



IPRO 355

Sports Technology for the Fans

The Challenge

- Spectators have a limited choice when it comes to watching replays at sporting events and have no control over when and how long replays last.

The Opportunity

- US sports fans spend \$6 billion a year to attend sports events
- The global market for PDAs and Pocket PCs was 13.5 million units in 2001
 - Consumers today are technology-driven and find just about anything with an LCD screen to be “cool”

Our Solution

- Develop an interactive, handheld wireless device that allows a spectator to view various camera angles and replays of players and areas on a field.
 - Enhances a sports fan's experience by making it more interactive and personalized.
 - Brings more people to the stadium thus increasing ticket sales and revenue for stadium owner.

The Product

- A Pocket-PC based handheld device with built-in wireless ethernet
- A wireless ethernet network within the stadium (802.11b)



The Product

- Using streaming video the device will display video from cameras positioned around the stadium
- Users will be able to:
 - View instant replays on-demand
 - Listen to the radio commentary of the game
 - View statistics from the game
 - View scores from other games
 - See stadium and team information

The Product

- Almost endless other possibilities
 - Instant opinion polls
 - Trivia quizzes
 - E-coupons for use at concession stand
 - At-seat food ordering service
 - Bathroom waiting times
 - An emergency “I have just grabbed a fly ball when I shouldn’t have. Please escort me out of the stadium before I get killed by angry fans” button.

Customers

- Who will use this service?
 - Stadium attendees would be able to make use of this service by paying a nominal service fee on top of their ticket price
 - Customers who have bought their ticket
 - An additional \$10 is small compared to most ticket prices
 - Customers who have received free tickets
 - \$10 is a small price to pay

Customers

- Why will they buy it?
 - A rental fee of \$10 for the service is considered to be very reasonable
 - Most sports fans long for anything that brings them closer to the game
 - The service will enable viewers to watch the live game just like on a television but with the controls in their own hands
 - Today's society is driven by electronics

Market Size

- White Sox: 1.9 Million Fans per season
 - Average attendance: 24,000
- Can be extended to all teams and/or any other televised event
 - Football, College Sports, NASCAR, etc.
- Survey results suggest:
 - 15% of people attending a baseball game would also purchase this product
 - ~3600 rentals per game

Marketing Strategy

- Aggressively attract attention of gadget enthusiasts
- Alliance with White Sox (or another team)
 - Ticket-back advertising
 - In-stadium advertising
 - Free or reduced price during opening day

The Competition

- No direct competitors currently exist
- Competition could emerge:
 - Stadiums: Upgrade/install jumbotrons and other TVs, making replays more accessible
 - Cannot provide interactive, in-control, on-demand nature of our offering
 - Cell Phone developments: Could bring this service to anybody with a cell phone
 - Speeds would not match our network

