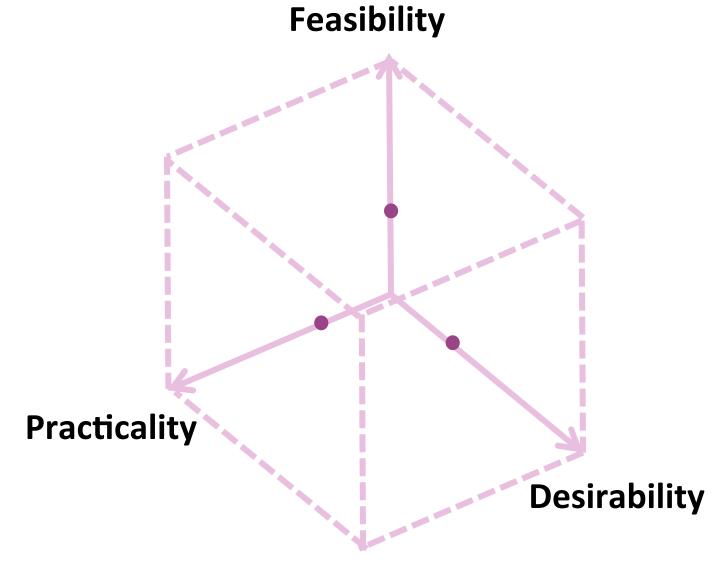






## RISK AREAS AFTER SKETCH MODEL

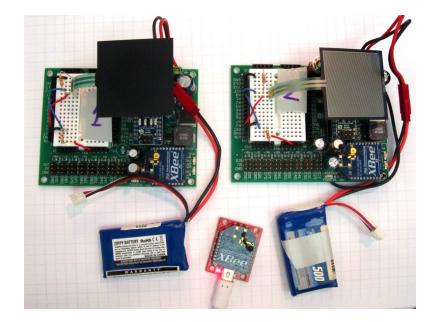




## **Feasibility**







Establishing alarm thresholds: Data capture & transmission:

**Demonstrated by mock-up** 



#### **Financial:**

**Price Range:** \$500-\$1000

3.7 M Show & race horses Capture ~10%



**Practicality** 

**Battery size & life:** 

Benchmarked power requirements

Sensor resolution: Identified COTS sensors



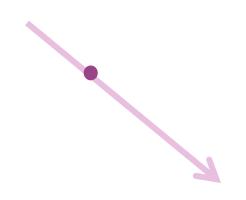
#### Do our customers want this?

#### **Interviewed 9 potential customers**

"Great idea...part of the growing field of preventative medicine"

- Dr. Mark Salemi

**President of NYC Veterinary Medical Association in 2002** 



Desirability



# **Feasibility Practicality** Desirability



# **EQUISENSE PRODUCT CONTRACT**

Product Description: Real time Equine leg injury detection system

Intended Customer: Race and show horse owners, trainers, and riders

Market: Equestrian Sports and Recreation Industry

<b>Customer Need</b>	Product Attributes	Engineering Specifications
Horse performs normally when wearing apparatus	Weight	Total weight of each boot less than 15oz.
	Size	No more than ¼ inch deviation from normal profile of splint boot
Provides reliable injury information	Temperature sensor sensitivity	Detect 1 degree (C) temperature differential
	Pressure sensor sensitivity	Detect at least 10% swelling based on pressure changes from circumference increase
Alerts rider at onset of injury	Wireless communication signal strength	Rider can receive signal from boots at least 10 feet away
Alerts rider when horse is warmed up for exercise	Temperature sensor sensitivity	Detect 1 degree (C) temperature differential
Operates in variety of equine sports conditions	Maximum loading	Withstands 1kN impact force
	Water resistance	Water resistant to 10m depth
Operates for duration of training session	Battery life	Battery life of at least 4 hours



#### **NEXT STEPS**

- Optimizing electronics
- Advanced diagnostics
- Alerting device
- Warm-up detection
- Live testing
- Algorithm refinement



