Sustainable Materials and Affordable, Resourceful Technology

SMAARTer homes for a smarter tomorrow
Statement of the Problem

Before

Your Music

Your Cellphone

Your Home

After

The Beatles

Before

After

SMARTr
Goals of the Project

• Self-sustaining, low-energy systems

• Cost, functionality, comfort

• New options to upcoming generations, a home based around their needs and desires

• 3rd semester of this IPRO
Organization of the Team

Group
- Design
  - Kyle Bigart
  - Bernardo Chapa
  - Saul Moreno
- Engineering
  - Aaron Anderson
  - Arjun Jani
  - Lachezar Handzhiyski
  - Marina Horchin
  - Matthew Hagopian
  - Michael Roseen
- Marketing
  - Steph Harmon
  - Luke Blakely
  - Michael Sullins

Leaders

Members
Progress Toward Goals - Business

36 Median Age

70% Households: No Children

50% of those households: Currently Married

Young Digerati

- Wealthy, Younger Family Mix
- Tech-savvy and live in fashionable neighborhoods on the urban fringe.
- Affluent, highly educated, and ethnically mixed.

Target Price: $350,000

$267,750 Median Sale Price 2009
Progress Toward Goals - Design
Home Automation

• Automated services
  • Window blinds
  • Laundry/dishes
  • Lighting
  • Security

• Room-by-room conditioning
  • Settings based on activities
    • Sleeping
    • Out of the house
  • User-friendly controls
Major Obstacles Encountered

• Architectural design - compromise

• Innovation – cost effective?

• Investment for energy efficiency – worth it?

• Cleaning up the site - environmental concerns
Anticipated Major Challenges

• Balance design, engineering, and cost to create a marketable product people desire

• Designing a home that will fit in vs. sticking out to the Evanston community

• Compromising
Questions