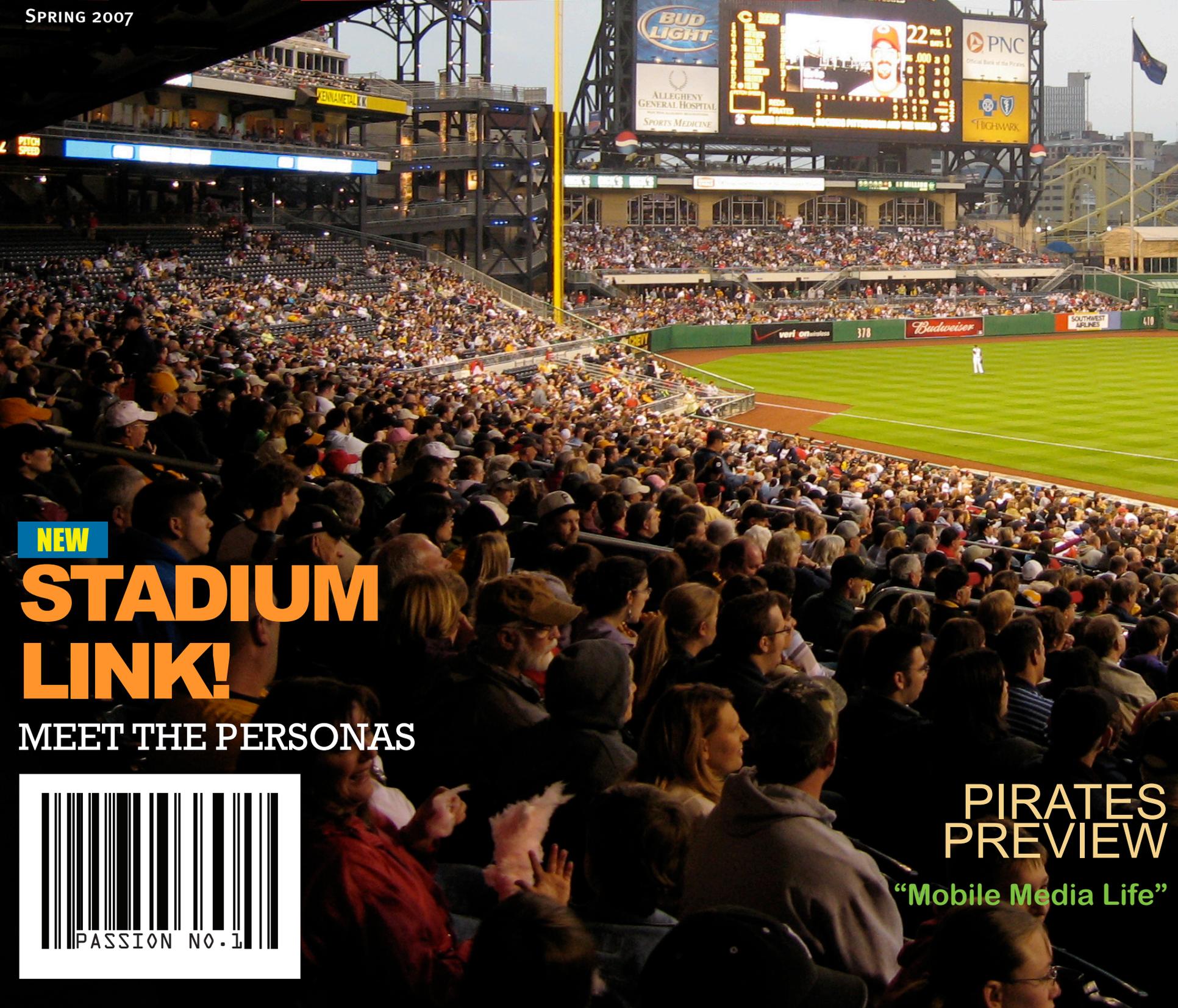


ELECTRONIC BASEBALL CARDS | CHEER FROM HOME

PASSION

SPRING 2007



NEW

STADIUM LINK!

MEET THE PERSONAS



PIRATES
PREVIEW

“Mobile Media Life”





