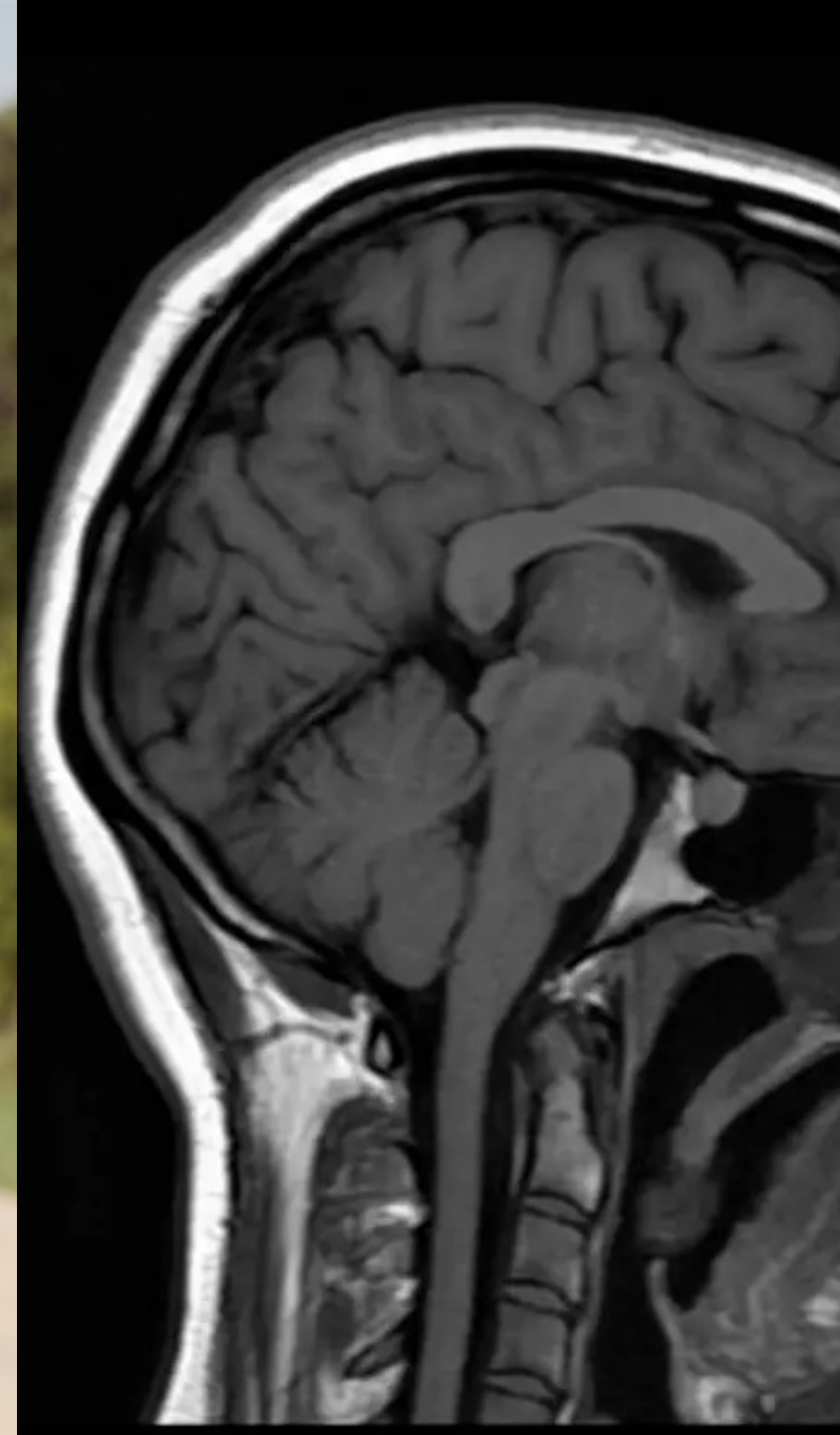


**Next \$1B Unicorn
Start-Up:**

**A Fitbit for your
Brain**

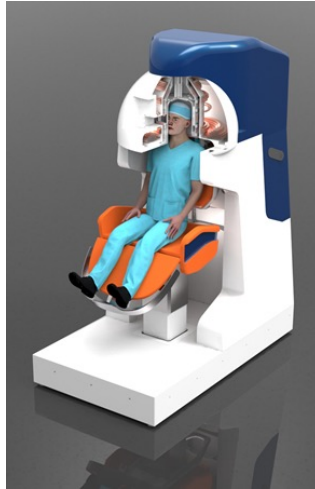
**(MGH-N: Low-Cost MRI for
the Public)**



The New Low Cost & High Capability MRI Technology: Fitbit for Brain Health

Technology & Value Proposition:

1. Developed by Harvard, MGH, U of MN & others.
2. Supported by \$13M+ NIH grant.
3. 1.5T MRI which does not require extensive shielding & field uniformity.
4. Core of technology: High quality imaging under imperfect & non-uniform fields.
5. Low Cost: **NO CapEx. NO shielding. Lease the equipment.**
6. 400kg, semi-portable device.
7. 15-30 min exam.



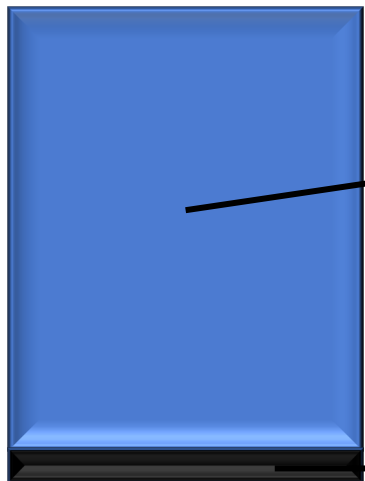
Jobs to be done:

1. NO sacrifice in image resolution.
2. NO CapEx needed. NO Upfront payment.
3. Potential drop-in installation in buildings with minimum infrastructure. Examples: Rural hospitals, pharmacies, sport medicine clinics, forward operating military bases, naval ships.
4. Potential for mobile MRI exam stations on trucks.

