

The background is a teal-colored collage. In the center, a hand is shown holding a large, light-green padlock. Surrounding this central image are numerous small, light-green icons representing various aspects of technology and cybersecurity, including a printer, a cloud with an upward arrow, a magnifying glass, a target, a line graph, a shield, a shopping cart, a calendar with the number 12, a mouse cursor, a Wi-Fi symbol, a person icon, a document, an envelope, an '@' symbol, a toolbox, a globe, a laptop, a smartphone, a tablet, and a house. The entire composition is overlaid with a pattern of concentric circles and dashed lines, suggesting a digital or network environment.

Seminar Series on Cyber Security

Hitesh Dharamdasani
Founder, Informant Networks

Computer Security 101

**The fun part of Computer
Security**

#whoami

- Security Research, Cyber Crime
- GIT > George Mason > UC Berkeley > FireEye > On Stage
- Extensive research on Cyber crime and internet threats
- Currently Building Data-driven Network Security Products at Informant Networks
- I love the Internet, A LOT!
- <http://hitesh.xyz>

Agenda

- What is Computer Security
- Need to protect computer systems
- Early Days of Computer Security
- Evolution of threats
- Current trends

Computer Security?



“Computer Security is the protection of computing systems and the data that they store or access.”

UCLA, Computer Security Training Guide

But its just a computer?

- Your bank records are no longer in books
- Your UID number is all electronic
- You use more money via plastic than via hard currency
- Your power at home is regulated by means of a computer
- Basically, Everything you consume went via a CPU

Early Days

- Mostly for fun or showoff
- No destructive intent or malice
- Exploratory rather than harmful
- Bunch of smart people trying to outsmart each other
- Bragging rights!

Internet and Trust

- Systems were designed to be simple
- Everyone knew each other
- Trust is human. Not computable
- In the early Internet, Everyone knew each other.
Personally

But then

But then

1979

First Computer Worm created at
Xerox PARC

1986

First ever Virus

Brian.A was created in Pakistan by
Basit Farooq Alvi and Amjad Farooq Alvi

1988

Morris Worm

First Worm uploaded to the Internet(ARPANET)

Robert Morris did it out of boredom

3 years probation and \$10000 Fine

1990

Self Replicating Viruses are
born.

Virus meets Worm

1998

500+ U.S. Government
Systems hacked by
two teenagers

2007

Storm

A Trojan that sends spam
Spread via social engineering

Infected 8% of the Internet in
72 hours

2006 - Nyxem

2008 - Koobface

2009 - Conflicker

2010

Stuxnet

Targeted Attack on Iran
Nuclear Power Plant

Paradigm Shift

Incidents of cybersecurity breach shoot up 117% in India: PwC

By PTI | 14 Oct, 2015, 03.09PM IST

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NEW DELHI: Incidents of [cybersecurity](#) breach surged by a record 117 per cent during the year and companies are investing more to tackle this menace, as also improve business performance, said a survey.

According to global consultancy firm [PwC](#) along with CIO and CSO, "The average number of information security incidents detected by respondents increased by 117 per cent over the previous year, up from 2,895 last year to 6,284 this year."



Meanwhile, the increase in incidents of cybersecurity breach globally stood at just 39 per cent during the period under consideration (July 2014-June 2015).

These are just the reported ones

Current Trends

India lost Rs 34,200 crore to cybercrime last year

Last updated on: September 9, 2011 13:16 IST

‘Consumer cybercrime cost India \$8bn in a year’

PTI | Sep 13, 2012, 04:15 AM IST

READ MORE » [Cybercrime](#) | [Consumer Cybercrime](#) | [Symantec](#)



MUMBAI: Software security services provider Norton on Wednesday said consumer cybercrime has cost the country around Rs 42,000 crore in the past 12 months, impacting 42 million people.

**Talk about
growth**

20K Crore

Karnataka top cop loses 10,000 to phishing

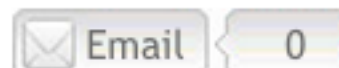
TNN | Jun 9, 2015, 01:04 AM IST

READ MORE » [Karnataka](#)

■ 3 Railway Loco Pilots Lose Rs 45,000 to Phishing

By S Lalitha | Published: 22nd June 2015 06:01 AM Last Updated: 22nd June 2015 07:57 AM

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BENGALURU: About two months ago, State DG & IGP Om Prakash became a victim to This high-profile case points at the fact that average persons are even more gullible to su through the Internet.

