Log

1. Identify key problem statements
   There is more than one problem that can identify from the paragraph provided
   We need to tackle both problems to truly help Anne. Also we need to use solutions that depend on AI, not generic ones. Or add AI into an existing solution
    a. Emotional: Trauma
    b. Physical: Discomfort from using prosthetic limbs, resulting in little use of her limbs
2. Research on real-world applications of AI related to above problems
   Off the top of our heads we can come up with some products that we have used before
   But we do not have enough knowledge about AI (esp. Data, engineering and algo) and we need to that for evaluation of the technology
    a. Linx
    b. Self-adjusting knees
    c. Intelligent feet that automatically adjusts to the terrain
3. Share findings
4. Create slides

Name	Targeted problem	What does it do (Beginner)	Business value	What is their data, algorithm, eng trade-off
Self-adjusting knee	Physical	Predicts the degree of bend of the knee for various movements	High end market, Selling of gait data collected	High power consumption, gait data collected
Linx Intelligent feet (terrain)	Physical	Uses sensors to predict the correct alignment of the feet for the terrain	High end market, selling of gait data collected	High power consumption. Gait data collected
Shirley Ryan abilitylab	Physical		Users who need professional help with adjusting to AI fueled technologies	Construction of leg with right metrics, Knowledge from practitioners to train AI
Solar powered limb	Physical	Makes up for high power consumption of bionic leg	Environmentally friendly users, users who spend prolonged hours outside	More weight. Additonal metrics: sunlight.
Limbs which brings feelings back to users	Physical	Sensation gives more cues to user to move his/her leg according to the environment	General market	Degree of sensation
Fitbit	Emotional	[Wearable + App] Capture and analyse	Mass market. Revenue from	

		sleep patterns and other vital signs	subscription fees and products	
The Gatebox	Emotional	[Hologram + app] Provide emotional support in the form of a virtual partner	Niche market targeting otakus.	
Q sensor	Emotional	[3D] Let people keep track of stress during everyday activities. The Q Sensor stores or transmits a wearer's stress levels throughout the day, giving doctors, caregivers, and patients themselves a new tool for observing reactions.	Autistic kids	Data tracked: Skin conductance level Skin temperature User motion
Virtual interviewer	Emotional	Virtual therapist to provide non-intrusive support whenever needed	Complement human therapists, potential for more information per session with AI	Able to collect annon data including video captures. Human researchers are not able to see emotions and reactions while being 'blind'.

Integrated solution

1. AI-powered bionic legs
2. Smart watch
   [Refer to slides for details]

Resources accessed

Symptoms of trauma
https://www.psychguides.com/guides/how-to-find-help-treating-a-trauma-related-problem/

Solutions to emotional stress

Linx
http://www.endolite.com/products/linx

Revolution in Artificial Limbs Brings Feeling Back to Amputees
https://news.nationalgeographic.com/news/2014/02/140222-artificial-limbs-feeling-prosthetics-medicine-science/

Shirley Ryan Abilitylab
https://www.sralab.org/conditions/limb-loss-impairment

AI-fueled prosthetic
https://www.wired.com/story/ai-is-fueling-smarter-prosthetics-than-ever-before/

Solar powered limb
http://www.cbc.ca/news/technology/solar-powered-skin-1.4039310

Smart robotics
http://www.popularmechanics.com/science/health/a7764/smart-bionic-limbs-are-reengineering-the-human-9160299/

Q Sensor
https://www.technologyreview.com/s/421316/sensor-detects-emotions-through-the-skin/

Development of a Wearable-Sensor-Based Fall Detection System
https://www.hindawi.com/journals/ijta/2015/576364/

Virtual interviewer
https://www.wired.com/story/virtual-therapists-help-veterans-open-up-about-ptsd/

Other documents