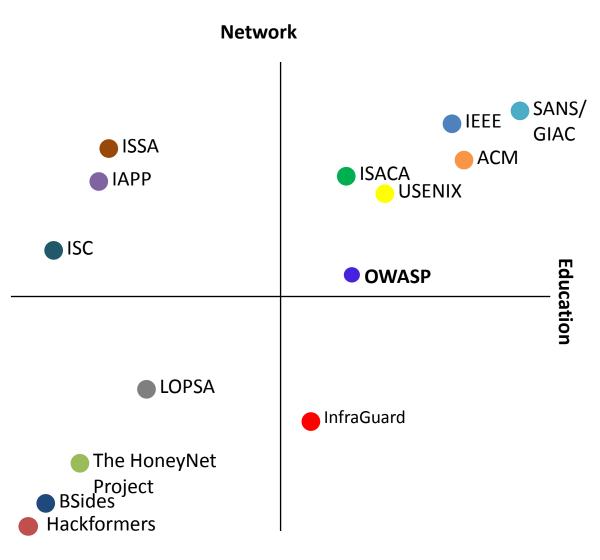
#### Universities

 Higher education is focusing in on cyber security education and integrating curriculum into all aspects of higher education.



### **Customer Relevance**

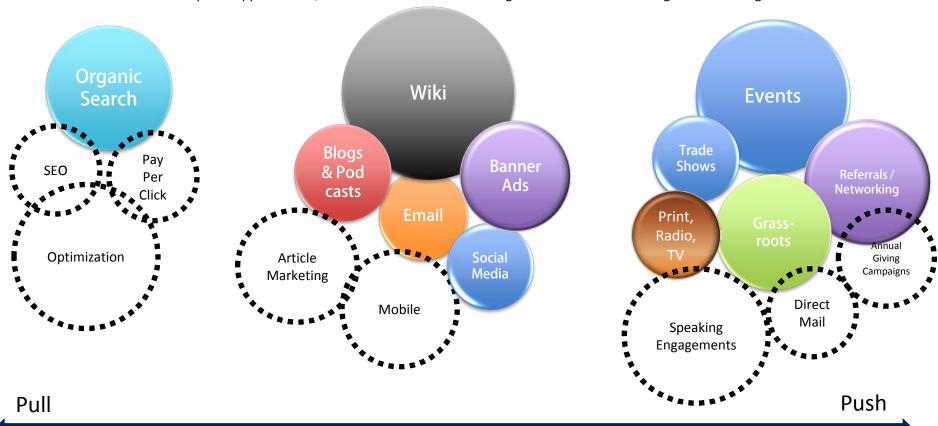
- This "qualitative" scatter diagram shows where OWASP seems to be positioned among its "partners" and/or competitors. The background research showed that many larger, membership-oriented organizations are offering more accredited educational opportunities and intense certification programs that are up-to-date on industry trends, as well. In order to meet the needs of potential and current members, OWASP will need to evaluate current membership offerings and available programs, events, etc.
- OWASP's decision-makers value education, community and the open-source platform.
   The ability to offer "free" resources are key to the organization's existing messaging.
   Since it's also a part of their cultural identity, it must play a primary role in future marketing strategies, as well.
- Major considerations for this diagram (Appendix 2) included: cost to join, amount of conferences, size of the organization, available educational opportunities, if any. The correlations were formulated based on best available information on the web. Assumptions were made to finalize these correlations.



## OWASP's Marketing Channel Mix: Present

#### **Key Takeaway:**

Background research revealed that OWASP has tried several marketing strategies, to-date, with some success. However, low budgets
and limited staff have made coordinated and strategic efforts more challenging and harder to replicate across the organization,
particularly internationally. The Wiki, word-of-mouth and annual events are the primary marketing tools for OWASP. The "open"
bubbles below identify new opportunities, as we work to formulate strategies to maximize ROI in targeted marketing channels.



The primary difference between push and pull marketing lies in how consumers are approached. In push marketing, the idea is to promote products by pushing them to people. On the other hand, in pull marketing, the idea is to establish a loyal following and draw consumers to the products.

