



memmic
dance. play. connect.

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Agile Aging Final Presentation

AGENDA

- Background
- Process
- Prototype
- Plan (as in Business)
- Future Directions

BACKGROUND



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About the Course

- 2 quarter course
- Perspectives from computer science, design, social & behavioral sciences, and medicine
- Focusing on improving mobility for older adults
- Goal: increase physical activity

Winter Quarter

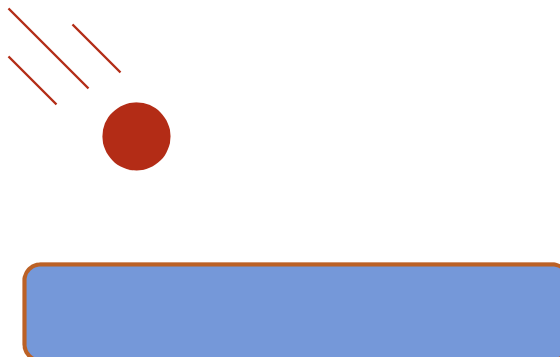


1-800-**GO**senior



ExerPong – Insights and Motivation

- Needs to be FUN
- Human interaction is essential
 - ▣ Envisioned a “buddy system” to connect people through the game
- Target the living room
- Make a game that requires movement

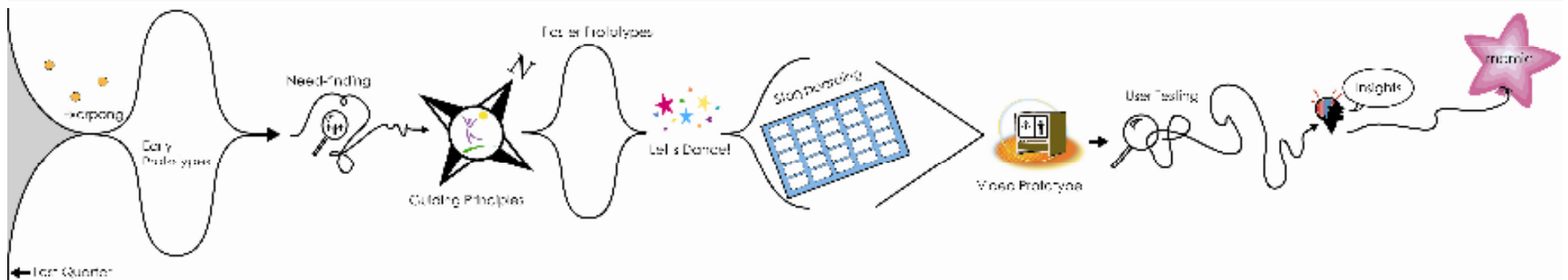


ExerPong – Where Next?



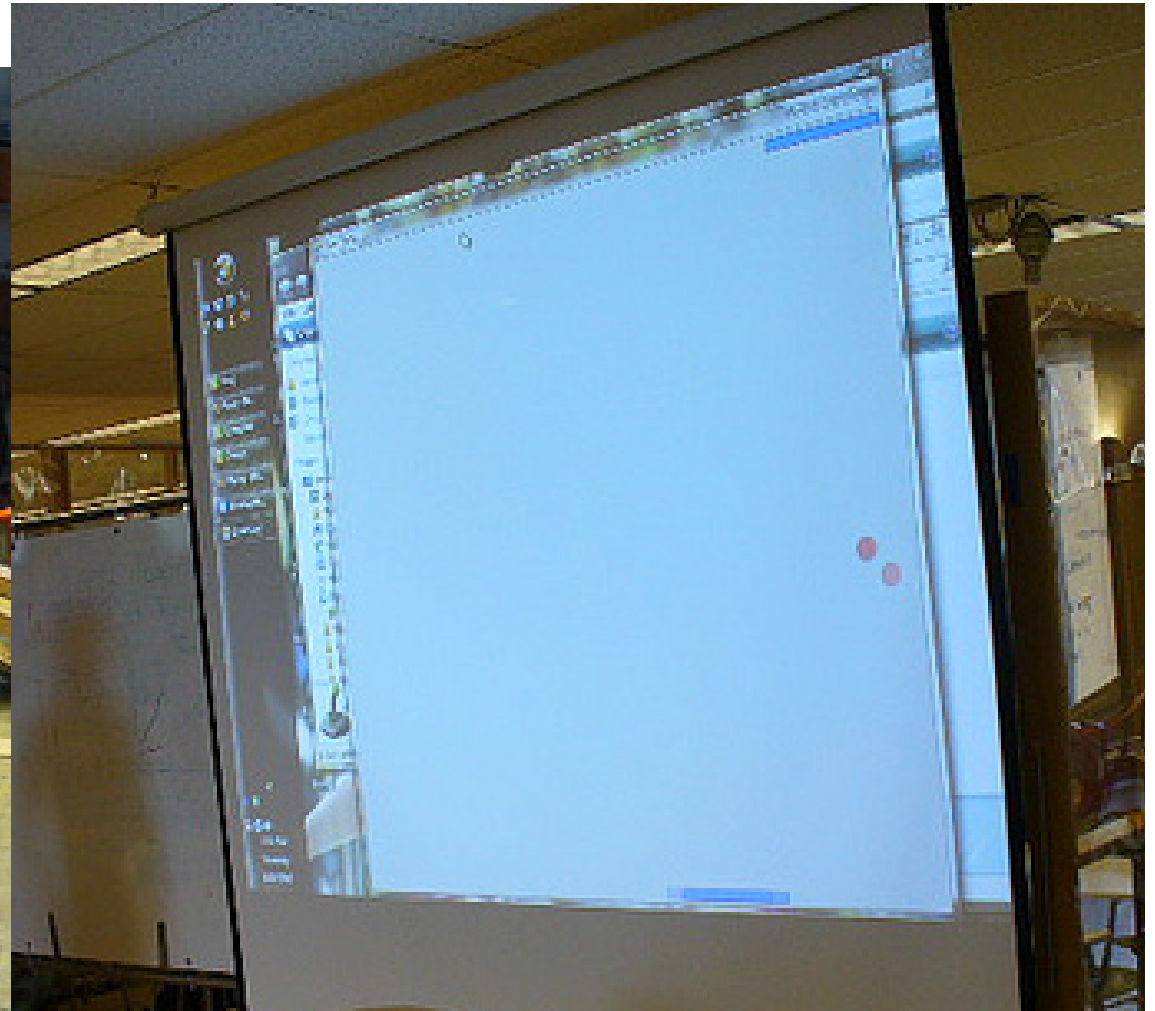
- Focus on social aspects
- Please... No more Pong
 - Determine what games or activities are most engaging
- Which motions to incorporate
- Whatever we do, keep it fun and easy to use

