The Cost of Doing Nothing

The Business Case for Proactive Anti-Abuse

Drew Bagley
ICANN 53, Buenos Aires
June 2015
drew@securedomain.org

Research

- What are the business costs of domain name abuse for Internet infrastructure providers?
- Is there a difference between proactive anti-abuse and reactive anti-abuse?

SECURE DOMAIN FOUNDATION

Research Methodology

- Focused on registrars for this first report
- Analyzed legal, reputation, and financial factors incentivizing behavior
- Surveyed Internet infrastructure providers (registrars, registries, hosting companies)
- Asked free response questions about abuse complaint processes, proactive and reactive anti-abuse methods, costs associated with each step

SECUREDOMAIN FOUNDATION

Legal, Reputation, and Financial Variables

- ccTLD and gTLD registrars face legal pressures to respond to abuse complaints in the form of contracts (ICANN accreditation for gTLDs), local laws, and community best practices
- Reputational incentive to be a clean registrar to avoid the ire of law enforcement and inclusion on blocklists
- Financial pressures from credit card chargebacks, court orders, lawsuits, loss of accreditation (gTLDs especially), and labor costs of responding to complaints

SECURE DOMAIN FOUNDATION

Profile of Respondents

- Registrars
- Represent 12% of the total domain name market
- Geographically diverse (Germany, India, Netherlands, Russia, USA)
- Range in size from 800,000 to nearly 15 million domain names
- Diversity of anti-abuse methods used (reactive to proactive)

SECUREDOMAIN
FOUNDATION

Key Findings

- Bad customers are bad for business
- Proactive anti-abuse can lower the number of abuse complaints and therefore save money
- Reactive anti-abuse can cost more money because of labor costs
- Better complaints could save registrars time and money