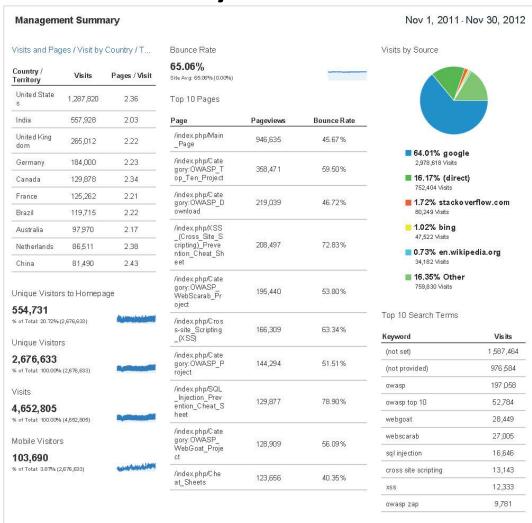
Sworks will work on a combined push-and-pull strategy that works best for OWASP, using a strategic marketing mix that fits within budget and resource allocations.

## Analytics

Nov. 2011 – Nov. 2012

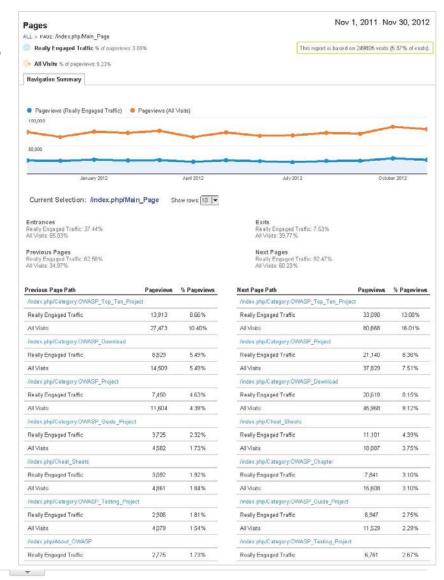
## Wiki Management Summary

- There were 2.6M unique visitors over last year, a 26% increase.
- There was an 18.5% increase in unique visitors to the homepage YOY from the previous reporting period Nov. 2011 – Nov. 2012.
- The average bounce rate at 63.37% over the last two years.
- Top 5 countries are U.S., India, UK, Germany and Canada.
- Sixty-four percent (64%) of OWASP's search traffic is from Google.
- The OWASP brand is strong in keyword searches from search engines in 13% of visits—specifically searching for OWASP, while 87% are from referring or direct links to the site from newsletters and other member communications.
- Mobile receives 3.7% of unique visitors, including those coming from tablets.



## Homepage Analysis

- The primary performance indicators for the appeal of any site are the Bounce Rate and Conversion Rates.
   There are not any conversion goals currently set for owasp.org; therefore, Sworks is using the measurement of page views to membership-related pages versus overall page views for the site as a type of conversion metric for use in this analysis.
- Sworks created an audience segment for OWASP of "Really Engaged Traffic." This segment consists of visits to the site where 3 or more pages were visited and more than 3 minutes was spent on the site.
- "Engaged visitors" spend more time on the homepage and have a lower exit rate. This could signify that users have set the page as their homepage in order to come back to the site often.
- Overall, the homepage has a lower bounce rate and exit rate in comparison to most pages on the site, therefore it appears to be performing to give visitors what they are looking for.



Really Engaged Traffic	Pageviews 307,902 % of Total: 3.00% (10,261,558)	Unique Pageviews 180,279 % of Total: 2.13% (8,470,729)	Avg. Time on Page <b>00:02:00</b> Site Avg: 00:02:05 (-4.24%)	Entrances 115,405 % of Total: 2.48% (4,652,730)	Bounce Rate 0.00% Site Avg: 65.38% (-100.00%)	% Exit 7.53% Site Avg: 45.34% (-83.40%)
All Visits	<b>946,635</b>	<b>747,209</b>	00:01:48	<b>615,916</b>	<b>45.67%</b>	<b>39.77%</b>
	% of Total: 9.23% (10,261,558)	% of Total: 8.82% (8,470,729)	Site Avg: 00:02:05 (-14.03%)	% of Total: 13.24% (4,652,730)	Site Avg: <b>65.38%</b> (-30.15%)	Site Avg: <b>45.34%</b> (-12.29%)

