NAPO-GMU Presentation
Your Digital Security & Privacy

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Master a Skill – Learn For Life

Outline

- **What is the Difference between Digital Security and Digital Privacy?**

- **How to Protect Your Digital Assets.**

- **How to Protect Your Digital Privacy.**

- **You've Been Compromised - Now What?**

Outcomes

- **Know What is Digital Security and Digital Privacy.**

- **Know Top Actions You Should Take to Protect Your Digital Assets & Privacy.**

- **Know When Your Digital Security and Digital Privacy have been Compromised and What to Do.**

What is Digital Security & Privacy?

- **Digital security and privacy are two significant issues.**
- **Digital security pertains to protecting your digital assets.**
- **Digital privacy has two parts:**
  - **How you protect your digital identity.**
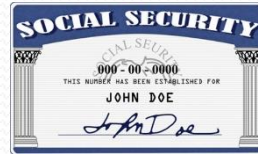 - **How you protect your digital privacy.**

Top 5 Actions
Protect Your Digital Assets, Identity, & Privacy

1. **Use a Password Policy**
2. **Protect Your Credit Files**
3. **Protect Digital Data in the Cloud**
4. Use Privacy Controls
5. Do Not Allow
   - 3rd Party Cookies
   - Clickstream Tracking
   - Geotracking

What are my Digital Assets?

What is my Digital Identity?

Programmer
Web Developer
Program Assistant
Project Manager
Program Manager

Washington DC
New York City
Los Angeles, CA
Dallas, TX
Brussels, Belgium

What Threats to My Digital Identity?

Compromised Personal Identifying Information (PII)

Compromised Digital Credentials

Compromised Digital Device Identification

Name

Driver's license number

SSN

Home address

Birthplace

Passport number

Date of Birth

Telephone number

Credit card numbers

Fingerprints

Facial Recognition

Nickname

Vehicle registration plate number

Email address

Login name

IP address

Handle

Screen name

Password

Tracking ID

Digital Certificate

IP address

ESN

Serial No

MAC Address

Barcode

RFID

What are Digital Threats?

Types of Threats
Physical damage
Natural events
Loss of essential services
Compromise of information
Technical failures
Compromise of functions

Threat Origination
Deliberate
Accidental
Environmental
Negligence

Threat Classification
(STRIDE Model)
Spoofing of user identity
Tampering
Repudiation
Information disclosure
(privacy breach or Data leak)
Denial of Service (D.o.S.)
Elevation of privilege

FBI Top Cyber Threats for 2020

- **Ransomware**
- **E-Mail Compromise**
- **Malware/Scareware**
- **Phishing/Spoofing**
- **Credit Card Fraud / Misuse**
- **Data Breach**
- **Denial of Service**

Protect Your Digital Assets in 5 Domains
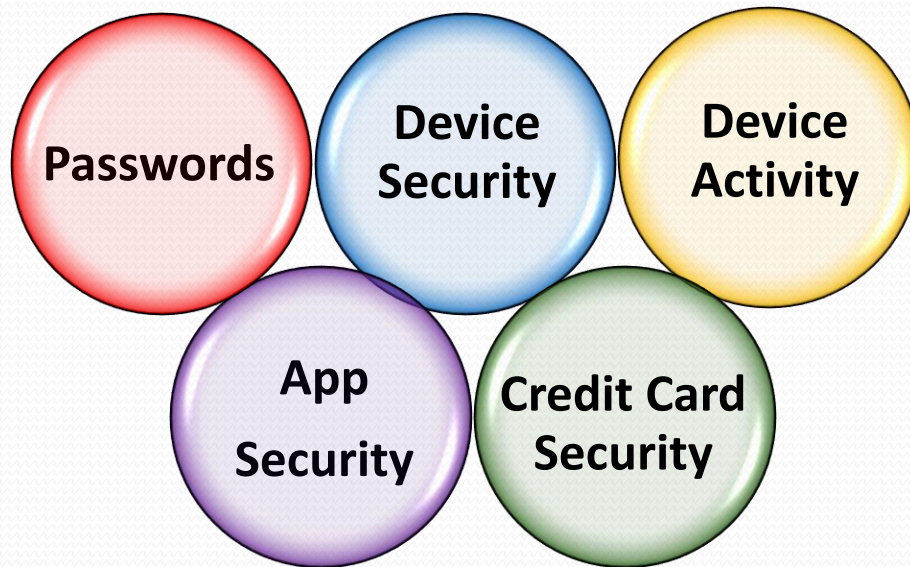
How to Protect Your Digital Assets
Passwords

