OFFICIAL BALLOT

Malicious Online Activities in the 2012 U.S. General Election

George Mason University

ShmooCon 2014

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Introduction

- ✓ 2012 cybercrime class project
 - o Thanks Professor McCoy!



- Investigated cybercrime in elections
- After election evidence quickly disappeared
- ✓ Majority of our work was performed in 2012
 - Some screenshots were taken using the wayback machine

Continue voting next side

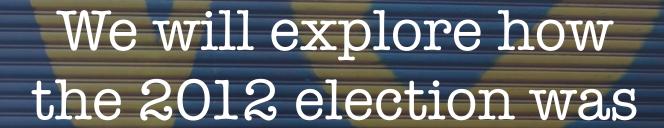






"THAT'S WHAT'S THE MATTER."

Boss Tweed. "As long as I count the Votes, what are you going to do about it? say?"



bought, sold, and manipulated

through malicious online activities.





Samantha G	RE: Become a star on Twitter - Hey, It's Samantha, how are you? Remeber I if you want to become a star on Twitter you need to	Nov 16
John Cornyn	Congratulations - ron, Please join me in congratulating Senator Jerry Moran of Kansas for being named the incoming	Nov 15
Mitt Romney	A few more hours - Friend, Polls are open for a few more hours. Your vote, and your outreach efforts, will determine the	Nov 6
Ann Romney	Your opportunity - Friend, Election Day is finally here. Please vote today, and remind your friends and family to do the	Nov 6
John Cornyn	most important thing - ron, This is it. After all our work together after a long campaign in which we spread our	Nov 6
Rob Jesmer	also - ron, Along with Senator Cornyn, I wanted to express my gratitude to you as well. Most of our staff is	Nov 5
John Cornyn	you can still make a difference - ron, Before America votes, I wanted to take a minute to give you my heartfelt thanks. We reached bot	Nov 5
Rich Dunn	Keep our ads going - ron, We have less than 48 hours left to help elect a new Republican Senate Majority! And with many	Nov 4
Newsmax.com	Obama Welfare Tops \$60K Per Household; Al Gore's 'Disgusting' Sandy Claims; Tax Hike on Click here to view this email as a	Nov 4
Rob Jesmer	He admitted it - ron, In case you needed another reason to get Harry Reid out of power, consider this Yesterday,	Nov 3
Carl Sceusa	Just a few hours left - ron, I'm sure the last thing you want to see heading into the weekend is another political email.	Nov 2
Mike Reed (2)	the difference between winning and losing - ron, Ever since our Triple Match was extended with a \$200000 one-day challenge, patriots	Nov 2
Rich Dunn	We just got another day with this! - ron, Thank you so much for your help. You have no idea how much we appreciate your support dur	Nov 2
Rob Jesmer	FWD: Now or Never - ron, We're so close! Please help us raise the remaining \$37283 to reach the \$2 million goal in	Nov 1
John Cornyn	Now or Never - ron, In just a few hours, our Triple Matching Gift offer will expire and we are currently \$87311 away	Nov 1

Topics to Cover

- Cybersquatting
- ✓ Phundraising
- ☐ ✓ Fake political campaigns
- ✓ Deceptive Super PACs
- The nigerian scam
- ✓ Buying & selling votes
- Social networking
- ✓ Election data analytics
- ✓ Foreign influence on US elections
- The strange case of Miami-Dade County

Methodology

- ✓ Initially looking for:
 - o Malicious election spam
 - Rogue Super PACs
 - o Fake campaigns
- ✓ Hows
 - Create fake email and social network accounts
 - Sign up for political spam
 - Follow links
- Combed social networks and public reports
 - OpenSecrets, Sunlight Foundation, and FEC filings
- ✓ Investigated news sources and partisan claims
- ✓ URL testing, Google hacking, whois database
 - ✓ We've continued to monitor election cybercrime over the past year

Friedrich's Work

- ✓ Oliver Friedrichs' Blackhat 2008 research [3]
 - We followed his methodologies
- ✓ Showed that cybersquatting occurred in the 2008 Presidential Election
- ✓ Registering and using a domain name for a purpose contrary to its intended use
 - o Registering a domain name in bad faith
 - ✓ Freidrichs noted the motivations people had for cybersquatting
 - Creating a semi-legitimate web site with the intent of earning money through advertisements,
 - Speculating the "cousin site" with the intent of reselling it in the future, and
 - Malicious intent (such as malware installation).

