



# Turn **it** on!

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Group Passion | Grad Studio 2 | Spring 2007 | Carnegie Mellon University

28% of U.S. cell phones are video capable, but only 1% “video snack”



Focus on **passion** and the potential increases exponentially











# January 17 - February 19



**Findings** 1. Even shy people can become active and aggressive when passion is involved.



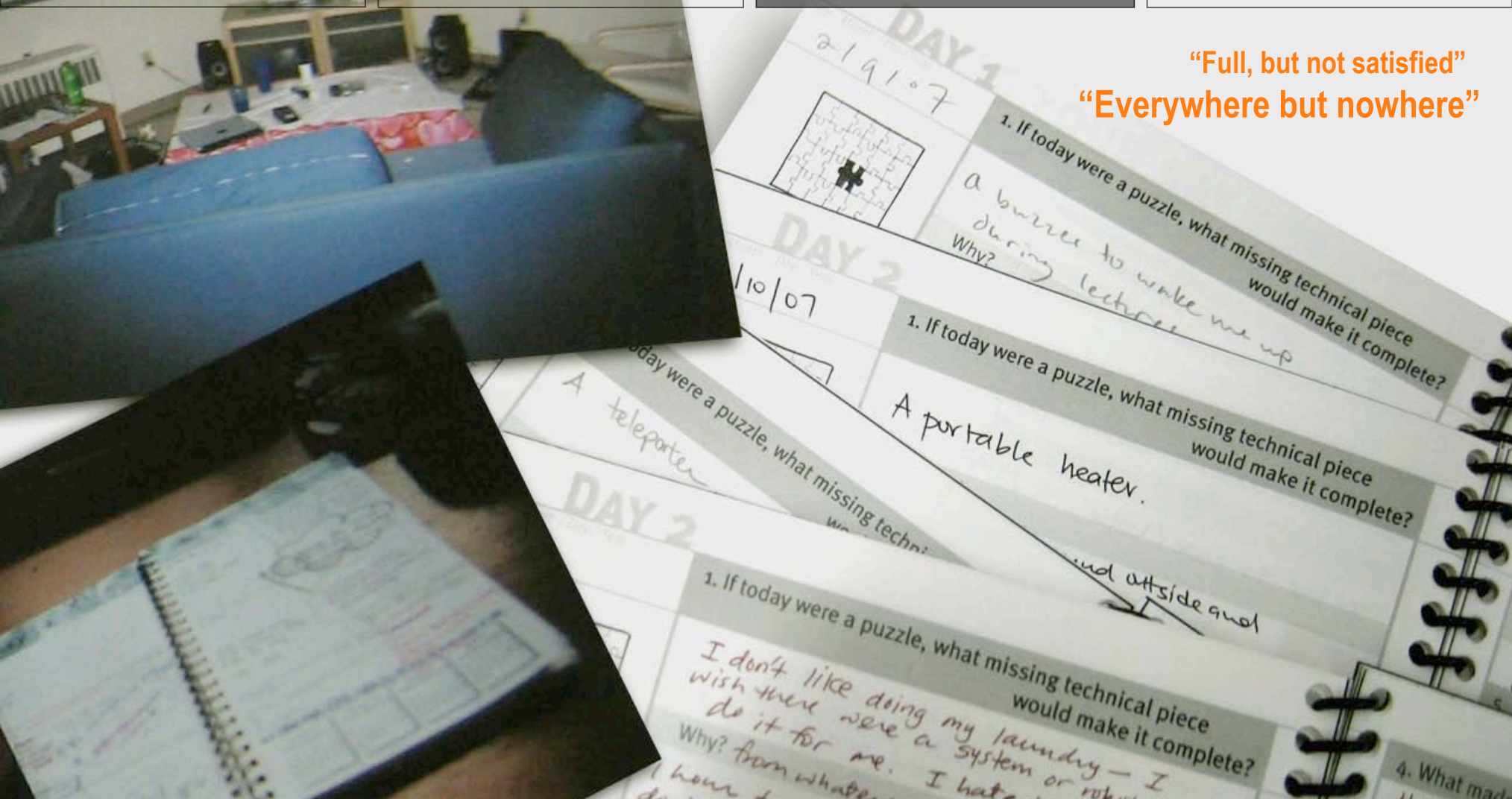
**DDR Manipulation:**  
Adding songs through  
keyboard & USB



**Phone Manipulation:**  
Bowling scores  
inputted & later stored  
onto Excel sheet to  
document progress

## Findings

1. Even shy people can become active and aggressive when passion is involved.
2. Documentation for the user (memory) and others (approval) is necessary.
3. Personalization is needed to meet the person's passion (skilling and upgrading)



**“Full, but not satisfied”**  
**“Everywhere but nowhere”**

## Findings

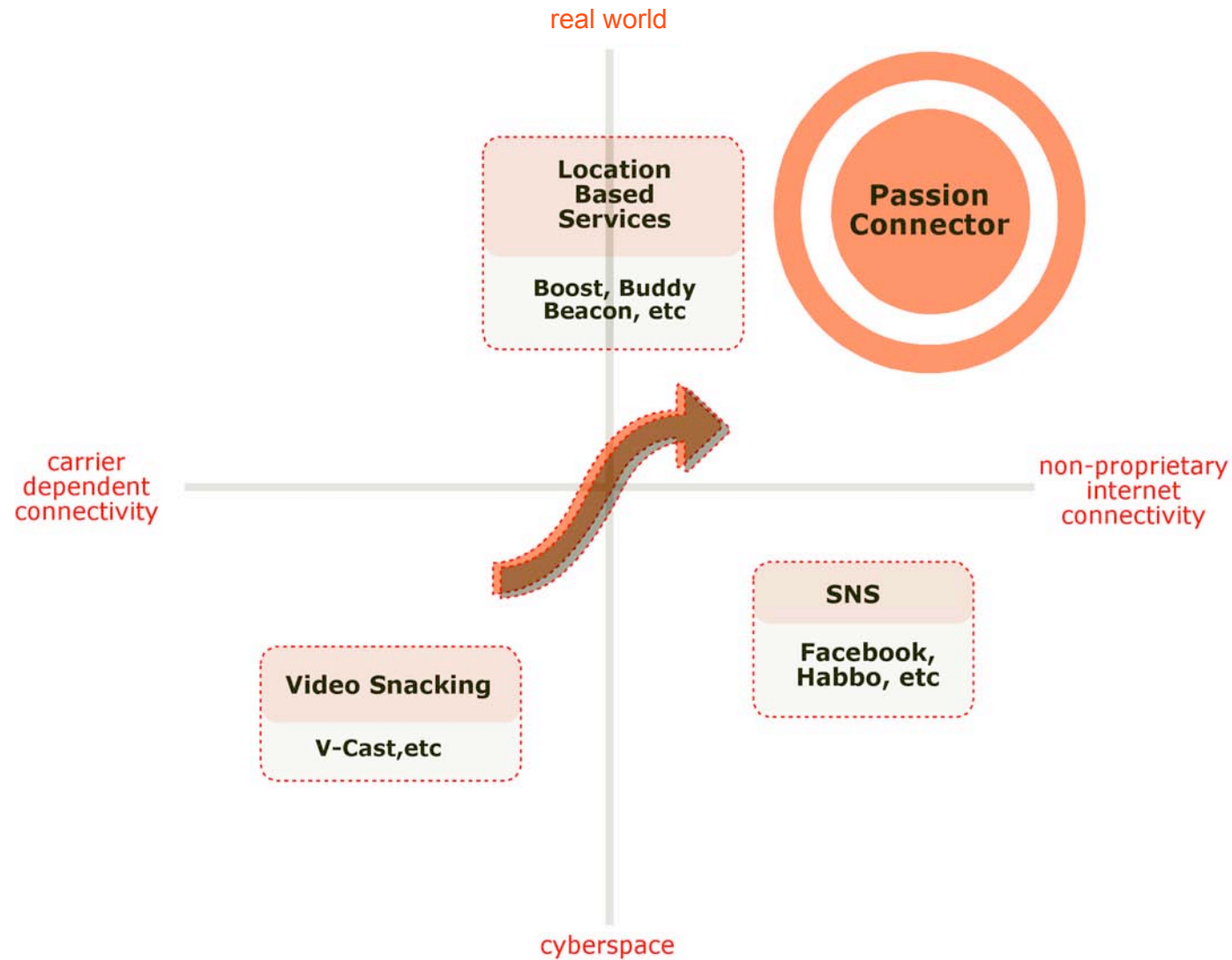
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4. Inherent value must increase.



