Domain of Expertise:
A Cyber Turnkey Solutions Provider:

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Architecture and Design

Penetration Testing

Forensics and Incidence Response

Training Programs

PCI Compliance

Mobile Security Testing

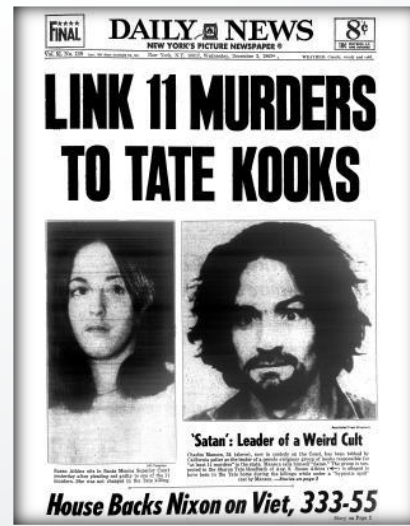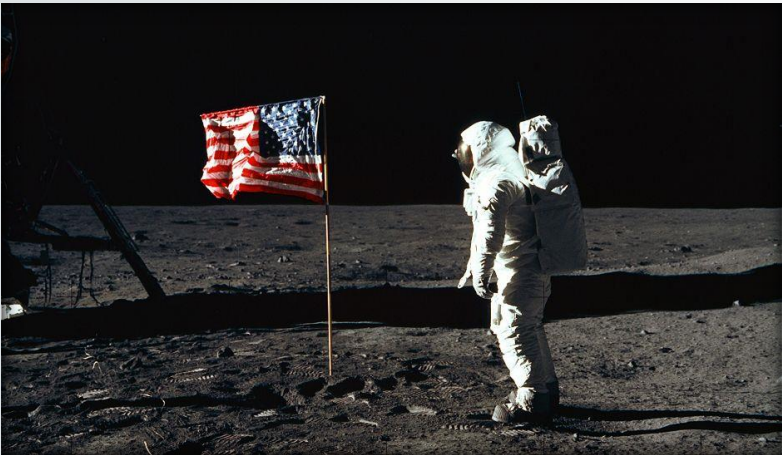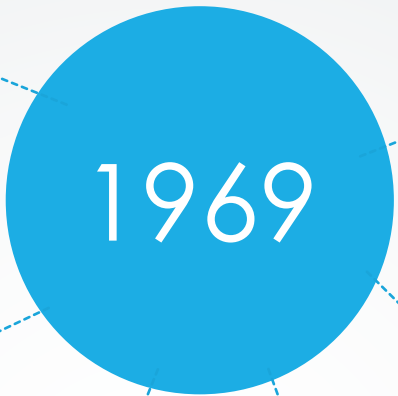Code Review

Cyber Intelligence

The Internet Then and Now

WOODSTOCK 1969

1969

LAOS SINGAPORE THAILAND MALAYSIA VIETNAM BURMA

FINAL
DAILY NEWS
NEW YORK'S PICTURE NEWSPAPER
8¢
LINK 11 MURDERS
TO TATE KOOKS
'Satan': Leader of a Weird Cult
House Backs Nixon on Viet, 333-55

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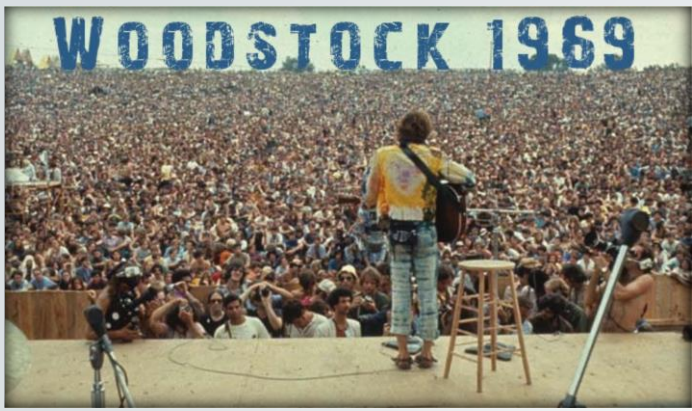
Further Reading: A Brief History of the Internet
https://www.internetsociety.org/internet/history-internet/brief-history-internet/

