

Tech Talks

Entertainment & IoT

Glen Maxson

Center for Learning in Retirement

Spring 2020 – Session 6 of 6

Seniortechadvisor.com

What we'll cover in 6 weeks

- 1) ~~Computers & Operating Systems~~
- 2) ~~Applications & The Cloud~~
- 3) ~~The Internet & The Web~~
- 4) ~~Social Media~~
- 5) ~~Security & Privacy~~
- 6) Entertainment & IoT

Digital Entertainment defined

Digital Entertainment refers to **accessing and experiencing your favorite entertainment** – TV shows, movies, book, music, radio broadcasts, newspapers, magazines, and audiobooks- **using the Internet and available technologies.**

Source: [My Digital Entertainment for Seniors](#), Jason R. Rich

Types of Digital Entertainment

- Audiobooks
- Video Games
- eBooks
- Movies
- Music
- Newspapers & Magazines
- Radio
- Television
- The Web

Digital Entertainment – terms

- On-Demand – when and where you want it
- Digital Publication – versus traditional paper-based [publishing](#)
- Streaming – content available on-demand, not downloaded
- Downloading – copy of content made available locally
- Pay-per-view or Subscription-based – not free
- ‘Appliances’ – devices designed to receive streamed content
- Security – payment methods, accounts and passwords are still a factor

Getting Started

- Be 'brave' – you can do it!
- What you'll need
 - An Internet connection
 - A 'smart' TV or streaming device
 - A subscription (service)

Word to the wise: Don't pay for things you don't need* or want, and don't pay too much for the things you do want

Connection

In our area Comcast/Xfinity and Verizon seem to own the market

[Comcast/Xfinity](#)

INTERNET

Up to 100 Mbps

Download Speeds

PERFORMANCE INTERNET INCLUDES:

Limited time: Save up to \$59.99 on installation with a Free Self-Install Kit • Add a Flex 4K streaming device + Voice Remote for no additional cost • Speed good for up to 5 devices at the same time

Select to Compare

Share

\$39.99/mo

for the first 12 months
with No Term Agreement

[Check Availability](#)

[Pricing & Other Info](#)

[View Details](#)

Connection (continued)

Verizon FIOS

1-Year Price Guarantee

100/100 Mbps Internet

\$39.99 /mo

w/ Auto Pay + taxes, equip. charges & other fees.

[Offer details](#)

Disney+ on us.

For the first year, then \$6.99/mo after

2-Year Price Guarantee

300/300 Mbps Internet

\$59.99 /mo

w/ Auto Pay + taxes, equip. charges & other fees.

[Offer details](#)

Disney+ on us.

For the first year, then \$6.99/mo after

3-Year Price Guarantee

**Fios Gigabit Connection
Up to 940/880 Mbps Internet**

\$79.99 /mo

[Offer details](#)

Disney+ on us.

For the first year, then \$6.99/mo after

**+ \$100 Visa® Prepaid Card
+ 3-year free router rental**



[Using your own router with Verizon FiOS](#)

OK, I have Internet access, now what?

- TV today
 - Smart vs Dumb TVs
- Streaming device choices
 - Apple TV([Gen 4 HD](#))
 - Roku ([Ultra](#))
 - Amazon Fire TV ([Ultra HD Cube](#))
 - Google Chromecast ([Ultra](#))
 - Others (ex. [‘Streaming’ DVD player](#))



A word about HDMI

HDMI (High-Definition Multimedia Interface) - a [proprietary](#) audio/video [interface](#) for transmitting [uncompressed video](#) data and compressed or uncompressed [digital audio](#) data from an HDMI-compliant source device to a compatible [digital television](#), or [digital audio](#) device.

This is the video interface cable standard for most TVs and devices that connect to them. S-video, RCA, and composite video are considered obsolete.



