Textile Device Applications
In Sports

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History of Wearable Technology at Under Armour
Armour39 Performance Monitor

MEASURES YOUR WILLPOWER™

WILLpower™ is based on an algorithm that combines how long you workout, what you did, profile info like gender and weight, and key heart rate measures to give you a single score. Set your target every day and go after it.

- **WILLPOWER**
  - TARGET: 8.2
  - TODAY: 8.5

- **MONDAY**
  - TARGET: 6.8
  - TIME: 01:35:00

- **TUESDAY**
  - TARGET: 4.9
  - TIME: 00:50:36

- **TODAY**
  - INTERVAL WORKOUT
  - TARGET: 0.5
  - TIME: 01:05:21

- **CARDIO WORKOUT**
  - LOW INTENSITY

- **INTERVAL/CARDIO MIX**
  - MODERATE INTENSITY

- **HIGH INTENSITY**
UA Healthbox

HERE’S TO YOUR HEALTH CHALLENGE
Gemini 2 Record Equipped
Connected Life

- [https://www.youtube.com/watch?v=uUTtT6XnviY](https://www.youtube.com/watch?v=uUTtT6XnviY)
Designing Wearable Tech for Sports
Identify the athlete.

• What type of data do they expect?
• Why is the data important to them?
• How often does the athlete expect to use the product?
• Where is the user going to use the product?
What type of sensors?

- ECG
- EEG
- EMG
- Motion
- Thermal
- PPG
- Capacitive Touch
- Etc.
How often does the athlete expect to use the product?

- Single Use
- Multiple times a week
- Everyday
- How often do they wash the product
Where is the athlete going to use the product?

- On field
- Training
- Recovery
- Sleep
- Everyday Life
Athlete Considerations
Athletes tend to use what they are familiar with (superstitions).

- Have learned what works for them
- Need to be convinced that the product will improve their performance
Comfort is very important.

- Subjective
- Non-restrictive
- Breathable
- Soft
- Flexible vs. Stretchable
Creating simple actionable data for the athlete and trainer.

• What exercises should I do?
• What should I eat?
• How much should I sleep?
• Am I ready today?
THANKS.