- **Use a Password Policy**

- **Use a Password Manager**

- **Use a Separate Password for:**

  - **Devices**

  - **Online and Offline Accounts**

How to Protect Your Digital Assets
Password Protection Policy

Asset Value	Type of Site	Password Strength
Low	Social Media	3 Level
Medium	Site where you pay for something	6 Level
High	Medical Site	8 Level & MFA
Very High	Banking	10 Level & MFA

- Develop a password usage policy based on type of asset.
- Never use the same password for your router/computer/email or online accounts.
- Avoid information of commonly known information (friends/family/colleagues).
- Encourage writing down passwords:
  - Keep in a safe place
  - Password Manager
  - Encrypted File

Password Strength Levels

Level	Asset Value	Alpha Characters	Numeric Characters	Special Characters	Total	MFA
1	None	4 (1 -UC)	2 (0-9)	2 - !@#$%^&*()?<>	8	No
2	Low	5 (2-UC)	2 (0-9)	2 - !@#$%^&*()?<>	9	No
3	Little	6 (3-UC)	2 (0-9)	2 - !@#$%^&*()?<>	10	No
4	Some	7 (2-UC)	2 (0-9)	2 - !@#$%^&*()?<>	11	No
5	Medium Low	8 (4-UC)	2 (0-9)	2 - !@#$%^&*()?<>	12	No
6	Medium	8 (4-UC)	3 (0-9)	2 - !@#$%^&*()?<>	13	No
7	Medium High	8 (4-UC)	3 (0-9)	3 - !@#$%^&*()?<>	14	No
8	High	4 (1 -UC)	1 (0-9)	1 - !@#$%^&*()?<>	6	Yes
9	Very High	4 (2-UC)	2 (0-9)	2 - !@#$%^&*()?<>	8	Yes
10	Extremely High	6 (2-UC)	2 (0-9)	2 - !@#$%^&*()?<>	10	Yes

How to Protect Your Digital Assets
Number & Special Character Sequence Password Use

- **Old Telephone Number Reversed**
- **Old House Number Addresses**
- **Graduation Date**
- **Other Special Date**
- **No SSN**
- **No Birthdate**

Numbers
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0

Special Characters
- 1 - !
- 2 - @
- 3 - #
- 4 - $
- 5 - %
- 6 - ^
- 7 - &
- 8 - *
- 9 - (
- 0 -)

Special Characters
- \
- "
- '
- :
- ;
- <
- >
- ?
- /

How to Protect Your Digital Assets

Mnemonic Password Protection Policy

- **Mnemonic Password**
  - **Slogan**
  - **Lyric of Song**
  - **Passage**
  - **Part of a poem**
  - **A Number Sequence.**
  - **Replace Lower Case with Upper Case.**
  - **Replace Number with special character.**

- **I Can't Believe I Ate The Whole Thing – IcBIaTwT**

  AlkaSeltzer TV Commercial

- **Imagine there's no countries, It isn't hard to do – ItNcIiHtD**

  Imagine – John Lennon

- **The most beautiful things in the world cannot be seen or touched – tMbTiTwCbSoT**

  Quote from Hellen Keller

- **You may shoot me with your words, You may cut me with your eyes – yMsMwYwyMcMwYe**

  Still I Rise by Maya Angelou

How to Protect Your Digital Assets
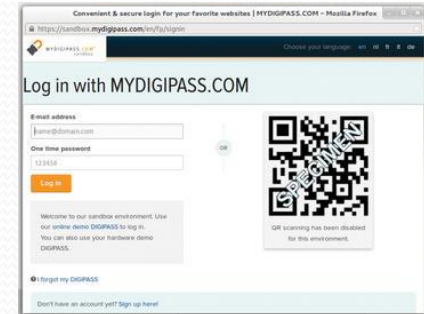
Multi Factor Authentication Protection