PROCESS



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ExerPong



Early Prototypes

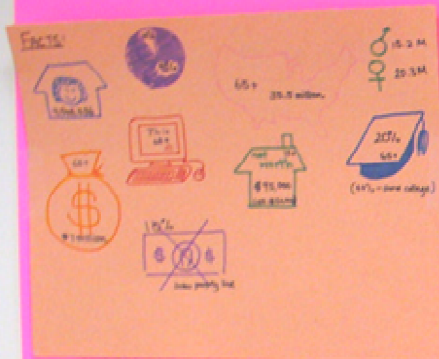
Technology

COMMUNITY CENTERED CARE

Business

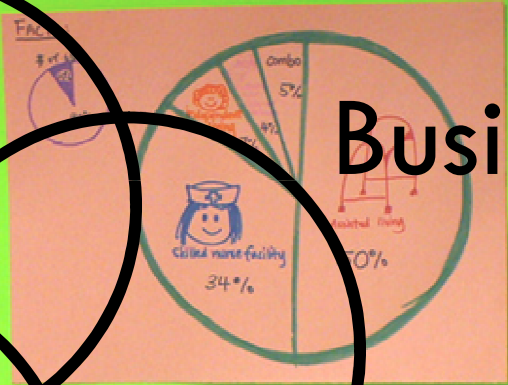
Human Values

OUT-OF-POCKET



PROS

- BIG market → \$\$\$
- Help Seniors in home where safe socialization may be most valuable



Pros:

- higher spending power \$
- direct contact: reach more seniors per product
- more focused group to market to

POSITION
"Safe" Socialization + exercise

PLACE
- Senior equipment depots
- Wal Mart + Target
- Online

PROMOTION
- Commercials (TV)
- word of mouth
- find the lead adapters (quite a few churches or senior centers?)
- Newspaper

PRICE
Low (most users + most price sensitive)
\$50? \$80? need to test...

CONS

- Likely to be price sensitive ☹️
- No good comparable product to study

POSITION
Fun Fitness

PLACE
- Trade Shows
- Fitness Equipment vendors

PROMOTION
Trade magazines
- Focus on largest companies
- word of mouth
- present at shows
- need some lead adapters

PRICE
High
Fewer purchasers, less price sensitive

Cons:

- Smaller market size
- fewer decision makers

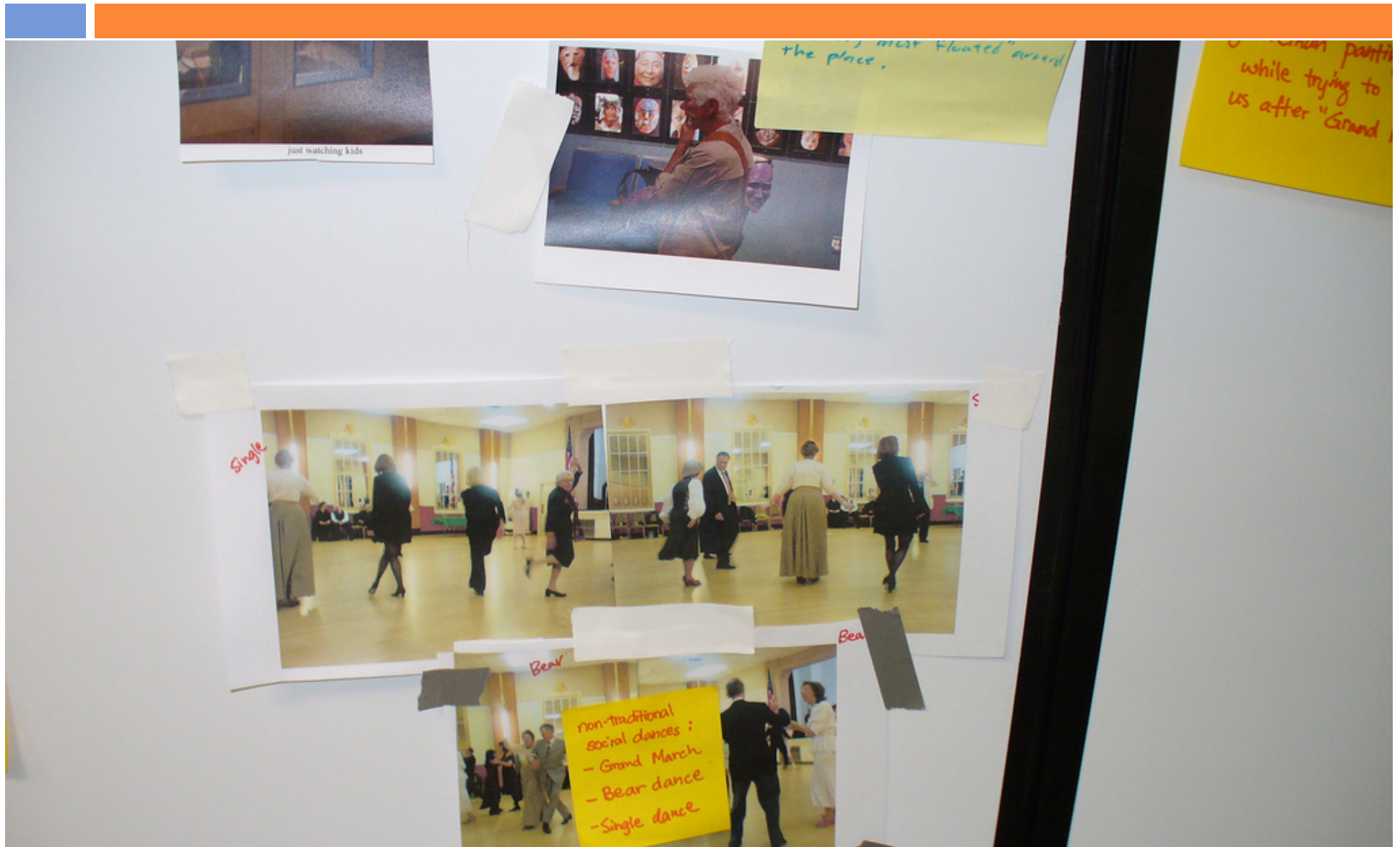
FUTURE QUESTIONS:

