

Why Is User Input Needed?

- Consumer have some input!
- Weighting/ranking of features
- Tailored products - better success!
- Applications not yet envisioned!
- Unanticipated preferences

Fairplay Technology, Inc.

3

How Will Home Owner Use Residential Gateway?

- Broadband
- Ethernet Port
- RS232 IR/S Ports
- Contact Sensing Relays
- Internet Streaming
- Home Networking
- Wireless Touchpanel Interface



Fairplay Technology, Inc.

4

Residential Trends - Past 50 years

- 75 million new homes and apartment units, or three of every four housing units in the country today.
- The homeownership rate has increased from 44 percent to a 66.3 percent.
- Spending for home related goods and services accounts for about 4 cents of every dollar spent in the U.S. annually.

Fairplay Technology, Inc.
Source: NAHB

5

Residential Trends - Present (June/July 1999)

- U.S. housing starts rose 5.7 percent to a seasonally adjusted **annual rate of 1.66 million units** - U.S. Commerce Dept.
- New single-family homes bounced up 3.1 percent to an annual rate of **929,000 units** - U.S. Commerce Department.
- !% penetration @ \$1,000 per unit - \$10M initial market!

Fairplay Technology, Inc.

6

Residential Trends - Present

- 31% of U.S. households with PCs said they are interested in a residential gateway; 62% if it were free or part of a service plan, such as an item on a cable bill. [Yankee Group](#)
- The residential gateway market will grow from \$200 million in 2000 to \$2.4 billion in 2003 [Cahners In-Stat Group](#)

source: Will "residential gateway" fuel home networking trend?
By [Wylie Wong](#); CNET News.com, August 3, 1999

Fairplay Technology, Inc.

7

Residential Trends - Future

- More than a million new households are being formed annually.
- The nation's population is projected to grow by about 30 million people over the next 10 years.
- Between 1.3 and 1.5 million new housing units are needed each year during the next decade.

Fairplay Technology, Inc.

8

What do Homeowners Want?

- NAHB conducted a written survey of 2,000 households nationwide & 3,000 households in 10 metro areas.
- Number one desired feature - a more energy efficient home (69 percent).
- Overwhelmingly - single-family detached home preferred.

Fairplay Technology, Inc.

9

Residential Trend - **Smart Growth**

- Broad initiative - NAHB, ULI
- "Providing a decent home in a suitable living environment for every American family."
- Plan for and manage growth
- Infrastructure-schools, highways
- Building a political consensus & *taking action*
- Meeting demand in "smarter ways"

Fairplay Technology, Inc.

10

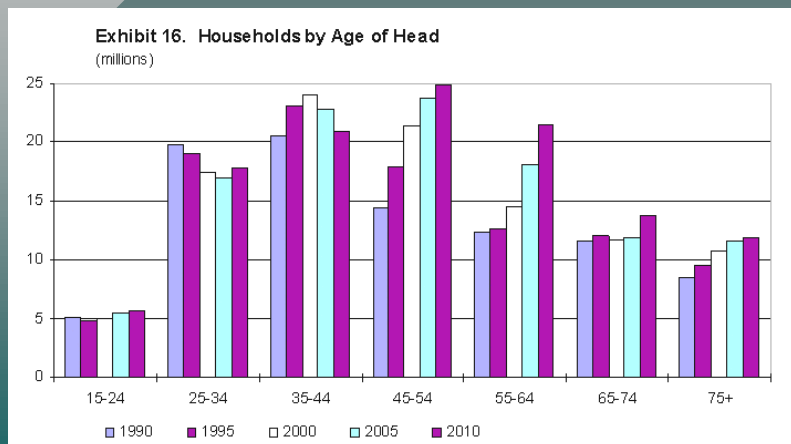
Who will R. G. Users Be?

- Minority share of the overall population is expected to expand from 24 percent in 1990 to 32 percent in 2010.
- Aging of the baby boomers.
- National household trends favor the growth of manufactured housing.

Fairplay Technology, Inc.

11

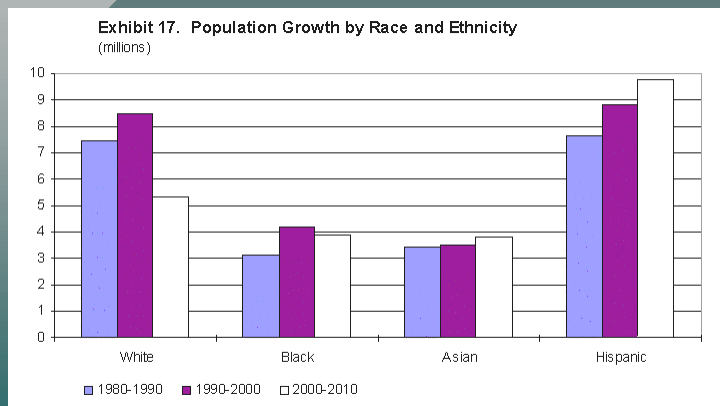
Residential Trends - Society Shifts



Fairplay Technology, Inc.

12

Residential Trends - Society Shifts



The Future of Manufactured Housing *Kimberly Vermeer, Josephine Louie* January, 1997, Harvard University

Fairplay Technology, Inc.

13

Residential Trends - Implications

“Bigger bilingual buttons?”....

- Features senior -friendly
- Incorporate cultural preferences
- Opportunities in pre-manufactured market

Fairplay Technology, Inc.

14

How Will Home Owner Use Residential Gateway?

- Advanced energy savings
- Security/emergency call
- Enhanced lifestyle - convenience
- Access to Internet
- Premium Audio/video
- Appliance control from exterior

Fairplay Technology, Inc. 15

Residential Gateways

Seeking User Input

Types of User Input?

- Individual
 - Preliminary features
 - Product tests
- Group
 - Collaborate w/ organizations
 - Involvement in standards process



Fairplay Technology, Inc.

17

Nat'l Association of Home Builders



"The Voice of America's Housing Industry,"

Fairplay Technology, Inc.

18

Nat'l Association of Home Builders

- Codes & Standards Group
 - Highlight potential pitfalls
- Research Center
 - Technology
 - Contract research



(800) 368-5242, (800) 638-8556

Fairplay Technology, Inc.

19

Urban Land Institute



- Member organizations & committees
- Residential councils
- Forums - incl. a special technology forum
- Publications.

(800) 321-5011

Fairplay Technology, Inc.

20

Other sources



- Trade press



Fairplay Technology, Inc.

21

Don't Forget the Internet

"Tiny Computer Could Allow Control of Household Devices"

Mr. Shrikumar began testing his computer this summer and announced it on a private Internet discussion group. Since then, about 5,000 people daily have visited the tiny computer's Web site (www-ccs.cs.umass.edu/~shri/iPic.html).

Source - WSJ

Fairplay Technology, Inc.

22

Special R.G. Mortgages?

- Little known energy-efficient mortgages are available to finance energy conservation home improvements.
- Energy-efficient mortgage lenders may qualify buyers for larger loans because buyers w/ lower utility bills have more money to spend on a mortgage.

Fairplay Technology, Inc.

23

Summary - Seeking User Input

- R. G. forecast to be a huge market
- Design products with market trends in mind.
- Trends in residential market may dictate popularity of divergent features
- R. G. industry may benefit from collaboration - lobbyists?
- Lots of sources for input

Fairplay Technology, Inc.

24