Devices

Streaming			Basic	Advanced
Apple (refurb)	Apple TV gen 4	\$ 129.00		X
Roku	Premier	\$ 70.00		
Roku	Express	\$ 30.00	X	
Roku (used)	Stick	\$ 16.00		
Google	Chromecast	\$ 35.00	X	
Amazon (refurb)	Fire TV	\$ 85.00		
Amazon	Fire Stick	\$ 40.00		
Asus	ChromeBox (2gb)	\$ 160.00		X
Asus	ChromeBox (4gb)	\$ 205.00		
Logitech	Wireless Keyboard	\$ 26.00		X
Sound				
Vizio (used)	2.1 soundbar	\$ 125.00	X	
Interface				
Tendak	HDMI switch 4x1	\$ 31.00		X
Portta (basic)	HDMI switch 3x1	\$ 9.00	X	
Amazon Basics	SPDIF cable	\$ 5.50	X	
Amazon Basics	HDMI cables (ea)	\$ 7.00	X	X
TV (many)				
Samsung	40" monitor	\$ 279.00	X	
Cheetah	Wall Mount	\$ 29.00		
DVD player				
Sony (refurb)	DVPSR210P	\$ 30.00	X	
getting started			\$ 520.50	
plus upgrades				\$ 344.00

Basic configuration:

This is a complete setup that allows you to start streaming with good audio and video quality. Add to this your monthly internet and subscription charges.

Advanced configuration:

Builds on the Basic configuration to add Apple TV, a ChromeBox/keyboard to access programming on the internet (like BBC America), a better HDMI switch since you're adding more devices that require HDMI access, and another HDMI cable.

* S/PDIF (Sony/Philips Digital Interface Format)

* [HDMI](#) (High-Definition Multimedia Interface)

OK, I have a streaming device, now what?

- (Mostly) Free content
 - ABC, CBS*, NBC, FOX, PBS*, BBC America, HGTV...
- Subscription-based content
 - Amazon Prime Video, Hulu, Netflix, AcornTV, Disney +...
- Pay-per-view content
 - iTunes Store, Amazon.com, Google Play
- Streaming TV services
 - [Sling TV](#), [YouTube TV](#), [Hulu TV](#)...
- Streaming from your DVR – [Xfinity TV Go](#)

*[WHYY Passport](#) - \$5/mth (\$60/yr) donation gives access to additional content

*[CBS All Access](#) - \$6/mth 'limited' commercials, \$10/mth commercial 'free'**

**Live TV includes commercials and select shows have promotional interruptions

Confessions of a cable-cutter

- If you plan to dump cable, compare your costs first

- My subscriptions:

- Netflix (1 DVD/mth + streaming) - \$20.12/mth
 - Amazon Prime – \$9.92/mth – paid annually
 - Hulu (no ads) -\$12.70/mth
 - Disney + (3 yr. deal) - \$5.75/mth paid 3 years in advance)
 - CBS All Access - \$6.35 (used primarily to watch sports*)
 - WHYY - \$5/mth (donation gets [Passport](#) access)
 - The Great Courses Plus - \$10.60/mth paid quarterly)
 - Pandora Premium - \$9.20/mth paid annually

Program total \$59.84/mth

Other \$19.80/mth

Plus Internet \$40/mth

*Canceling CBS All Access can be tricky...

Sennheiser

Sennheiser RS120 On-Ear Wireless RF Headphones with Charging Dock



13,323 customer reviews | 1000+ answered questions

List Price: \$129.00

Price: **\$62.99** ✓Prime



These headphones are great for those with some hearing loss for two reasons:

- Provides sound amplification close to the ear
- Allows others to adjust TV sound volume in the room that's comfortable for those with better hearing

Oh, and they do look cool!

This is the best price I have found which is a great value for these headphones!

\$35.24 ✓Prime

+ \$2.11 estimated tax

Used - Very Good

Minor cosmetic imperfection on front of item (less than 1/4"x1/4"... » [Read more](#))

FULFILLMENT BY AMAZON ▾

- Free Two-Day Shipping: Get it Wednesday, March 29 (order within **6hr 3min**) .
- [Shipping rates](#) and [return policy](#).