- 1) How do seniors decide what to buy? How much would they spend?
- 2) How to market to seniors?
- 3) What motivates them to spend?

FUTURE QUESTIONS:

- Is the market large enough to make this profitable?
- How concentrated are the owners?
- Does selling to centers and communities mean we have to have a lower price? (assumes centers can't afford as much)

Need-finding

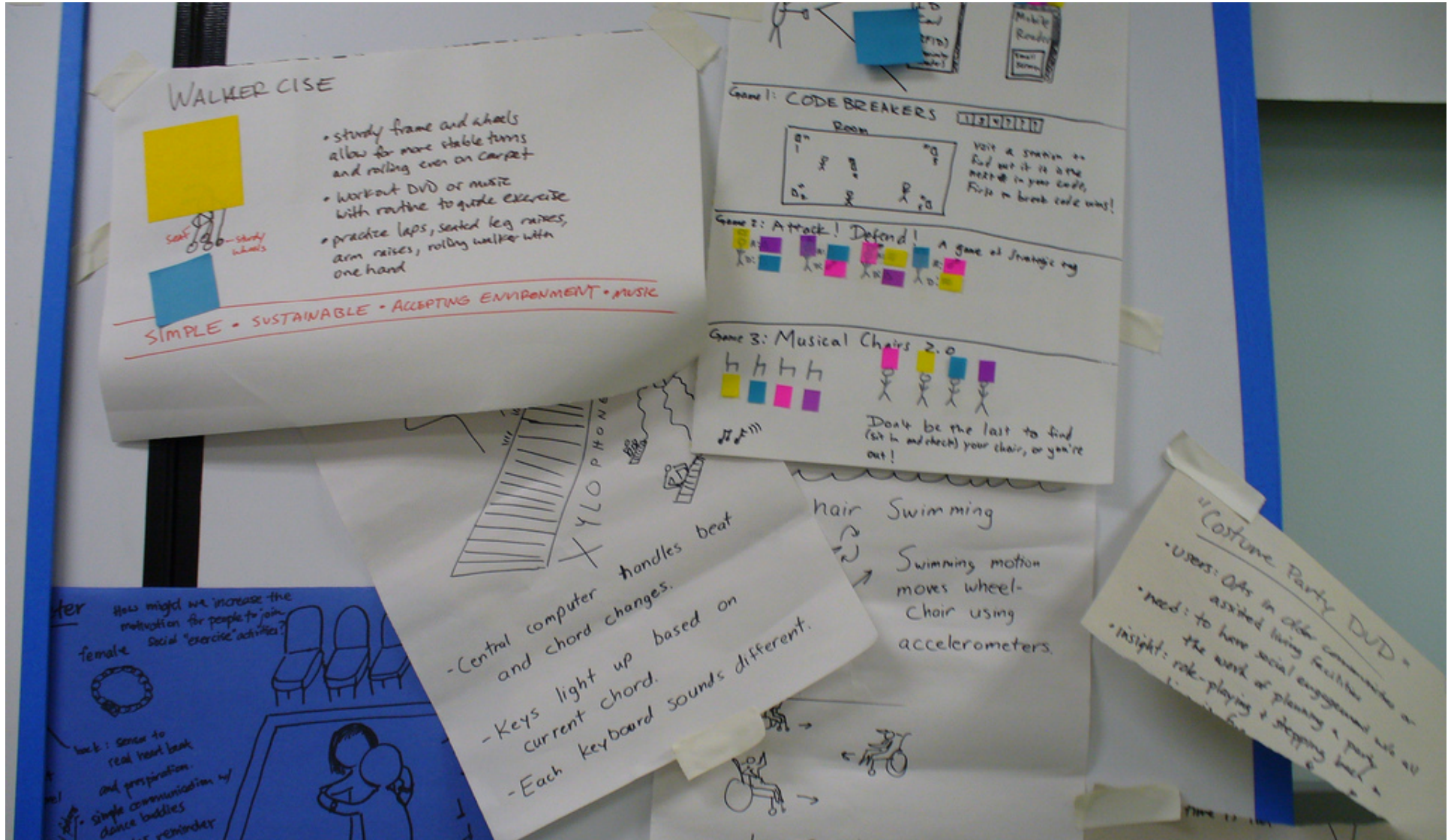


Guiding Principles

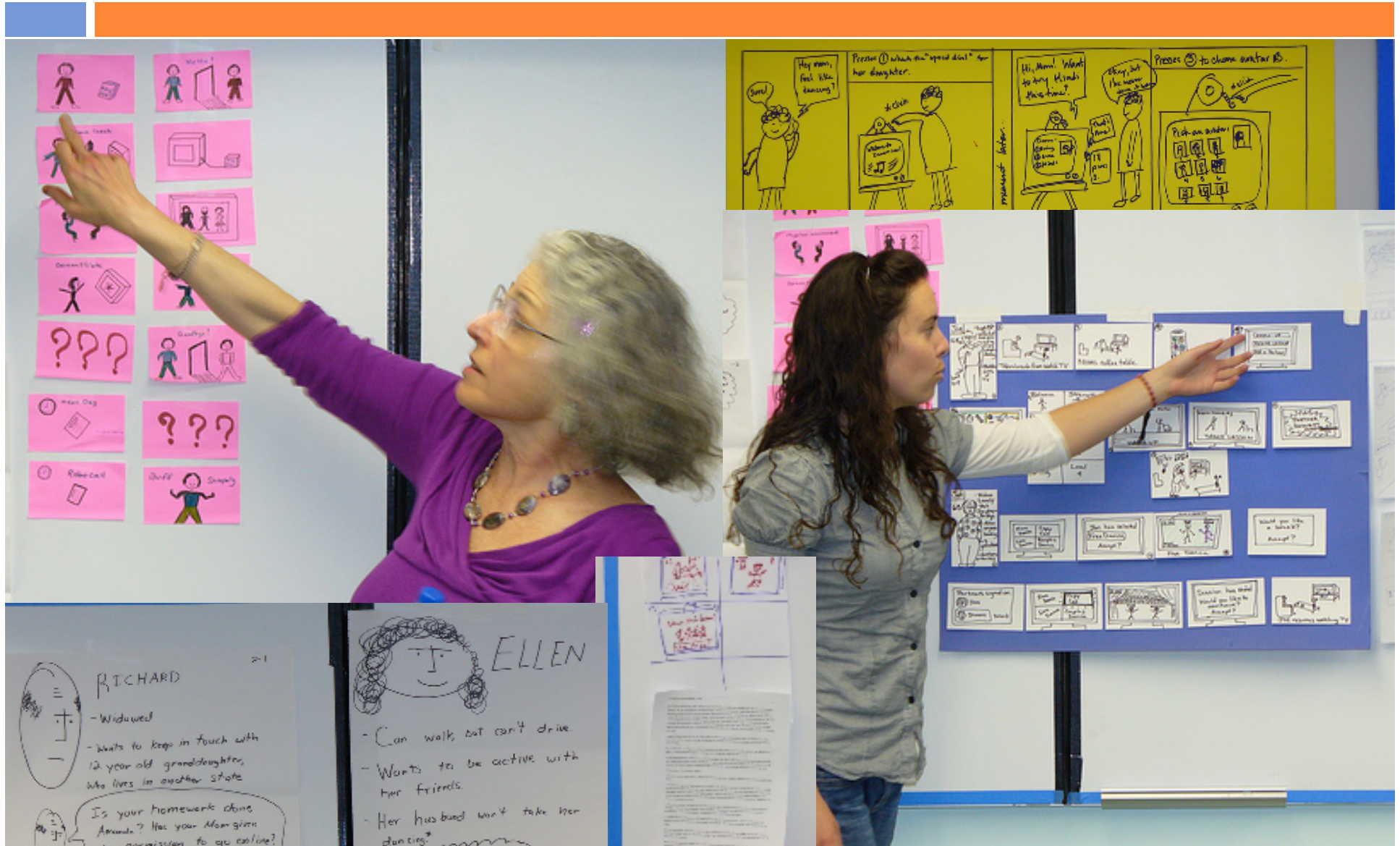


- Laughter and music
- Use all parts of body
 - ▣ But let people “Do what they can”
- Social in nature
 - ▣ Let users be socially comfortable
- Variety to preserve long-term interest

Poster Prototypes



Storyboards and Personas



Guiding Principles: Iteration



- Show real people, not avatars
- One-on-one dancing with friends or relatives
- Let people dance alongside an instructor or a
celebrity

First Video Prototype



Video Prototype 1.0

Video Prototype 1.1



User Testing

- In-Home Prototyping
 - ▣ 4 very different users
- Observational Inquiries
 - ▣ Comfortable with the technology?
 - ▣ Having fun?
 - ▣ Any mobility issues? Space issues?
 - ▣ Do they focus on their image? Or the friend's image?
 - ▣ Motivation?
- Amazon Mechanical Turk



Reactions



- More people responded to “Dance” than “Exercise”
- “I was skeptical at first, but I can see that it does have some great possibilities.”
- “Especially effective way for seniors to connect with children and grandchildren”
- “Getting the right music will be important”
- “Women would enjoy it, but how to interest men?”

Insights



At home



Loved ones



Mirror, mirror
on the wall



TV
(keep it simple)



Feedback?



Let's dance!!