*Ethnographic Interviews**Participant Observation**Diaries**Shadowing***Findings**

1. Even shy people can become active and aggressive when passion is involved.
2. Documentation for the user (memory) and others (approval) is necessary.
3. Personalization is needed to meet the person's passion (skilling and upgrading).
4. Inherent value must increase.
5. Form of usage is evolving.



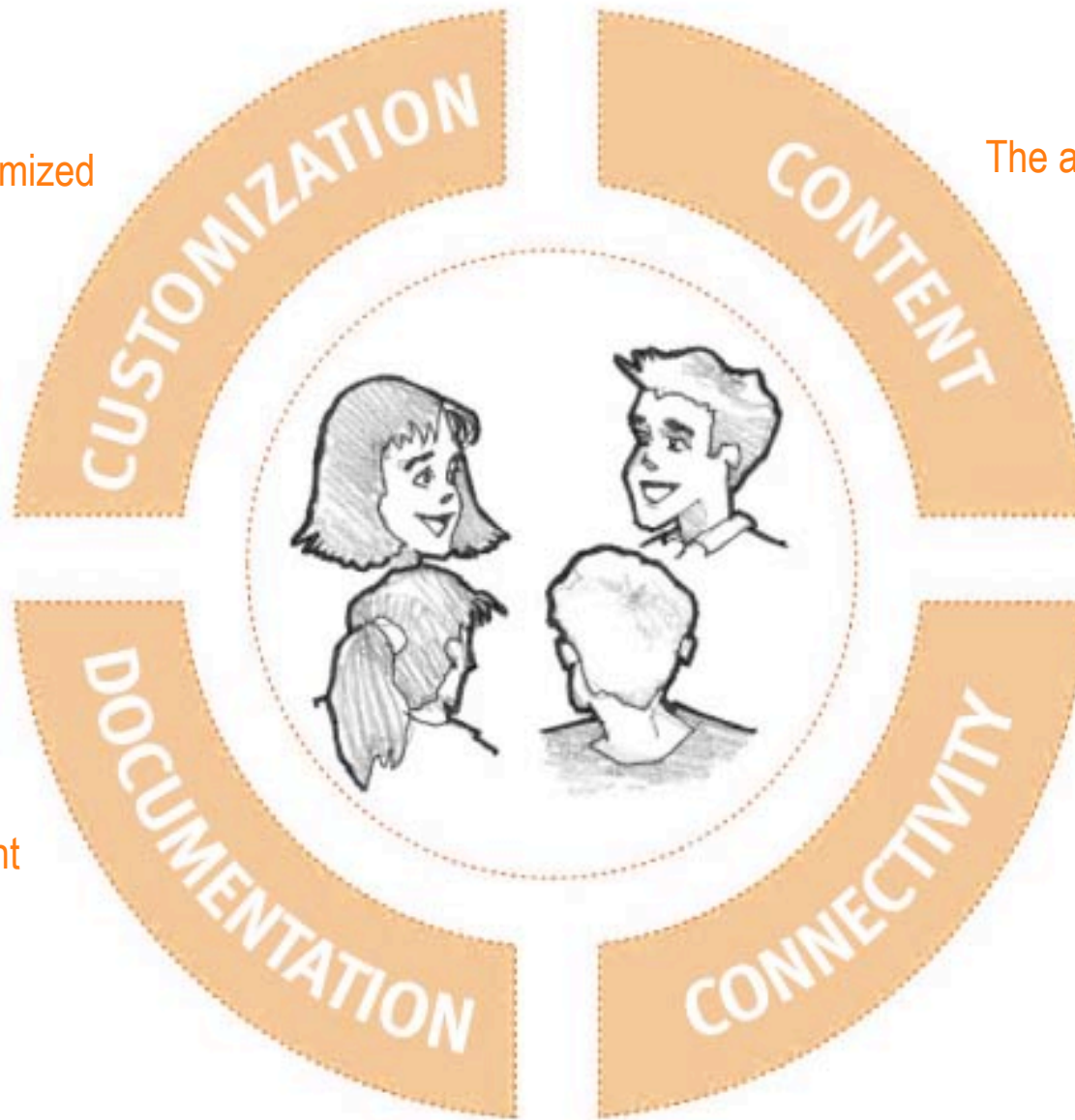
**Area of Opportunity****Direction**

Cell phone as a mediator between people & passions  
We want to create a "Tool for Passion."

**Tool for 'PASSION'**

The ability to be customized

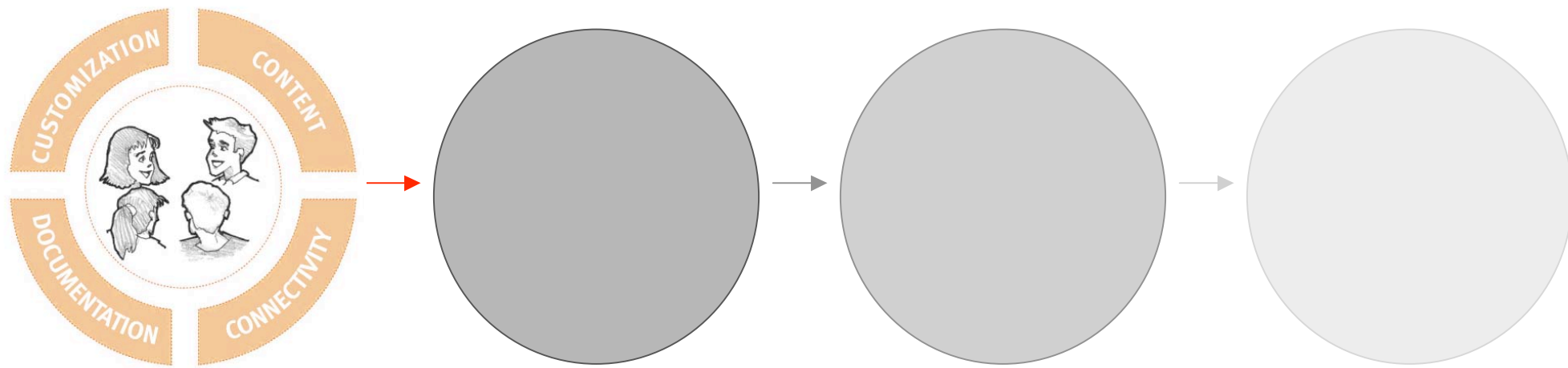
The ability to receive content specific to passion