**ALL HUMANITY IS PASSION;
WITHOUT PASSION,
RELIGION, HISTORY, NOVELS, ART
WOULD BE INEFFECTUAL.**

- HONORE DE BALZAC



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

Professor Shelley Evenson
Graduate Studio II
Spring 2007

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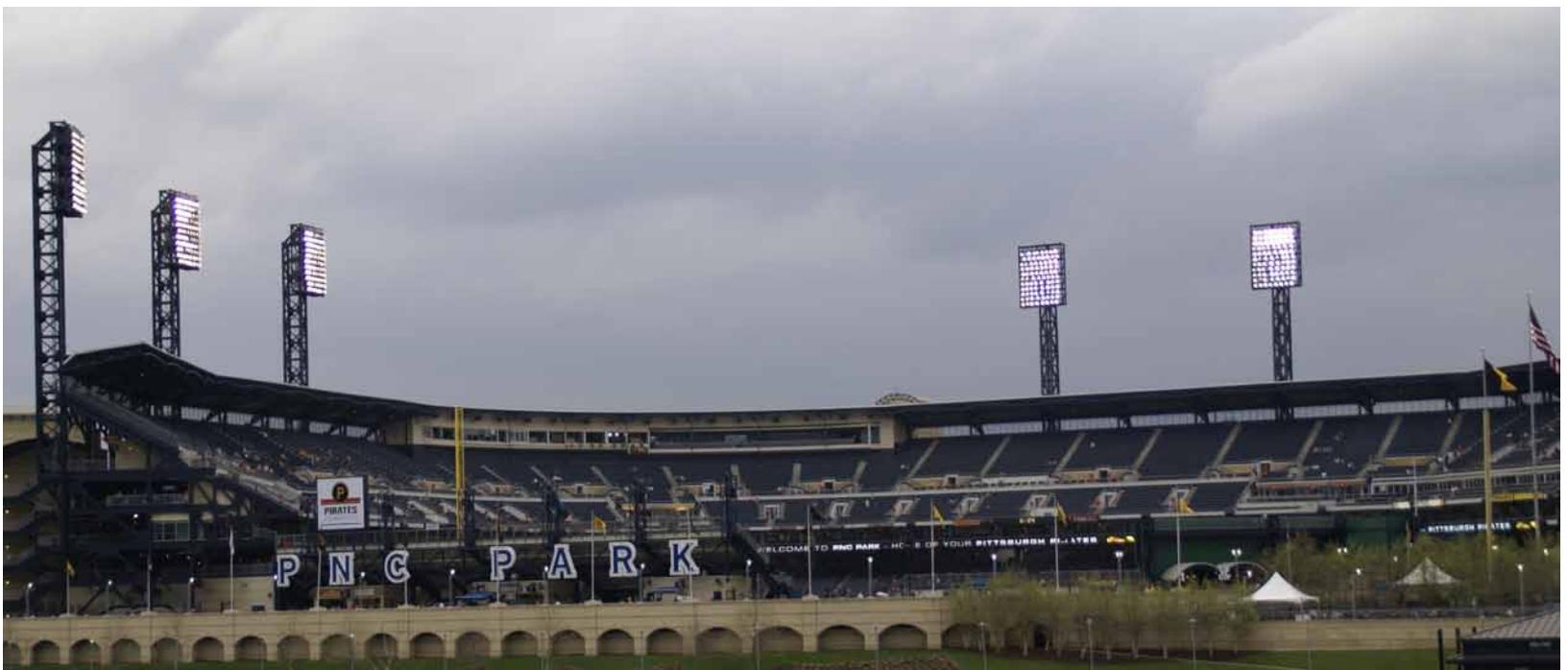
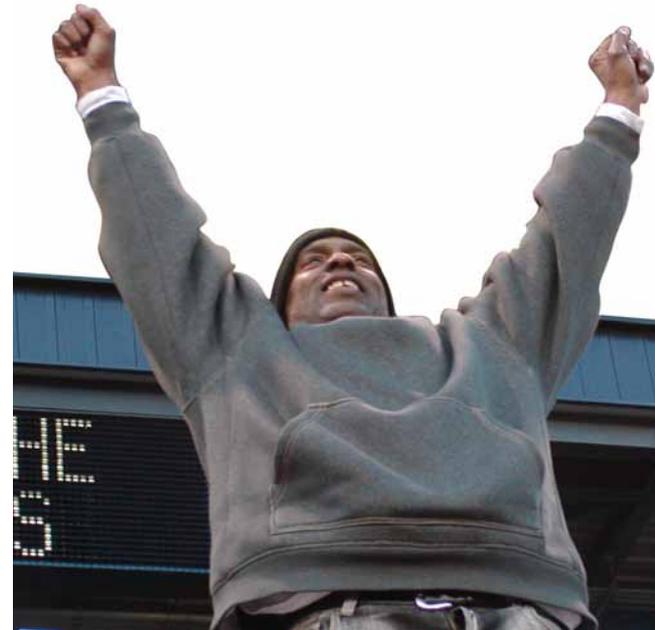
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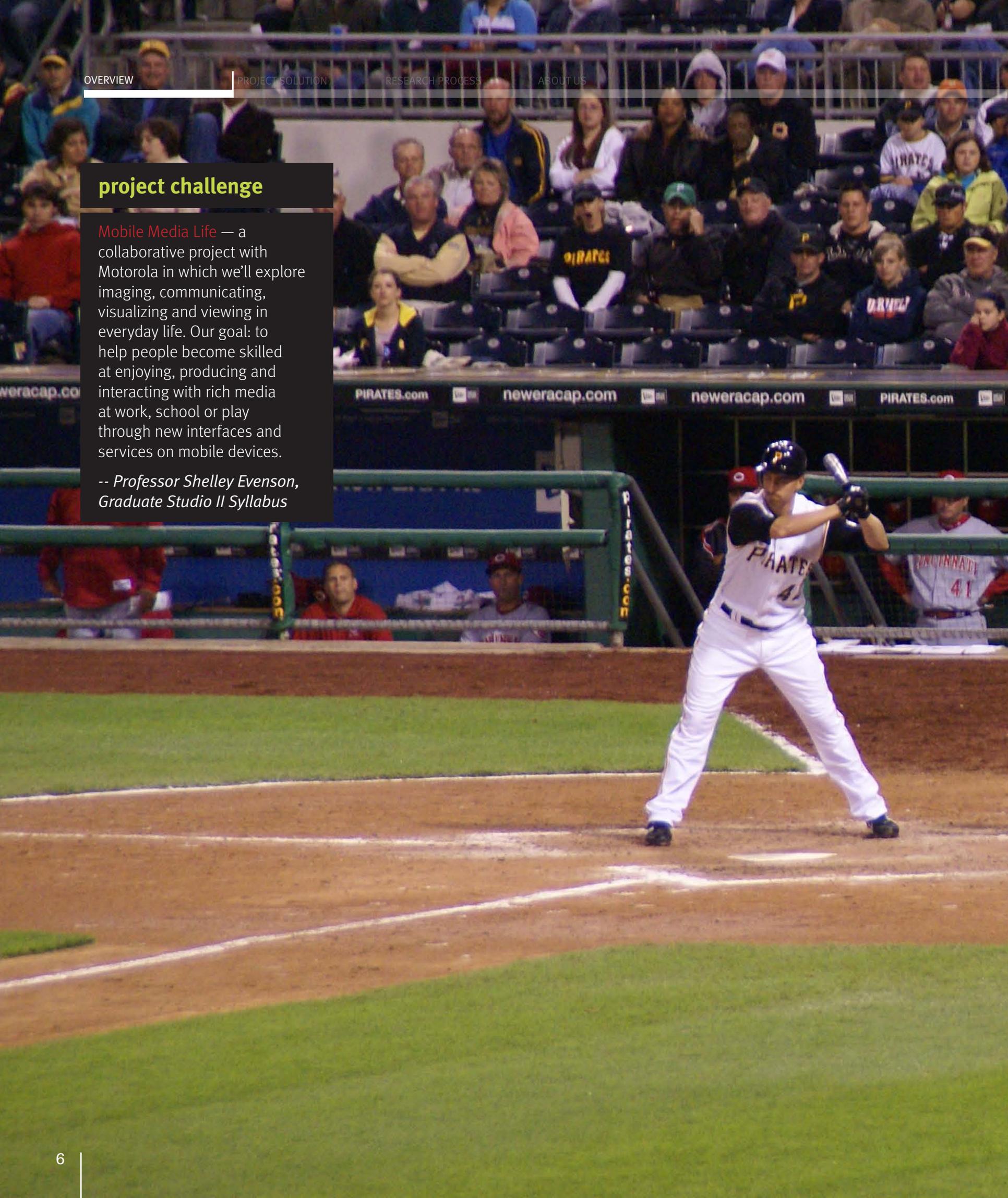
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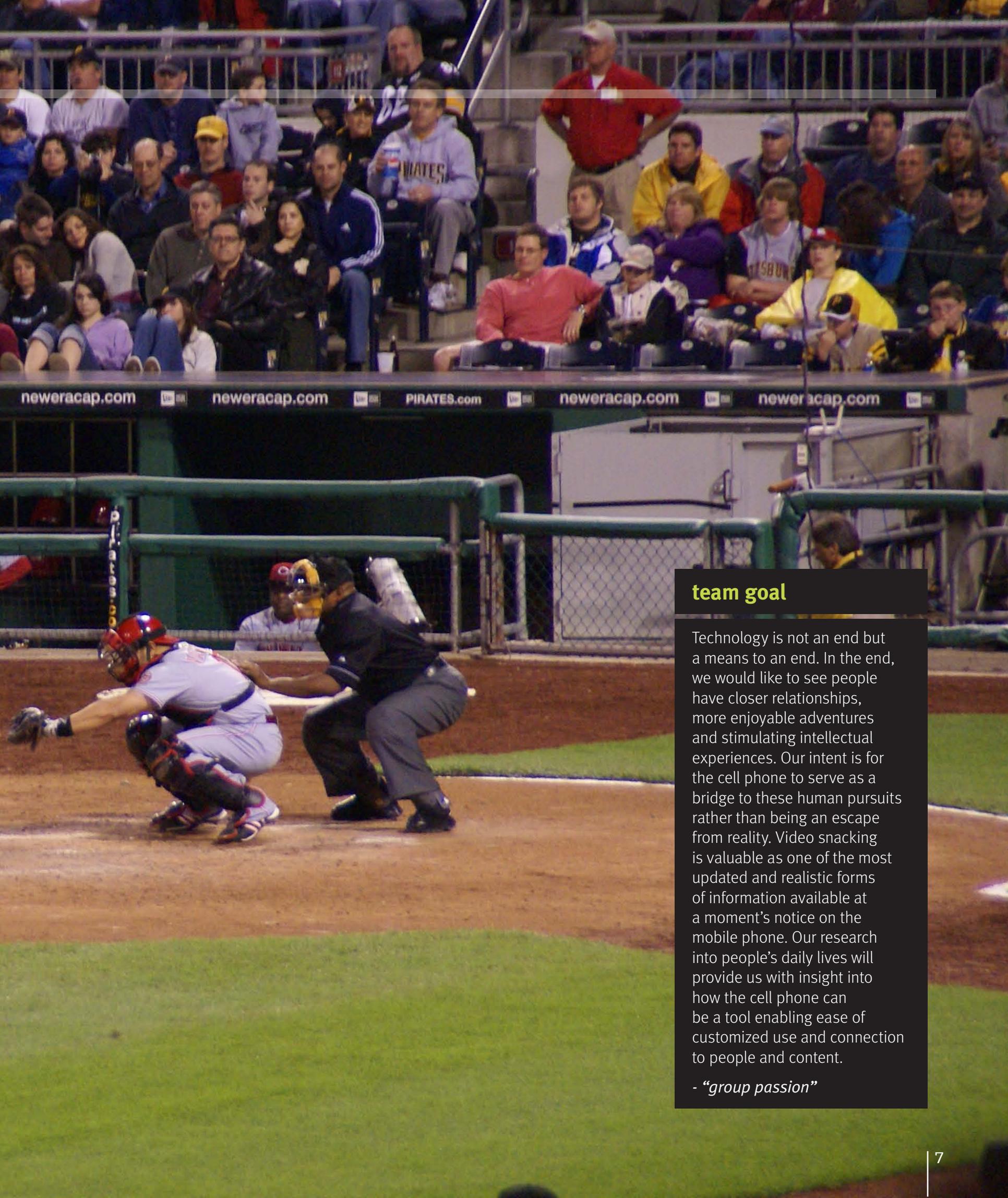


project challenge

Mobile Media Life — a collaborative project with Motorola in which we'll explore imaging, communicating, visualizing and viewing in everyday life. Our goal: to help people become skilled at enjoying, producing and interacting with rich media at work, school or play through new interfaces and services on mobile devices.

-- Professor Shelley Evenson,
Graduate Studio II Syllabus





team goal

Technology is not an end but a means to an end. In the end, we would like to see people have closer relationships, more enjoyable adventures and stimulating intellectual experiences. Our intent is for the cell phone to serve as a bridge to these human pursuits rather than being an escape from reality. Video snacking is valuable as one of the most updated and realistic forms of information available at a moment's notice on the mobile phone. Our research into people's daily lives will provide us with insight into how the cell phone can be a tool enabling ease of customized use and connection to people and content.

- "group passion"

advertisement

Memorable Moments...

1925 1927 1960 1971 1979



Welcome to "The Best Ballpark in America."
Pirates tickets are on sale now.

PNC PARK

A large, stylized logo in the background. It features a white soccer ball with orange and yellow flames rising from its center. The ball and flames are enclosed within a semi-circular orange arch. To the right of the arch, there are several horizontal orange lines, suggesting a stadium's seating or architecture. The entire logo is set against a white background with a faint grid pattern.