-	Domain	Result
1	http://mittr0mney.com	Copy of http://www.ronpaul.com/
= 2 = 2 = 2 = 2	http://mittronmey.com	Copy of http://www.garyjohnson2012.com/
= ;3	http://www.ronpaui.com	3rd party Ron Paul site
4	http://www.barackaboma.com/	Psuedo-3rd party Mitt Romney site
± 5	http://donateobama.com	http://www.imprinting360.com/
6	http://donateromney.com	http://roykatzmusic.com
7 ====================================	http://www.barackobama2008.com	3rd party Barack Obama site selling Viagra
8	http://www.democraticnationalcommittee.org	Fake site of http://www.democrats.org/
9	http://www.republicannationalcommittee.org	Fake site of http://www.gop.com/





Continue to Site









"The battle for freedom **never** ends."

- Gov. Gary Johnson



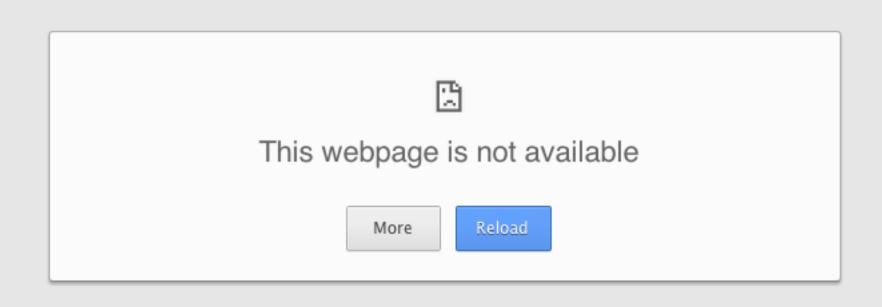








www.barackaboma.com



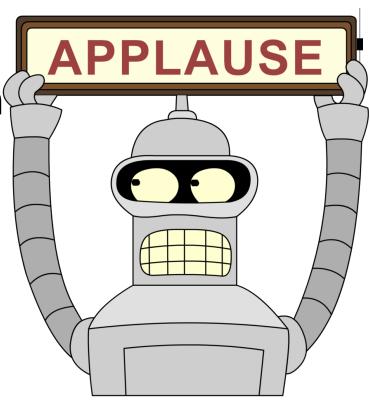
Phundraising

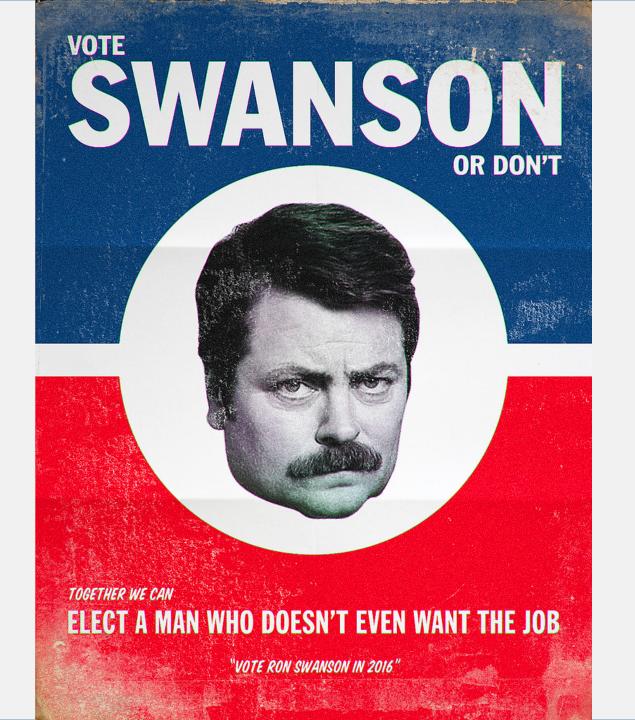
- ✓ Pretend to be the candidate and take donations on their behalf
 - People running phundrasing sites aren't intending to spend the money on the elections
- Identified fake pages for DNC and RNC
 - o Points to info on overall political topics
 - Hides SEO links to other sites and asks for contributions
 - Owned and operated by the same individual (the whois information was not obscured)
 - o Tracked back to the same IP
 - Both hosted in a datacenter in Oregon