The ability to document through multimedia

The ability to connect to a wider network



**Results**

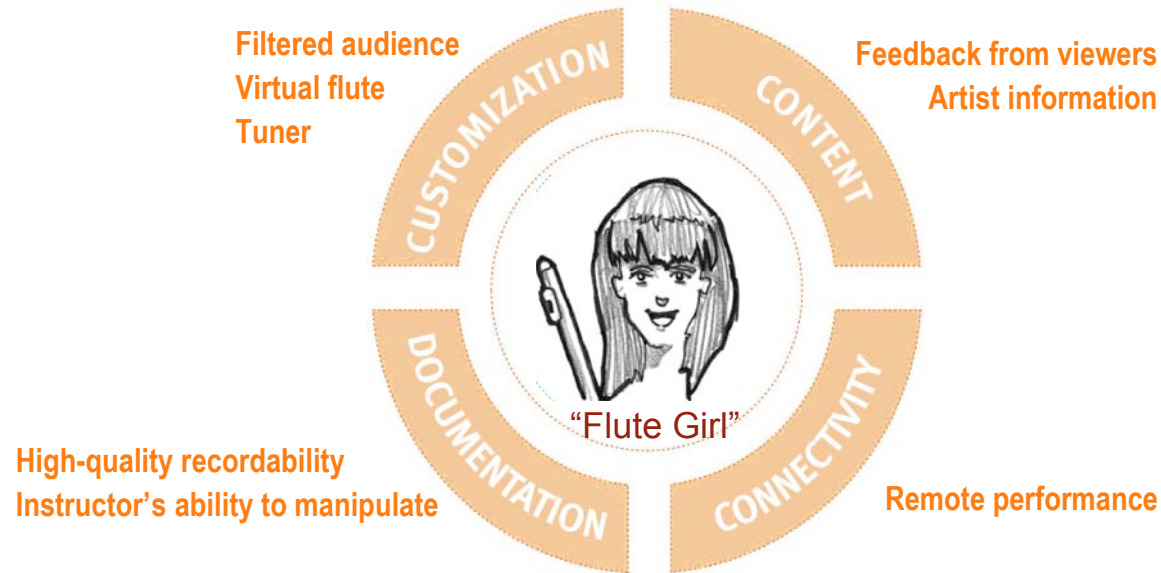
“Tool for Passion”  
formula



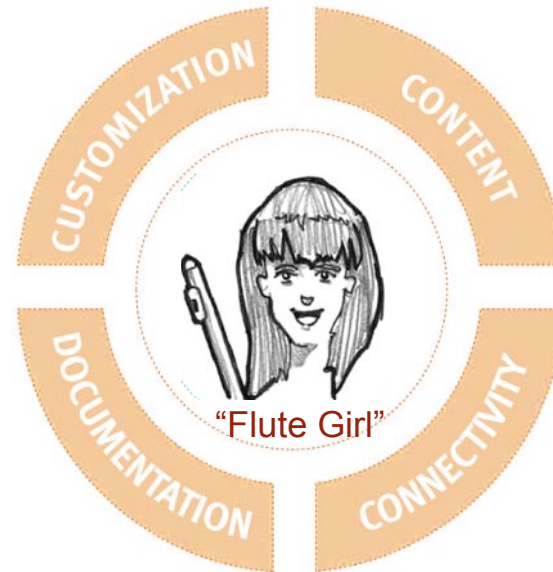
February 21 - March 28



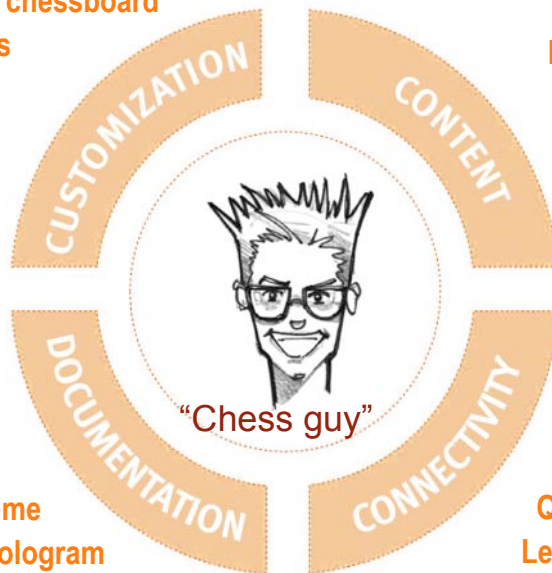
## Persona Mapping



## Persona Mapping



Scale of chessboard  