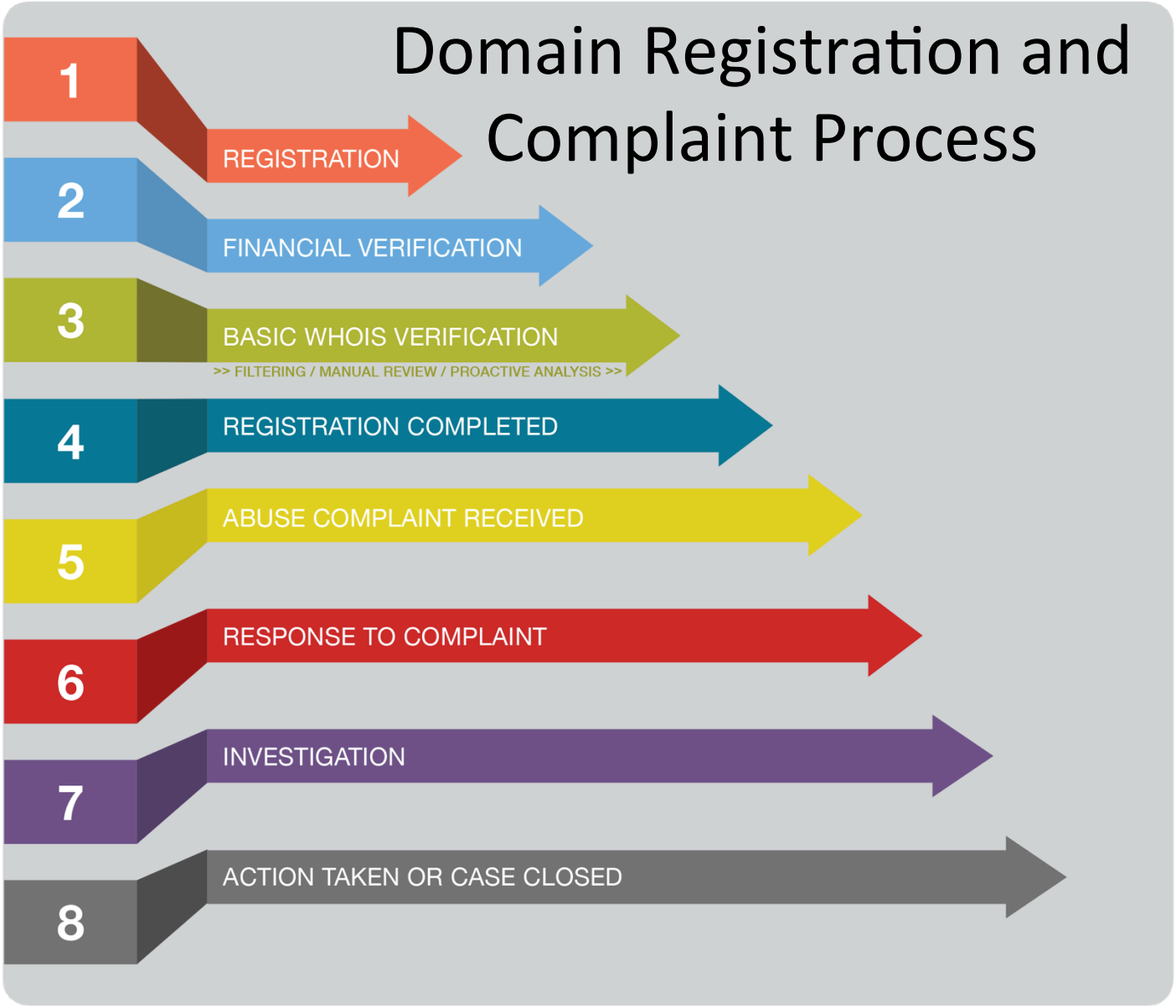
SECUREDOMAIN FOUNDATION

Anti-Abuse Methods at the Point of Sale

- Some do nothing
- Financial information validation
- Manual review of registrant and reseller accounts flagged for suspicious credit card activity
- Blocklisting of certain words in domain names (i.e. paypal)
- Determine association of would-be registrant with known malicious activity
- All of them require customers to consent to terms of service prohibiting the use of domain names for phishing, malware, command and control of botnets, and high volume SPAM

