



## BUILDER REALTY COUNCIL OF METROPOLITAN DENVER GENERAL BOARD MEETING MINUTES

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<b>Date of Meeting:</b>	Tues. August 17, 2021
<b>Location:</b>	The Cascade Building, 6300 S. Syracuse Way, STE 120, Centennial, CO 80111
<b>Meeting Facilitator:</b>	Troy Warrick, President
<b>Attendance:</b>	18 People in Attendance, 2 ZOOM Attendees; 16 People Pre-Registered;
<b>Start and End Time:</b>	9:10a.m. to 10:55a.m.

Troy Warrick, President facilitated the meeting.

Warrick introduced the Guest Speaker.

The Guest Speaker- Walker Hinshaw, COO, Lumiere Fiber & Technologies, a subsidiary of the Sterling Ranch 'Smart' Community, Colorado. Topic Title- 'Smart Homes in Home buying: Navigating the Seas of Technologies'. Lumiere and their technology partners such as Siemens, provide smart city solutions for the Sterling Ranch Community. Mr. Walkers' background is in real estate, engineering, and management consulting. Here is well suited to synthesize ideas and best practices across multiple disciplines and apply them to the deployment of smart city technology. Walker holds bachelor's degree in biomedical engineering from Vanderbilt University with a minor in Engineering Business Management. Lumiere developer-owned fiber network, connected community infrastructure, and smart homes at scale provide the most technologically advanced communities in North America.

### Announcements

- In person attendees introduced themselves all around. Other attendees on ZOOM.
- Referenced the BRC public facing Facebook site and requested members and others post and engage with the site.

**Introduction of Presentation-** delivered by Sterling Ranch 'Smart' Community, Colorado. Topic Title- 'Smart Homes in Home buying: Navigating the Seas of Technologies'

- History of smart homes and the journey. Technologies and uses. What homebuyers want from the smart homes and navigating their anxiety around the technology?
  - A 3400 acre master plan development in Douglas County, CO. Zoned for 12K+ residential units and a downtown up to 7 stories. Building a 21<sup>st</sup> century community from the ground up. Live work play community is the focus.
  - Walkability and the local feel of coffee shops, and more. Safety and security offered. A community with technology. Forge interactions between people in homes, neighborhood and nature.
  - Conservation, connectivity, community main focus of the entire Lumiere.
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## History of Smart homes

- Smart Homes started in late 1800's. In 1966, the first smart home was built. Used mainframes to connect parts of the homes. Ruth Sutherland was all about smart homes in 1967. Home owners requested homes to automate the lights, alarm's, lock doors, water the lawn, wash the car, feed the baby, do the family accounting.
- Leverage the tech to make our lives easier and give us more time with our family.
- ARPANET used in 1969 was the initial Internet to enable the current connectivity.
- X10 Home automation in 1975. Connect via the electrical wiring of the house. Send signals to the wiring system in the home.
- Personal Computers (PC) introduction into homes in the 1980's created the first real smart homes.
- IOT in 1990's the Internet of Things (IOT) all things and devices are connected to the Internet. At end of 1990s' new protocols used to customize homes. Central automation hubs as price points for implementation.

## Technology Adoption

- A graph presented of adoption of appliances, and entertainment devices.
- 2000's the modern era forms. Enhanced internet, smart phones, 4G cellular to enable connectivity around the world. Leave the home and remotely check on the home.
- The evolution of tech adoption and usage increased from 2000-2016 to mass market adoption. Broad band a slow adoption in homes.
- In 2010'w used tech nest, hue, and august which all rely on Internet connectivity. Many depend on smart phones.
- 2014 then presents Amazon smart speaker products. Early adopters a small percentage then adoption slows. Next step is to get the tech into the mass market.
- Smart home adoption exposes in 2017.
- Echo & Co. hit the home automation market. Entertainment smart speakers widely adopted especially by 2020. Speaker adoption continues to increase to 157mill. 30% adoption of speakers today.
- Hyper cycle ensured and tech adoption lifecycle plotted in a graph where generally a peak of inflated expectation then disillusionment then a slope of enlightenment until there is a plateau of productivity. We are now hitting the slope of enlightenment.