Materials



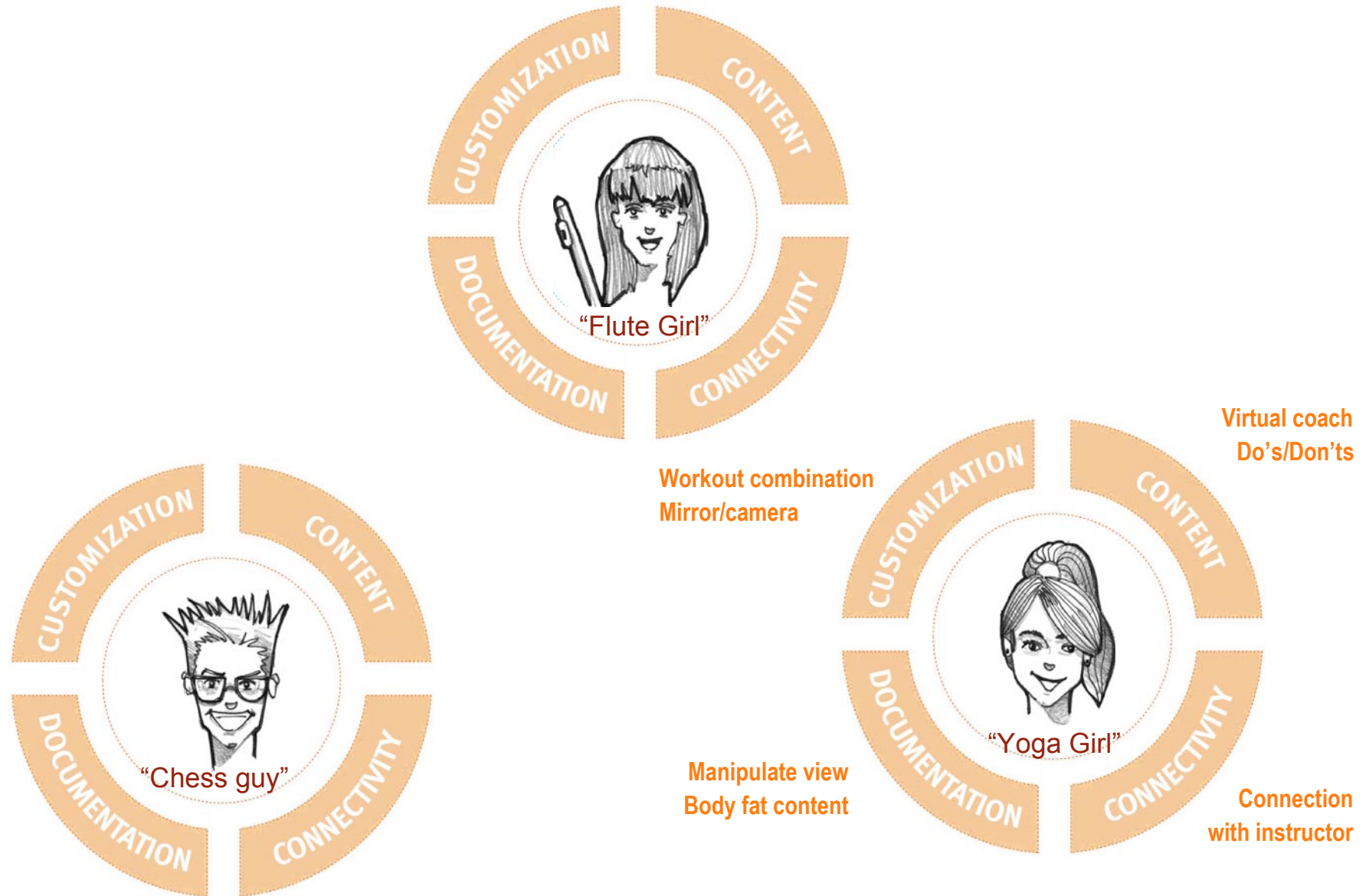
Expert analysis  
Bobby fisher

Time  
Hologram

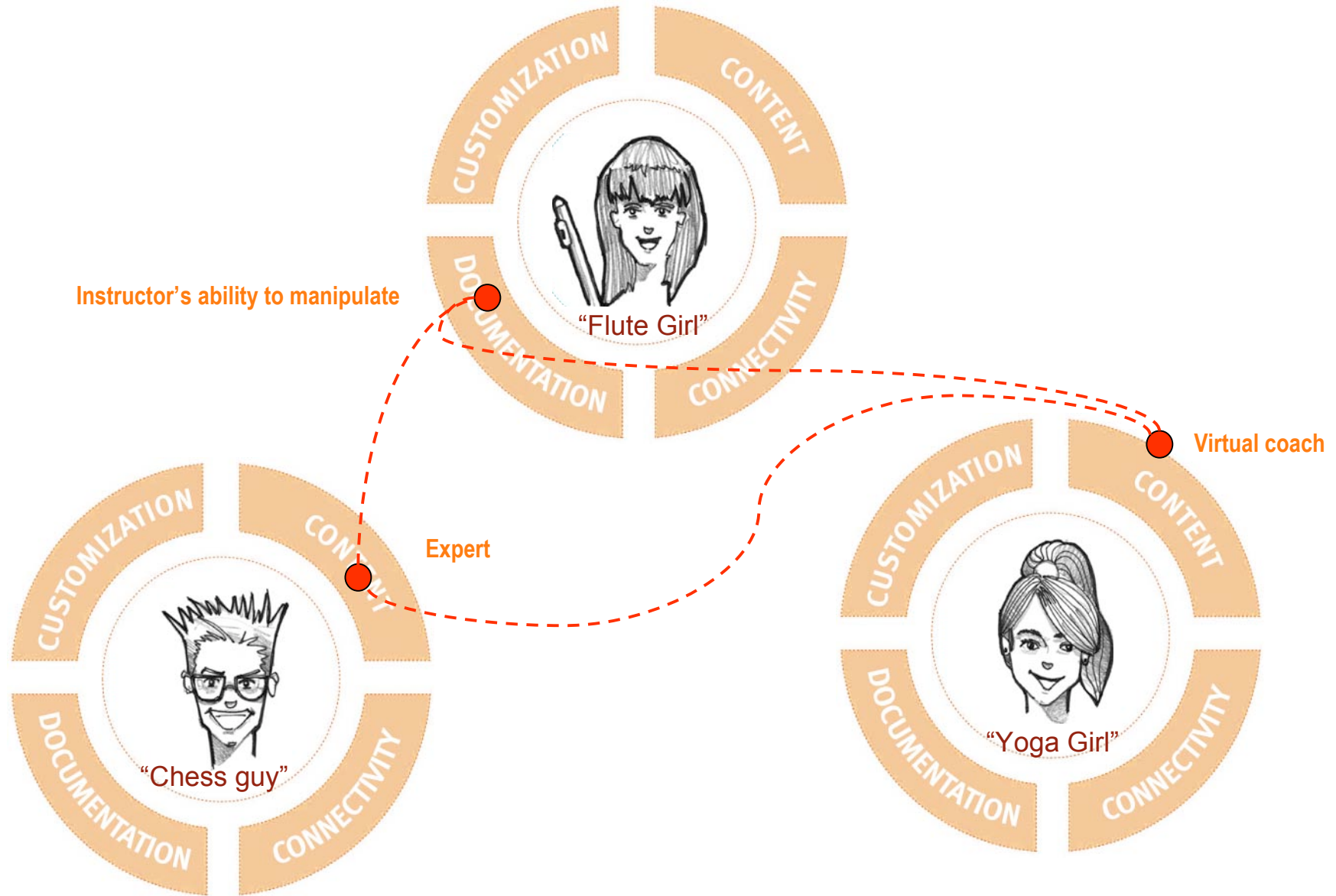
Quality of software  
Learning, Challenge



## Persona Mapping

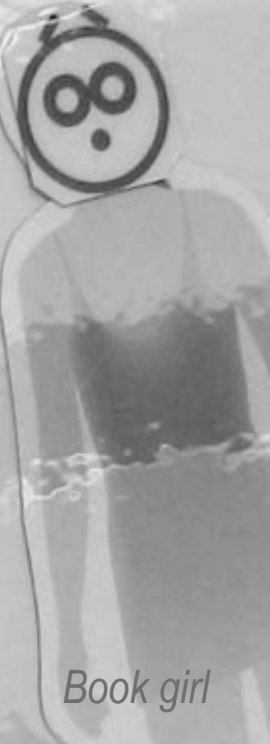
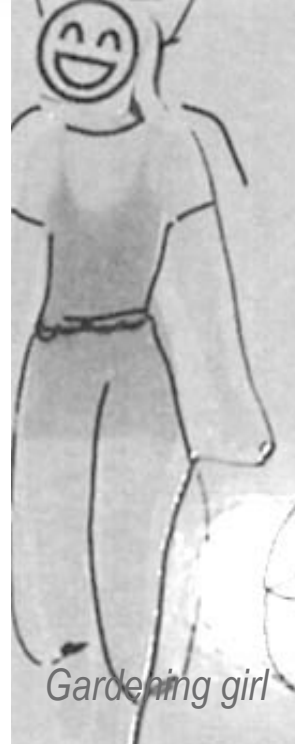
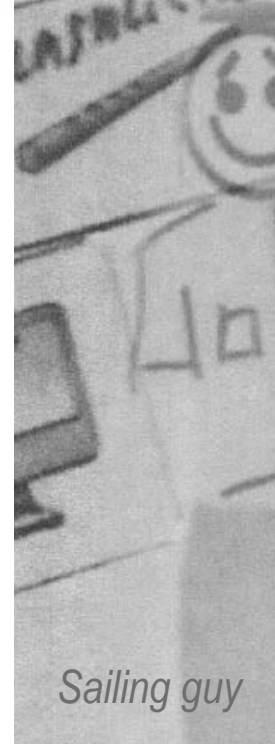