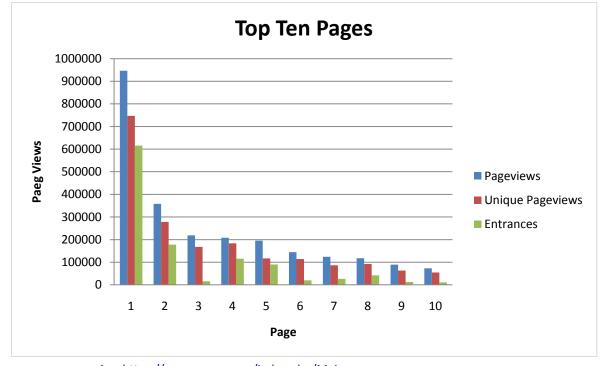
## Page Analysis: Membership

- Less than .5% of your page views are from membership-related visits.
- Visitors in the United States drive a majority of membership page views, possibly showing that international visitors are not utilizing the site and are not joining.
- Bounce rate and number of visits exiting membership pages, shows that approximately 50% of the traffic to membership pages are leaving the site from these pages.
- See Appendix 3 for top pages for membership traffic.
- Additional campaign-level tracking will yield a better analysis of targeted membership pages.



## Page Analysis: Top 10 Content

- Content on the Wiki is attractive to OWASP's visitors.
- Three landing pages keep visitors for less than 1 minute 20 seconds:
  - Cheat Sheets
  - Attack
  - OWASP Download
- One page keeps visitors on site for more than 4 minutes, but 73% of visitors leave the site completely after viewing this page:
  - XSS Cross Site Scripting
- Visitors are finding content via search, bookmarking, link sharing, social media, etc. So, opportunities exist in cross promotion of similar content and keeping top content pages up-todate. These pages are also key to highlighting new content offerings and events via banners, ads, etc.



- 1. <a href="https://www.owasp.org/index.php/Main">https://www.owasp.org/index.php/Main</a>
- 2. <a href="https://www.owasp.org/index.php/Category:OWASP">https://www.owasp.org/index.php/Category:OWASP</a> Top Ten Project
- 3. https://www.owasp.org/index.php/Category:OWASP Download
- 4. <a href="https://www.owasp.org/index.php/XSS">https://www.owasp.org/index.php/XSS</a> (Cross Site Scripting) Prevention Cheat Sheet
- 5. <a href="https://www.owasp.org/index.php/Category:OWASP">https://www.owasp.org/index.php/Category:OWASP</a> WebScarab Proje <a href="https://www.owasp.org/index.php/Category:OWASP">ct</a>
- 6. <a href="https://www.owasp.org/index.php/Cross-site">https://www.owasp.org/index.php/Cross-site</a> Scripting (XSS)
- 7. https://www.owasp.org/index.php/Category:OWASP Project
- 8. <a href="https://www.owasp.org/index.php/SQL Injection Prevention Cheat Sheet">https://www.owasp.org/index.php/SQL Injection Prevention Cheat Sheet</a>
- 9. <a href="https://www.owasp.org/index.php/Category:OWASP">https://www.owasp.org/index.php/Category:OWASP</a> WebGoat Project
- 10. https://www.owasp.org/index.php/Cheat Sheets

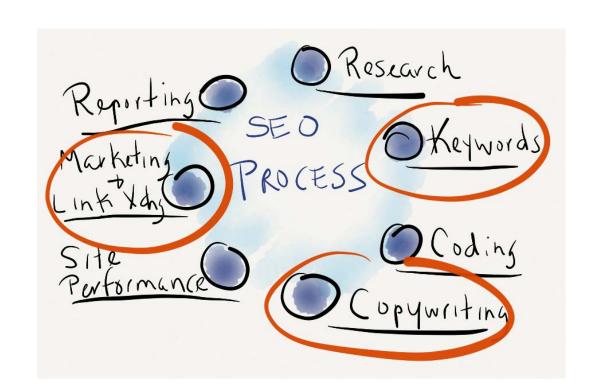
## Countries with Opportunity (%)

- Top 5 Origin of Attack countries have low penetration within OWASP website.
- Marketing opportunities exist within these demographics.