The Evolution of Radio

- Streaming options
 - Streaming internet radio stations – subscription and free
 - TuneIn, Radio.com, iHeart, NPR... and hundreds of others
- Sirius/XM – subscription only
- Streaming music services – create your own radio station
 - Pandora (paid vs free)

Digital Music

- ~~Vinyl, 8 track, cassettes, CDs – obsolete~~
- ‘Digital’ music sources – free and paid
 - Amazon Music Store
 - Google Play Music – Play Music
 - iTunes Store – iTunes Player
 - YouTube Premium – YouTube Music
 - Pandora Plus or Premium
 - Spotify (paid version)
 - *A word about ‘explicit’ filters*

Games and 'Interactive' Entertainment

- Free or fee
- Online gaming
- In-app purchases
- What's popular (top 15)
 - Angry Birds, Bingo Bash, Bridge Baron, Candy Crush, SagaDoubleDown Casino, Heads Up, Mahjong Deluxe, myVegas Slots, NYTimes Crossword, Scrabble, Solitaire Deluxe Social Pro, Sudoku, The Room Three, WordBrain, Words with Friends

Digital Newspapers and Magazines

- Evolution from print to online news
- Access digital content
 - Download an app
 - Subscribe to a publication
 - Read – online or download content
- Free News Apps – network access required
 - Apple News, (Google) Play Newsstand
- What's available through our local library?
 - [RBdigital](#) – read current magazines

eBooks

- Devices
 - Kindle , Nook, tablets, smartphones
 - Pros and Cons of each
- eBook sources
 - Apple iBooks, (Google) Play Books, Amazon Kindle, Barnes & Noble Nook
 - Your local library: [Overdrive](#), [Hoopla](#),
And now [Libby](#)
- A word about eBook formats...



Kindle e-Book loan example



Kindle reading preference

Would you like to set your reading preference to Kindle? You'll only see the Kindle Book option for borrowed eBooks. You can adjust this preference on your Settings page at any time.

NO THANKS

SET KINDLE PREFERENCE



Success!

You've set Kindle as your reading preference.

CONTINUE TO AMAZON



You are signed in as
grantmaxson@gmail.com
[Use a different Amazon account](#)

Get library book

Deliver to:

Daniel's 2nd Kindle ▼

[How does this work?](#)

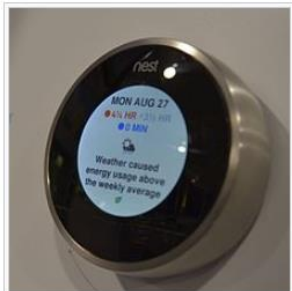
Audiobooks

- Devices
 - PCs, tablets, smartphones
- Audio book sources
 - [Audible.com](#), Apple [iBooks](#), [Google Play](#)
 - Local Library resources
 - [Overdrive](#), [Hoopla](#), [Rbdigital](#), and [Libby](#)
 - Free stuff
 - Resource: [The Best Free Audio Books](#)

My Top 10 IoT Devices

What's IoT? ([source](#))

- The **Internet of Things (IoT)** is a system of interrelated computing devices with the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction



A Nest learning thermostat reporting on energy usage and local weather



A Ring doorbell connected to the Internet

- Security is the biggest concern in adopting Internet of things technology.
- Poorly secured Internet-accessible IoT devices can also be subverted to attack others as was the case with the [Mirai Botnet](#) that infected 65,000 IoT devices in the first 20 hours
- The Mirai Botnet singled out specific IoT devices that consisted of DVRs, IP cameras, routers and printers.
- IoT devices have access to new areas of data, and can often control physical devices, so it is possible to say that Internet-connected appliances could "spy on people in their own homes", including televisions, kitchen appliances, cameras, thermostats, etc.

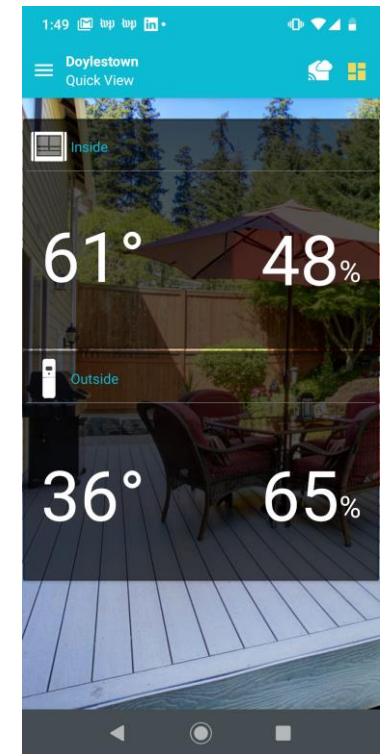
But that's not going to stop me from enjoying the benefits of IoT devices...