**Connections** : generated questions to ask 'real' people







**Storytelling Collage***Book girl**DDR guy**Gardening girl**Movie girl**Sailing guy**Shopping girl****Tennis guy***



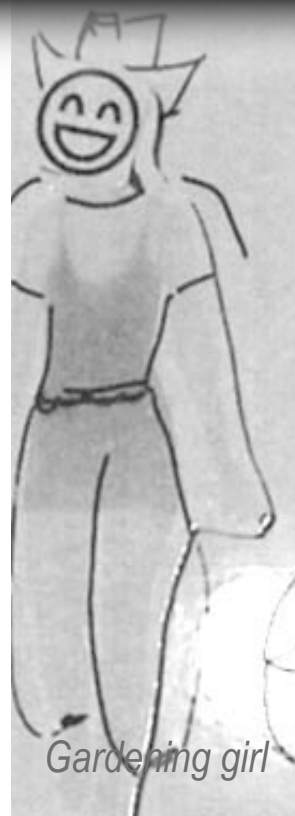
## Storytelling Collage



Book girl



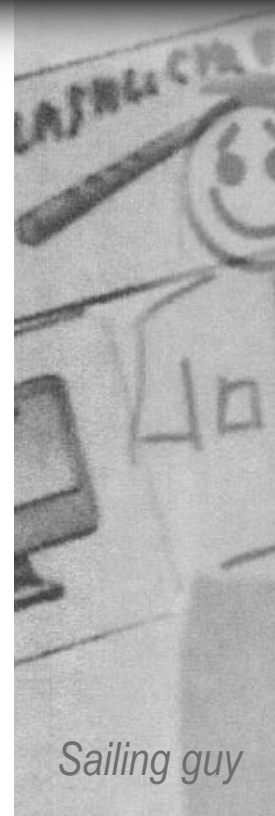
DDR guy



Gardening girl



Movie girl



Sailing guy



Shopping girl



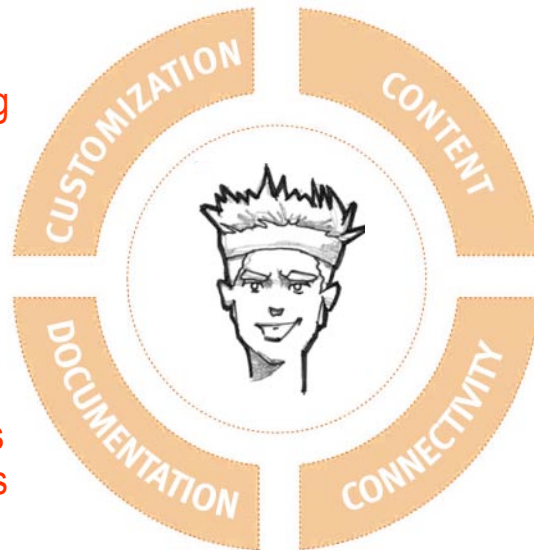
Tennis guy

Study opponent's swing

Expert advice

Find partners  
Take pictures

Meet people at same level



## ***Initial Concepts***

### Concept 1

#### **“Skilled Me”**

Maintaining a passionate lifestyle by actively participating in music, sports, hobbies that involve skilling.

### Concept 2

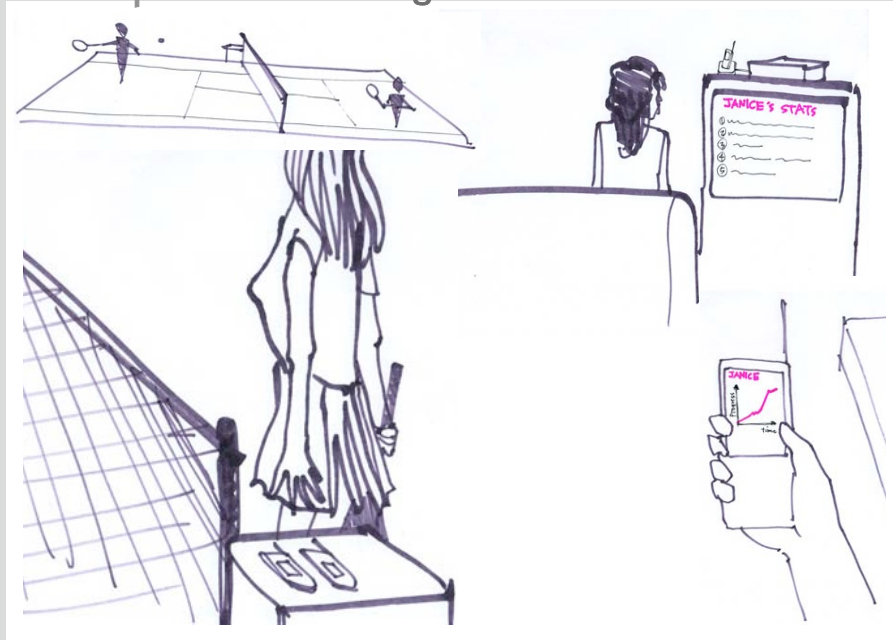
#### **“Vicarious Me”**

Maintaining a passionate lifestyle by living vicariously through professional musicians, athletes, and entertainers.



## Initial Concepts

### Concept 1 - Connecting to the tennis court.



- using sensors to improve tennis game
- connect to others through documentation of stats

### “Skilled Me”

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### Concept 2 - Connecting to the stadium.



- using video and motion sensor technology to enhance sporting event experience
- connect to others inside and outside the stadium

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#### **"Vicarious Me"**

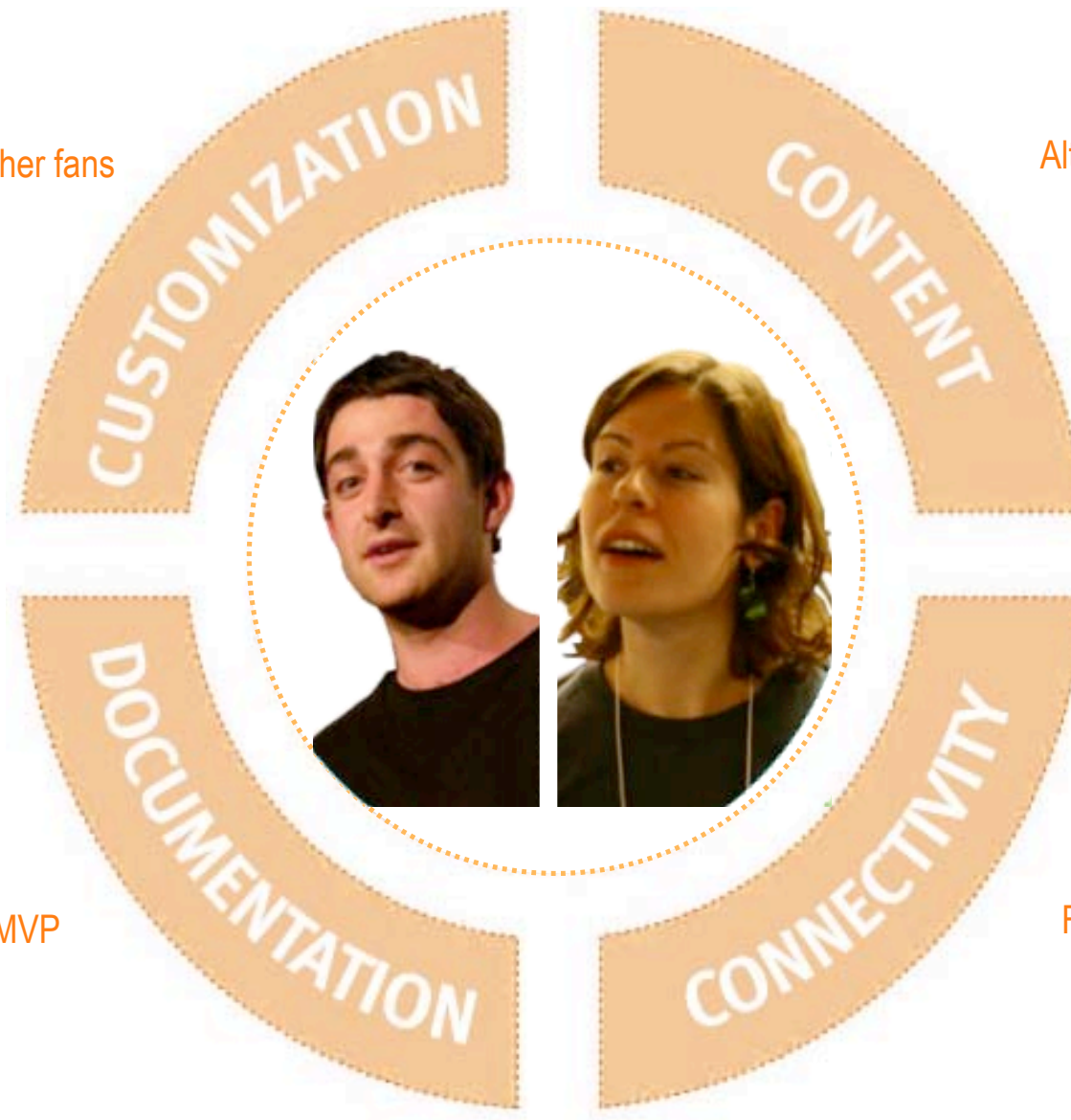
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**Results**