PROJECT SOLUTION

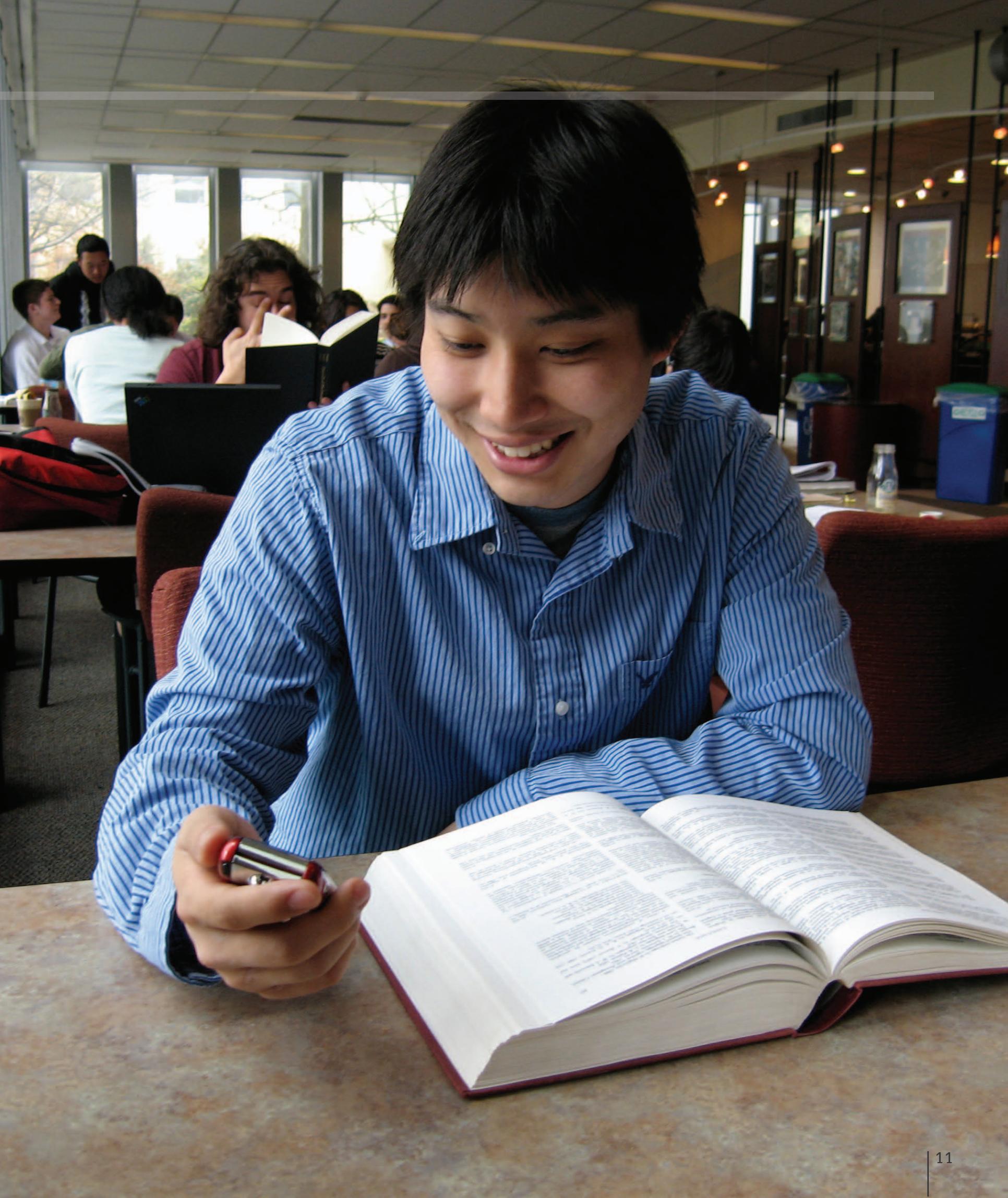
stadium.link

OUR SERVICE

5:40pm @ the library

Sam looks up from two hours of studying and pulls out his cell phone for a well-deserved break. Having signed up for **Stadium Link** that morning, he views some preview clips of the his favorite home team, the Pittsburgh Pirates. Since he never wants to miss any of Jason Bay's plays, he can make sure he has his cell phone handy for whenever the Pirates are up at bat. Later, when his friend, Judy, goes to the game, Sam plans on keeping up with the game by synchronizing his view with her Stadium Link view of the game. They will use the angle viewer to get a good shot of Jason as he warms up and practices his swings before stepping up to the plate. And if Jason hits a home run, he will use the event clipper function to save a video replay and add it to his collection of "electronic baseball cards." He collected 35 last year. How many clips will he be collecting this year?





SERVICE FEATURES



5 key services

Stadium Link is comprised of 5 key services that gives Motorola's customers an insider's view of the entertainment, even if they are not present at the venue. This not only enables those who cannot attend to enjoy the experience of "being there," but allows friends and family unable to attend together to connect with each other during the event.

How it works

Customers sign up for a particular game or event. For instance, a baseball fan might sign up for an upcoming game between the Pirates and the Reds, or a U2 fan might sign up for an upcoming concert at Madison Square Garden. The service is activated as soon as the customer signs up for the service, and remains active for 24 hours after the target event ends. The following features are available to subscribers.

1. sign-up for Stadium Link

>> 2. Pre-event Video Snacking

Preview clips can be viewed before the game or concert. They might be highlights from previous baseball games or music videos for an upcoming rock concert.

3. Game beigns

>> 4. Angle View

The angle view feature allows subscribers to switch between live camera angles, acting as virtual binoculars for both people who are at the event, and for those who cannot attend.

>> 5. Event Clipper:

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.

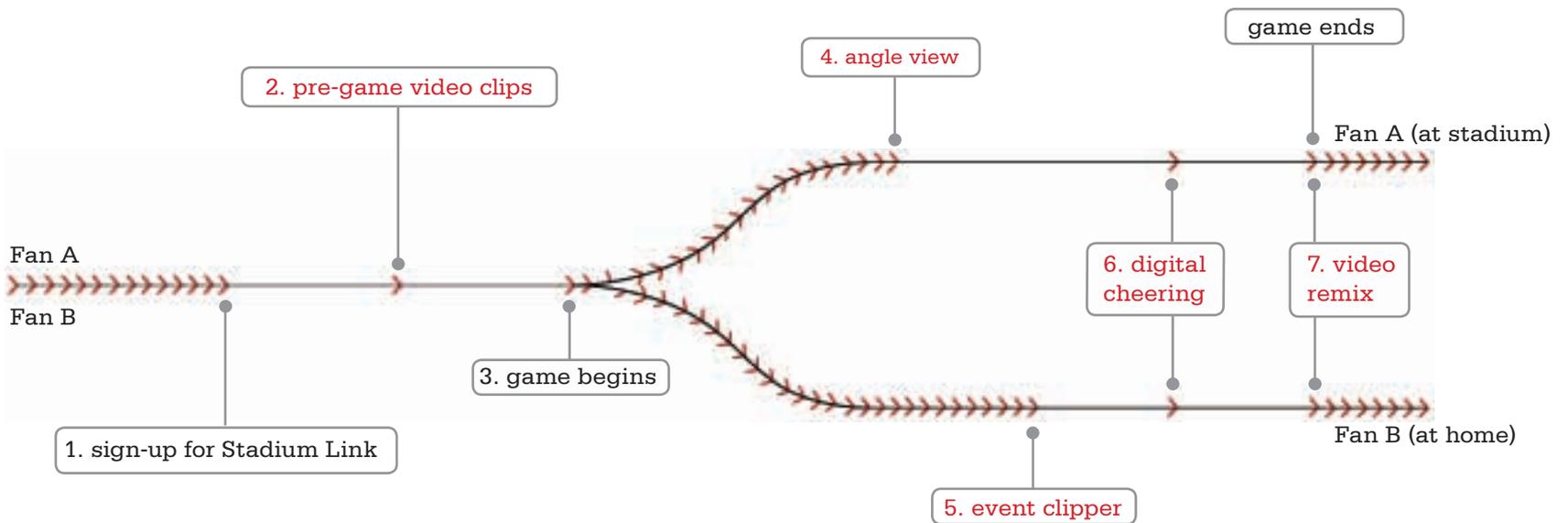
>> 6. Digital Cheering:

Motion tracking technology enables each cell phone to become a game controller, converting the stadium into a "Wii for the masses," a phrase coined by Chris Bregler (Assistant Professor of Computer Science, New York University). Motion tracking for the cell phone utilizes the camera on the cell phone to detect movement, and is already available through GestureTek on many cell phones throughout the world.

>> 7. Video Remix:

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 after the game or event ends. This technology can already be found on DVRs in Japan that rely upon crowd noise to provide shorted versions of soccer games that show only the goal scenes.

Benefits to the customer vary according to the venue and event. In the case of a baseball game at PNC Park, the ability to access the Park's video cache of the game is beneficial because it allows subscribers to replay content that is not controlled by Major League Baseball, the owners of the broadcast rights. For instance, replays of stolen bases are not broadcasted on national television in an effort to reduce complaints toward the umpires. Fans who subscribed to Stadium Link are able to view replays on their cell phones by accessing images captured by one of PNC Park's 4 video cameras.



FEATURES ON A TIMELINE

TOUCHPOINT DIAGRAM



FEATURES OF



"wii for the masses":
interact digitally with other fans

pre-game video clips:
previous highlights, classic games, players to watch

angle view: access to television camera views from different angles

event clipper: clip, send or save the past 30 sec, 3 min or 5 min of game play

video remix: event highlights recorded according to crowd noise levels

HOW IT WORKS >> scenario



Judy is at home watching television...



...and receives a call from her friend, Sam. They talk about the upcoming Pittsburgh Pirates game which will be against the Cincinnati Reds. She invites Sam to go to the game with her and her other friends. Unfortunately, Sam can't make it but they agree to connect again later through **Stadium Link**.



After talking to Sam, Judy flips open her phone and gets connected to **Stadium Link**.

1. Judy navigates to the Menu screen. She selects Passion Link.
2. From the list of Passion Link activities, Judy selects Stadium Link.
3. From the list of sports, she chooses baseball.
4. From the list of baseball teams she clicks on the Pittsburgh Pirates to access PNC Park.



1



2



3



4



Sam also registers for Stadium Link after his call with Judy. At his apartment, he uses his connection to access a cache of **pre-game video clips**.

1. Sam chooses the upcoming Pirates v. Reds game.
2. Unlike Judy who purchased a ticket and Stadium Link, Sam purchases only Stadium Link.
3. He connects to Stadium Link.
4. From this video cache, Sam chooses to watch *previous games*.
5. He chooses the homerun video collection.
6. The video begins with a Freddy Sanchez homerun.



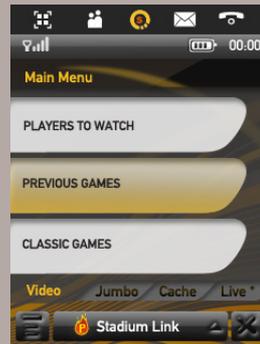
1



2



3



4



5



6



A few days later, it's game day and Judy arrives at PNC Park.



She checks in by using the electronic ticket she purchased through her phone with Stadium Link.

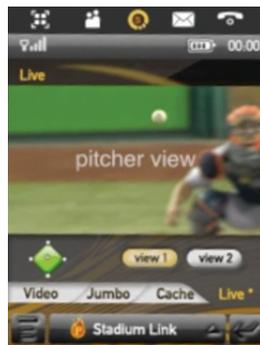


As she is watching the game, Judy wants to see a play from the point of view of the pitcher's mound so she picks that angle on the **angle view** and clips that play with the **event clipper**. She connects to Sam and sends him her clip.

1. Judy chooses the pitcher's mound as her preferred angle.
2. She watches a play from the pitcher's point-of-view.
3. She sees that Sam is also connected to Stadium Link.
4. She connects to Sam.
5. She sends her clip.



1



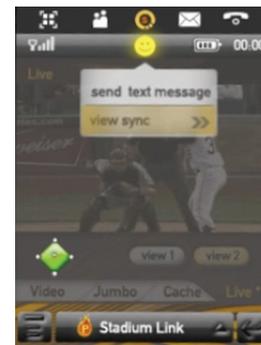
2



3



4



5



After she sends her clip, Judy puts down her phone and cheers the Pirates on.



Meanwhile, at the university library...



David is getting a feel for the game by watching a live view of the Jumbotron when he receives a notice inviting him to sync with Judy. After he is synched, he receives Judy's event clip from the point-of-view of the pitcher's mound.

1. David selects yes, he would like to sync with "Judy Jason Bay" so that he can watch her event clip.
2. He views the clip.



1



2

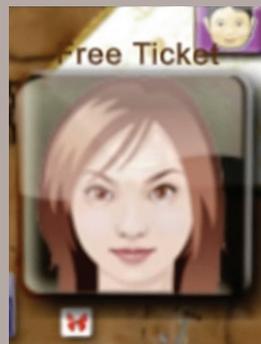


It's the top of the seventh inning and everyone with Stadium Link, both inside and outside of the stadium, is invited to play a digital game on their phone--a "wii for the masses." Judy competes with other fans for free prizes.

1. Judy moves her avatar across a virtual game field on her phone screen by using her hands to tilt her motion-sensitive phone back and forth.
2. She drops her avatar onto one of the winning zones and wins a free Pirates ticket to a future game.