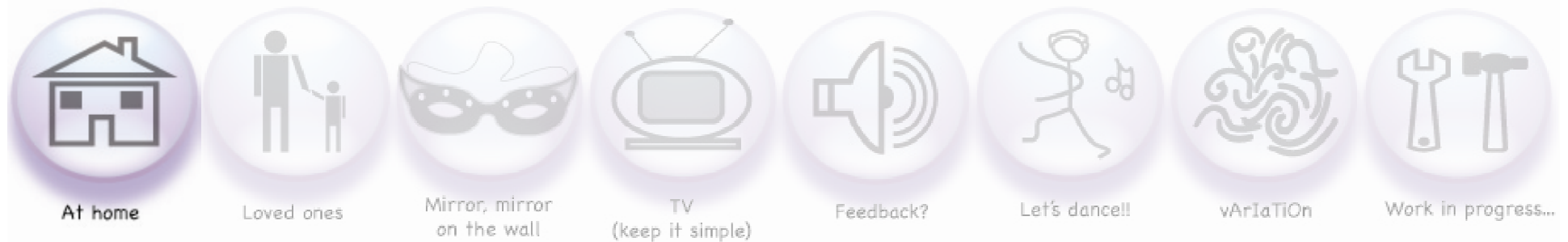


vArIaTiOn



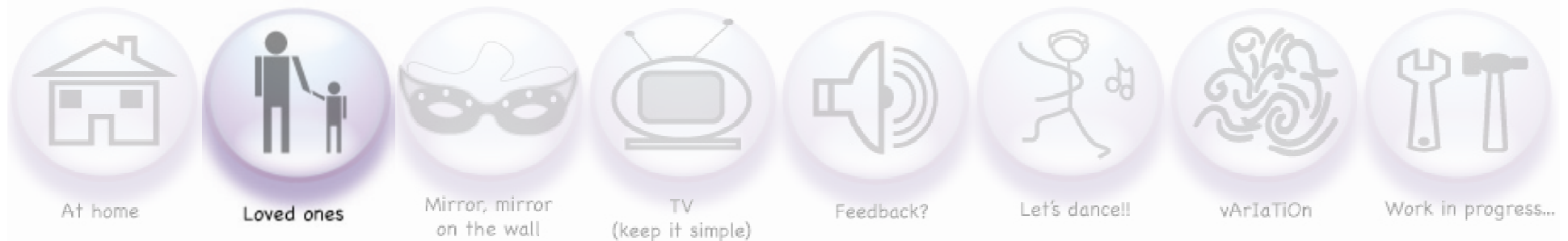
Work in progress...

Insights: At home



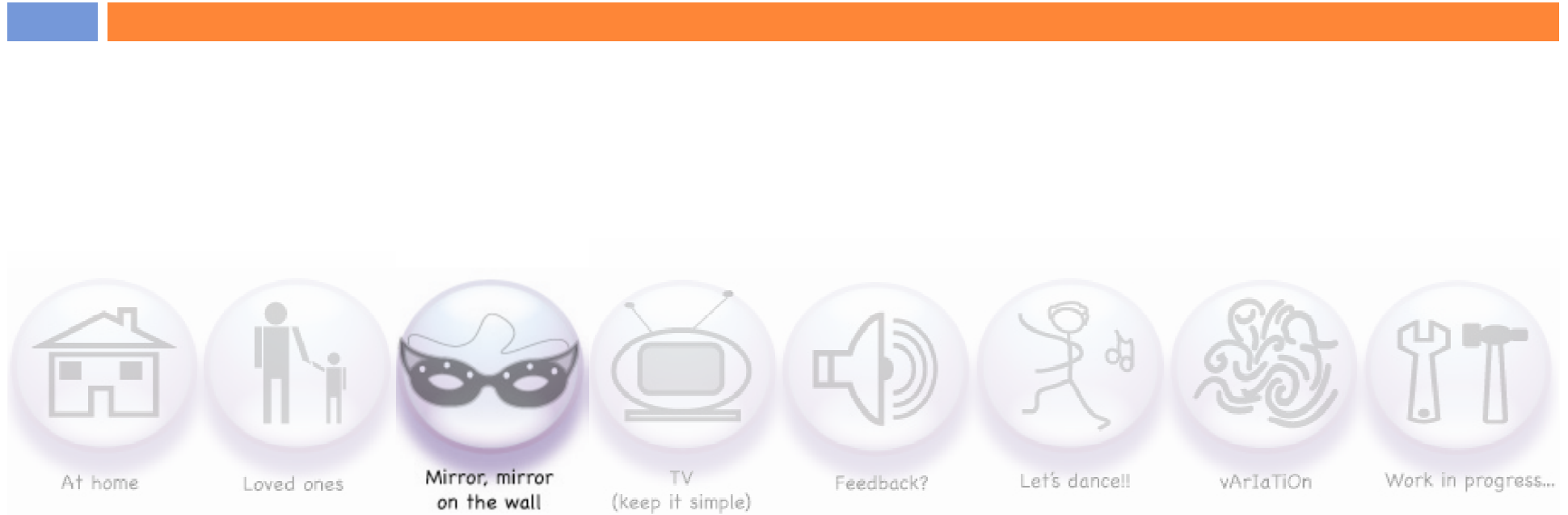
- Wanted: safe environment
- safe exercise = not exposed to weather, falling, strangers

Insights: Loved ones



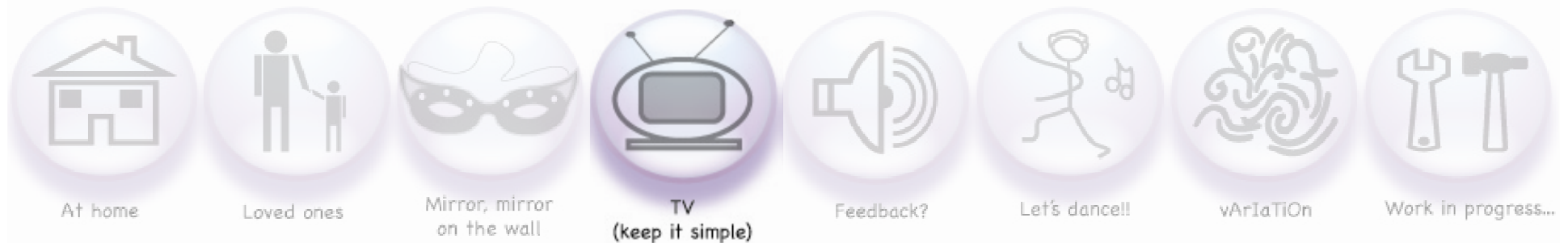
- With family = more fun + more motivation
- Children give OAs permission to do silly things
- Intergenerational, coaching dynamic
- a babysitting tool?

