

ENGAGING MILLENNIALS & GENERATION Z:

FROM ALWAYS CONNECTED
TO AWESOMELY SECURED

UNIVERSITY *of*



DAYTON

Center for Cybersecurity &
Data Intelligence

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OHIO INFORMATION SECURITY CONFERENCE

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BABY BOOMERS

BORN

- 1946-1964

WORKPLACE TRAITS

- Well-established in their careers, holding positions of power and authority
- Bold, ambitious, and goal-oriented
- Loyal and work-centric
- Motivated by professional development, acknowledgement, and promotions
- Prefer monetary rewards
- Do not seek constant feedback

TECHNOLOGY-USE DISTINCTIONS

- 76% of older boomers (ages 60-69) and 83% of younger boomers (51-59) use the internet
- Careful when sharing personal information online and wary of social media due to privacy issues
- Likely to use email encryption, anti-virus software, and security programs
- Compared to other generations, most susceptible to phishing or social engineering scams

GENERATION X

BORN

- 1965-1980

WORKPLACE TRAITS

- First generation to desire work-life balance
- Entrepreneurial -- Largest percentage of startup founders
- Prefer independently working and little supervision
- Seek mentorship relationships
- Desire professional growth opportunities
- Motivated by work flexibility, recognition from superiors, and monetary rewards

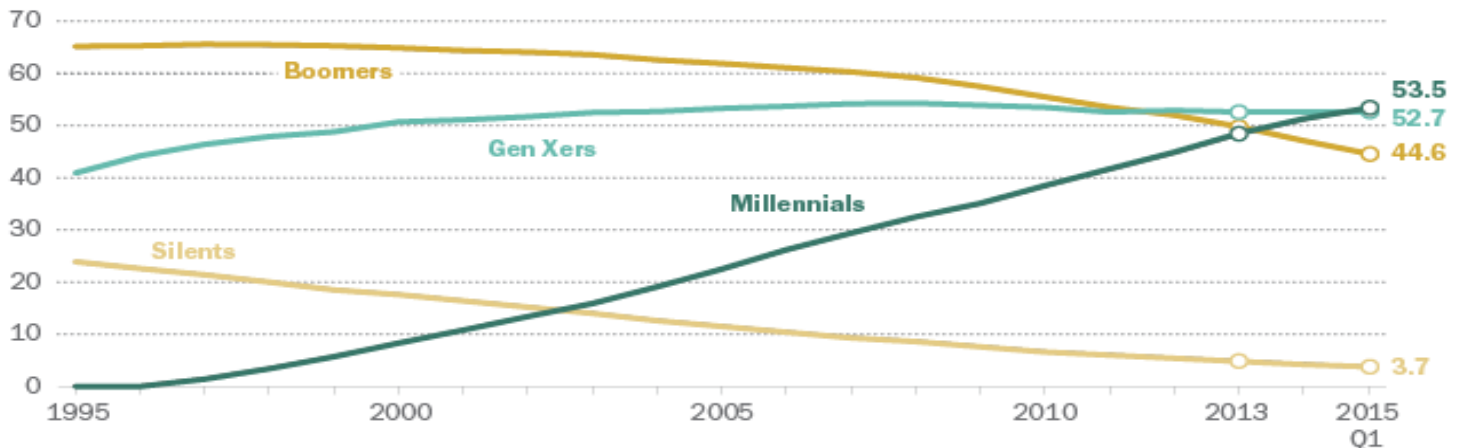
TECHNOLOGY-USE DISTINCTIONS

- Heavy users of social media
- Along with Millennials, most likely to access unauthorized apps at work
- Compared to other generations, most negligent in following companies' security policies

WORKPLACE DEMOGRAPHICS

U.S. Labor Force by Generation, 1995-2015

In millions



Note: Annual averages plotted 1995-2014. For 2015 the first quarter average of 2015 is shown. Due to data limitations, Silent generation is overestimated from 2008-2015.