## Smart Home Landscape

- Protocols, smart home types, popular devices, and builder smart home packages.
- Protocols
  - 4 communication protocols; WiFi, Wave, ZigBee, BLE. Each has pros and cons.
  - Some are user friendly, efficient, stable and scalable, or not.
  - Wave connects 100s of devices. Not as user friendly.
  - Wi-Fi\_\_33 user friendly using smart phones and the Internet.
  - BLE may be supplemental and has a small footprint and uses battery and change batteries less often.
  - Wi-Fi\_\_33 seems to be most adoptable today.
- Smart home types

- Smart speaker centric, security system centric, smart hub centric. 3 types.
- Each of the 3 have their pros and cons. Some types of home owner sets up. Some types a dealer should set up.
- Speaker centric add more speakers.
- Security is a middle ground between the speaker and smart hub.
- Sue smart speaker as the core system, many compatible devices, homeowner can DIY everything.
- Adopt a type that works for a decade.
- Key players; Amazon Echo...there are many.
- Those who are tech literate may adopt due to flexibility.
- Security system centric; security monitoring at its cores, more integrated, controlled experience, business model based on monthly fees.
- Players: Ring, SimpliSafe, Alarm.com, Vivint Smart Home, ADT Command. Each provider offers a range of ease or difficulty depending on how tech savvy the home owner is. DIY or have dealer install the devices.
- Smart Hub Centric- home automation at its core, very integrated, controlled experience, most expensive option where the system is custom designed and installed.
  - Key players install this Centric product mostly in luxury homes.
- There is a demand on energy in Sterling Ranch so will need safety measures to avoid black outs. Excel energy a partner to make the grid resilient. Fiber, Internet and more tech to ensure the tech works.
- Sterling partners with Century Link today to pull fiber and provide Internet service.
- Making Sterling sustainable not for technology sake but also for the ecosystem. Integration controls automating things for homeowner will save homeowners money.

### **Popular Devices**

- Ring, Amazon, Echo, Apple, Nest, Google, Home, Samsung provided by these suppliers and manufacturers.
- Apple home kit has not gained traction yet.
- Ownership of smart home devices are many. Amazon Alexa, Google Assistant, Apple Siri, Samsung Bixby, SoundHound.
- Amazon's Alexa can be controlled with Alexa.
- Smart Security
  - Ring door bells, and cameras,
  - Smart locks and smart keys, garage door controllers, smart thermostats, smart lights,

### **Builder Approaches**

- Lennar uses Ring system
- Toll Brothers use Alarm.com or Control4 depending on homebuyer
- DR Horton uses Alarm.com
- Brookfield uses myCommand brand agnostic platform
- Taylor Morrison uses Legrand-AV Custom Device Suite
- Meritage uses Standard Device Suite
- Century uses Standard Device Suite

### **Smart Home Benefits and Objections**

- Smart home benefits
  - Savings, safety, sustainability, and convenience.
- Objection No. 1 is Cost
  - Homes automation saves money long term
  - Reduced utility bills
  - Possible home insurance discounts
  - Asset protection
- Objection no. 2 Cyber Security
  - We tools help you stay safe online and help keep your home safe
  - Use reputable brands
  - Secure your WiFi network
- Objection no. 3 Data Privacy
  - Tools to opt out of surveillance
  - Update privacy preferences
  - Request data deletion
- Objection no. 4 Usability
  - Demonstrate that home buyer they can use it themselves
  - Pick technologies that function like their manual counterparts like smart switches
  - Help is available from smart home tech support resources such as Best Buy Geek Squad

### **Smart Homes of Future**

- More connected devices over time.
- Artificial intelligence (AI), enhanced robotics, sustainable, increase standardization.
- Integration of the technology with wearable watches and clothes.
- Artificial Intelligence drive coordinated suggestions wand actions without need for user setup.
- A focus on sustainability will lead to coordination of energy usage.
- Reduce demand when needed to ensure conservation.
- Smart appliances for more cost effective and mainstream usability. Make it easy to use.