1



2



The big picture view of everyone participating in the game can be seen on the large Jumbotron.

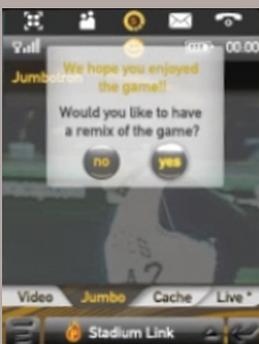


Sam can also play the game from his phone at the library since he is signed up for Stadium Link. Unfortunately, he doesn't win anything.



As Sam leaves the library, he views the Pirates game [video remix](#).

1. Sam agrees to accept an automatically generated invitation to download a video remix of the game.
2. He watches the highlights of the game as measured by the loudest points of crowd noise level.



1



2

THE FUTURE APPLICATIONS of Stadium Link

The mutual benefits of Stadium Link for Motorola and its partners are not limited to baseball games. The sponsorship of music events, academic lectures and lifestyle activities provides the same opportunities for Stadium Link to make money for Motorola.

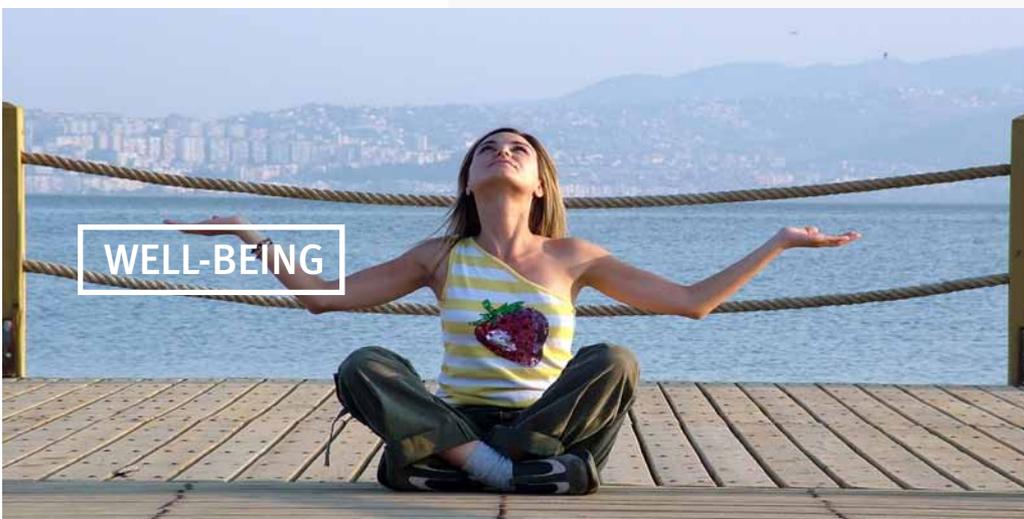
For instance, pre-concert video clips, close ups of performers on stage, manipulation of the light show by fans and post-concert downloads of previously unreleased songs for fans are just some of the variations on Stadium Link that can be applied to musical performances.

Stadium Link enables Motorola cell phones to connect people to their passion,

no matter where they are.



LINK
to your passion



BENEFITS

THE GAME

Stadium Link connects avid fans with each other both **inside** and **outside** the stadium or concert hall through the exchange of video clips on their Motorola cell phones. Revenue is generated by the purchase of the service and the traffic generated between the subscribers to the service. The key to generating business lies in the subject matter - people will pay more for what they love.

Other models of wireless services are self-contained in the sense that they offer a service only to the participants within the venue. This seriously limits the customer base, allowing only the participants attending the event to enjoy the service. In baseball's case, this means that potential customers are limited to the seating capacity of the stadium, and that they encounter the service only as often they attend a baseball game.

The key to leveraging the passions of a stadium's audience is to enable them to **connect** to people who are not at the stadium, thereby substantially increasing the number of people who can sign-on to the service.





PNC PARK
HOME OF
THE PITTSBURGH PIRATES

HOME PLATE

HOME PLATE

THE COMPETITION

Previous examples of stadium services include interactive baseball trivia games played on “**Angle Vision**,” a cross-carrier system sponsored by Verizon that enables fans at an Anaheim Angles game to compete for free tickets by answering trivia questions on their phone in between innings. (*Ballpark Watch*, 2004.)

Another example is Seattle’s **in-park fantasy baseball game**. Fans pick a player from the Mariners, and receive points based on the athlete’s performance that are redeemable at the ballpark for food and merchandise. Although innovative, these services fail to connect the much larger television viewing audience outside of the stadium. By allowing Stadium Link fans to connect to the game from home, the potential for exposure to advertising increases approximately 40 fold.

(Calculations based on a seating capacity of 38,496 for PNC Park and an estimated viewer-ship of 1.5 million per game. The per game viewer-ship as reported by PNC Park Public Relations.)

IT’S A PARTNERSHIP

By utilizing a cross-carrier system, Stadium Link



allows Motorola to enter into symbiotic partnerships that benefits all partners. Not only will Motorola gain valuable exposure in stadiums, the stadiums will expand their exposure with Motorola’s customers.

“My problem is how I get PNC Park and the Pirates to **stay in people’s lives. Our competition is not the Brewers, it’s [the local amusement park] and Carnegie Museums.”** - Alex Moser,

Director of Creative Services, PNC Park, Pittsburgh.

Stadiums throughout the world face a similar problem - they need to keep people interested in their service even after the last pitch has been thrown or the last song has been sung. Stadium Link enables customers to remain connected to Motorola’s partners by offering meaningful video content in between events.

PRODUCT RISKS

The risk of duplicating the service by competitors within the same venue is minimal because Motorola’s partner controls the content. In the case of PNC Park and the Pirates, PNC Park’s Daktronics video board records the

game and provides a cache for replays, and the Park's database provides the video clips of previous games. The risk with this service lies in the possibility that other manufacturers and venues may copy the business model before the service is patented, thereby shutting out Motorola from other stadiums and concert halls. Another risk is that Major League Baseball would wish to control the video content of the game, and would not allow PNC Park to distribute the broadcast of the game. Recording the game using one of the Park's 4 proprietary video cameras can circumvent this risk.

INDUSTRY TRENDS

Research shows that the viewing of sports video clips is on the rise. Of the top 5 mobile internet web sites in 2005, ESPN was number 5 with a 2.1% share. In 2006, ESPN jumped to number 3 with a share of 2.5%. (*Telephia*

<http://www.telephia.com/>)

ESPN was quick to recognize this trend and launched the ESPN phone, but was only able to find 30,000 subscribers and eventually discontinued the service in December of 2006. The reason for ESPN's failure is attributed mainly to marketing failures - customers simply did not know where they could buy an ESPN phone. (http://searchviews.com/archives/2006/09/today_disney_pu.php)

Naturally, Motorola would not be faced with this problem because Stadium Link is not specific to one model of phone. The service is designed to be accessed by all makes and models.

Another reason for the failure was the high monthly premiums of \$20.00 that ESPN was forced to charge its customers because of Sprint's high infrastructure fees. This too does not affect the Stadium Link model, as it does

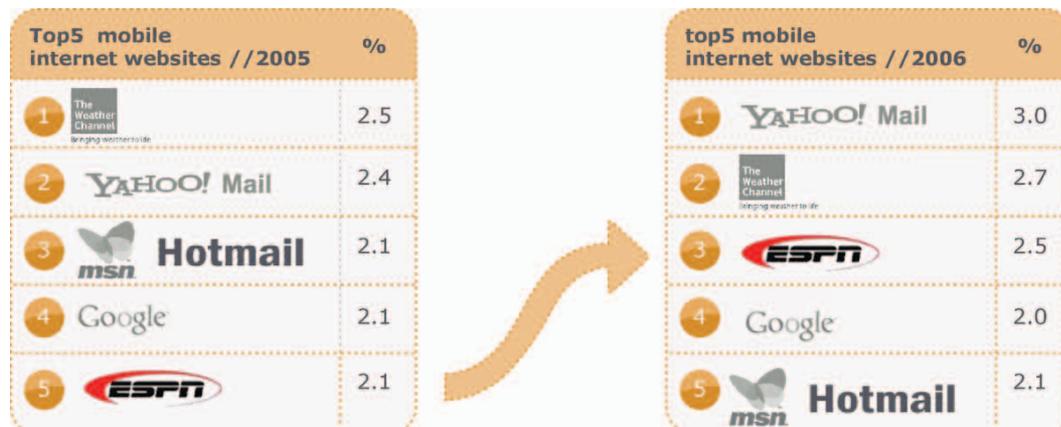
not require the carriers to provide proprietary services. Texting and video services are all that are needed to drive Stadium Link's 5 features.