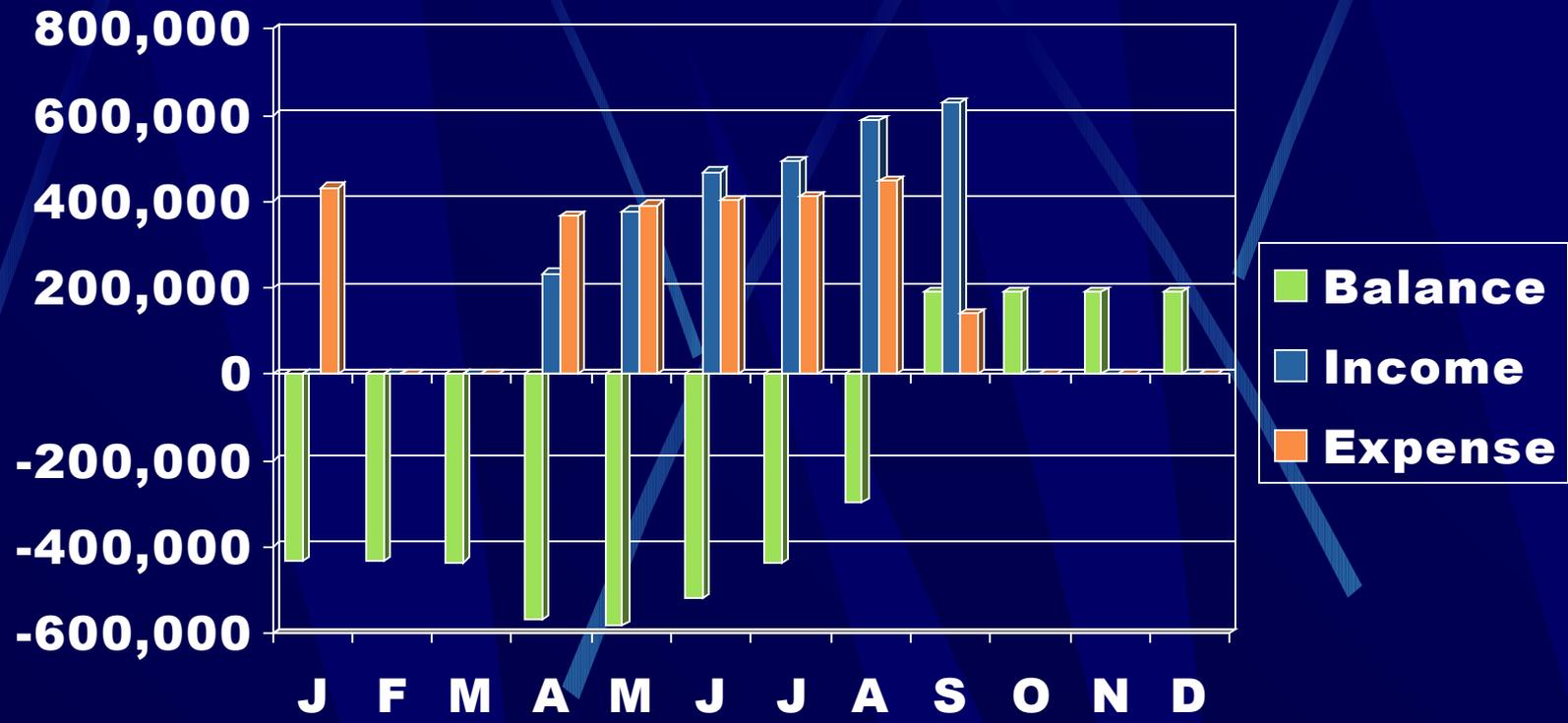
Financials

- Each PDA costs \$300, rents for \$10/game
- Anticipate \$1/unit/game additional revenue through advertising
- Slow build up from 1000 units to 6000 units
 - Add 1000 units per month during first season
 - Average of 60% of units rented per game
 - Sell out games balance out with empty games
- Startup costs are regained by end of the season

Financials

- Principal Costs:
 - Server - \$50000
 - Wi-Fi Network – \$10/unit (\$60000 total)
 - Credit Card Service – 3% of revenue
 - PDAs – \$1.8 million for 6000 units
 - Accounting & Legal Fees – \$17000

Financials



Risks

- Technical issues

- Limitations on wireless ethernet

- Bandwidth, interference, resilience etc.

- Reliability of equipment

- PDAs subject to outdoor environment, misuse.

- Market issues

- Inability to keep customers

Risks

- Legal issues
 - Inability to reach agreement with a ballpark or sports team
 - Video ownership issues

Progress to Date

- Identified suitable hardware
- HTML-based demo product
 - User interface feedback
- Preliminary market survey
- Cash flow predictions

Path Forward

- Product Development

- Server
- Software
- Testing

- Financials

- Alliance with a team (e.g. White Sox)
 - Profit and cost sharing
 - Advertising revenue and control
 - Video ownership issues

The Team

- A team built for success:
 - Strong & varied technical background
 - Enrolled in Kaplan Entrepreneurial program and have a strong grasp on entrepreneurship and business
 - Diverse cultural backgrounds
- Additional team members needed:
 - Marketing manager, accountant, intellectual property lawyer

The Team

● Team Members:

- Richard Holbrook – Advisor
- Matthew Pearson (Mechanical Eng.) – Leader
- William Prost (Computer Science.) – Webmaster
- Kalvyn Rasquinha (Computer Eng.) – Secretary
- Graham Nadig (Mechanical Eng.)
- Scott Waicekauskas (Internet Comm.)
- Thomas D'Silva (Elect. & Comp. Eng.)
- Kunal Shah (Elect. & Comp. Eng.)
- Jathurshun Sivalognathan (Comp. Eng.)
- Jackie Hu (Elect. & Comp. Eng.)

Summary

- With responsible growth rate, risks are low
 - \$600,000 initial investment can be easily returned before the end of a baseball season.
 - Following seasons – profitability reaches \$2 million per season
 - Expandability to ~30 teams in MLB and beyond!