BENGALURU: It's an embarrassment Ka police could well do without. The city's sc cop and head of the state police force lost 10,000 to a phishing scamster. The fraud happened in April and the culprit was ca was produced in court on Saturday.

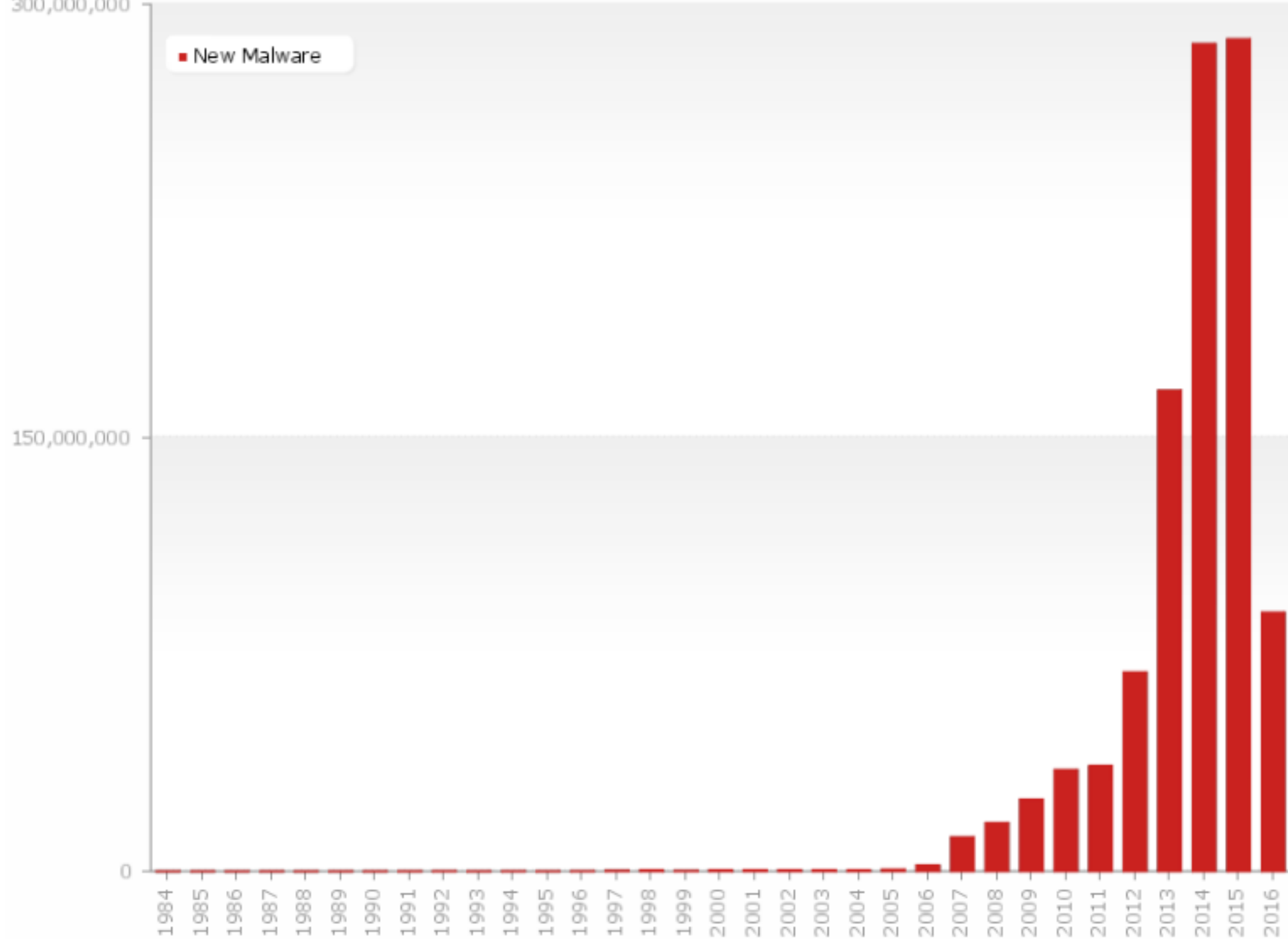
It's ironical considering that Bengaluru p have been repeatedly warning citizens wi not to fall prey to phishing scamsters and away their bank account information to u callers.

Cyber security: 1 million cyber security professionals needed by 2020

ET Bureau Aug 25, 2015, 06.27AM IST

Tags: Tata Power | Symantec | State Bank Of India | Nasscom | CEO

Clearly, The problem is not solved



More Malware per day then ever

<https://www.av-test.org/en/statistics/malware/>