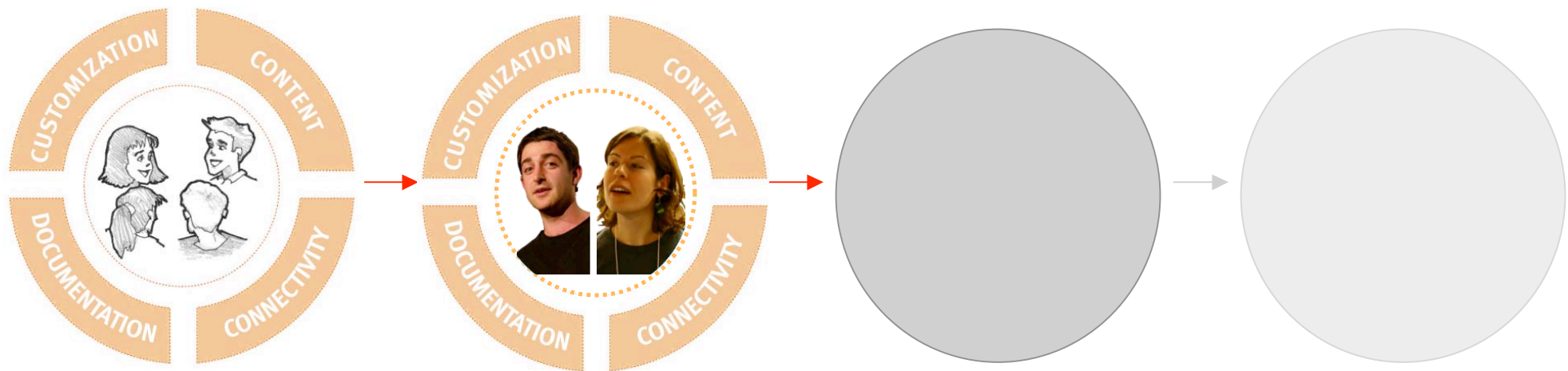
Playing games with other fans  
Posting to Jumbotron

Alternate views/angles  
Instant replay



IPv6  
Video snack  
Spectator's choice MVP

Fan+Fan communication  
Fan+Team communication

**Results**

“Tool for Passion”  
formula





April 2 - April 19

## *Scenario Revisited*



### *Pre-game clips*

“Realistic”  
“If this were an option, I would take it.”  
“Classic games are cool”

### *Video Remixes*

“Definitely need something to get people cheering.”  
“I want a remix of the clips that were sent.”

### *Pre-game live cam*

“Not important”  
“Not too interested”

### *Replays*

“Replay is great, but need to be able to save it.”  
“I have a friend who loves replays.”



## *Night at PNC Park*



### *Two levels of entertainment*

- The baseball game
- The Jumbotron

Entertainment happens between innings.



### *Examples of Jumbotron Interaction*

- Vote by texting for favorite play
- Clap to vote for favorite song
- Take Me Out to the Ball Game karaoke



## *Interview at PNC Park*



### *Alex Moser, Director of Creative Services, PNC Park*

- **Scenario comments** : The live video clips are great! That's friggin' cool! It makes people who are not watching the game say, "Oh @#! I've gotta watch the game."
- **Stadium technology** : Game is recorded to Daktronics video board to feed the Jumbotron with replays and "melt" re-mixes. PNC Park has 4 proprietary video cameras in addition to the FSN network feed.
- **MLB restrictions** : Can't broadcast slow-motion replays of strike outs, double plays and stolen bases.
- **Team sponsorship** : 1 million to 1.5 million dollars a year.



stadium.link

Stadium Link connects avid fans with each other both inside and outside the venue. It offers commercial content, personalized documentation and interaction between people of similar passions.





## Features *(benefits)*

### Pre event

#### Preview Clips *(video snacking)*

: Preview clips are sent to subscriber's phone. Contents change according to the event.

### During event

#### Angle View *(customization)*

: The angle view feature allows subscribers to switch between live camera angles.

#### Event Clipper *(personalized documentation)*

: The event is recorded to a cache to which the subscriber can access and "clip" scenes. Scenes can be selected according to the previous 30 seconds, 3 minutes or 5 minutes, and can be used as instant replays, sent as video messages or saved as souvenirs.

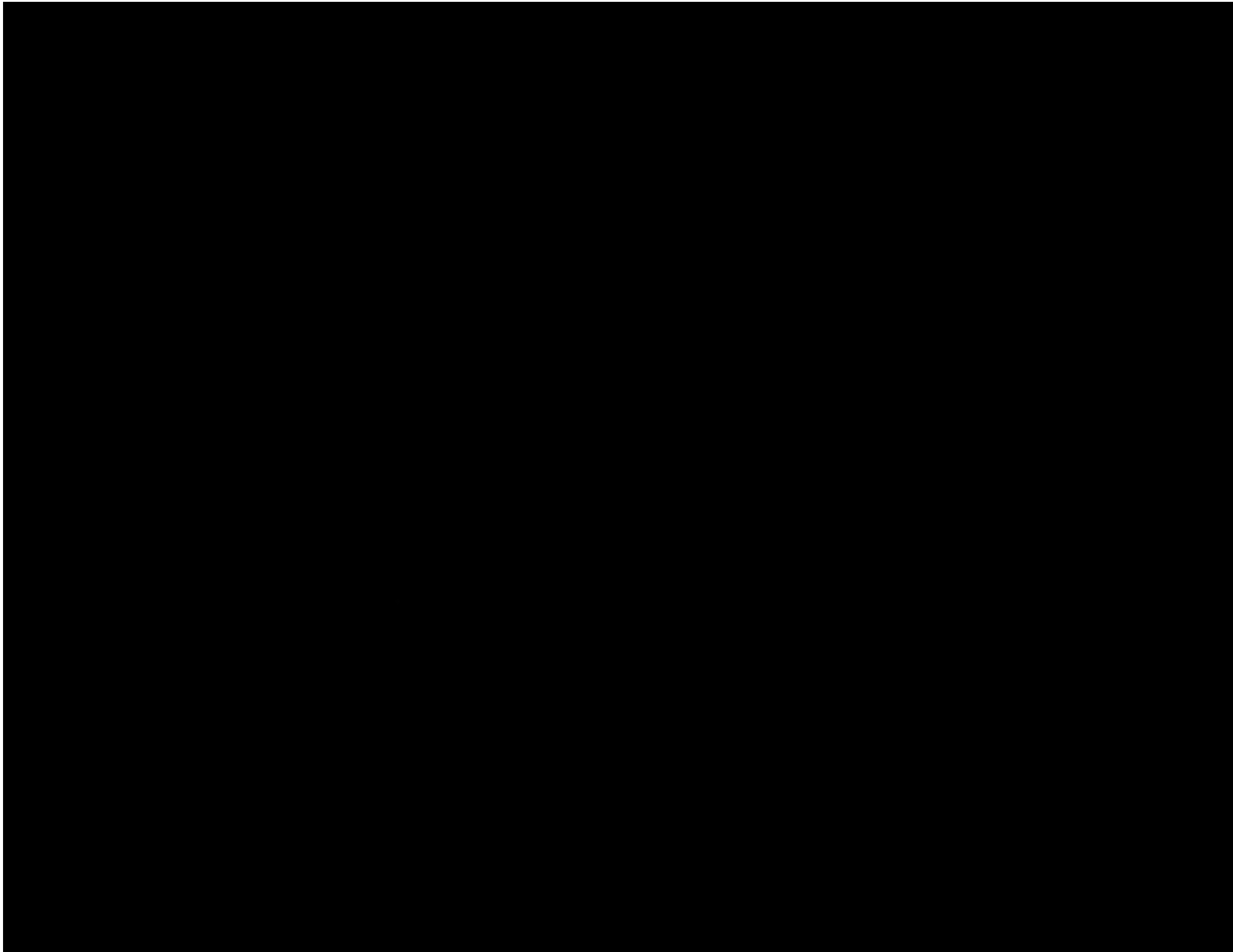
#### Digital Cheering *(connection, interaction)*