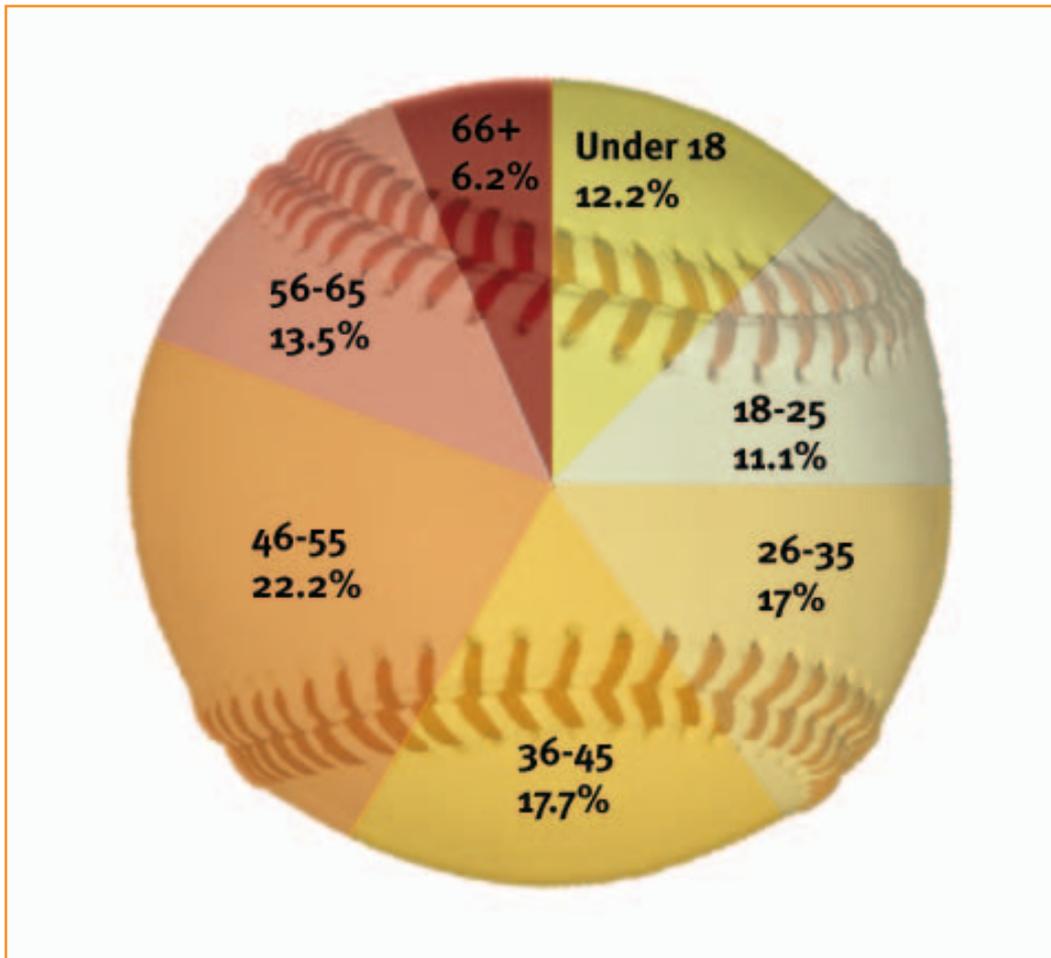
CUSTOMER TRENDS

Although 28% of mobile phones in the United States are video capable, only 1%, or approximately 57,120 people, "video snacked" in February of 2006. (*NPD Group, April 5, 2006.*)

While the figures do not indicate that watching videos on the phone is currently popular, industry statistics point to a strong upsurge in future consumption of video clips and TV broadcasts.

- **48% of teenagers would watch a full-length film on their cell phones** (*Parks Associates*)
- **The mobile TV audience is growing, surging 45% between July and September of 2006** (*Parks Associates*)
- **Although only 19% of phones were TV capable in 2006, analysts predict that 40% of phones will be TV capable by 2010** (*Strategy Analytics*)





Age of PNC Park Attendees

As the percentage of fans watching video on their cell phones increases, the potential client base for Stadium Link will increase as well. The following shows the demographic potential of Stadium Link's customer base using PNC Park as an example.

With roughly half of all 1.86 million single season attendees being women, this graph shows that attendance at PNC Park is well balanced, meaning that an event such as a baseball game will cover the demographic requirement

for just about any stage of the technology's development. As the viewer-ship of videos on cell phones increases from younger to older age groups in accordance with the spread of the technology to more cell phones, Stadium Link's usage can also be expected to grow because all age groups are well represented at a baseball game. By extending these statistics to the estimated 1.5 million per game television viewers, the potential customer base of 25 years old or younger grows to 350,000 (as reported by PNC Park Public Relations).

PRICING

The pricing structure shown here is based upon the number of potential Stadium Link customers interested in watching a single game at PNC Park.

- Estimated number of TV viewers at home per game: 1.5 million
- Estimated number of TV viewers 25 years old or younger: 350,000
- Average game attendance: 24,000 (38,496 capacity)

- A:** Attendees 25 years old or younger: 5,592 (23.3%)
- B:** Estimated number of potential TV viewers who want to access the game through their cell phone: 28,000
- C:** Estimated number of potential Stadium Link customers per game:
A + B = 33,592.
- D:** Motorola's cost of sponsorship per game \$67,010 .
- E:** Patent fees per sign-up \$2.00 (\$1.00 for GestureTek, U.S patent #5-534917, \$1.00 for Hitachi's sound recognition recording system)

D + E / C = \$1.99

Assuming that half of the potential customers sign up for Stadium Link and the number increases by 20% per year, Motorola would begin to generate a profit after 5 years.

This price is highly competitive when compared to the current offerings by **ESPN Bottomline Pro** (\$4.99) and **MLB.com** (\$14.99). ESPN Bottomline Pro provides only real time game statistics in text format, and MLB.com does not offer video clipping or electronic cheering capabilities. However, the benefits of Stadium Link need to be made clear in order to justify the \$1.99 per game cost. The per game cost for MLB.com is only \$0.66. However, the potential for the Stadium Link market to grow beyond MLB.com's estimated per team market of 28,000 exists because the current number of fans under 25 years of age is 350,000 and the aforementioned research shows that they are ready to watch video clips on their cell phones.

OPERATIONS

Stadium Link is designed to be a partnership between Motorola and the venue. By sponsoring events at the venue, Motorola gains access to proprietary video content, which is provided

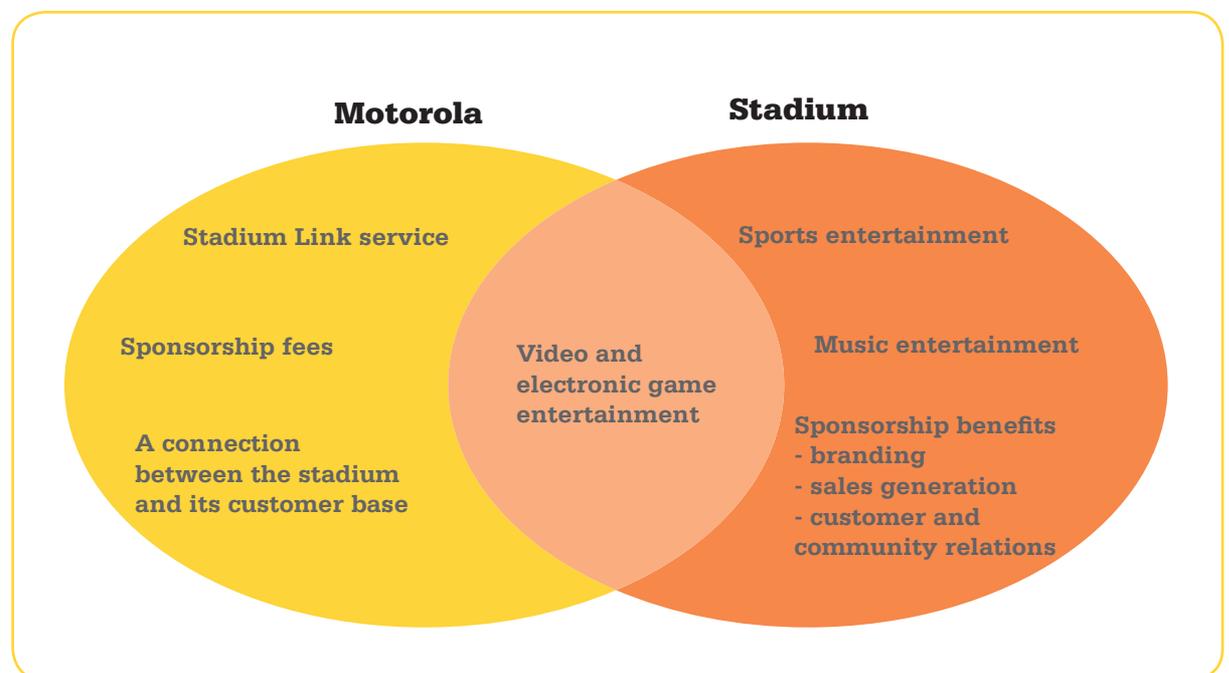
to customers who have purchased the Stadium Link service. This is why copyright fees for game content are not mentioned in the equation to the left. In return for giving PNC Park much needed exposure in between games, Motorola would receive the right to broadcast all video that is recorded by PNC Park.

Sponsorship of PNC Park gives Motorola access to live connections with more than 600,000 unique visitors to PNC Park throughout the season, proprietary interactive experiences, database mining and product displays and demonstrations. This is an important benefit for Motorola as it introduces Stadium Link to the public. For instance, sponsorship enables Motorola to set up kiosks that will distribute Motorola phones with Stadium Link capability. It also enables



Motorola to tie into the Park's current campaigns such as "College Night."

Designed for college students, this campaign provides tickets to the game, a t-shirt and \$10.00 food coupons for a price of \$20.00. Motorola can take advantage of its sponsorship and design campaigns much like "College Night" that provide free Stadium Link sign-up to anyone attending the game. Naturally, those who sign-up for Stadium Link at the game can use the service to encourage friends and family who are not attending to sign-up as well, thereby bringing the game home to them.



advertisement



It could happen...



stadium.link

DREAM CATCHER



OUR PROCESSES

PROCESS

OVERVIEW

DEFINE

Evaluate given research question

Understand content, users, and technologies

Develop territory map

State project definition

Develop preliminary research plan

EXPLORE

Practice human-centered research methods

- ethnographic interviews
- participant observation
- photo diaries
- shadowing

Examine data, find patterns and draw implications

Begin concept development from research thus far



GENERATE

Validate initial concepts through user feedback

Create personas to further explore design possibilities in the real world

Engage and collaborate with users by using storytelling collages

Develop initial concepts with scenarios and with validation, choose one

REFINE

Build prototype based on chosen concept

Receive feedback on developed concept ideas and prototype

Further refine prototype

Final documentation collection and refinement of information presentation

DEFINE

warming up

What counts as media? What makes an experience? Could technology enhance people's lives? These are some of the questions we wrestled with in the first stage of our research. As we thought about what usually drives people to music and videos, we agreed that one of the biggest motivations is a desire for entertainment. As we discovered from our affinity map, entertainment can be anything from hanging out with friends watching television to snowboarding on the mountains.





AFFINITY MAP



Method

What is entertainment? Our first step was to brainstorm about all things that are entertaining (and not-entertaining). We divided up our topics according to activities that can be performed by *individuals*, in *pairs*, and in *groups*.

Discoveries

- Almost all entertaining activities require a **skill**.
- The randomness and unpredictability of the entertaining activities are what make it **interesting**.
- The randomness and unpredictability give the entertaining activities a sense of **adventure**.
- The activities **trigger** something that leads to an adventure. Even shopping is an adventure.
- We are interested in other people's lives. We want to know what will happen **next** in their lives.
- The beauty of the adventure is in the struggle. You do not always win, but it builds **character**.
- We share experiences in two ways:
 1. Try to **reproduce** the experience you have in someone else. For instance, you send a YouTube video to someone else for them to experience.
 2. You watch other people having experiences, and try to gain **knowledge** from that.
- Individual experiences are held in different places and at different times. The phone can be used to bridge the gap between distance.