10

- [La Crosse Technology V10-TH-INT V10-TH Wireless WiFi Weather Station](#)
 - \$39.99 (maybe \$30 on sale)
- [La Crosse Projection Alarm Clock with Weather](#)
 - \$39.99 (Costco sale \$25)



Smart Phone App

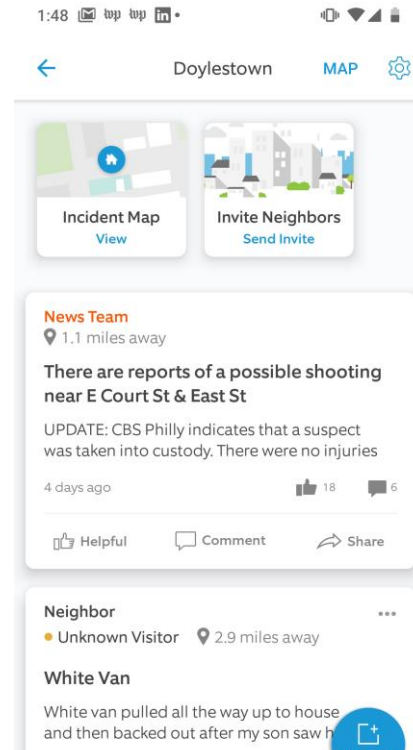
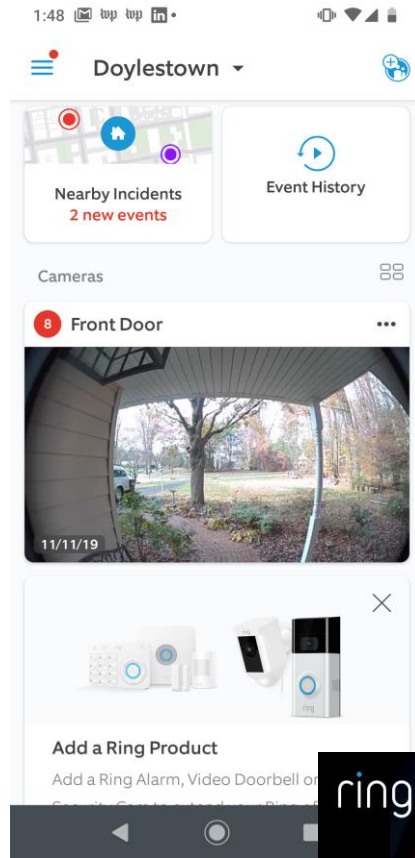
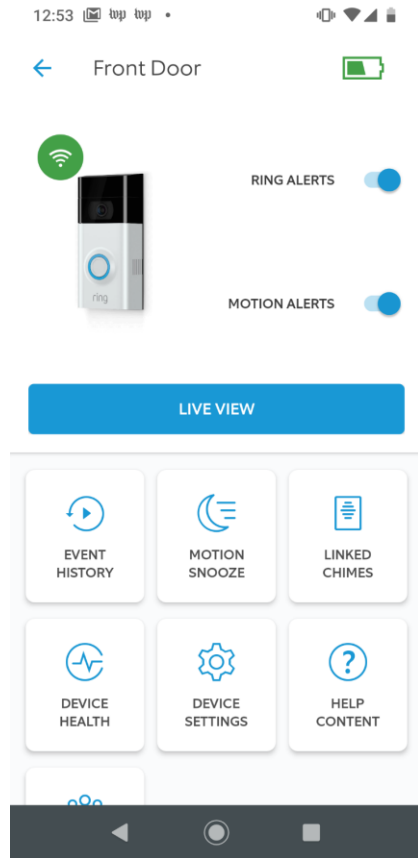