Insights: Mirror, mirror on the wall



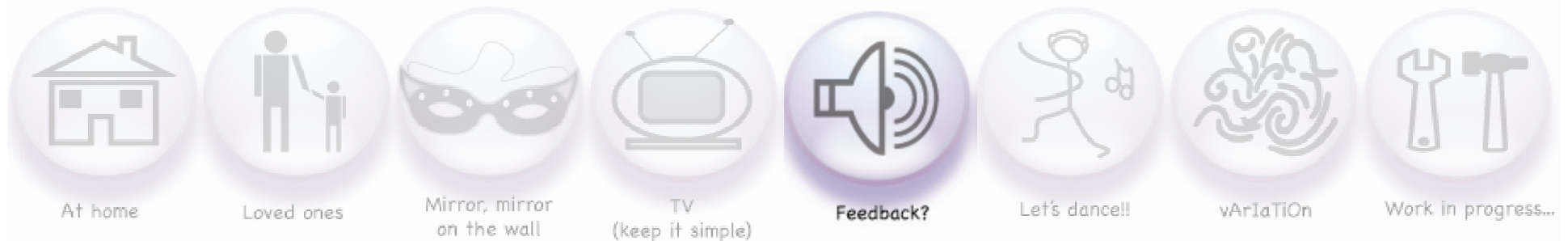
- Important to see self
- But concerns about triviality and vanity
- There IS such thing as too much “make-believe”

Insights: TV



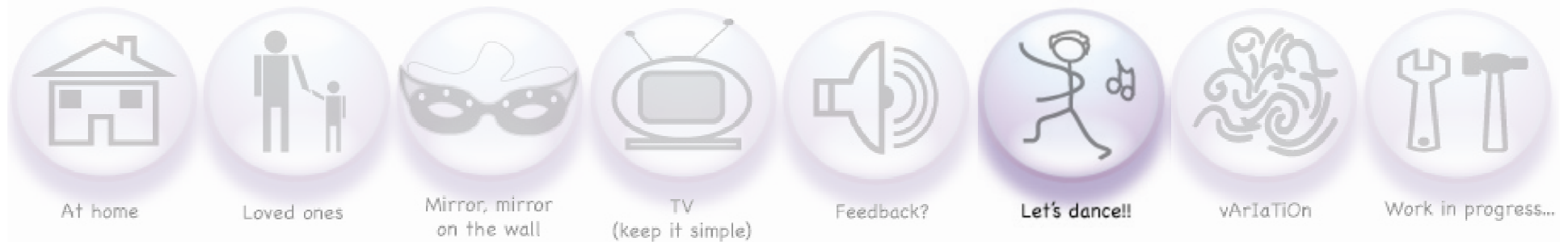
- SIMPLE
- Can't look too computer-y
- OAs are comfortable with TVs
- Not video phone, it's 2-way TV

Insights: Feedback



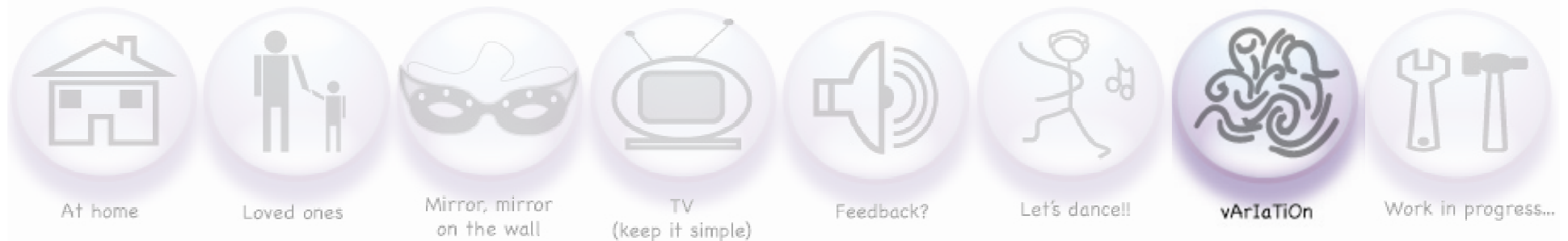
- Bells and whistles can be intimidating
- Feedback could range from charts to laughter
- Clear audio connection important
- Success = increase in physical function and happiness

Insights: Let's dance



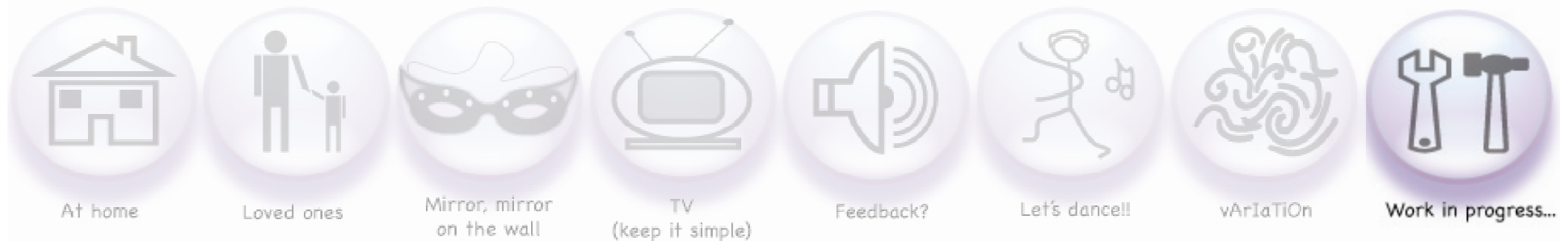
- Social aspect of dance
- Beyond dance...simon says, role play, simple games