### **Downside of Smart Homes of Future**

- Hacking and malware targeted advertising, technology gap, decrease of self-reliance, and increasing reliance on technology.
- Technology can be a 'single point of failure' if the technology goes down then that convenience or service is no longer available.
- Loss of passwords when sell a home to another home buyer from the old home buyer.

### **Goodside of Smart Homes of Future**

- Scale the tech to enhance sustainability re: energy, water
- Home healthcare, for automated issue decision with an aging area of the population.
  - Elder care in assisted living. Put safeguards in place and elders may still be independent.
  - Dependency vs autotomy. A smart home already has sensors and cameras to recognize certain events if the event is out of place and so alert you to the event and the need for your attention.

- Smart appliances can save a life. A TV, an appliance and more.

### **What to Do, in Summary?**

- Leverage smart homes at scale
- Build resilience into tech and utility grids
- Design technology that brings people together
- Walk a balance so that home does not become a cocoon and also socialize for human health.
- Technology moving from novelty to standard
- Prepare to sell the benefits of a smart home
- Know what concerns are there and address them
- Learn to navigate smart home transitions from traditional to smart
- Stay updated as technology continues to evolve.

### **Q & A**

- Sterling installs generators? No. developers will install power generators at Sterling Ranch.
- In Sterling hard to get signals on our phones when in Sterling? In the home smart phones have good connectivity? Use Internet as a back bone. Internet connection means fiber backbone. Internet speeds no longer dependent on the fiber pipe. The speed depends on the devices at either end. Build a base on fiber in Sterling Ranch right now. 5G for cellular needs fiber to drive the speed.
- Does cable mean it is fiber? Comcast uses mostly coaxial cable and not fiber. Cable uses electrical signals and fiber shoots light.
- TAM is fiber install in Sterling. Sterling seeks to keep the fiber affordable. Downtown Denver power poles used to string fiber so not have to bury the fiber in the ground. Sterling only ones building fiber in the ground. Internet connectivity in homes what Sterling does best and so sets Sterling ranch apart from others. Fiber is mostly the focus in Colorado. Century Link was not pulling fiber into Sterling. Therefore, Sterling had to pull their own fiber.
- Sterling to offer other communities in Colorado with fiber? Not right now. Eventually Sterling to offer a fiber ring. This will be connected. There is an Anschutz's interface and is done through Century Link.
- Price to unit for house? It's charged monthly. \$2000-\$2,500 included in the home. Everything works in the home via Internet, and battery backup. Smart light bulbs not easy or intuitive to use.
- Smart homes are standardize; a central automation hub. A hybrid between, the centric types. Custom set up upon move in. connected lights, security, monitoring, smart irrigation, real time utility feedback on energy gas water usage indoor and outdoor. Sterling built on the aquifer so water was a problem. So do a lot of renewable water and water conversation. Conserve with irrigation control, monitor weather to leverage rain. The water use should follow the temperature outside and weather conditions.
- Cost of water in Sterling? The water bills are on the high side. Plant arid native plants so they do well and use little water. This gives homeowners the type of landscaping when designing landscape and support the ecosystem.
- Gray water system considers? Not implemented yet. What found is treat indoor water to use outdoor. In Colorado not allowed to use rain water. Sterling challenged this and tested it working with Water Conservation board over years. Findings are that the rain is in fact absorbed mostly by plants. At most, only 10% rain reaches the streams. This challenges the law. So homeowners can use rain barrels.

- Monthly water bill much higher than \$20/mth in Sterling Ranch hence water is more expensive to homeowners living in Sterling Ranch. There may be price correction over time.

**Affiliates Report**

- Announcement- A rare investment in MLS- 4597546, the price is flexible. Highlands park zip 80211 of a lot with a duplex on it. Investors, developers, call Krista 303-875-8639 Realty 5 Star.
- Betsy conducted a successful fund raiser. Doing smart Friday socials on the 3<sup>rd</sup> Friday @ mth.

Respectfully submitted,

C.J. Wells

Secretary