PESTEL Analysis of Hacktivism Campaign Motivations

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Abstract

A political, economic, socio-cultural, technological, environment and legal (PESTEL) analysis is a framework or tool used to analyse and monitor the macro-environmental factors that have an impact on an organisation. The results identify threats and weaknesses which are used in a strengths, weaknesses, opportunities and threats (SWOT) analysis. In this paper the PESTEL framework was utilized to categorize hacktivism motivations for attack campaigns against certain companies, governments or industries. Our study is based on empirical evidence: of thirty-three hacktivism attack campaigns in manifesto level. Then, the targets of these campaigns were analysed and studied accordingly. As a result, we claim that connecting cyberattacks to motivations permits organizations to determine their external cyberattack risks, allowing them to perform more accurate risk-modeling.

Keywords

PESTEL analysis
Security
Online anonymity
Hacktivism
Cyberattack
Political activism
Strategic management
Risk modeling

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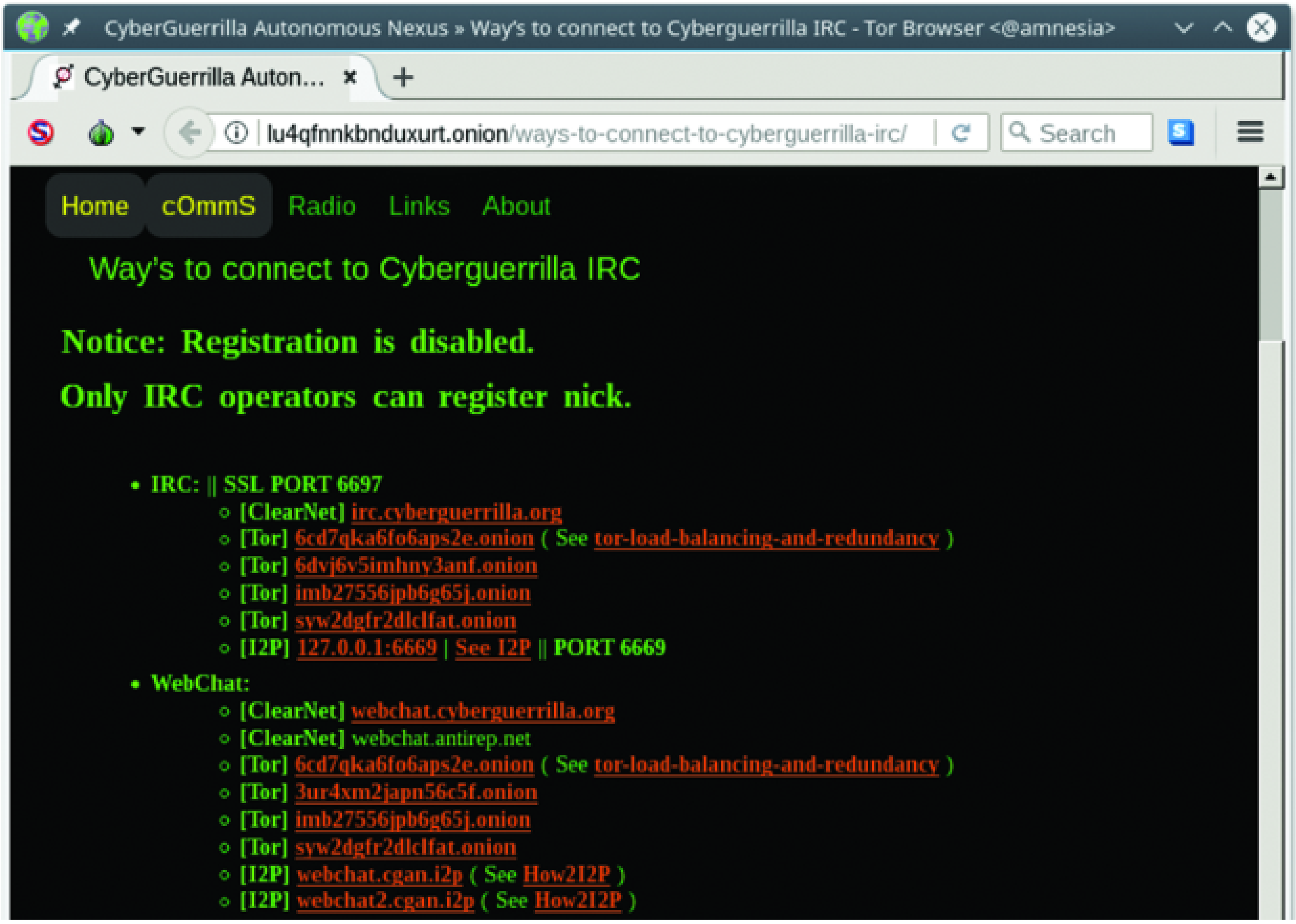
Appendices