Insights: Variation



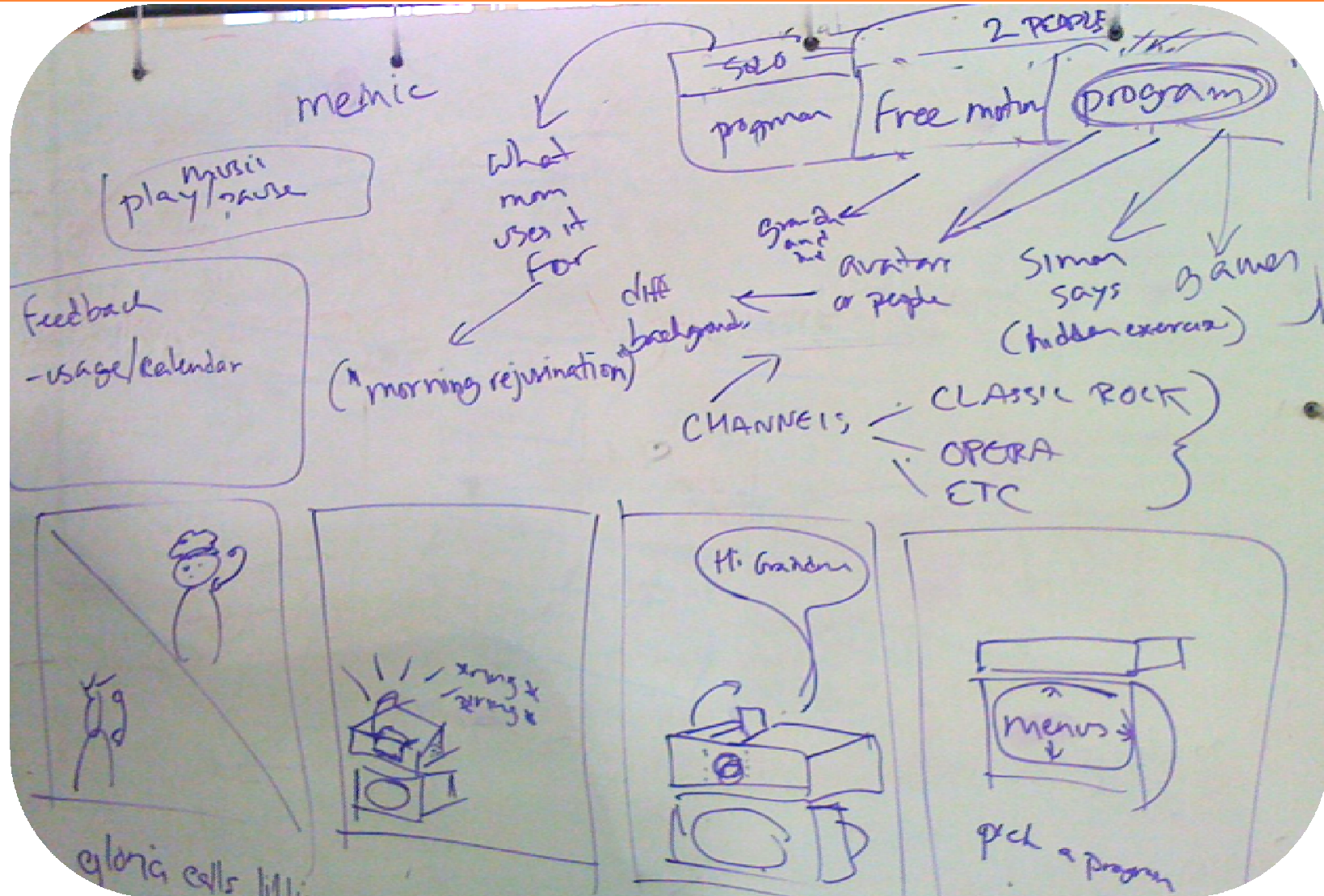
- Different “levels” for those comfortable doing more or less
- Movements sitting down
- Power of music as a motivator
- Capacity for updates and user-generated content

Insights (yet to be resolved)



- Hard to mimic an avatar
- Hard to follow without instructions
- Too many people on screen is distracting
- Eye contact
- Audio connection

memic. Video Prototype



PROTOTYPE

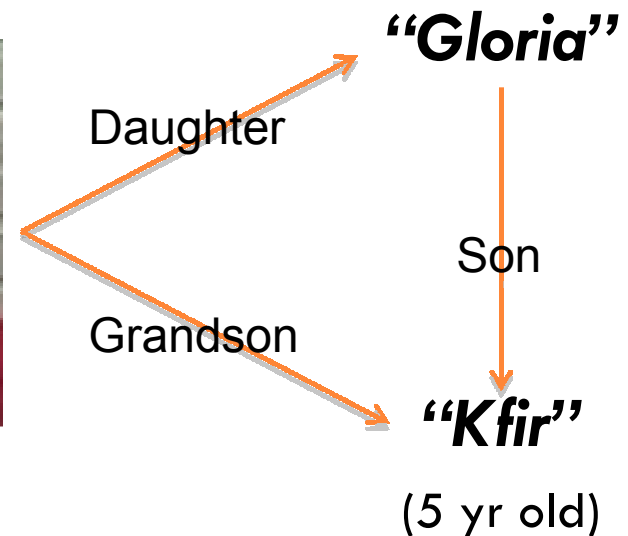
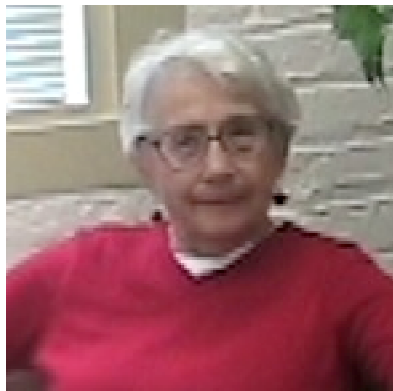


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Persona

“Lillian”

- 70 years old
- Has osteoporosis but in good health
- Has 4 grandchildren (ages 5 – 14)
- Lives 100 miles away from daughter, Gloria