Security Token

Smartphone Security Code

Smartphone App

Web-based Security Authorization

Biometric Security

Password Generators & Checkers

Online Password Generators

- **Strong Password Generator**
- **Strong Password Generator - 2**
- **LastPass Password Generator**
- **Strong Random Password Generator**
- **DashLane Password Generator**
- **Random Password Generator**
- **14 Best Password Generators**

Online Password Checkers

- **Kaspersky Lab Password Checker**
- **Dashlane Password Checker**
- **My1Login's Password Strength Checker**
- **Password Checker Online**
- **RoboForm How Secure Is My Password**

Password Managers

PC Magazine Best Password Managers

RANK	PROGRAM	COST
1 – Editor Choice	Dashlane 3	Free / Premium - $5/M / Plus - $10/M
2– Editor Choice	Keeper Password Manager & Digital Vault	Free / Express - $2/m / Advanced - $5/M / Pro $15/M
3	RoboForm Everywhere 7	Free / Indiv - $23.88/Y / Family - $47.75 /Y
4	LastPass 3.0	Families (6) - $4/M
5	LastPass 3.0 Premium	$2/M
6	Zoho Vault	Free / $0.9 per user per month
7	Sticky Password 7	Free / 14.99/Y
8	Intuitive Password 2.9	Free / Express - $2/m / Advanced - $5/M / Pro $15/M
9	Keeper Password Manager & Digital Vault 8	Personal $2.50/M / Family $5/M
10	Norton Identity Safe	Free
11	my1login	Free

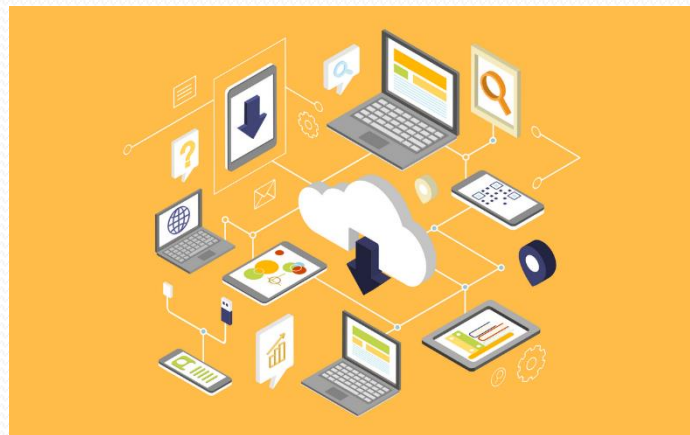# How to Protect Your Digital Assets Application Security

- **Use and Update Antivirus Programs**

- **Update Your Apps Regularly**

- **Online / Cloud Apps**

- **Mobile Apps**

- **Local Resident Apps**

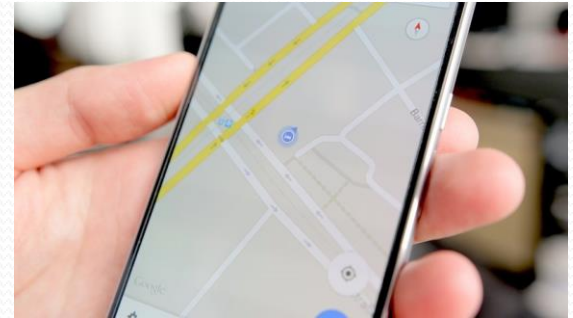# How to Protect Your Digital Assets Device Security

- **Secure All Devices – Antivirus & App Updates:**

  - **Desktop**

  - **Laptop Tablet**

  - **Smartphone**

  - **Smart Watch**

  - **IoT Devices**

- **Backup Your Data Regularly**

How to Protect Your Digital Assets Device Activity

- **Monitor Your Computer Activity.**

- **Never open attachments or links in email, IM's from unknown people.**

- **Watch out for Social Engineering**

How to Protect Your Digital Assets Credit Card Security

- Use Online CC for all Online Purchases.
- Use Offline CC for all Offline Purchases.
- Use Single Use CC for big purchases.
- Monitor Your Financial Accounts (Text Alerts)
- Receive Free Credit Report Monitoring.
- Freezing and Lock Your Credit Files
- Free Dark Web Scan

How to Protect Your Digital Assets
Stopping Robocalls - Text - Phone Scams

- Don't answer calls from unknown numbers. If you answer such a call, hang up immediately.
- Be aware: Caller ID showing a "local" number does not necessarily mean it is a local caller.
- Do not respond to any questions, especially those that can be answered with "Yes."
- Never give out personal information:
  - account numbers
  - Social Security numbers
  - mother's maiden names
  - Passwords
  - other identifying information in response to unexpected calls or if you are at all suspicious.
- Inquiry from someone who says they represent a company or a government agency
  - Hang up
  - Call the phone number on your account statement - in the phone book - Company's or government agency's website
  - Verify the authenticity of the request.

