

**EVOLUTION OF CYBER  
SECURITY WITH THE  
EMERGERANCE OF IPV6  
AND IoT**



# Objectives

- ▶ To understand IPv6 and how it raises major security concerns.
- ▶ To understand why IoT (The Internet of Things) is fast becoming a major target for security breaches.
- ▶ To know a few ways to protect ourselves from cyber attacks

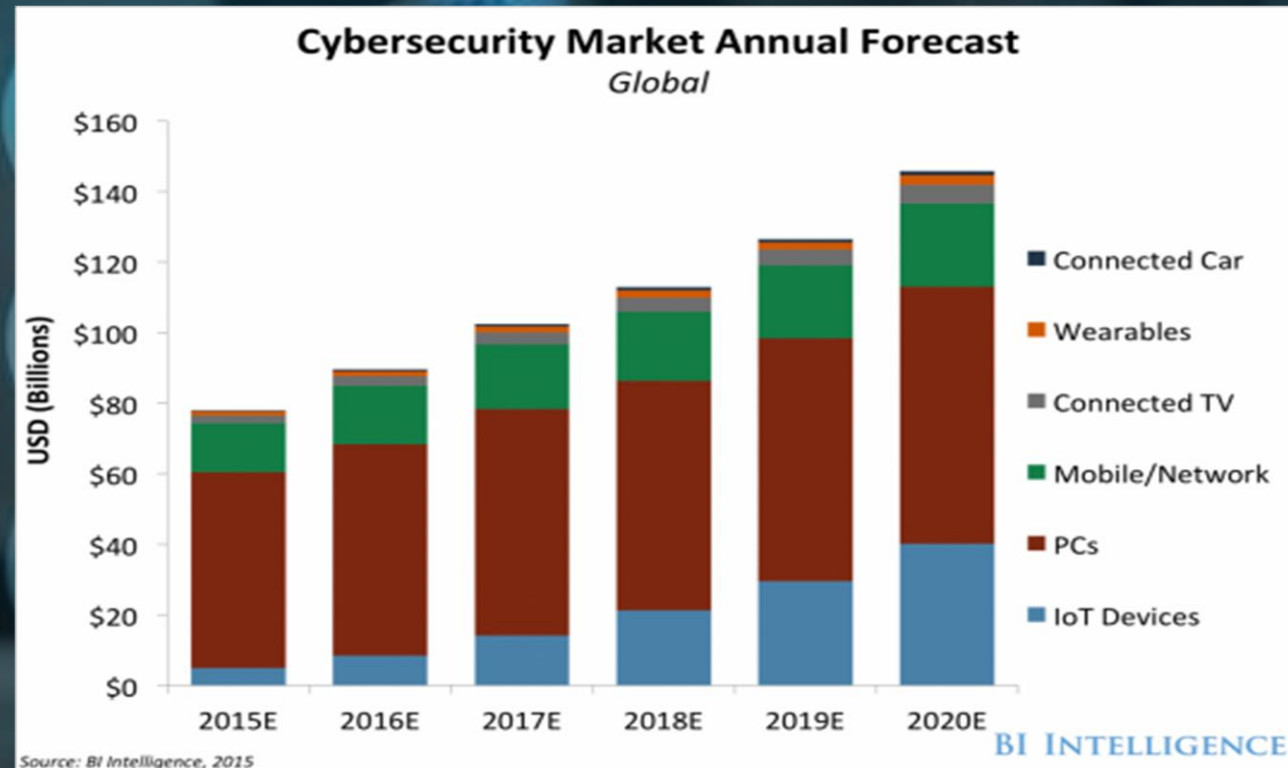
# How IoT Will Affect Security and Privacy



# Increase In Cyber Attacks



- ✓ Major DDoS attacks in 2016
- ✓ 21<sup>st</sup> October “Mirai Botnet”
- ✓ Automating Systems in Finland



- ✓ HP study (2016) reveals 70% of the most commonly used IoT devices contain vulnerabilities.

# The Multiplying Effect of Today's Cybersecurity Challenges

- ▶ The Speed of Change
- ▶ A Network of Networks
  - ▶ Growing use of mobile devices
  - ▶ The “BYOD” employer
- ▶ Application risk
  - ▶ Malwares
  - ▶ Application vulnerabilities
- ▶ Infrastructure
- ▶ Cloud computing


# Internet of Insecure Things

## ▶ Security Issues

- ▶ Public Perception
- ▶ Vulnerability to Hacking

## ▶ Privacy Issues

- ▶ Too Much Data
- ▶ Unwanted Public Profile
- ▶ Eavesdropping
- ▶ Consumer Confidence



THE INTERNET  
OF  
INSECURE  
THINGS

# No Silver Bullet

- End Point Security
- Resilient Networking Principles
- Awareness



“Si vis pacem, para bellum”

“Threats are everywhere and what you don’t know CAN harm you”  
(Unknown)