Theory

We are designing for an **experience** that is fresh and exciting >>

PASSION

TERRITORY MAP



What constitutes a passionate experience? What's involved? We created a territory map in which this experience would take place, analyzing the three elements of and experience: milieu, actions and people.

This enabled us to begin asking questions about our direction. What's the stereotype of a passionate person? What kind of tools will get people talking about their passions? What's in their world? What's in their physical environment? The territory map enabled us to formulate the questions that we would be asking people in the exploratory phase.

We also needed to decide upon a fundamental direction for our service. After discussing what is important to us, our biases and our values, we reached the following agreement:

- our service will facilitate the sharing of an experience
- our service will facilitate activities outside of the phone

EXPLORE

finding our footing

Target Audience

In order to narrow the scope of our project to a demographic that could easily integrate and adjust to new technology into their daily lives, whether it be in daily routines or fun activities, we decided to focus on 18 to 25-year-olds.

Discovering and Exploring

Through the research methods of this stage, we wanted to see what kind of activities people were involved in and further refine our definition of passion as a universal experience. The methods consisted of ethnographic interviews, participant observation, photo diaries and shadowing. The research confirmed that passion is possessed by everyone and can move people in a way that different from the duty and obligation. **Documentation, personalization** and **quality of connection** are vital components of a product that engages people. The results led us to believe that a cell phone with such capabilities could be used as a **"tool for passion."**





EXPLORATORY METHODS



Ethnographic Interviews

We interviewed nine people by phone ranging from ages 18 to 65 to explore the meaning of passion. We discovered that people enjoy sharing stories about their passions and are interested in activities that challenge them physically or stimulate their minds and creativity. We concluded from the collection of answers we got to our questionnaires that just about **everybody** has a passion. Even shy people can become active and aggressive when passion is involved.



Participant Observation

We refined our questions about what people enjoy doing, to more specific questions about people, their activities, their environment and their possessions. We directed a storytelling session with five people; we also watched some perform an activity they love. By closely observing people and their milieu, we saw that people will customize and manipulate their technological products to fit the needs of their activities. **Documentation** is important for the user to keep records and display the results of their efforts. **Personalization** is needed to meet the person's passion in increasing their skill and upgrading their sense of self-worth.



Photo Diaries

The purpose of the week-long diaries--complete with disposable cameras--was to get an idea of what motivates people on a daily basis. We distributed and received feedback from seven participants who wrote about what technical piece, emotional piece and physical piece was missing from their lives during each day. They also revealed what made their day and how their cell phone was involved in that event. We discovered that people were creative and knew what they wanted. A major desire that was expressed was to be **connected** to friends and family.



Shadowing

To see how the cell phone is used in public spaces, we investigated people at the mall and airport. The mall trip showed us that people are capable of performing many activities at once as they interact with other people, and that interactions with the phone comes in **many forms**. The airport was a contrasting environment where people are more stationary than active as they wait in line or at a waiting area. Here, people seemed more inclined to check their phones for online information and spend time engaging in conversation with loved ones on the phone.

INITIAL

SHOULD

Must manifest passion

Documentation

Personalization

Inherent value

Form of usage

Ease & quality of connection

COULD

Tool can aid in expressing passion

Self-satisfaction & approval from others

Flexible manipulation of tool to passion

New content possibilities (connection to expert)

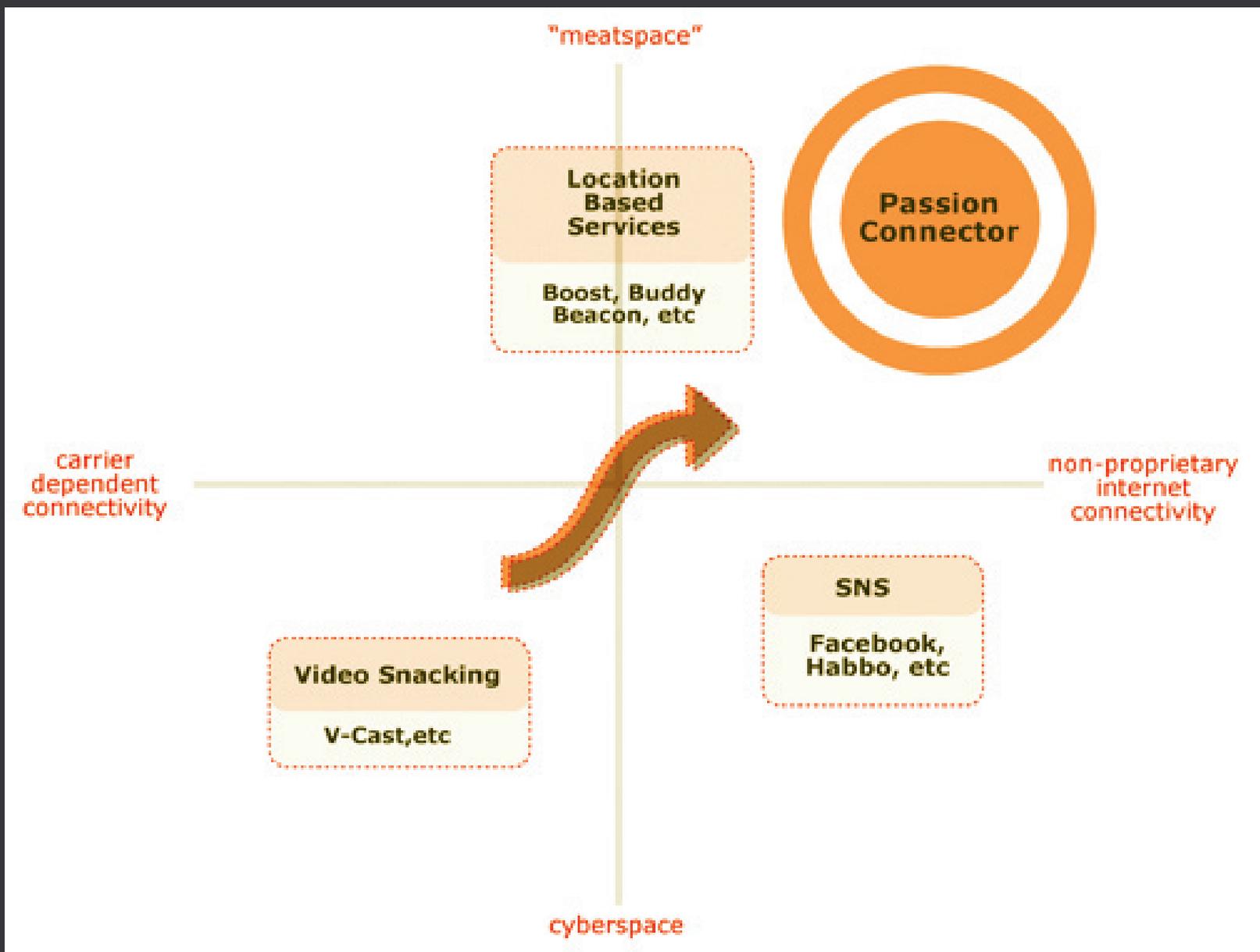
New functional possibilities

Service of phone important

CONCEPTS

Area of opportunity.

The cell phone can be a mediator between people & passions--a “tool for passion.”

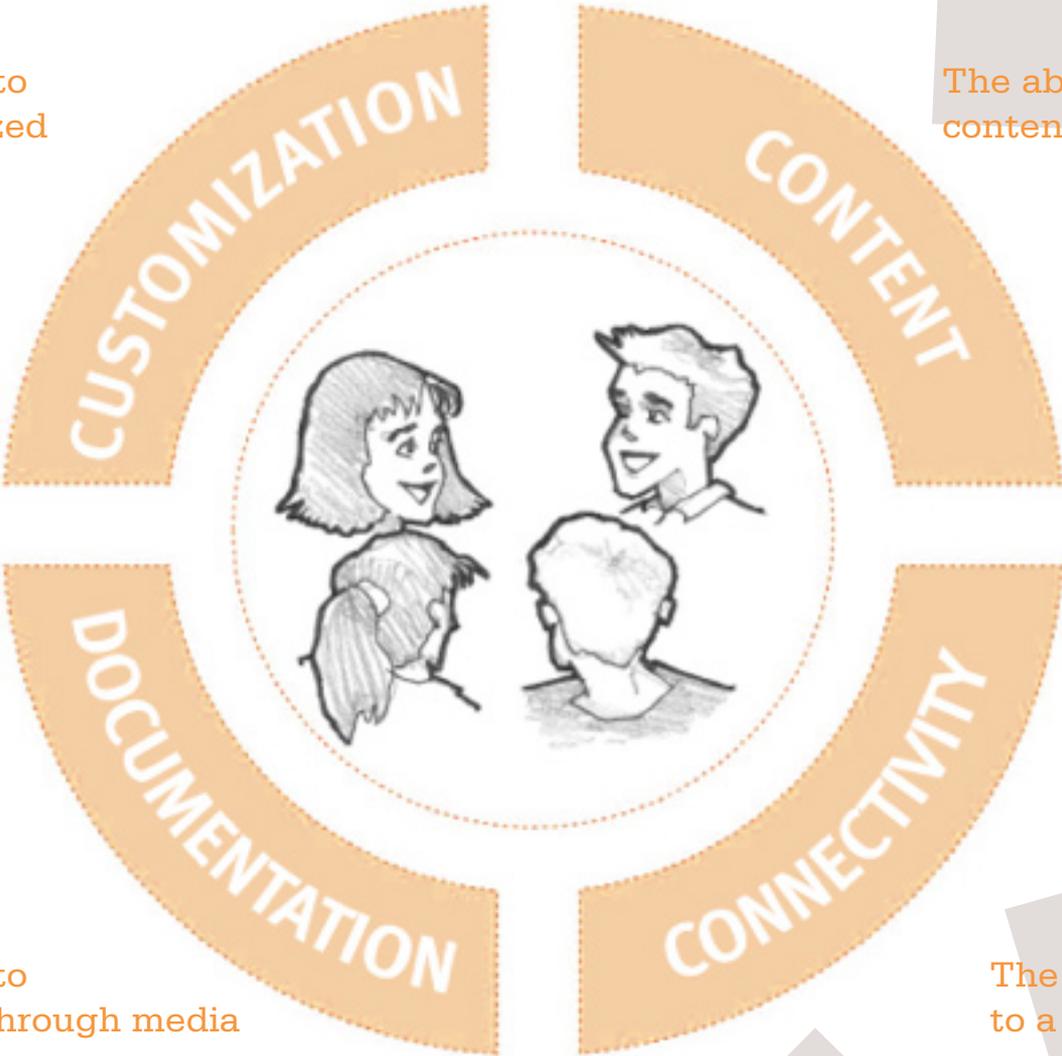


We believe that the market is already saturated with social networking services in cyberspace and location based services in the real world. The area of opportunity lies in the ability to bring “video snacking” into the physical world around us.