A Discussion Channels Within the Tor Anonymity Network are used to Coordinate DDoS Attacks

Fig. 7.


CyberGuerrilla Autonomous Nexus » Way's to connect to Cyberguerrilla IRC - Tor Browser <@amnesia>
CyberGuerrilla Auton...
lu4qfnnkbnduxurt.onion/ways-to-connect-to-cyberguerrilla-irc/
Search
Home
cOmmS
Radio
Links
About

Way's to connect to Cyberguerrilla IRC

Notice: Registration is disabled.

Only IRC operators can register nick.

- IRC: || SSL PORT 6697
  - [ClearNet] irc.cyberguerrilla.org
  - [Tor] 6cd7qka6fo6aps2e.onion (See tor-load-balancing-and-redundancy)
  - [Tor] 6dvj6v5imhny3anf.onion
  - [Tor] imb27556jpb6g65j.onion
  - [Tor] syw2dgfr2dlclfat.onion
  - [I2P] 127.0.0.1:6669 | See I2P || PORT 6669
- WebChat:
  - [ClearNet] webchat.cyberguerrilla.org
  - [ClearNet] webchat.antirep.net
  - [Tor] 6cd7qka6fo6aps2e.onion (See tor-load-balancing-and-redundancy)
  - [Tor] 3ur4xm2japn56c5f.onion
  - [Tor] imb27556jpb6g65j.onion
  - [Tor] syw2dgfr2dlclfat.onion
  - [I2P] webchat.cgan.i2p (See How2I2P)
  - [I2P] webchat2.cgan.i2p (See How2I2P)

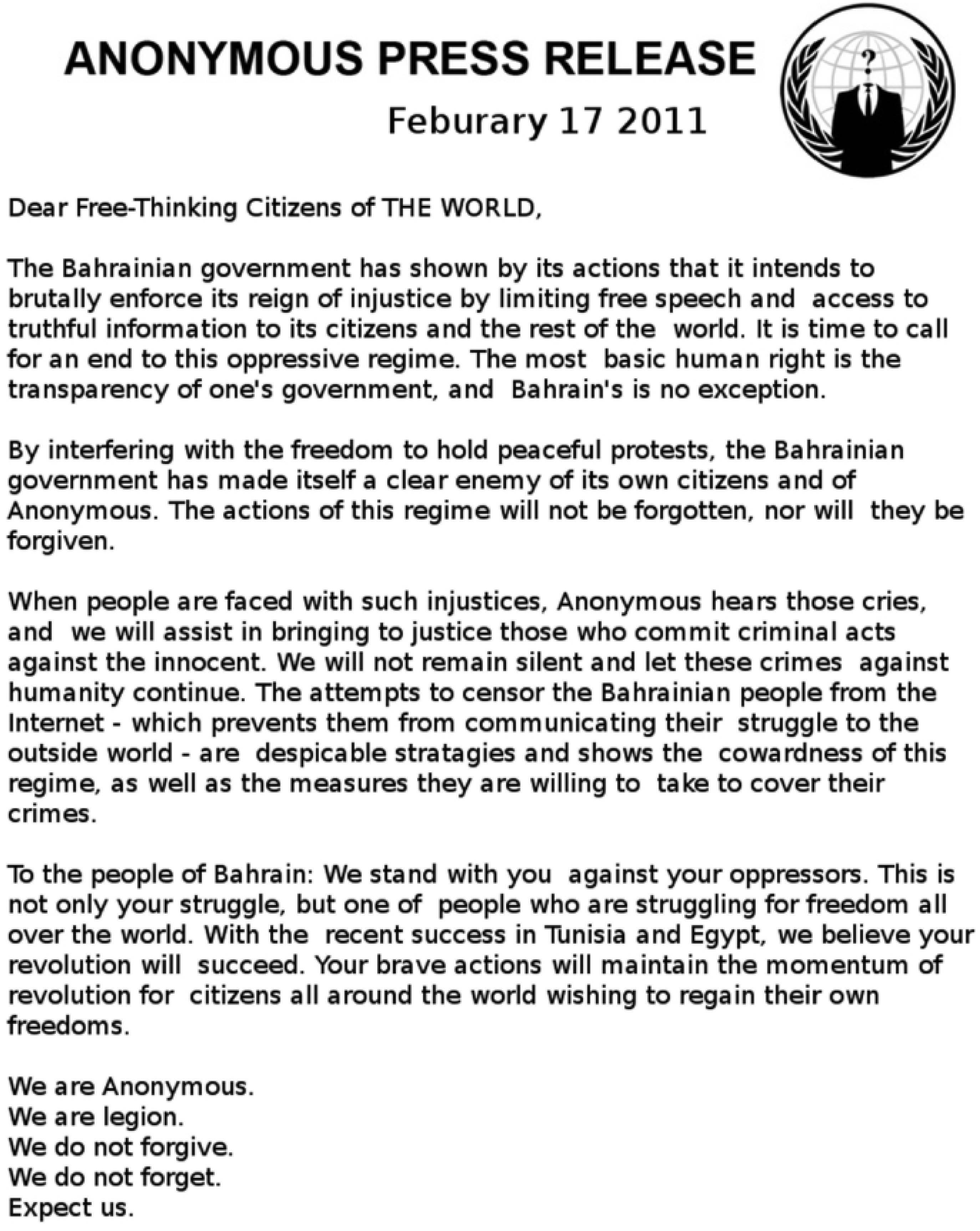
An example of anonymous onion website that shares a tutorial to connect IRC channels. These services operate inside the Tor anonymity network.

