TOMORROW'S SMART HOME TODAY:

Disruptors in the Homebuilding Industry
Disruption: Energy

Issue

- 50% of Energy Consumed by Buildings is wasted
- Buildings consume the most energy of any sector in the US
- Energy Efficiency can improve individual affordability > $100,000
- Energy Efficiency can reduce Utility cost > $1.2 Trillion
Response

- Regulatory Codes increasing new building requirements
- Lack of value recognition in MLS / Realtors
- Lack of value recognition in Appraisals
- Lack of value recognition in underwriting
DISRUPTION: BUYERS

- Buy Home every 5-7 years
- > 90% of transactions resale
- Green Washing
- Competency of Buyer’s Realtor
CREATING CHANGE

- Awareness
- Validation
- Evaluation

INFLUENCE
OUR CUSTOMER

Maslow's Hierarchy of Needs

1. Physiological Needs: Food, water, sleep, sex, homeostasis
2. Safety: Security, employment, property, morality
3. Love and Belonging: Friendship, family, love
4. Esteem: Respect, esteem, achievement, self-actualization
5. Self-Actualization: Creativity, problem-solving, acceptance of facts, moral clarity
TRUSTED EXPERT (THAT CARES)

- What is the Best Home for my Family?
- How do I find the Best Builder Partner?
- How would an Expert Choose among homes choices?
- How should I evaluate other choices?
- Will I have made the right choice?
DISRUPTION: BUYERS

Response:

- Benefits, not features
- True cost of ownership
- 1:20
- Influence the influencers
Homes to the Power of **ZERO**

**A Symbol of Excellence**

- **HEALTHFUL ENVIRONMENT**
- **COMFORT PLUS**
- **ADVANCED TECHNOLOGY**
- **ULTRA EFFICIENT**
- **QUALITY BUILT**
- **DURABILITY**

**What is the DOE Zero Energy Ready Home™ Label?**

It is a Symbol of Excellence for energy savings, comfort, health, quality, and durability met by a select group of leading builders meeting U.S. Department of Energy Guidelines.

**What is a Zero Energy Ready Home?**

It is a high-performance home so energy efficient, all or most annual energy consumption can be offset with renewable energy. In other words, it is the home of the future.
Reduced Operating Cost
  - Energy Efficiency
  - Renewable Energy
  - Durability
  - TOU
Comfort
Health
Security
Investment
During 2008, the number of things connected to the Internet exceeded the number of people on Earth. By 2020, there will be 50 billion connected devices.
• Enhance 4d Dfunction and Safety
• All work as a normal component without internet at the home
• Each Component can operate through a stand alone app
MOVING THE ENERGY DEMAND

A. Smart ventilation (off peak)
B. Thermal mass / phase change
C. Thermal storage (heatpump HVAC precool off peak)
D. Low solar heat gain (reflective / vented cladding materials)
E. Smart appliances
F. Large hot water storage w/ heat pump.
G. West facing solar.
THANK YOU!

CR HERRO

VP, Innovation
Meritage Homes