Fake Political Campaigns

- Could be used to divert attention towards or away from actual candidates or issues
 - Intent varies
- ✓ Benderforpresident.com
- ✓ Ronswanson2012.org





Fake Political Presence

- ✓ Plenty of Fake Twitter handles popped up during the 2012 election.
 - @RealTedCruz (still exists, but locked down)
 - @Bill_Clinton12 (suspended) [15]
- ✓ Actual campaigns have millions of twitters followers [20]
- ✓ If actual political parties are going down this route, what's to stop those with malicious intent.

Bill Clinton

Oopsies! Politico: "Clinton breaks with Obama over Bush tax cuts" politi.co/JU2Nou

Following



Power to the PACs

- ✓ The 2012 race marks the first presidential election since the Citizens United v. Federal Election Commission decision [4]
- ✓ Since the ruling, Super PACs have been created to serve a wide variety of political causes
 - Unlimited fundraising no limits
- ✓ Google identified several compromised or suspicious Super PAC websites

Our Country Deserves Better PAC

www.ourcountrydeservesbetter.com/

This site may be compromised.

Buy Viagra online from an official certified pharmacy, OVERNIGHT Shipping, Exclusive & competitive discount prices, express shipping & discrete packaging.

- ✓ Fundraising just got interesting
- ✓ Now, this Super PAC primarily uses Facebook
- ✓ PACS are now targets

PAC-MAN

- We identified two potentially malicious ways a Super PAC could operate through information available online
- Cloaking, or phishing, as some other entity to obtain financial or political gain
- Not using funds in the way they were advertised or misleading potential donors to the PAC's purpose.

CAPE-crusader

- ✓ The Coalition of Americans for Political Equality[2]
- Cybersquatting for:
 - www.allenwest2012.co & mittromneyin2012.com
 [5]
- ✓ Have the appearance of official campaign sites, with a small disclaimer at the bottom
 - A campaign support website funded by CAPE PAC
- ✓ Raised almost \$1.5 million during the 2012 Election cycle.
 - Less than \$200k was spent for or against candidates.
 [10]
 - Wasn't spent until after July 2012 [11]

Honesty is the Best Policy

- ✓ The Heart of America Super PAC promised to promote moderate Republicans and Democrats (hoapac.com)
 - "Protecting mainstream values and moderate voices"
- ✓ All reports to FEC showed Democrat-only donations
 - Brought in ~\$788,000 [12]
 - Donated ~\$758,000 money to another super PAC, Majority PAC, to maintain Democrat Senate majority [13]
 - ~\$1300 to Claire McCaskill

Continue voting next side



Protecting Mainstream Values and Moderate Voices.

Too much noise coming from the far left and far right has drowned out common sense political ideas and discourse. Compromise has lost its place in Washington. At Heart of America, we believe that it's moderate leaders who deserve our support.

In today's Washington, past leaders like Senator Bob Dole and Tom Eagleton would be targeted by extreme special interests because they often worked across party lines to move the country forward. We believe that now more than ever leaders who strive for independence are what is desperately needed in the Senate.

Join Us Today and Stand Up for Independent Voices and Mainstream Politics.

Latest News

Politico: Claire McCaskill's future could hinge on GOP slugfest

Politico: Road Report: McCaskill draws cheers from Tea Party in Lebanon

Columbia Tribune: Missouri Republicans



Paid for by Heart of America PAC. Not authorized by any candidate or candidate's committee.

www.HOAPAC.com





Nigerian Scam

I don't think this is the First Lady...