Source: Pew Research Center tabulations of monthly 1995-2015 Current Population Surveys, Integrated Public Use Microdata Series (IPUMS)

PEW RESEARCH CENTER

STATISTICS

- **Millennials** (ages 18-34) have surpassed **Generation X** as the dominant generation in the workforce (Fry, 2015)
- By 2020, **Millennials** will make up roughly **50%** of the workforce (Meister, 2012)
- By 2025, **Millennials** will make up **75%** of the workforce (Donston-Miller, 2016)

THE "NEW" GENERATIONS

Millennials

BORN

- 1981-1998

CHARACTERISTICS

- Idealistic
- Creative
- Self-expressive
- Self-centered
- Entitled
- Sheltered
- Diverse
- Ambitious
- Entrepreneurial
- Liberal
- Open to change
- Confident

VALUES

- Doing the right thing
- Diversity
- Tolerance
- Privacy
- Education
- Activism

TECHNOLOGY-USE DISTINCTIONS

- Known as the "app generation"
- Top smartphone owners
- Early adopters of social media
- Form networks online
- Vocal online but concerned about peer feedback
- Shop online but wary of cybersecurity risks

WORKPLACE TRAITS

- Company culture matters to them
- Prefer collective work and group decisions
- Seek feedback and continued learning opportunities
- Comfortable with working remotely and answering work emails/calls outside of work
- Believe that their personal technology is more effective than their work technology

Generation Z

BORN

- 1999 or later

CHARACTERISTICS

- Self-aware
- Persistent
- Realistic
- Innovative
- Self-reliant
- Pragmatic
- Cautious
- Practical
- Smart
- Collaborative
- Fun
- Cynical

VALUES

- Safety and stability
- Ethics and sustainability
- Social empowerment
- Speedy communication
- Freedom of choice and customization
- Fiscal responsibility

TECHNOLOGY-USE DISTINCTIONS

- Known as "digital natives" and "iGen"
- Have never lived in a world without the internet
- Constantly connected to devices
- Prefer to shop online using mobile devices
- Use devices to socialize and fill emotional voids
- Find a sense of belonging online

WORKPLACE TRAITS

- Known as "zappers" because they will make sudden employment changes if unhappy at work
- Desire employment flexibility
- Value networking and mentorship opportunities
- Seek constant feedback and direction
- Prefer independent learning with online resources and videos
- Like experiential learning

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Our Research Findings:

Millennials feel a stronger sense of agency than Generation Z

- Effective training must encourage individuals to feel responsible for community safety

Millennials are more concerned about privacy than Generation Z

- Effective training must encourage a strong and positive attitude toward privacy

Gen Z have more confidence in institutions to protect their privacy than Millennials do

- Effective training must communicate that the weakest link in the security chain is the individual end user

Gen Z are less comfortable with authority and authoritarian control than Millennials

- Effective training should avoid scare tactics, threats, and/or restrictive policies

Some differences may be attributed to experience and not generation

- Effective training and engagement can mitigate risks

Key Takeaways:

Don't overgeneralize generational differences

- Experiences influence attitudes and behaviors
- Training can make a difference

Instill values, not rules

- Personal privacy already matters to them - "foot in the door" for corporate privacy
- Encourage **Cyber-Mindfulness™**

Find new ways to engage and train

- Develop meaningful, mentor relationships
- Offer experiential learning opportunities (e.g., phish training)

Mobile BYOD is the new reality

- Prohibition is not an option
- Control data and systems, NOT personal devices

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Mobile BYOD Practices for "Next Gen" Users:

Provide/train employees on VPNs and "tethered WiFi"

- Reduces risks of open access WiFi

Implement browser-based cloud technologies and virtual desktops

- Helps keep data off BYODs

Promote/reward secure use of personal devices

- Encourage and support encryption and 2FA
- Educate and promote PIN codes for mobile devices
- Provide realistic guidance on password management
- Create a reporting and mitigation process for lost personal devices
- Deploy "positive-checking" tools to assure secure configurations

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