: Motion tracking technology enables each cell phone to become a game controller, converting the stadium into a "Wii for the masses" (*Chris Bregler, NYU*).

### After event

#### Video remix *(documentation, video snack)*

: Utilizing the event cache and an algorithm that identifies the most exciting scenes by crowd noise, a 5 minute remix of the game or event is provided at the end of the event to subscribers.

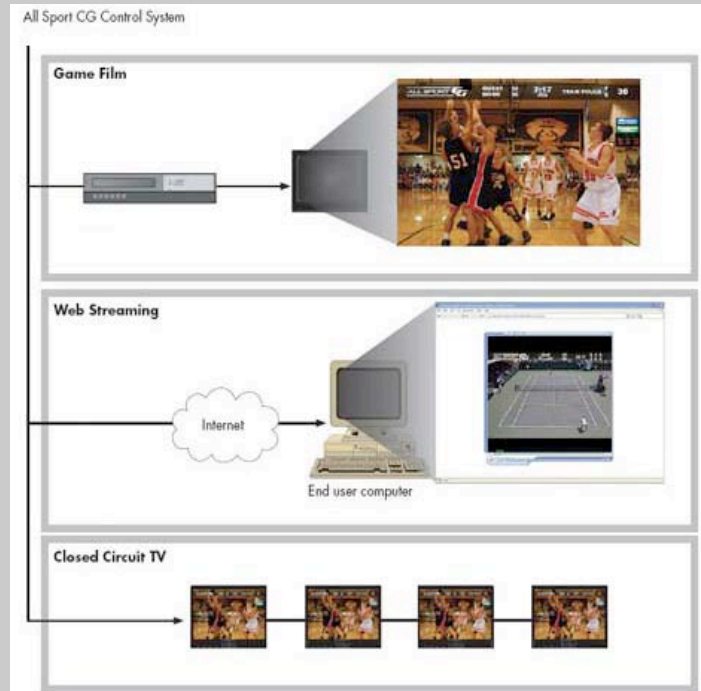


Technologies

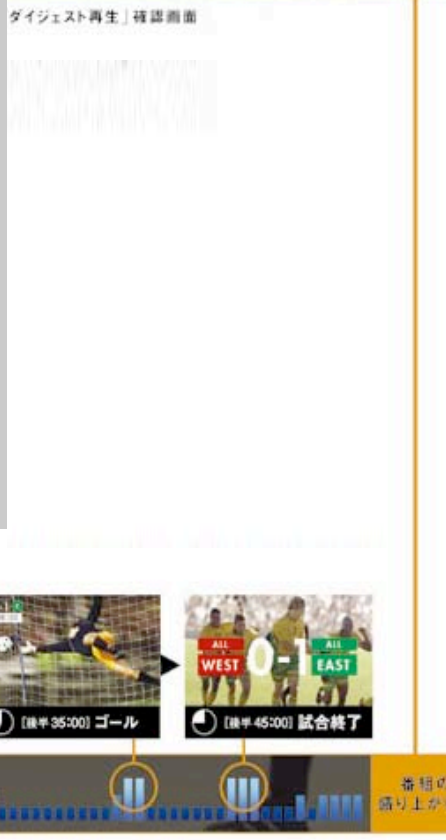
1. Motion Sensor Technology  
[www.gesturetekmobile.com](http://www.gesturetekmobile.com)



2. Dactronics Video Board  
[www.dactronics.com](http://www.dactronics.com)



3. Sound Recognition  
Hitachi, Sony DVRs





## Similar Service

### Other examples of stadium services:

- Anaheim's "Angle Vision"
- Seattle's in-park fantasy baseball

## Why it's Unique

### Symbiotic Partnership

- Motorola provides sponsorship → ← Stadium provides proprietary content via Dactronic video board
- Stadium Link connects avid fans with each other both inside and outside the stadium.
  - Compared to in stadium services, potential for exposure to advertising increases approximately 40 fold.
  - Utilizes PNC Park's 4 video cameras for proprietary content.

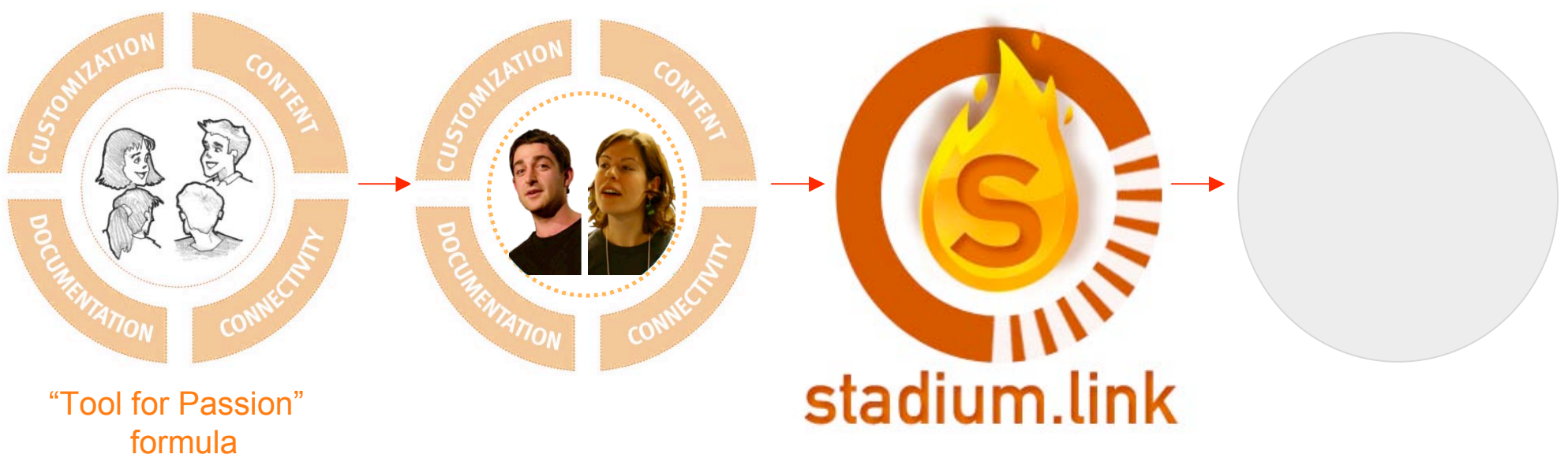
## Key Goals

### Cost of Stadium Link per game: \$1.99

- A: Estimated number of potential SL customers per game 33,592.
  - B: Motorola's cost of sponsorship per game \$67,010
  - C: Patent fees per sign up \$2.00
- Anticipated time to positive cash flow: 5 years
- Comparable services: ESPN Bottomline Pro (\$4.99 per month), MLB.com (\$14.99 per month)