Product Video



Prototype 2.0

Product Features



- Visual communication (video and audio)
- TV-accessory device
- Broadband connection
- Pre-programmed with your set of contacts
- Background replacement
- Easy and intuitive to use
- Selection of activities:
 - ▣ Dance
 - ▣ Games
 - ▣ Exercise
- Wide selection of music
- Call-in technical support service for adding new contacts and updating programs

PLAN (as in Business)

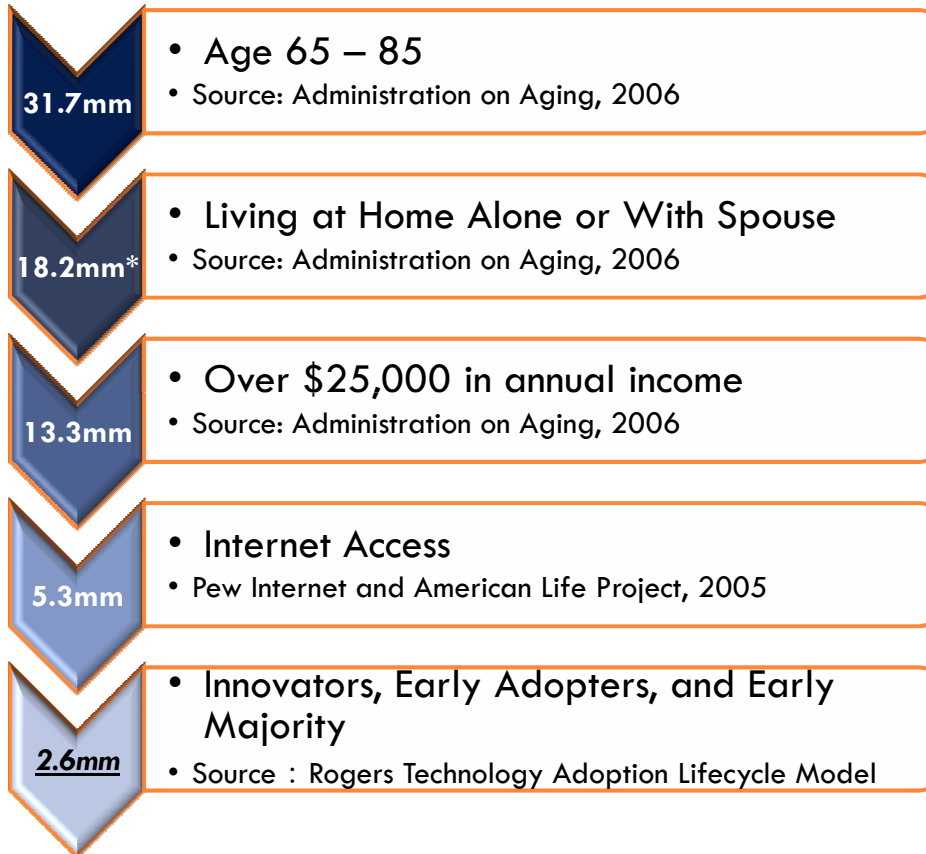


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Target Market

- 65 – 80 years old
- Living at home
- Has Television and Internet Access
- Modest to High Income
- Wants to stay in touch with friends and/or family
- Early adopters and early majority

So how big is that market?



Estimated
Size of
Market:
2.6 million

*55% of older adults live with a spouse and 30% live alone. This number is based on the assumption that there is only one memic per married household

What business are we in?

Business and Revenue Model Possibilities

Sell the Box / Hardware

Profit based on units sold (e.g. \$200/memic)

Pros:

- Format is familiar for older adults
- Accessory market may be lucrative

Cons:

- Hardware margins are thin
- Difficult to fend off competition
- Relinquishes opportunity for monetizable customer relationship

Sell the Service / Subscription

Users subscribe to memic monthly to stay connected (e.g. \$10/month)

Pros:

- Recurring and higher overall revenue (if paid for 2yrs or more)
- Could be added to existing bills (such as cable)

Cons:

- Delays cashflow
- People have to say yes to memic every month

Sell the User / Advertising

Advertising appears during usage. Box costs much less (e.g. \$20)

Pros:

- Cheapest for users
- Reaching well defined group in the home is attractive real estate

Cons:

- Users may dislike ads
- Ad income is volatile

memic could consider creating original content for sale under all of these models

Marketing plan is contingent upon choice of business model

How might we... go to market?

- Consider Partners
 - Such as Cisco or Comcast for distribution
 - Google for ad placement
 - Disney for content
 - AARP and older celebrities for branding
- Be purchased by strong hardware brand (Sony, Panasonic, etc)
- Raise enough capital to build distribution and content from the ground up?

Future Considerations



- LEGAL: IP Protection and purchasing rights to content
- TESTING: User Interface, Technical Capabilities
- OPERATIONS: Manufacturing and Supply Chain Terms
- MARKETS: Future geographical markets (such as China) and consumer groups (such as children?)

Special Thanks To...

Teaching Team

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Abby King

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The d. school fellows

Video Cast

Kfir Shoham

Shera Shoham

Cliff and Zelda Barnett

The Banchoff Family

Guest Speakers

Beth Novack

Fred Gibbons

Coe Leta Stafford

Damien Newman

Dave Thompson

Scott Klemmer

Peter Rubin

Paul Yock and the Biodesign Team

User Test Participants

Marianne Crowder

The Samuels

Heidi Stein and the

Jewish Community Center

Branding Ideas (we couldn't resist)

SLOGANS / CAMPAIGNS

“memic. Making TV Two-way.”

**Me and my memic
(tongue-twister commercials)**

PACKAGING (see demo)

COLOR PALETTE

**PRIMARY /
BACKGROUND**

Accent 1

Accent 2

LOGO



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