9

[Ring Video Doorbell 2 with HD Video](#)
\$90 Amazon deal



Smart Phone App

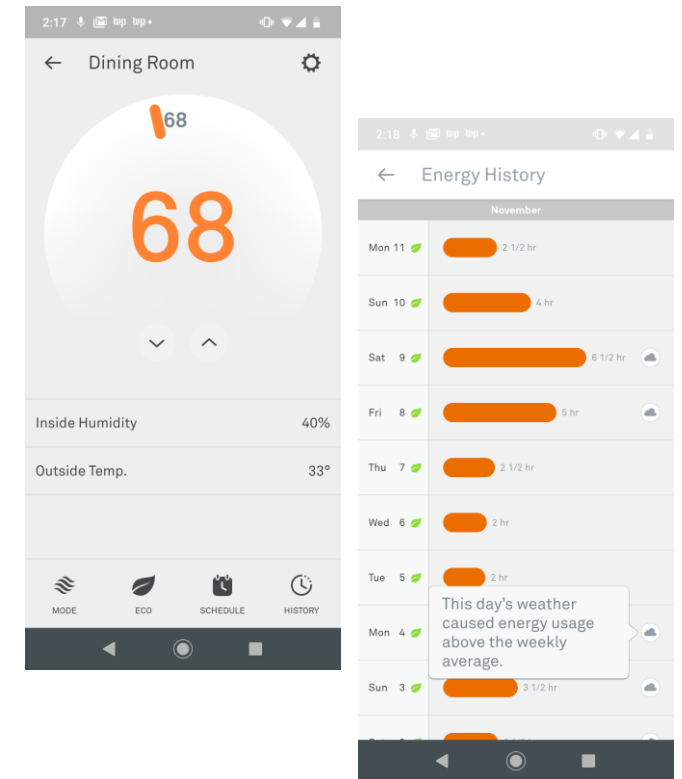


8

- [T4000ES Learning Thermostat E \(White\)](#)
 - \$167.99 (\$100 PECO promotion)



Smart Phone App



7

Corentium Home Radon Detector by Airthings 223 Portable

\$165 on Amazon



And this is the IoT version:

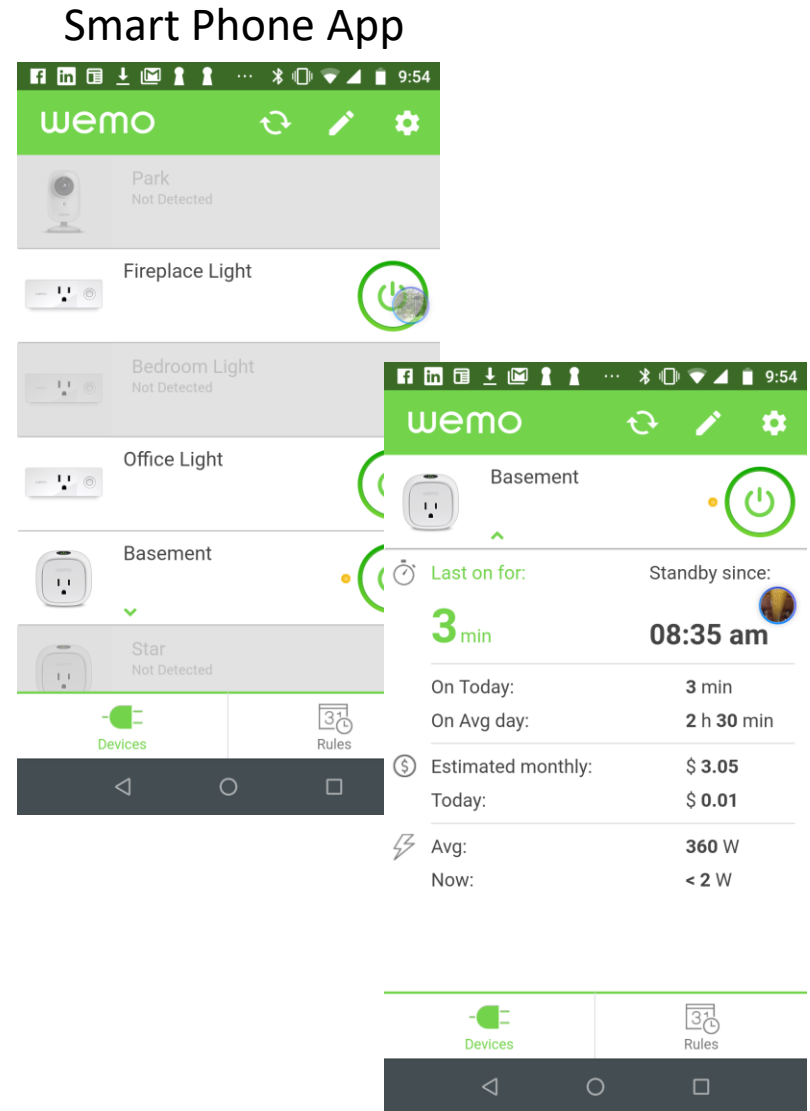
Airthings Wave (2nd Gen) - Smart Radon Detector