THE INTERNET WAS NOT BUILT TO BE SAFE

"It's not that we didn't think about security. We knew that there were untrustworthy people out there, and we thought we could exclude them." David D. Clark

Further Reading: Washington Post, A Flaw in the Design, Craig Timberg, May 30, 2015
http://www.washingtonpost.com/sf/business/2015/05/30/net-of-insecurity-part-1/?utm_term=.b94209bed151

THE MORRIS WORM

o November 1988 the Morris Worm was released

o Creator: Robert Tappan Morris Jr. – Grad Student at Cornell University

o First cyber attack to gain mainstream media attention

o 5%-10% of computers connected to the Internet were infected

o Millions of Dollars of Damage

o In regards to % of infected devices it is the largest known attack of all times

The realization dawned that there was **no more control over the internet**

Further Reading: Five Interesting Facts About the Morris Worm
https://www.welivesecurity.com/2013/11/06/five-interesting-facts-about-the-morris-worm-for-its-25th-anniversary/

30 YEARS SINCE THE MORRIS WORM
A Connected World

Others

Finance

Government

Critical Infrastructure

IOT

THE THREAT IS REAL

"A cyber attack perpetrated by nation states or violent extremist groups could be as destructive as the terrorist attack of 9/11 …. Such a destructive cyber attack could paralyze the nation."

➡ Leon Panetta, Former US Secretary of Defense

THE DANGER IS REAL

(Independent)

(Reuters)

(Reuters)

(Gov Tech)

(Daily Mail)

THE ATTACKERS ARE REAL

Countries

Cyber Criminals

Hacktivists

Scriptkiddies

So What's Up in Myanmar?

Myanmar Telecom Milestones

o 2014: Telenor and Ooredoo start Operations

o 2014: ISP Licensing Process Begins

o 2015: E-Government Masterplan kickstarted

o 2016: Mobile Money regulatory Framework is released

o 2018: Cyber Law???

➡ An unprecedented digitalization Process

Myanmar is at Risk

o The risk to Myanmar in many ways is even greater than that to Europe or the USA.

o Government institutions and private enterprises in all sectors are not sufficiently secured.

o There is a lack of cyber security specialists around the world and Myanmar is no exception.

o Initial costs of setting up cyber divisions has put off most investments in cyber security.

Lack of Awareness

Myanmar is at Risk

o The Microsoft Security Intelligence report (volume 22), which covers reports an encounter rate of 23.8% for Myanmar. (Jan. – Mar. 2017) – International Average is at 9.8%.

o String of attacks on Myanmar Government Websites by Turkish Hackers in 2017.

o Retaliatory attacks by Myanmar hackers on Turkish sites.

"Because of the continuously increasing volume and diversity of connected devices, the attack surface is exponentially increasing which results in a broader amount of attacks."
Jochanan Sommerfeld – Cyber Security Specialist

How Bad is it really?

We don't really know…

o The vast majority of cyber related incidences in Myanmar go unreported.

o There is no authority to report to…

o Myanmar has Cyber Institutions such as the ITCSD and a Myanmar CERT in place – but a lack of regulatory framework and funding hinders them to work effectively.

It's up to the private sector to step up it's security and for the consumer to demand it.

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Reading Materiel

Some articles for all those interested in delving a little deeper into the topics covered in this presentation

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Myanmar Business Today: Florian Frank, With Digital Expansion come Digital Concerns
https://www.mmbiztoday.com/articles/cyber-security-digital-expansion-come-digital-concerns

Myanmar Times: Florian Frank, Cyber employees put Organizations at Risk
https://www.mmtimes.com/news/cyber-world-employees-put-organization-risk.html

Myanmar Times: Myo Lwin, Uncontrolled use of social media a real threat: Doron Landau
https://www.mmtimes.com/news/uncontrolled-use-social-media-real-threat-expert.html

Washington Post: A Flaw in the Design, Craig Timberg, May 30, 2015
http://www.washingtonpost.com/sf/business/2015/05/30/net-of-insecurity-part-1/?utm_term=.b94209bed151

A Brief History of the Internet
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Five Interesting Facts About the Morris Worm
https://www.welivesecurity.com/2013/11/06/five-interesting-facts-about-the-morris-worm-for-its-25th-anniversary/