TOOL FOR PASSION

The ability to be customized

The ability to receive content specific to passion



The ability to document through media

The ability to connect to a wider network

Our exploratory research methods and investigation into market opportunity led to this equation. The “tool for passion” equation provides a service framework for components necessary for people to connect with their passion activities.

GENERATE

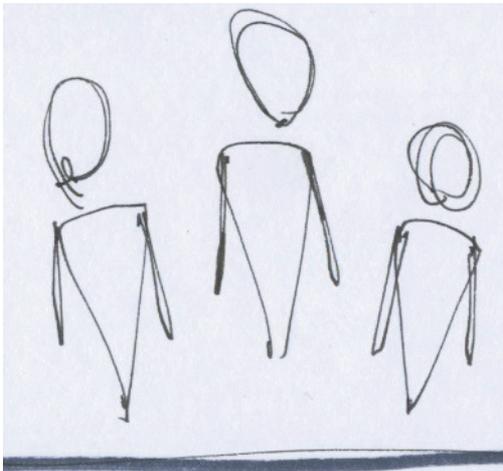
pitching ideas

In the process of turning ideas into concepts, we used fictional personas, storytelling collages and scenarios to create and test the notion of the phone as a “tool for passion.” We applied the components of customization, documentation, content and connectivity to different activities and found that documentation as the area that was consistently compelling.





GENERATIVE METHODS



Personas (page 46)

The creation of personas with different passions such as yoga, music, and chess enabled us to see how the cell phone as a tool for passion tool could function and be useful in enhancing someone's interaction with their activity or within a relationship. The most compelling finding in this exercise was the fact that some form of documentation is needed and valued across all activities, whether it is capturing yoga positions on video or correlating schedules with a loved one. This method also enabled us to generate questions that we could ask to "real" people in the next stage.



Storytelling Collage (page 47)

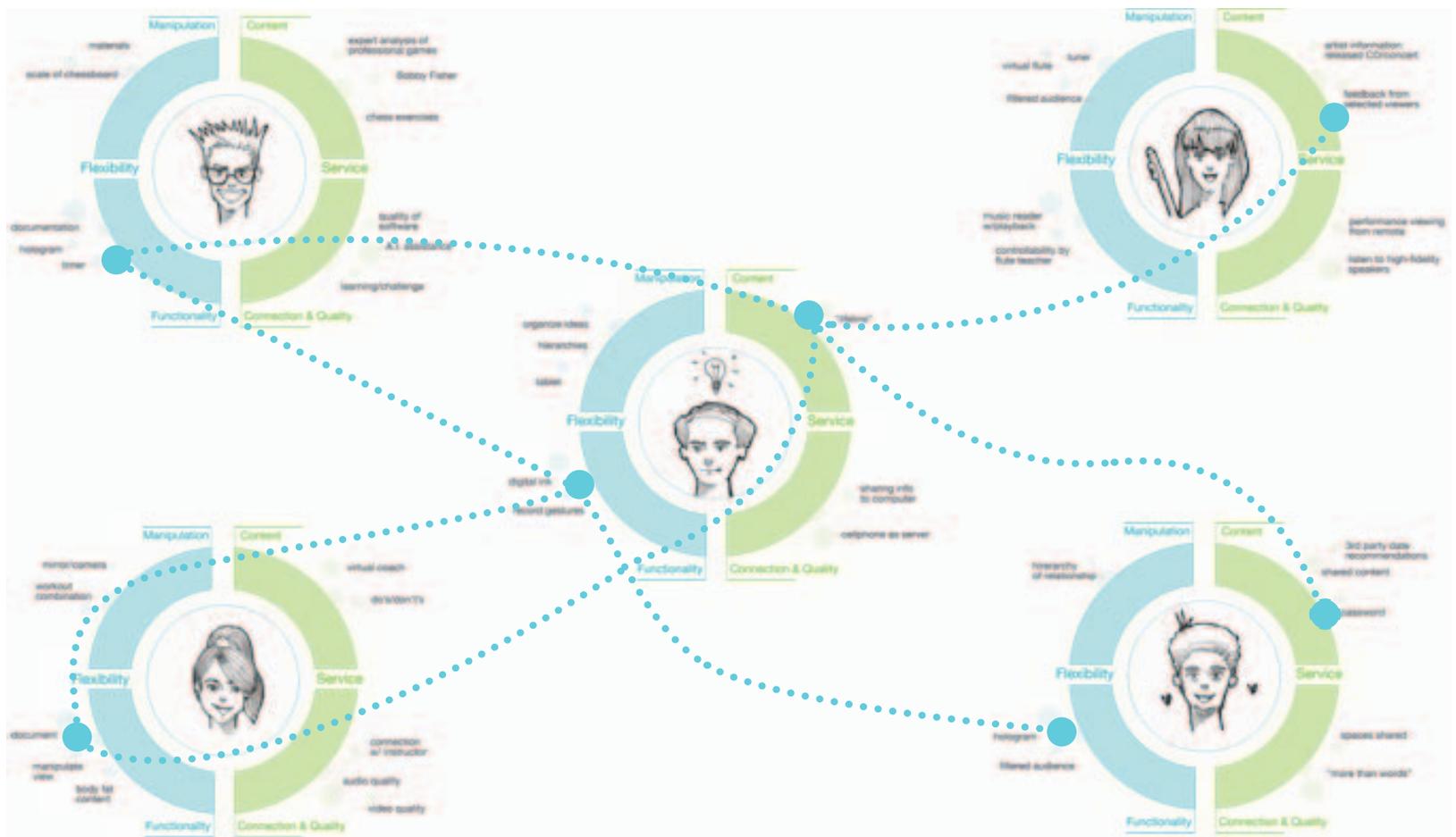
Two blank wipeboards, a cutout human figure, colored shapes, pictures of common tools and emoticon faces were the tools contained in the storytelling collage toolkit. We held one-hour sessions with users who told us about something they felt passionate about. Using the collage toolkit, they visually/verbally expressed how they felt a cell phone might be used for functionality and convenience in that particular activity. We confirmed the significance of documentation in passions from these sessions and determined that people are made up of two categories of passion: skilled passions (such as playing sports) and vicarious passions (such as watching sports).



Concepts (page 48)

With all of the data we collected about people and their passions and the deepening question of how the cell phone could be a bridge between the two, we came up with our first set of concepts. The scenarios were based on fictional characters and would show how the "passion tool" would be used in two different contexts.

PERSONAS



By applying personas to our formula for a “tool for passion,” we arrived at the conclusion that:

“Documentation of activities is important when people are passionate about them.”

STORYTELLING COLLAGE

Colored shapes, tools, emoticons and markers on a wipeboard provided a visual means for participants to express their thoughts and ideas regarding an activity they were passionate about, the objects they interacted with and the environment and people surrounding that activity.



me...and my passion



Our research led us to realize that people have two sides to their passions.