Buying & Selling Votes

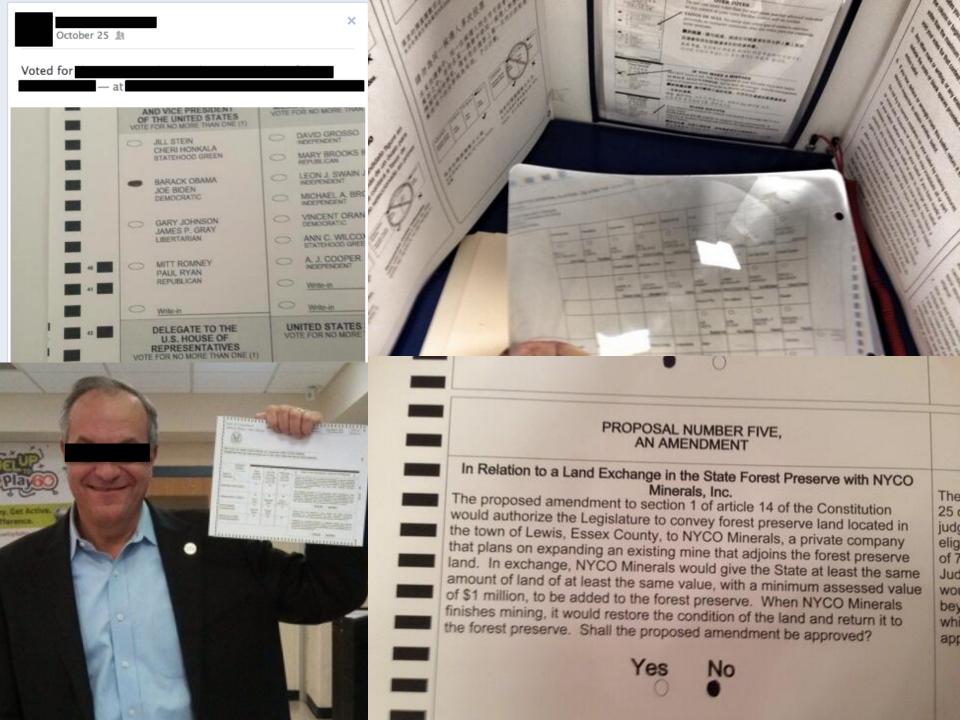
- Buying votes is obviously illegal
 - We identified multiple people willing to sell their vote
 - Craigslist and Ebay full of ads to sell votes



I will cast my ballot the way you prefer for money. Any and all candidates and any and all propositions. I will fill out the ballad exactly as you want me to. If you love your candidate and want to see him win, this could help. Thanks.

Social Networks & Elections

- ✓ Digital "I Voted" stickers became popular
- ✓ Some citizens took pictures of their of completed ballot to show who they voted for.
 - Voters showing pride/giddiness
 - Also provides proof of receipt if they are selling their vote
- Depending on state laws, such pictures could be illegal
- Social networks and smaller cameras (or
 Google Glass) are making this easier than ever



The Twitters

■Back to Tweets



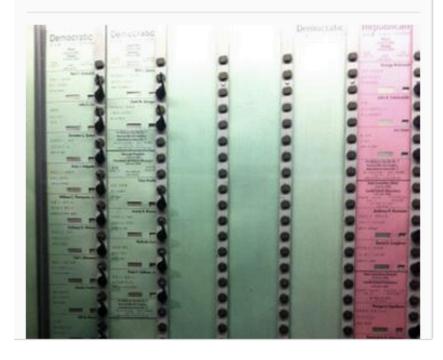
Did you vote yet? Go Joe!!! #NYC2013 #Lhota yfrog.com/mn5gxtpj