6

- [Wemo Insight Smart Plug with Energy Monitoring, WiFi Enabled, Control Your Devices and Manage Energy Costs From Anywhere, Works with Alexa and the Google Assistant](#)

- \$40 on Amazon



5

- Amazon Echo 'Everything'

- Amazon Echo Input \$18
- Amazon Echo Auto \$25
- Echo Dot (Gen 1) \$100
- Echo Dot (Gen 2) \$25
- Echo Dot (Gen 3) Free*
- Echo Dash Wand Free*

- And the Google Home Mini Free*



* Got these during various Amazon and Google/Spotify promotions

4

- What's Bluetooth?
 - a [wireless](#) technology for exchanging data between fixed and mobile devices over short distances (uses 2.400 to 2.485 GHz)
- My favorites:
 - Soundbar: [Vizio SB3651-E6 36" 5.1 Channel SmartCast](#) (\$200)
 - Has Bluetooth and Chromecast* built in
 - [Google Chromecast Audio](#) (\$39, sale \$20)
 - [TP-Link NFC-Enabled Bluetooth 4.1 Receiver](#) (\$20)
 - What's [NFC](#)?



3

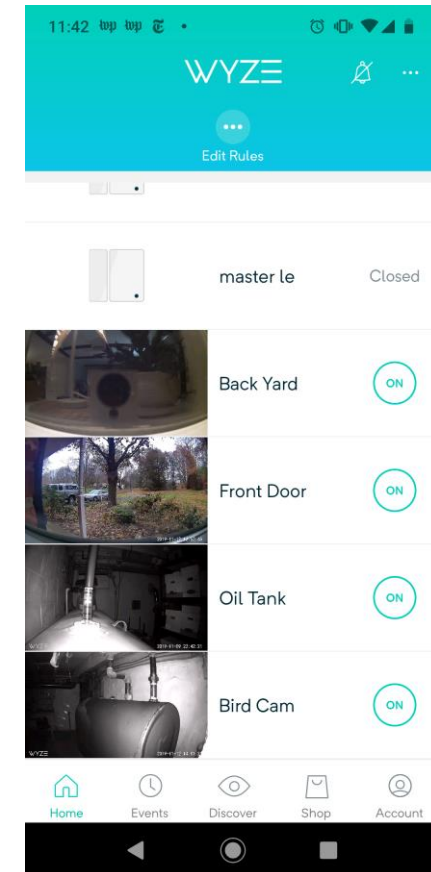
[Wyze Cam](#) (\$20) + [Wyze Sense](#) Starter Kit (\$20)



+



Smart Phone App



2

- VoIP and Analog Telephone Adapters (ATAs) – what are these?
 - My favorite [ATAs](#) (assumes you have a good Internet service provider)
 - Current favorites: [MagicJack](#) and [ObiHai](#)
 - Previous favorite: [Ooma](#)
 - Not such a great deal: [ZTE Wireless Home Phone Base](#)
 - Also consider [WhatsApp Messenger](#) for international calling
 - [ObiHai](#) (\$50, then free)
 - [MagicJack](#) (\$50, then free for a year)
 - After that \$39/yr, or \$89 for 3 years = \$2.50/mth
 - [Ooma](#) (\$60, then \$6.32/mth – local taxes)
 - [ZTE Base](#) (\$25, then \$15/mth with existing CC contract)



1

- [Roku Express - HD Streaming Player](#) \$22
- [Roku Ultra 4K/HD/HDR](#) \$48 (Black Friday sale)