Country	OWAS P Visits	Origin of Attacks
Romania	.01	4.1
Russian Federation	.01	29.6
United Kingdom	.01	3.5
United States	27.7	10.5
Vietnam	.01	3.2

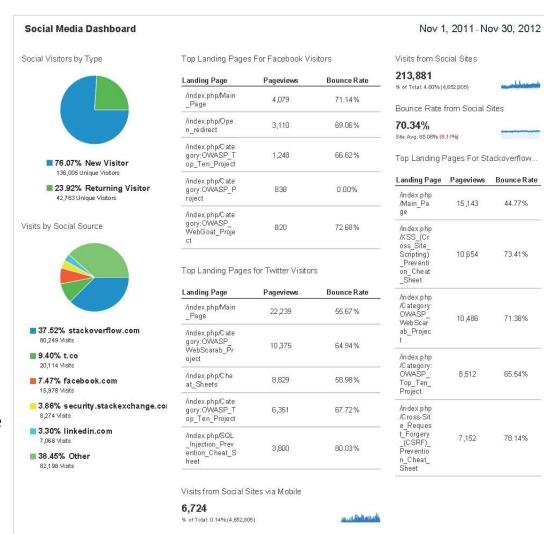
### **SEO** Performance

- Sixty-six percent (66%) of visits come from organic search.
- Forty-six percent (46%) of unique visitors (2,676,633 unique visitors per this report's time frame) use keywords (Appendix 4).
- OWASP has strength in link exchanges, keywords, and copywriting.
- OWASP has extensive educational copy available online. This content lends itself to strong search engine optimization.



## Social Media Summary

- Forty-three percent (43%) of growth in visits from social sites since the previous reporting period (see appendix TBD)
- Top growth from social visits are from stackoverflow.com, Twitter, Facebook, and Linkedin
- Stackoverflow.com visits grew 37.6% from last year.
- Seventy-six percent (76%) of social visitors are new visitors.
- Social visits show significantly higher bounce rates of top level content and to website. Overall, there is a 70% bounce rate from social visitors, which is 7.86% higher than web visitors.



# Surveys

## General Membership Survey Results

#### **Key Takeaways:**

- There were 450 respondents to this survey; 98% were paid members and 2% were corporate supporters.
- Forty percent (40%) of respondents heard about OWASP through a colleague – word-of-mouth referrals are a major marketing tool.
- Fifty-seven percent (57%) of respondents interact with OWASP monthly, half are interacting with OWASP via the wiki (56%); attending local meetings (23%); and attending events (11%).
- Overall, 76% of respondents rate their interactions with OWASP as helpful to very helpful, which is extremely positive.
- Eighty-two percent (82%) of respondents would recommend an OWASP membership to a colleague.

"I'd like to better understand what is available as [a] part of my membership."

#### What could OWASP do to enhance your membership?

- "Sometimes I have trouble finding items on the website."
- "Make more online events and share the videos of the APPSec."
- "Provide something useful or don't charge 50 bucks for a free Gmail account."
- "Make the Wiki navigate-able. That thing is a nightmare to find anything. Also, help push the OWASP mission so it is a more recognizable brand."
- "For individual members, OWASP should offer more free web-based training videos and documents. Free OWASP gear, too."
- "I'd like to better understand what is available as [a] part of my membership."
- "Tell me what the benefits actually are."
- "Joined as part of signing up for conference and know nothing of resources or membership benefits."
- Immediate access on the results of research for web application security.
- "More exposure on a local basis, more meet-ups that are advertised via email or Twitter."
- "Be more marketed. It's a shame not everyone who does web applications knows about it. I have been in the industry 10 years before finding it."
- "A guide to the online resources might be helpful."
- "It would be good to have a SME membership which allows small companies to participate
  in OWASP. At the moment the gap between the individual and enterprise membership is
  too steep."
- "Use standard email and LinkedIn more to alert members of events for secure coding and infosec in their local chapter areas."