SECUREDOMAIN FOUNDATION

Domain Registration and Complaint Process

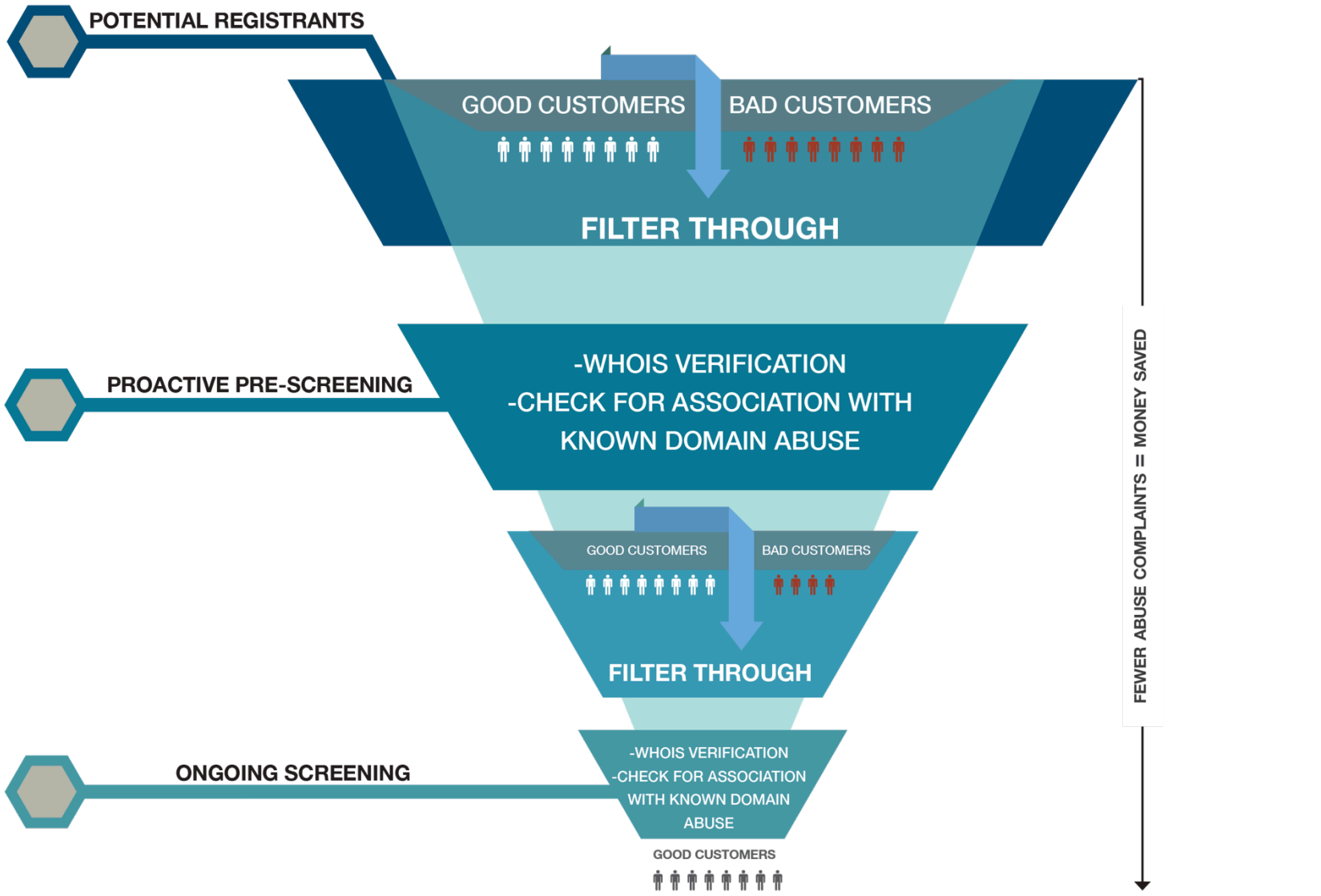


SECUREDOMAIN FOUNDATION

Abuse Costs

- Labor costs are the most expensive part
- Respondents indicated that anywhere from 15 minutes to 10 hours are spent resolving a single complaint
- Respondents spend between 80 cents USD to $65 per complaint
- The registrar with the lowest amount per complaint spent between $100,000 to $280,000 per year to resolve complaints