$$\frac{B+C}{A}$$

*Results*





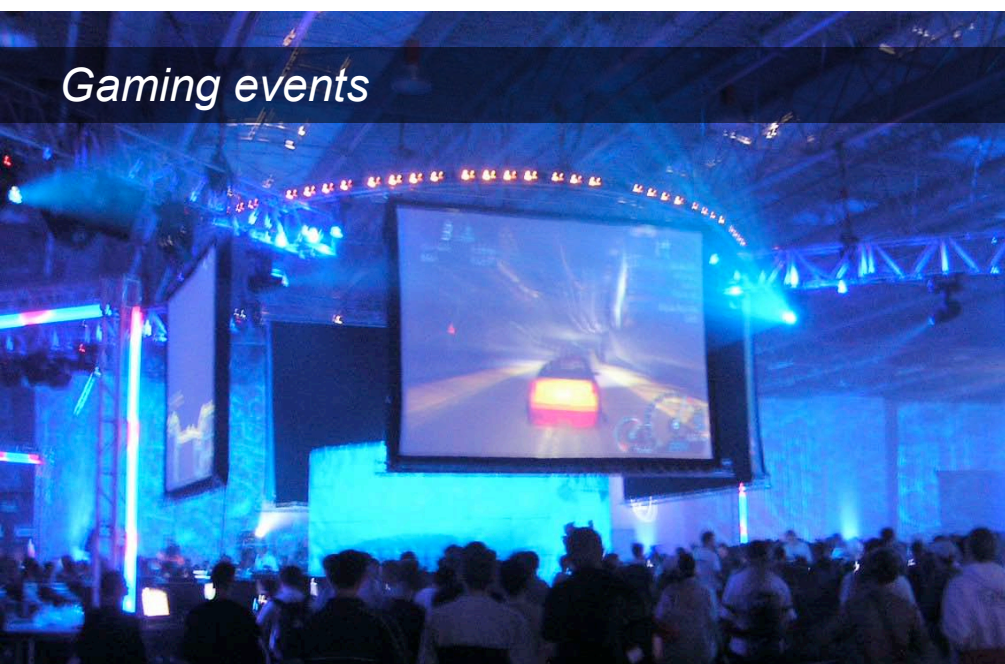
*Lecture hall*



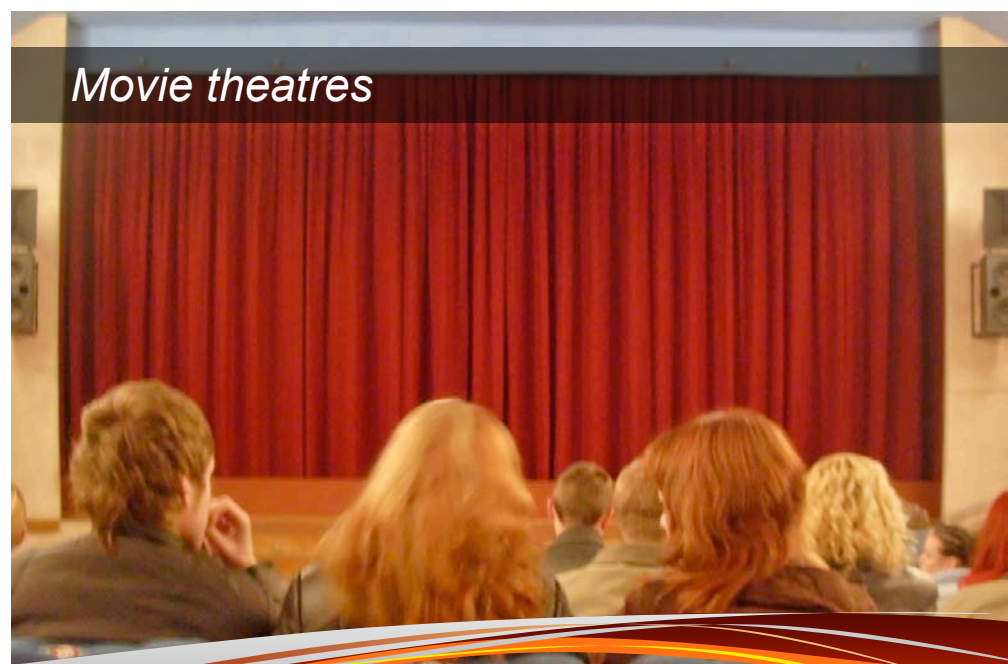
*Concert*



*Gaming events*

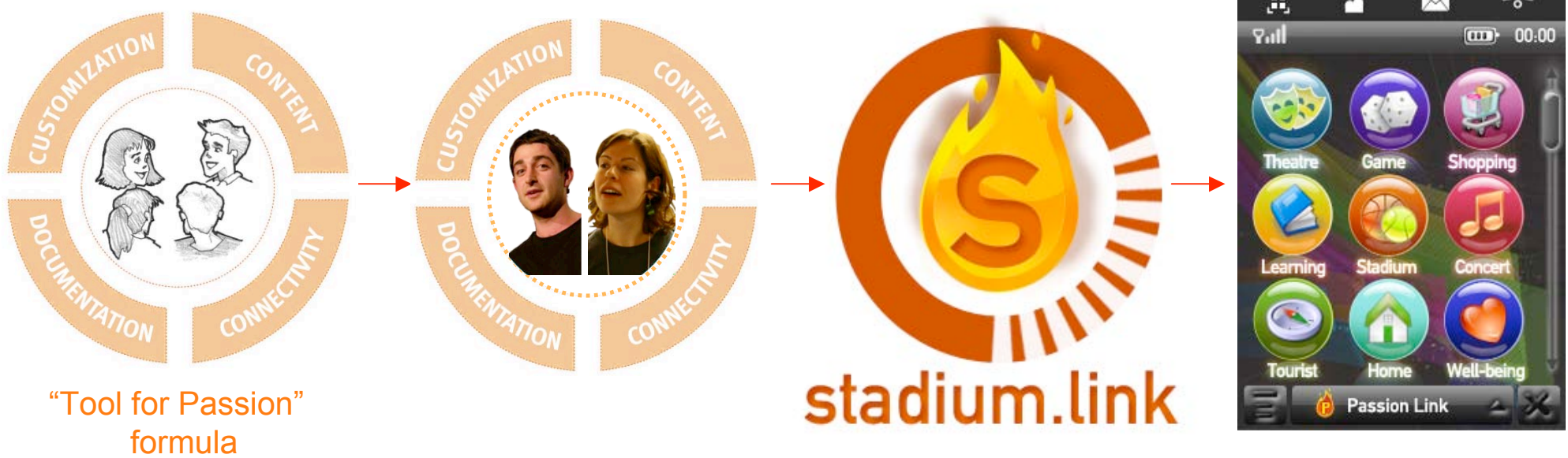


*Movie theatres*





**Results**



# Thank you!



**passion.link**

**Carnegie Mellon University  
Spring 2007**

**Matthew Forrest  
Hee Young Jeong  
Maria Kim  
Kipum Lee  
Beste Nazilli**

**Instructor Shelley Evenson**

# Questions?