## General Membership Survey

What do you value most about OWASP membership? This word cloud is just a glimpse of the key words that came up most often when members were asked the question above. Information, security, meetings, resources and community were repeated most often among members when asked what they valued most about their membership.



### APPSecUSA Survey

#### **Key Takeaways:**

- There were 109 respondents to this survey; 68% identified themselves as paid individual members and 59% were attending their first conference.
- Sixty-nine percent (69%) of attendees who completed this survey think the conference fee is worth the money because they get a lot of value for the dollars spent. Only 16% percent of respondents found some value to no value for the price of attending. Fifteen percent found this question not applicable.
- Those surveyed felt very positive about the conference, saying it was organized (96%), the information was useful (87%), and that there were quality talks/sessions (84%).
- Fifty percent (50%) of respondents heard about OWASP through a colleagues.
- Seventy-six percent (76%) of respondents interact with OWASP every month or at least every three months. About 60% are interacting with OWASP via the wiki; attending local meetings (20%); and attending events (17%).
- Overall, 78% of respondents rate their interactions with OWASP as helpful to very helpful, which is great to know but there seems to be a disconnect with some of the comments.
- Seventy-nine percent (79%) of respondents would recommend an OWASP membership to a colleague.

#### What could OWASP do to enhance your membership?

- "Let me know through e-mail what I can have."
- "I would like to know more about the OWASP projects and resources available online."
- "More stuff when we are a regular member."
- "More online learning experiences, mini-conferences."
- "Send me a list of what you feel the exclusive benefits are."
- "Provide special early access to security threats."
- "Move from awareness and conference planning to improve concrete, practical, and technically-accurate developer and security tester content."
- "Allow a way for OWASP members to communicate more easily about random security topics. Maybe a special mailing list, forum or something. Not sure."
- "Keep me informed about new information (tutorials, conferences, cheat sheets, etc.)"
- "Distribute a regularly-produced, yet fun-to-read bulletin of hot topics in the Application Security space."

## APPSecUSA Survey

What do you value most about OWASP membership? These event attendees highlighted the security "community" as the key driver of value in an OWASP membership.



### APPSecLatam Survey Results

#### **Key Takeaways:**

- There were only 45 respondents to this survey: 27% were paid members, 69% identified themselves as never being a paid member and 82% were attending their first conference. There is a definite disconnect about membership being tied to conference attendance.
- Forty-two percent (42%) of attendees who completed this survey think the conference fee is worth the money because they get a lot of value for the dollars spent. Forty-two percent (42%) of respondents found some value to no value for the price of attending, as well. Sixteen percent (16%) found this question not applicable. Those surveyed seem to be split on this question.
- Those surveyed who felt very to extremely positive about the conference, saying it was organized (91%), the information was useful (67%), and that there were quality talks/sessions (87%).
- Fifty percent (40%) of respondents heard about OWASP through colleagues, 27 % percent through their company, 16% through search engines, and only 2% were returning members.
- Fifty-one percent (51%) of respondents interact with OWASP every month or at least every three months. About 70% are interacting with OWASP via the wiki, primarily; attending local meetings (11%); and attending events (9%).
- Overall, 69% of respondents rate their interactions with OWASP as helpful to very helpful.
- Fifty-eight percent (58%) of respondents would recommend an OWASP membership to a colleague; 31% fall in the "maybe" category.

#### What could OWASP do to enhance your membership?

- "I'm not sure what the membership offers, will take a look on the website and think about enrolling."
- "I would say that there are some plans in the road to help the community, including news letters and more advertizing about OWASP."
- "Throw in some t-shirts!:D
- "Organize more local activities."
- "Nothing, it's cool!"

"I'm not sure what the membership offers, will take a look on the website and think about enrolling."

## **APPSECLatam Survey**

What do you value most about OWASP membership? This word cloud didn't discern any primary words except "security," "application" and "professionals." It's interesting that words like "community" and "events," which stood out in the general membership and APPSecUSA surveys aren't even mentioned among this audience. However, it could just be an English as the second language issue.