How to Protect Your Digital Assets
Stopping Robocalls - Text - Phone Scams

- Use a voice mail account password.

- Contact your phone company about call blocking tools.

- Use robocall-blocking technology

- Register your number on the Do Not Call List.

- File a complaint with the FCC.

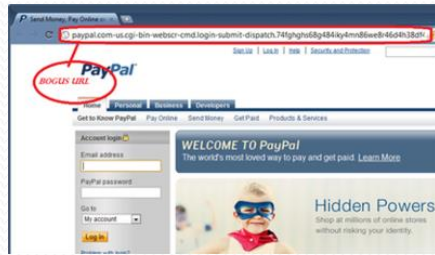# How to Protect Your Digital Assets
Robocall Blocker Apps

Android

- **Call Blocker Free**
- **Master call blocker**
- **Safest Call Blocker**
- **Should I Answer?**
- **Blacklist Plus**
- **Truecaller**

iOS

- **Call Controls** (iOS) …
- **Whoscall** (iOS) …
- **Truecaller** (iOS) …
- **Avast Call Blocker – Spam Blocking** $$
- **Mr. Number** (iOS)
- **YouMail** $$

How to Protect Your Digital Assets
e-Skimming

Hacker collects PII

Fraudulent Website Link (Spoofed) or Magecart Code

PII entered on Fraudulent Receiver site

Hacker post PII on Dark Web

Hacker purchases PII on Dark Web

How to Protect Your Digital Assets
e-Skimming

- **Apple Pay**
- **PayPal**
- **Similar mobile payment**
- **Send one-time token of your CC info.**

- Shop on well-known, reputable sites.
- Use one-time-use money or credit cards.
- Enable two-factor authentication.
- Use strong passwords that are unique to the websites and accounts they unlock. Change passwords frequently.
- Activate transaction alerts on all credit cards and bank accounts for free.
- Consider freezing your credit to prevent the creation of new accounts.

If you've been notified of such breaches - get a new credit card.
Check your statements weekly for misuse.
File a detailed complaint at the **FBI Internet Crime Complaint Center**

How to Protect Your Digital Assets

What digital security measures can I take to protect my digital assets?

1. Use a strong password (Multi-Factor Authentication)
2. Use a Password Manager
3. Use a separate password for your devices and accounts.
4. Use and Update Antivirus Programs
5. Update your apps regularly
6. Secure Your Cellphone
7. Secure your laptop/tablet
8. Backup your data regularly
9. Monitor your computer activity.

10. Never open attachments or links in email, IM's from unknown people.
11. Watch out for Social Engineering
12. Use online Credit Card for all online purchases.
13. Use a offline Credit Card for all offline purchases.
14. Monitor your financial account (Text Alerts)
15. Receive free credit report monitoring.
16. Freezing and locking your credit file.
17. Free dark web scan.

Break

Protecting Your Digital Identity & Privacy

http://www.profburnett.com

Knowledge for the World

Top 5 Actions
Protect Your Digital Assets, Identity, & Privacy

1. Use a Password Policy
2. Monitor Your Credit Files
3. Backup Your Critical Digital Data (Offline & Cloud)
4. **Use Privacy Controls**
5. Do Not Allow
   - 3rd Party Cookies
   - Clickstream Tracking
   - Geotracking

Privacy Controls

- **Facebook**
- **Twitter**
- **Google**
- **Microsoft**
- **Apple**
- **LinkedIn**
- **Yahoo**
- **Amazon**

- **TV's – STB**
  - **Comcast**
  - **Verizon**
  - **Verizon Email (See Yahoo)**
- **Cellphone Providers**
  - **AT&T**
  - **T-Mobile**
  - **Sprint**
- **WiFi Routers**

