Morgan Bartlett
CIT 383
Phil Colbert
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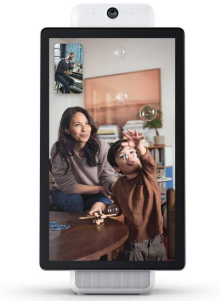
Project 6

VENDOR	PRODUCT / PRICE	IMAGE	PROS	CONS
Amazon	Echo Dot (4th Gen) - $49.99		Compatible with other Smart Home devices LED clock display Built-in Alexa	On the more expensive side Cheap looking material Reported poorer sound quality compared to 3rd Gen
Amazon	Echo Show 8 - $129.99		Capable of streaming video on one of the largest home assistant screens Built-in Alexa Capable of shopping on Amazon hands-free	Rather expensive Doesn't have the best speakers (when compared to Echo Studio) Not compatible with Zigbee networking
Amazon	Echo Studio - $199.99		Built-in Alexa Quality speakers	Expensive
Google	Google Nest Cam Indoor - $129.99		Face recognition 1080p resolution, wide angle view	

			Capable of remotely adjusting the angle of the camera during a livestream	
Google	Google Home Mini - $49.00		High accuracy in answering queries via voice commands Quality speaker Compatible with a variety of products, including current-gen gaming consoles	Less functionality compared to Alexa Can't shop on Amazon like the Echo products No screen = no visuals
Google	Google Nest Hub - $229.00		Displays Smart Home functions Screen allows for streaming such as YouTube Ideal for kitchens or personal offices	Very expensive Poor sound quality in comparison to Echo Show No shutter for the camera
Google	Google Nest Thermostat - $129.99		Simple controls Efficient energy saving Will monitor weather and adjust indoor temperature accordingly to make the environment comfortable	Home unit may require a C-wire to help support it Temperature targeting isn't very accurate (has a 3 degree swing) Mainly relies on a battery for power

Google	Google Chromecast - $29.99		Affordable Supports multiple apps, allowing for streaming on any TV Compatible with Google Assistant	No support for UHD or HDR Security issues- any capable device can cast to it No remote control- must always have mobile device for casting
Facebook	Portal - $179.00		Compatible with Alexa Smart-camera features with AI Connection capabilities with Facebook	Privacy concerns given it's Facebook Supports up to 720p Limited functionality
Facebook	Portal Plus - $279.00		Compatible with Alexa Big screen and better speakers Can be displayed vertically and horizontally	Privacy concerns given it's Facebook Very expensive
Facebook	Portal TV - $149.00		Capable of turning a TV into a large smart display Video calling User-friendly interface	Doesn't come with a speaker Privacy concerns given it's Facebook Limited streaming services

Ring	Ring Video Doorbell 3 - $179.99		1080p resolution Compatible with Alexa Contains a microphone to communicate with visitors	Expensive! Tends to sound false alarms Battery life needs improvement
Ring	Ring Indoor Cam - $59.99		1080p resolution and a wide angle view Night vision and motion detection Compatible with Alexa	
Roku	Roku Express - $29.99		Affordable Ability to use phone as the remote control with Roku app Simple setup with any TV	No support for 4K or HDR No voice control with remote
Roku	Roku Streaming Stick+ - $49.99		Supports 4K and HDR Works with Alexa and Google Assistant Long range remote (max. 30 feet)	No Dolby Vision support No audio jack Seems overprices for how little it offers compared to other Roku products
Roku	Roku Streambar - $129.99		Supports Bluetooth streaming	Although decent, not the best audio device in the market

			Compatible with Alexa and Google Assitant Solid and loud audio	On the more expensive side No support for Dolby Vision

I think the innovation of IoT devices are really cool and fascinating. I like the idea and aesthetic of having a Smart Home that is automated with a variety of devices because it feels very futuristic and something that you'd see in sci-fi movies. However, the issue that comes with this is a concern for security. There have already been numerous instances of IoT devices getting hacked, such as Ring Doorbell Security Cameras or Amazon Echo products. So if one has a Smart Home unit, there is a vulnerability with getting hacked from many different entry points (I think this is best visualized in the show *Mr. Robot* in season 2, episode 1, around the 18:00 minute mark (or read about the scene here). I personally have one Smart Home device, a Google Home Mini, and I use it on occasion whether it be to turn on my Xbox One remotely, play music, or sometimes execute a routine. Other than that, I don't have a big interest in buying IoT devices myself. One reason is because they tend to be on the more expensive side. Another reason is I don't really have a need or use for them, so there isn't much a point in spending the money. At my parent's house, however, we have some more IoT devices there. For example, my family frequently uses Google Chromecast and an Amazon Firestick on our living room TV. My siblings and I enjoy watching YouTube a lot so it makes doing that activity together really convenient. We also have some Sonos speakers scattered around the house, but to my knowledge I don't think my mom has them set up with the house's Amazon Echo. I believe my mom also has a remote thermostat (not sure of the product name specifically) installed as well which allows her to remotely control the temperature as well as set timers for how warm or cold the

house should be at what time. I can see myself in the future buying more IoT devices for whenever I get my own house but I'll only do that if the products have improved security so that I am not as vulnerable to hacking.

1. Cisco Systems (NASDAQ: CSCO) - $52.83
2. Amazon (NASDAQ: AMZN) - $3,223.91
3. Microsoft (NASDAQ: MSFT) - $246.23
4. Skyworks (NASDAQ: SWKS) - $166.89
5. Google (NASDAQ: GOOGL) - $2,270.06