## Key Terms

**TERM** 

**DEFINITION** 

**Bounce Rate:** 

This Internet marketing term is used in web traffic analysis. It represents the percentage of visitors who enter the site and "bounce" (leave the site) rather than continue viewing other pages within the same site.

**Conversion Rate:** 

The proportion of visitors to a website who take action to go beyond a casual content view or website visit, as a result of subtle or direct requests from marketers, advertisers, and content creators. For example, conversion rate = number of goal achievements/visits.

**Keywords:** 

the actual search terms or keywords typed into search engines and which search engines are preferred by their targeted audience.

**Organic Search:** 

listings on search engine results pages that appear because of their relevance to the search terms, as opposed to their being advertisements. In contrast, non-organic search results may include pay per click advertising.

Page Views:

They are counted as part of web analytics. For the owner of the site, this information can be useful to see if any change in the "page" (such as the information or the way it is presented) results in more visits. If there are any advertisements on the page, the publishers would also be interested in the number of page views to determine their expected revenue from the ads. For this reason, it is a term that is used widely for Internet marketing and advertising.

Pay-Per-Click (PPC):

This term is an Internet advertising model used to direct traffic to websites, where advertisers pay the publisher (typically a website owner) when the ad is clicked. With search engines, advertisers typically bid on keyword phrases relevant to their target market. Content sites commonly charge a fixed price per click rather than use a bidding system. PPC "display" advertisements, also known as "banner" ads, are shown on web sites or search engine results with related content that have agreed to show ads. This approach differs from the "pay per impression" methods used in Facebook, television and newspaper advertising. Similar to the pay per click model which often uses a bidding system, with the online pay per impression method, advertisers bid how much they are willing to spend for their ad to show up 1000 times. (It's also called Cost-Per-Click.)

Search Engine Optimization (SEO):

The process of affecting the visibility of a website or a web page in a search engine's "natural" or un-paid ("organic") search results.

**Unique Visitors:** 

A count of how many different people access a Web site. For example, if a user leaves and comes back to the site five times during the measurement period, that person is counted as one unique visitor, but would count as five "user sessions." Unique visitors are determined by the number of unique IP addresses on incoming requests that a site receives, but this can never be 100% accurate. Depending on configuration issues and type of ISP service, in some cases, one IP address can represent many users; in other cases, several IP addresses can be from the same user.

## Appendix

## Appendix 1: Forrester Data

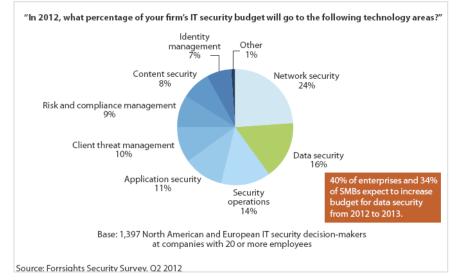


Fig. 2

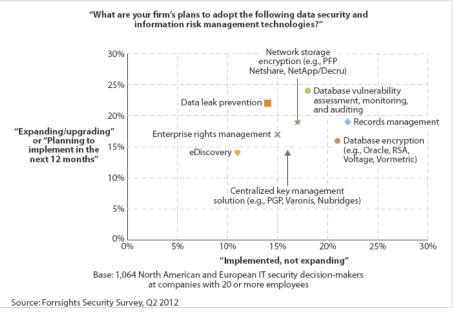
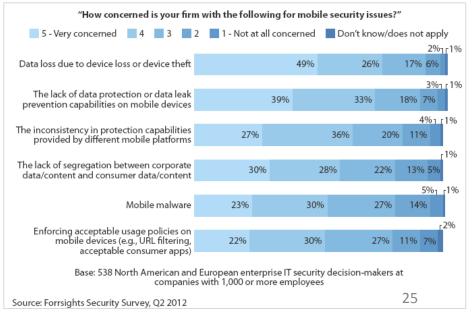


