SensoTech

-let’s start the game-
iFarm Team 6

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The Video Gaming Market

$65 Billion Industry

1 Billion gamers worldwide

(67% of US households play video games)

Annual growth rate: ~ 10%

➢ Gaming Peripherals:
  Mice, Keyboards,
  Headsets, Mouse Pads

➢ Average spend on gaming peripherals: $70
Market Components

$65 BILLION WORLDWIDE GAMING SPEND

- $8B SOCIAL/BROWSER
- $12B PC
- $8B HANDHELD
- $10B MOBILE/TABLET
- $27B CONSOLE

Console leads w/ 42% global consumer spend

SOURCE: NPD, GfK, IDG, Public Financial Disclosures, MSFT Estimates
Competitive Landscape: Gaming Console Revenue and Unit Shipments-2012

- **Nintendo**: 29.9%
- **Sony**: 41.9%
- **Microsoft**: 28.2%
- **Sony**: 38.8%
- **Microsoft**: 17.7%

Total: $11.7B  
Total: 57.2m

*Source and Copyright ITCandor, 2013*
Competitive landscape: Gaming Peripherals

Razer: U.S. company
Revenue: $80 Million
Founded in 1998

Swiss-American provider
Market Cap: 2.22 Billion
Founded in 1981

Danish manufacturer
Revenue: $50 Million
Founded in 2001

America manufacturer
Revenue: > $500 Million
Founded in 1994

Subsidiary of Dell
Revenue: $112 Million
Founded in 1996

Mad Catz
Market Cap: 41.3 million
Founded in 1989
Taking Gaming to the Next Level!

Casual gamers:
➢ Willing to spend on new technologies
  (average $90: range $10-250)

Core gamers:
➢ Welcome a more sensitive mouse /keyboard /console

Quotes from gamers:
“This tech would be great for recording video games, no clicking noise from the keys”

“Core gamers would really like this tech”

“I am really trying to find a keyboard that is responsive enough for my needs, I need a keyboard to go when I say go and I mean fast”

“I’m using the original Saitek Eclipse.. with blue backlighting under the keys. It’s very responsive but I want an even quicker response...I am a spoiled perfectionist...lol”
The Game-Changing Technology for Gaming: 
Highly Sensitive Flexible Sensor Technology

Polyvinylidene fluoride (PVDF) thin film

No structures
Conductor
Elastomer
Conductor

Micro-structured
Conductor
Air
Air
Conductor

http://ktech.com

Measures transient pressures
> Kpa, poor sensitivity

PDMS 0.55 kPa \(^{-1}\)
Targeted Gaming Peripheral Products

- Xbox 360 controller
  - Extra Sensitivity

- FPS Freeks

- Razer Mamba - Wired/Wireless Ergonomic
  - Response rate: 1 ms

- Sharkoon Skiller
  - Weight: 603 g
Key Features and Improvement Over Existing Products

➢ Low power consumption: < 1mW
➢ High sensitivity: Increased accuracy, high signal/noise ratio
➢ Rapid response time: <10 ms
➢ Low cost, small size & light weight
➢ Flexible: Applicable on curved surfaces
➢ Long working life
➢ Enhanced portability
➢ Ergonomic - less pressure required for response
➢ Possible Bio-feedback
Route to Market: Licensing

Prototype Build
Peratech | SSI Electronics

Licensees

capital supply for product development
Leverage their established distribution channel to core gamers

console makers: MS, Sony, Nintendo

gaming peripheral manufacturers: Razer, Logitech, SteelSeries, Corsair
Next steps to win the Game!!

1. Troubleshoot and build a robust 2nd generation sensor prototype
   - 1 Ph.D. student
   - Approximately 6 weeks and approximately $3000 salary
   - Materials are readily available and relatively cheap, cost $600
   - Computer/connections/software to sample the response, cost $1,500
   - Sensor that remotely connects to the computer, $1,500

2. Possible obstacles
   - Finding qualified candidates to build the device; can pool candidates from the Engineering department or Dr. Bao’s lab at Stanford.

3. Additional costs, contact with Key Partners
   - Emailing, meeting key partners, traveling, hotel staying etc, $6,000

Total estimated cost: $12,600  Approximately 3-6 months
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**Consultants**
Thierry de Crespigny, Age 14
Casual gamers and Core gamers interviewed

*Highly sensitive flexible pressure sensor: S06-190 & S10-252*