Privacy Controls

- Facebook
- Twitter
- Google
- Microsoft
- Apple
- LinkedIn
- Yahoo
- Amazon

- TV's – STB
  - Comcast
  - Verizon
  - Verizon Email (See Yahoo)
- Cellphone Providers
  - AT&T
  - T-Mobile
  - Sprint
- WiFi Routers

Facebook Privacy Controls

- **Technolicious Facebook Privacy Guide**
- **Facebook Privacy Basics**
- **Data Policy**
- **Posts**
- **Apps**
- **Profile**
- **https://stalkscan.com/**

- **Advanced Privacy Controls**
  - **Timeline and tagging options**
  - **Manage blocking**
  - **Customize app privacy**
  - **Apps, websites and Platforms**
  - **Apps others use**
  - **Ad Settings**

Twitter Privacy Controls

- **Privacy Policy & Data Controls**

- **Privacy Settings**

- **Personalization and Data settings**

- **gPost Article on Twitter Controls**

Google Privacy Settings

- **Google Privacy Policies**
- **Security Checkup**
- **Privacy Checkup**
- **My Activity**
- **Data Takeout**
- **PC Magazine Google Privacy Article**
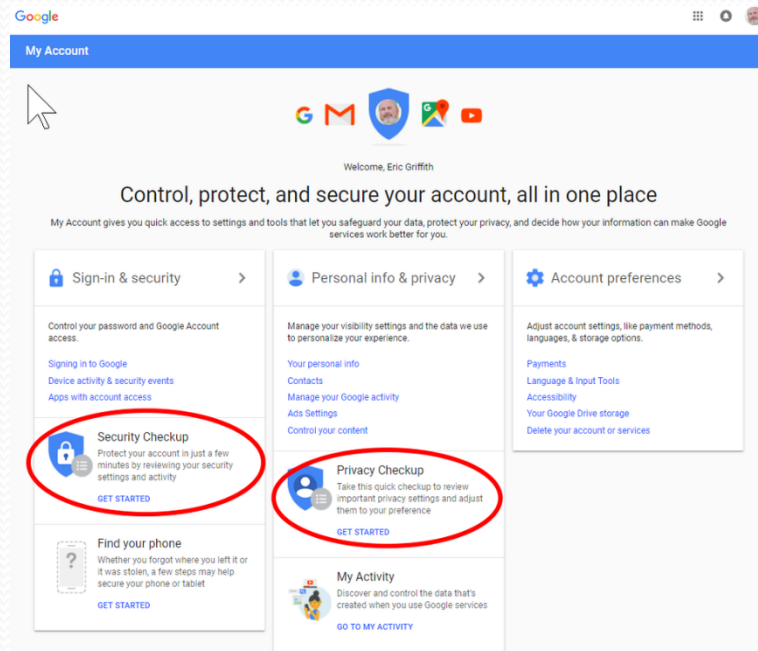
Microsoft Privacy Controls

- **Privacy at Microsoft**

- **Privacy Dashboard**

Apple Privacy Controls

- **Apple Privacy Policies**

- **Manage Your Privacy** **– By Device**

- **Touch ID**

- **Face ID**

LinkedIn Privacy Controls

- **LinkedIn Privacy Settings**

- **Account**

- **Privacy**

- **Ads**

- **Communications**

Yahoo Privacy Controls

- **Oath - Verizon**
  - **AOL**
  - **Yahoo**
  - **Tumblr**
  - **MapQuest**
- **Oath Privacy Controls**

Amazon Privacy Controls

- **Amazon Privacy Notice**
- **Your Profile**
- **Wish Lists**
- **Customer Reviews**
- **Amazon Prime**

TV's – STB Privacy Guidelines

- **Set Top Box (STB)**

- **Disable interactive services**

- **Limit ad tracking**

- **Opt out**

Xfinity YouTube Channel

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Comcast Customer Privacy Notice

- **Online Privacy Notice**

- **PDF**

- **XFINITY Data Usage Center**

Verizon YouTube Channel

Verizon Privacy Policy

- **Verizon Privacy Policy**

- **Verizon Selects Preference Center**

- **Fios Privacy Policy** **(for email See Yahoo)**

- **Verizon Fios TV Terms of Service**

Cellphone Providers Privacy Controls

- AT&T – **Privacy Policy** / **Smart Controls**

- T-Mobile – **Privacy Statement** / **Protecting your Privacy**

- Verizon – **Privacy Dashboard** (OATH)