B Hacktivist Campaigns, Motivations and Targets

Table 1. An approximated timeline of hacktivist campaigns. Thirty-three cases were examined for motivation and targets. The main target sectors and countries are listed here. The number of targets refers to unique sites and online services which were attacked during the campaign. Anon. represents Anonymous, CyFi represents Cyber Fighters of Izz ad-Din al Qassam, and NWH represents New World Hackers. Please note that timeline is not clear because many campaigns failed to start or were re-launched several times. The main target sectors and countries are listed here. Finally, there are categories of motivation under the PESTEL framework. Note that several campaigns could intuitively fit under more than one category. We selected the main category.

C OpBahrain Manifesto by the Anonymous Hacktivist Group

Fig. 8.



ANONYMOUS PRESS RELEASE

Feburary 17 2011

Dear Free-Thinking Citizens of THE WORLD,

The Bahrainian government has shown by its actions that it intends to brutally enforce its reign of injustice by limiting free speech and access to truthful information to its citizens and the rest of the world. It is time to call for an end to this oppressive regime. The most basic human right is the transparency of one's government, and Bahrain's is no exception.

By interfering with the freedom to hold peaceful protests, the Bahrainian government has made itself a clear enemy of its own citizens and of Anonymous. The actions of this regime will not be forgotten, nor will they be forgiven.

When people are faced with such injustices, Anonymous hears those cries, and we will assist in bringing to justice those who commit criminal acts against the innocent. We will not remain silent and let these crimes against humanity continue. The attempts to censor the Bahrainian people from the Internet - which prevents them from communicating their struggle to the outside world - are despicable stratagies and shows the cowardness of this regime, as well as the measures they are willing to take to cover their crimes.

To the people of Bahrain: We stand with you against your oppressors. This is not only your struggle, but one of people who are struggling for freedom all over the world. With the recent success in Tunisia and Egypt, we believe your revolution will succeed. Your brave actions will maintain the momentum of revolution for citizens all around the world wishing to regain their own freedoms.

We are Anonymous.
We are legion.
We do not forgive.
We do not forget.
Expect us.

A manifesto of a hacktivist campaign. Anonymous published this manifesto before it launched “OpBahrain” attacks against the Bahrainian government. The manifesto describes clear motivation for the attacks.

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