

# SWOT Analysis - Template

LG: Create a SWOT analysis for sensors in compressions/sleeves for athletes

Who is the competition and what do they do well and poorly?

Competition	What do they do well?	What do they do poorly?
1. Nike	Relationships with sports teams and athletes and they are a well known and well trusted brand	Mainly focus on collecting biophysiological data and how long athletes ran
2. AiQ	They are focused on electronics and textiles/clothes as a whole and investing deeply "to create fashionable, functional, comfortable solutions to meet everyday needs, in sports and fitness, outdoor and leisure, home and leisure, home care and health care"	They do not have a user base in the US yet as they are based in Taiwan
3. SmartLife	Make all sorts of sensor-equipped products on markets and focused on sportswear	They are only focused on biophysiological data, not sensor pressure points



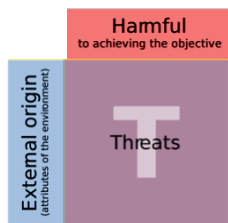
- 1 Sensors in sportswear have become to track player performance and do analytics so its not a new field to convince people
- 2 The sensor will be able to sense and measure individual/athlete discomfort so a custom compression or sleeve can be made that doesn't hinder performance like most generic sleeves
- 3 Sensors will provide real time data so you know how you're moving certain parts of your body and you can see what motions are causing stress and adjust



- 1 Finding the right fabric/sensor material that does not impede data collection has been a challenge - gels are irritating but are good for data collection while textile electrodes or "textrodes" can be integrated into the fabric and are comfortable but are bad for data collection
- 2 Doing Research and Development for many different types of sensors to find the best fit is expensive
- 3 Moisture management of sweat is necessary factor as it can impede data collection



- 1 Competition focusing on normal sportswear like shoes, sports shirts, shorts, we will focus on sleeves and have the potential to dominate a new sub-category in the industry
- 2 Opportunity to find and patent the perfect material for the sensors that provides comfort and does not impede data collection still possible
- 3 Competition focused on either sports or healthcare, we can combine both



- 1 Nike and other companies are investing heavily in this field
- 2 Competitors are good at biophysiological data collection now, are focusing on sensitive signals like we want to collect
- 3 Could be expensive at first, coast could be a barrier to entry for initial adoption

# SWOT Analysis - Template

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LG: Create a SWOT analysis for Proesthetic Sensors/ Force Sensor Applications

Who is the competition and what do they do well and poorly?

Competition	What do they do well?	What do they do poorly?
1. TekScan	Multiple patented products Already proven technology Partnerships with established researchers	Need a specialist or trained researcher for proper application or optimal use
2. Sandia National Laboratories	Neural interface and bladder system Universal system for socket implementation	Bladder system not optimal for auto adjusting fit based on pressure
3. University of Southampton	Intelligent sensor with wireless capabilities Alerts in real time for fit adjustment	No dynamic or automatic adjustment.



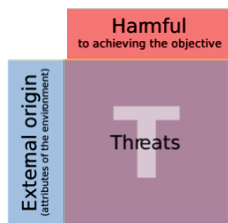
- 1 Gel based technology for realtime and automatic pressure adjustment
- 2 Wireless smart sensor capable of providing wear and tear data
- 3 Sensor implementation capable of user input customization



- 1 Sensor technology is largely patented. Thin film sensors are optimal
- 2 Difficulty in differentiation between existing products
- 3 Longevity of gel based technology in question



- 1 Gel technology could be licensed to existing producers
- 2 App interface for real time user input and data tracking is clean and user friendly
- 3 Customizable options allow a user to feel empowered in controlling their own health



- 1 Thin film sensor technology is largely already discovered and patented
- 2 Neural interface and neural signal incorporated sensors are the next trend and milestone
- 3 Limitations of applicability to other uses/clients