■ Back to Tweets



Voting. #NYC #vote #NYC2013 pic.twitter.com/LuX5iEZLbU

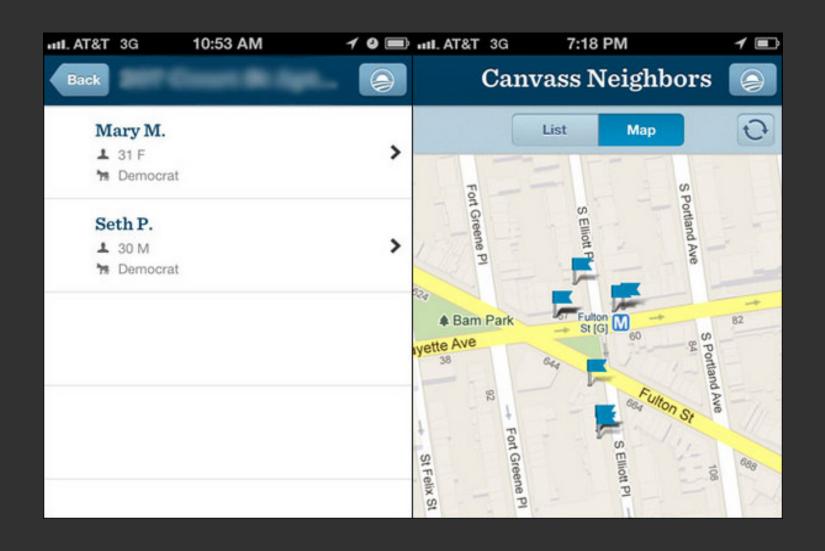




Election Data Analytics

- ✓ Both campaigns heavily relied on IT infrastructure and data analytics to target certain voters [18]
 - o Who are all these "Undecided Voters"?
- Large amounts of data was gathered about the electorate [17]

 What information was specifically gathered on the electorate?
 - electorate?
 - o How was this data used?
 - o What happened to it after the election?
 - ✓ This information could also be used to coerce opposing voters to the polls
 - Threats to vote for their candidates
 - Or to even keep opposing voters away from the polls altogether



Obama for America iPhone app [19]

ORCA Harpooned?

- GOP monitoring application (Orca)

 failed
- ✓ Anonymous claims credit [14]

We coded and created, what we call, The Great Oz. A targeted password protected firewall that we tested and refined over the past weeks. We placed this code on more than one of the digital tunnels and their destinations that Karl's not so smart worker bees planned to use on election night. We noticed that these tunnels were strategically placed to allow for tunnel rats to race to the server sewers from three different states. Ah yes, Karl tried to make it appear that there were more than three but we quickly saw the folly of his ploy.

We watched as Karl's little boys and girls confidently ran their tests while Karl told his barons to smoke cigars.

6 November, 2012 10am EST—ORCA Killer 8pm EST-The Great Oz

Foreign Influence

- Campaign finance laws forbid the acceptance of foreign funds by candidates seeking office
- Obama.com owned by individual with significant business ties to China [16]
 - 68% of traffic from foreign locations
 - Redirected traffic to Obama's primary donation page - <u>my.barackobama.com</u>
- Combed through data from
 campaignfundingrisks.com/raw-data/
 - Identified many links of the Obama/Romney campaigns receiving donations from foreign sources

Fraudulent Ballot Requests

- ✓ Miami-Dade County received 2,552 fraudulent ballot requests via their elections website in July 2012 [7]
 - Requests came from both domestic and foreign IPs
 - When alerted, election officials blocked the IPs and...this worked.
- ✓ Originally dubbed as first US-related elections cyberattack (there have been obvious ones in Austria, Canada, and Russia)
- ✓ Law enforcement tracked ~500 of the requests to a local IP
 - Eventually linked to individuals working on a Congressional campaign
 - A plea deal was struck for 90 days in jail
- ✓ A grand jury provided security recommendations [6]

Near-Term Predictions

- Cryptocurrencies will be used in conjunction with phundraising
 - ✓ Some candidates already accept them for donations, and why not? [8]
- Election data will become very desirable
 for external organizations
 - This will be a predictor of how you will vote
 - Malware targeting people based on political views
- Bespoke malware will be used for election crimes
 - Election-specific botnets
 - Attacks on PACS, attacks from PACs

Conclusions

- ✓ Research into election cybercrime is lacking
- ✓ The techniques discussed here are not new
 - This presentation is just a snapshot of 2012 attacks and techniques will evolve
- Determining the intent for mass collection of data on the electorate may not come until much later after it is collected.
- ✓ The sophistication of election crime will rapidly increase.
- Fake campaigns and phundraising are likely to become a greater part of the normal election process.

END OF BALLOT Be sure to review your ballot selections

Malicious Online Activities Related to the 2012 U.S. General Election

Questions?

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- http://upload.wikimedia.org/wikipedia/commons/thumb/e/e2/
- Boss_Tweed,_Nast.jpg/553px-Boss_Tweed,_Nast.jpg
- [2] Obama vs Romney:
- http://www.flickr.com/photos/donkeyhotey/7189682629/
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