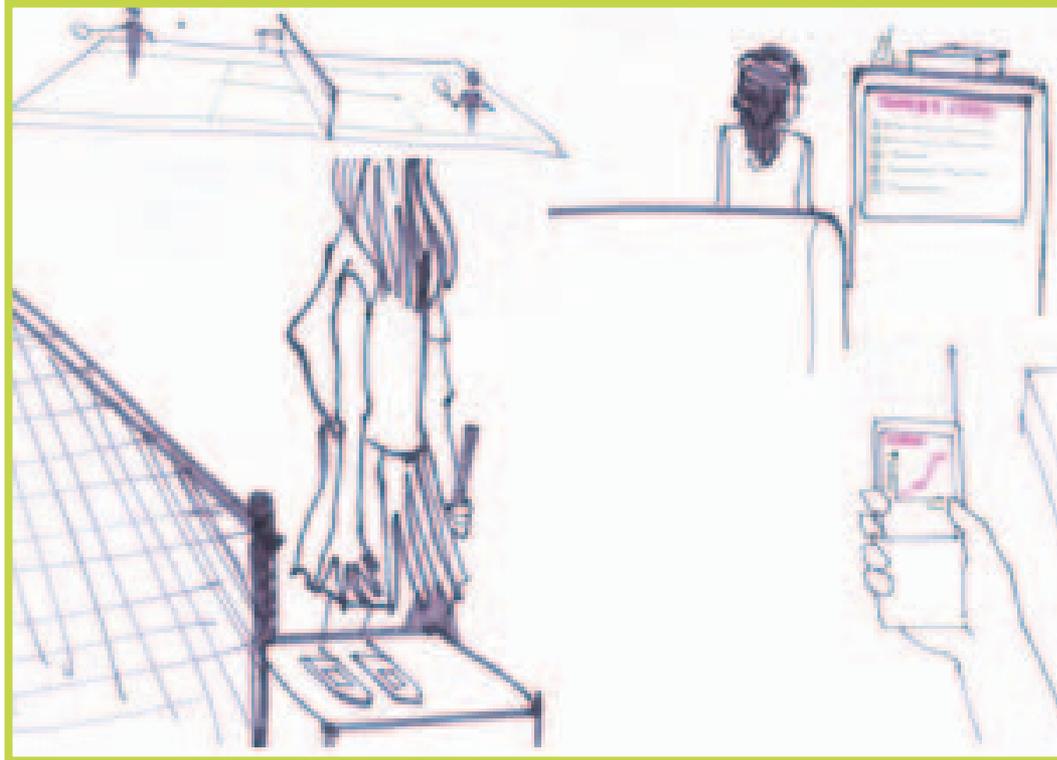
skilled me

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

vicarious me

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

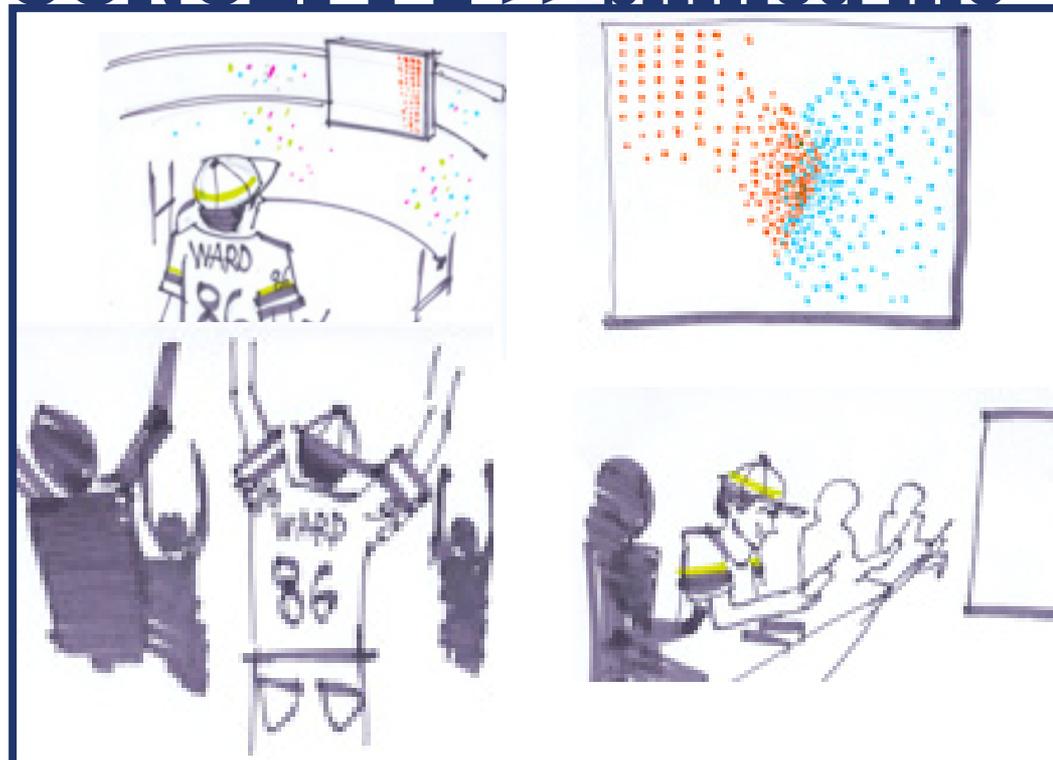
CONCEPT 1 >> vicarious me



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

CONCEPTS

CONCEPT 2 >> skilled me



- using video and motion sensor technology to enhance sporting event experience

- connect to others inside and outside the stadium

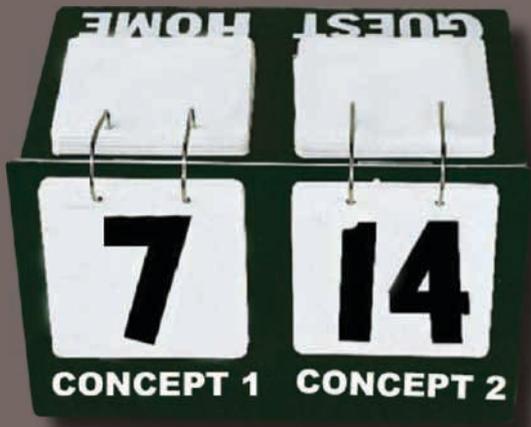
REFINE

following through

After the initial scenarios, it was time to test and validate them to in order to refine a final concept. We validated our concept through two rounds of user validations, a trip to PNC Park and an interview with Alex Moser, the creative services manager of the Pittsburgh Pirates Baseball Club. The findings helped us to evaluate weaknesses in our solution such as fan activities that would be too silly and discourage people from participating in stronger ideas such as the instant replay which would enable people to access the information they would otherwise not be provided with. The final concept was then put into production for a final prototype.





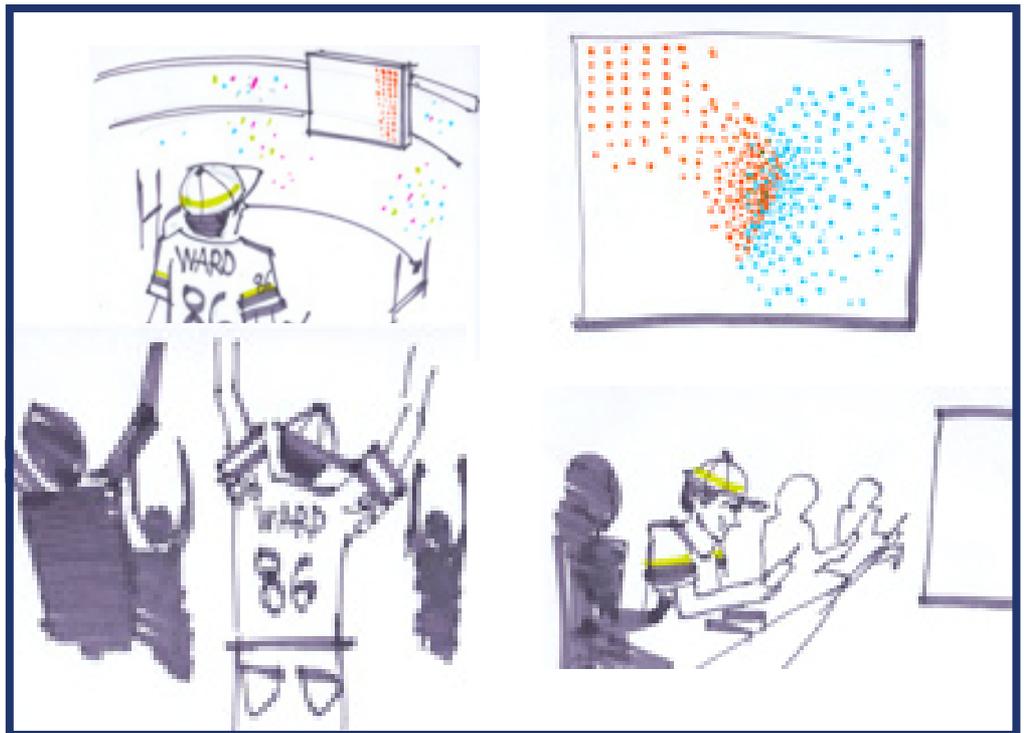


CONCEPT 2 WINS

In a vote that was 2:1, most participants liked the idea of connecting fans inside and outside the stadium. Based on this feedback, we decided to forge ahead with the “vicarious me” scenario.

Many companies are creating virtual worlds where people can participate in communities, so this is something like that. It has business opportunities.

I'm not a hardcore fan for any sport but if that stadium link was available it would deepen my involvement in a game.



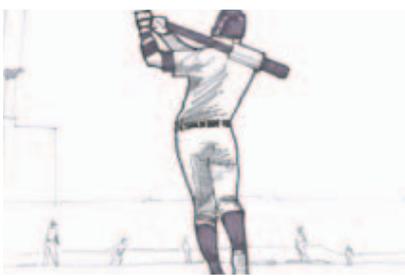
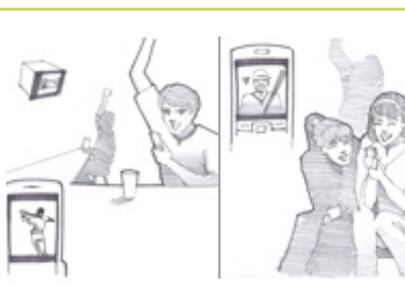
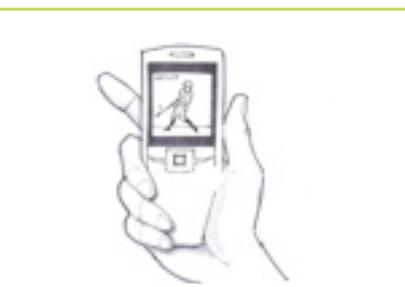
I could see this actually occurring. It lets people at home interact with the game.

i also like the instant replay...especially if it was a play to go down in history

5 SCENES FROM

“VICARIOUS ME” SCENARIO

Based on the “vicarious me” concept, we constructed a scenario with five potential ideas in five scenes and got feedback from participants during a validation session.

scene	description	feedback	yes/no
	Judy and Sam receive “countdown” clips - players to watch - classic games between Pirates and SF - highlights of previous games	“Realistic” “If this were an option, I would take it.” “Classic games are cool”	yes
	Judy and Sam watch warm-up before the game.	“Not important” “Not too interested”	no
	Game starts and Jason Bay hits home run. - Sam gets an electronic baseball card - Judy gets a “love note”	“I like to get clips (electronic cards)” “Love notes are corny” “Love notes can’t be from every player.”	yes for baseball cards no for love notes
	It’s top of the 6th inning and Judy is talking with friends. Fails to see Freddy Sanchez hit home run. Watches replay on cell phone.	“Replay is great, but need to be able to save it.” “I have a friend who loves replays.”	yes
	It’s the bottom of the 9th and the Pirates are about to edge SF 3-2. Duke is pitching and the fans are cheering electronically by their cell phones. Sam’s cheering is transmitted through the bar’s STB to the stadium.	“Definitely need something to get people cheering.” “I want a remix of the clips that were sent.”	yes

A NIGHT AT PNC PARK

Entertainment at PNC Park comes in two forms - the analog game on the field and the digital game on the Jumbotron.

We discovered that both of these forms are equally enjoyed by the audience, and that experiencing the Jumbotron was a big part of PNC Park.

Examples of interaction with the Jumbotron include:

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

Clearly, our service would have to include the Jumbotron as an integral part of our service.

TALK WITH PNC PARK

Lucky for us, we were granted an interview with Alex Moser, the director of creative services for PNC Park. After explaining our service and scenario to him, he gave us the following feedback.

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.

Stadium technology : 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.

Our interview with Alex was very fruitful in that it gave us financial and technological insight into how our service could work at PNC Park.



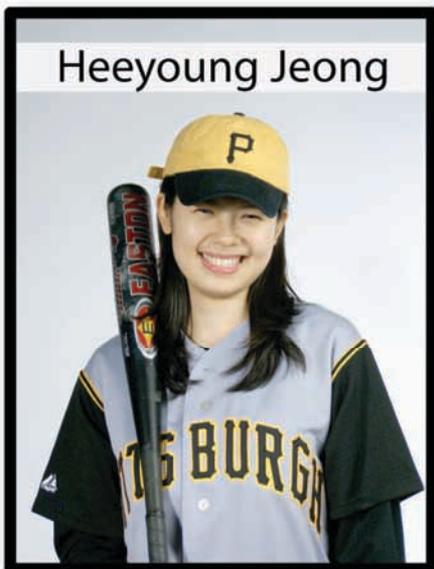
Taking our research from the previous three phases, we arrived at our solution :



TEAM PASSION

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PASSION
IS
ALL
AROUND