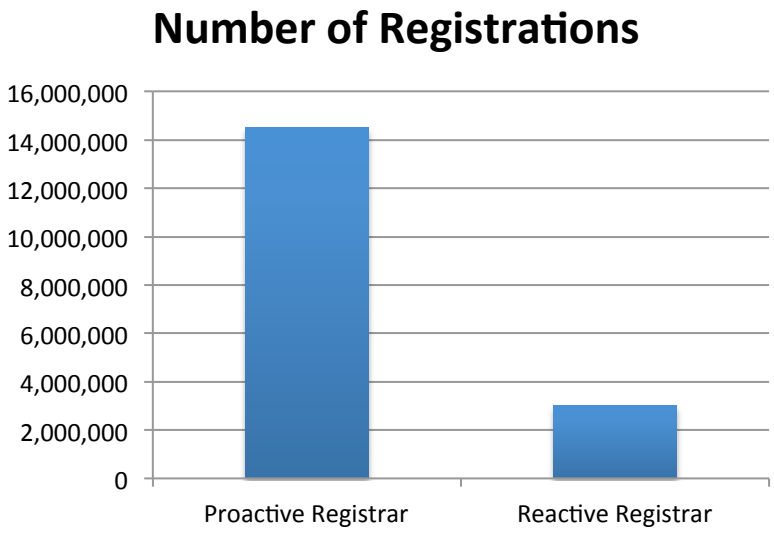
SECUREDOMAIN FOUNDATION

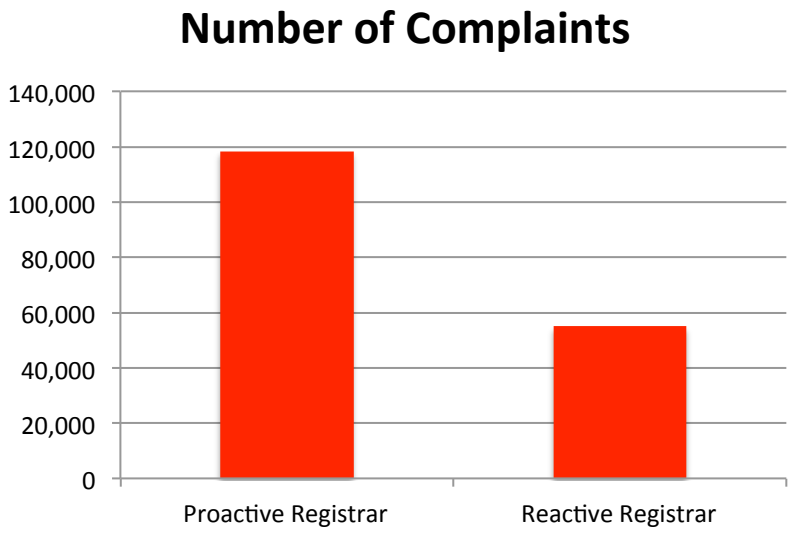


SECURE DOMAIN FOUNDATION

Volume Matters

- One purely complaint-driven registrar received nearly half as many complaints as a much larger proactive registrar despite managing only 20 percent as many domain names





SECURE DOMAIN FOUNDATION

Suggestions from Respondents

- Improve anti-abuse efforts through increased DNS literacy
- Relevant information to the relevant party
- Use a universal form to ensure that requisite information is provided from the beginning
- Reduce the back and forth communication and rerouting of abuse complaints

SECUREDOMAIN FOUNDATION

Summary

- More expensive to be reactive instead of proactive
- Bad customers are bad for business
- Proactive anti-abuse saves money in the long run and makes registrars less attractive for would would-be cyber criminals

SECUREDOMAIN FOUNDATION

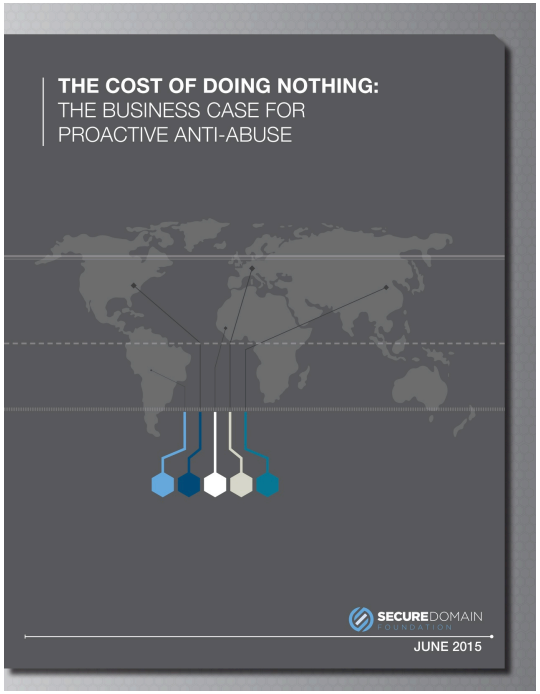
What Next?

- Seek greater participation
- Look into how business models (i.e. reseller vs. direct sales) affect anti-abuse costs and processes
- Analyze technical data for correlations, trends, and factors relevant to domain name abuse discussions
- Identify cost effective and impactful proactive anti-abuse models

SECUREDOMAIN
FOUNDATION

Questions, Comments, Suggestions?

Check out the report at
www.securedomain.org



Drew Bagley | drew@securedomain.org

SECUREDOMAIN
FOUNDATION