Fig. 1

Fig. 3



## Appendix 2: Other Member Organizations

Organization	Dues	# of Members	Types of Membership	Education	Scope	Conferences	# Conferences/yr	Chapters
	\$99 to \$198	100,000+	Affiliated Orgs, Joint Societies, Professional (2), Lifetime, Senior Member, Distinguished Member, Fellow Member	for schools, Learning Center with books, courses, tech packs and learning paths, skillsoft and discounts with NYU- Poly and Stevens Institute of TechNology	Global	Yes	11	170 local, 35 special interest groups, 500 college and university chapters
Global Information Assurance Certification (GIAC) and SANS Institute (Escal Institute of Advanced TechNologies)		n/a	n/a	42,663 certifications; IT security certifications worldwide	Global	Yes	5	Community SANS
Hackformers	None	n/a	n/a	n/a	localized in US	No	n/a	n/a
Information Systems Security Association (ISSA)	\$30 to \$995	10,000	Corporate, General, Government and Student	Web Conferences, Webin/ars, Forums	Global	Yes	3 to 5	100
InfraGuard <sup>2</sup>	\$0	n/a	Member	downloads, access to FBI trainings	National	Yes	per local chapters so hard to tell	n/a
Institute of Electrical and Electronics Engineers (IEEE) <sup>1</sup>	\$13.50 to \$185	400,000	Student, Members, Society Affiliates, Senior Members, Fellows, HoNorary, Life Members and Life Fellows	Online degrees, certifications and courses	Global	Yes	1300+	4000+
International Association of Privacy Professionals (IAPP)	\$50 to \$250	9500	Professional, Government, Not- for-profit, Higher Ed, Student	Certifications: In-Person, Media-based, practice tests and Web Conferences		Yes		n/a
Internet Systems Consortium (ISC)	n/a	n/a	n/a	kNowledge base, technical workshops, software support	Global	No	No	n/a
ISACA	\$25 to \$200	95,000	Member	Certifications, degrees, kNowledge center, bookstore	Global	Yes		200
League of Profession/al System Administrators (LOPSA)	\$0 to \$50	n/a	Member, Charter, Student, Founding, Complimentary and HoNorary	chat room, blog	Global	No		19

## Appendix 2 Cont.

OWASP	\$50 to \$5000		Corporate, Individual, Global, Government, Academic, Organizationsl	None	Global	Yes	8 to 12	200+
Security Bsides	None	Community wiki	None	Community driven	Global	Yes	3	n/a
The Advanced Computing Systems Association (USENIX)	\$20-\$495		USENIX Individual, LISA SIG Member, Joint, Student and Student Joint, Educational, Cornorate	n/a	Global	Yes		140
The HoneyNet Project	None	50?	n/a	grassroots education	Global	Yes	2	45

<sup>&</sup>lt;sup>1</sup> offers full and half year membership options

<sup>&</sup>lt;sup>2</sup> Parntership between U.S. businesses and FBI

## Appendix 3: Top Membership Pages

	Page	Pageviews ↓	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit
1.	/index.php/Membership						
	Really Engaged Traffic	9,201	6,277	00:02:11	689	0.00%	12.15%
	All Visits	19,538	15,143	00:02:27	6,072	57.05%	37.37%
<b>2</b> .	/index.php/Newmembership						
	Really Engaged Traffic	3,949	2,682	00:01:55	205	0.00%	8.03%
	All Visits	6,649	5,048	00:01:37	1,062	29.85%	19.06%
<b>3</b> .	/index.php/Membership/2012_Election						
	Really Engaged Traffic	2,645	1,658	00:01:36	335	0.00%	9.87%
	All Visits	7,376	5,886	00:01:45	3,297	68.91%	42.68%
<b>4</b> .	/index.php/Membership_Map						
	Really Engaged Traffic	2,570	1,751	00:03:15	112	0.00%	24.63%
	All Visits	5,476	4,265	00:02:50	913	59.15%	51.02%
<b>5</b> .	$/index.php?title=Special:UserLogin\&returnto=Membership \\ @$						
	Really Engaged Traffic	373	317	00:00:35	0	0.00%	0.00%
	All Visits	503	447	00:00:29	19	0.00%	0.00%

## Appendix 4: SEO Data