WiFi Routers

- **Change you defaults**
  - **Admin Name:**
  - **Password:**
- **Turn Off Wireless Router Broadcasting**
- **Use MAC Addressing**

Top 5 Actions
Protect Your Digital Assets, Identity, & Privacy

1. **Use a Password Policy**
2. **Monitor Your Credit Files**
3. **Backup Your Critical Digital Data**
4. **Use Privacy Controls**
5. **Do Not Allow**
   - **3rd Party Cookies**
   - **Clickstream Tracking (Do Not Track)**
   - **Geotracking (Do Not Track)**

How to Protect Your Digital Identity & Privacy

What security measures can I take to protect my digital identity?

De-identification

Destroy Tracking Cookies

Implement DO-NOT -TRACK

Do Not Accept Third-Party Cookies

Anonymous Searching

Eliminate Device Fingerprinting

Destroy Click-Stream Data

Use a Password Policy

Break

You've Been Compromised Now What?

Ransomware Remediation

- **DO NOT PANIC!**
- **Never Pay Ransom!**
- **Restart Your Computer – Scareware Ransomware will be cleared.**
- **Follow Virus Protection Remediation Procedures**
- **Find/Determine Corrupted Accounts /Files**
- **Disable Accounts**
- **Delete Accounts / Files**
- **Use System Restore to Restore Accounts from Backups**
- **Restore Files from Unaffected Offline Backup Files**
- **<u>Contact the FBI Internet Crime Complaint Center (IC3)</u>**

E-Mail Compromise Remediation

- **DO NOT PANIC!**
- **Restart Your Computer**
- **Change Account Password**
- **Run Advanced System Repair Software**
- **Shutdown Email Account**
- **Contact anyone since your account was compromised**
- **Contact the FBI Internet Crime Complaint Center (IC3)**

Malware/Scareware Remediation

- ## DO NOT PANIC!
- **Restart Your Computer**
- **Check Antivirus Software**
- **Run Antivirus Software for Malware/Scareware**
- **Download and Run Malwarebytes Anti-Malware**
- **Contact the FBI Internet Crime Complaint Center (IC3)**

Phishing/Spoofing Remediation

- **DO NOT PANIC!**
- **Restart Your Computer**
- **Turn on your Email spam filter / Robocall App.**
- **Don't click on links or open attachments in emails/texts if it is from an unknown sender.**
- **Log in through a separate tab or window.**
- **Pick up the phone - Call or text the sender and confirm the sent the email/text.**
- **Contact the FBI Internet Crime Complaint Center (IC3)**

Credit Card Fraud / Misuse Remediation

- DO NOT PANIC!
- **Contact Credit Card Issuer**
- **Get New Credit Card**
- **Freeze / Lock Credit Agency Files**
- **Freeze / Lock Other Credit Files**
- **Contact the FBI Internet Crime Complaint Center (IC3)**

How to Protect Your Digital Assets
Credit Freeze

- **Starting Sept. 21, 2018**

- **Free to place or remove a freeze on your credit report.**

- **Equifax or 800-349-9960**

- **Experian or 888-397-3742**

- **TransUnion or 888-909-8872**

Other Credits Agencies

https://www.innovis.com/personal/creditReport
1-800-540-2505

https://www.chexsystems.com/
800.428.9623

https://www.nctue.com/
1-866-349-5185

Data Breach Remediation

- **DO NOT PANIC!**
- **Forty-eight U.S. states, Guam, District of Columbia, Puerto Rico, and Virgin Islands, have data breach notification laws.**
- **Mandated to notify customers in the event that their sensitive information is lost in a data breach.**
- **Pertain to only personal identification data, including bank account and Social Security numbers**
- **Does not require notification if the data is encrypted and unusable.**
- **Some companies are required by state law to offer credit monitoring and remediation services.**
- **Contact the FBI Internet Crime Complaint Center (IC3)**

Denial of Service Remediation

- **DO NOT PANIC!**

- **Business service mitigation is only remedy.**

- **Contact the FBI Internet Crime Complaint Center (IC3)**

Questions

Review

- **What is the Difference between Digital Security and Digital Privacy?**

- **How to Protect Your Digital Assets.**

- **How to Protect Your Digital Privacy.**

- **You've Been Compromised - Now What?**