Timeline & Next Steps:

1. Extensive IP coverage secured.
2. Operational Prototype Ready: mid-2021
3. FDA 501(k) approval submission: 2021
4. Scale-Up & Commercial Launch: 2022+

Competitive Offerings & Market:



1. \$8B market (2019)
2. 1.5T-3T.
3. High-end equipment by GE, Siemens, Phillips.
4. CapEx ~ \$5M. OpEx ~ \$5M/yr.
5. High margin for vendor and operator.

1. 0.06T, Fully portable equipment by Hyperfine. CapEx ~ \$100k.
2. 0.5T, smaller MRI by Synaptive. Mid-tier MRI.

MIT Team:



Emily Jager



Sedat Gunes



Matt Burgunder

Mentor: Mike Benedetto

Tested Options & Projections

#1: Target US or OUS Hospitals (B2B):

- 1. Dominance by Healthcare Majors: GE, Siemens, Phillips.
- 2. High margin, core business for the Majors
- 3. High margin for each player in Value Chain
- 4. Entrenched competition & high barriers to entry: Service & software contracts & cost of integration.
- 5. GE portfolio: \$700k to \$5M. Mid-tier equipment (\$2-3M) more common for commercial customers.


Our Recommendation: Challenging to Implement



#2: Target US Military (B2B):

- 1. NO current interest from US Military.
- 2. NO current plans to use MRI as a screening tool.
- 3. NO interest to install MRI equipment due to cost & need for operators. Evacuating personnel to civilian hospitals in US, Germany, Japan feasible.

Our Recommendation: Challenging to Implement



#3: Leasing w/o CapEx for small US hospitals (B2B)

Our Recommendation: Implementation Possible, if True Drop-In with AI

<p>Why are we in this business? Create a new, accessible category to bring MRI to masses. Current MRI: Upfront CapEx = up to \$10M (\$5M for building + \$5M for device) New MRI: NO Upfront CapEx. NO Building. Lease the device as you go.</p>	<p>Competitive Advantage: This is the ONLY MRI technology that can provide a high-quality image without the need for shielding at the fraction of the cost of existing equipment (protected by multiple patents).</p>	<p>Customer Acquisition: Customer will lease the equipment. NO need for expensive CapEx. NO need for expensive building prep. Nearly turn-key equipment.</p>	<p>Overall Economics: \$50M in upfront R&D and scale-up. Need ~70 paying customers (70 equipment sold) to break even at 70% Net margin</p>	<p>Design & Build: The core of the technology is a software, along with limited hardware, that enables imaging under imperfect conditions. Thus, easy to build. Risks: FDA approval, engineering.</p>
<p>Initial Market: Facilities without Tier 4/5 US hospitals (~500) & small clinics (~500) which do NOT have MRI (The existing MRI users are not accessible due to entrenched competitors).</p> <p>Initial TAM: ~\$1B (equipment lease + service contracts)</p>	<p>Value Creation: <u>Value for Patient:</u> Faster access to care & diagnosis. <u>Value for Physician:</u> No sacrifice in image quality. <u>Value for Care Providers:</u> MRI is extremely profitable but requires huge CapEx. Our MRI does NOT require CapEx.</p>	<p>Product Unit Economics: Current MRI: Upfront CapEx = \$10M Annual OpEx = \$1M New MRI: Upfront CapEx = 0 Annual OpEx = \$1M</p>	<p>Sales: Dedicated B2B sales team.</p>	<p>Scaling: 1. Start from the lowest Tier of the existing US market. 2. Create a new category, expand & capture new market. 3. Replicate the same in outside of US.</p>

#4: Target Gen. Pop. (B2C)

Market Research Needed to Identify:

1. Addressable Consumer Pain Point
2. Willingness to Pay
3. Value Creation
4. Competitive Advantage

Our Recommendation: Ethnographic, Qualitative, & Quantitative Market Research Needed

Recommended Path Forward for Option #4 (B2C)

1. Ethnography & deep learning

Method: Home visits.

Typical # of consumers tested: <10

Typical Objective: Identify jobs to be done.

2. Qualitative Testing:

Method: Online and/or in-person probing. Conjoint study most likely needed.

Typical # of consumers tested: ~500+ if online, <100 if in-person

Typical Objective: Segmentation, believability, importance of job-to-be-done etc.

3. Quantitative (actual use) Testing:

Method: The use of actual prototypes by consumers in a representative setting (Walmart or CVS?)

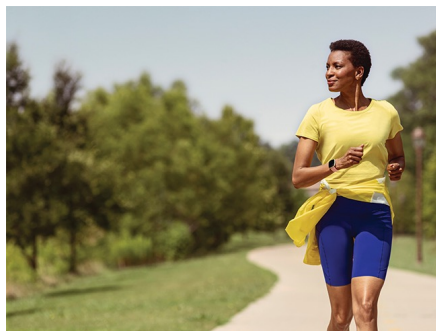
Typical # of consumers tested: min. 300

Typical Objective: Answering big questions of willingness to pay, net promoter score (top 2 boxes).

Estimated timeline & budget: 8-16 weeks. \$250-500k

Overall Project Recommendations: Fitbit for Brain Health

1. Developing & Integrating AI software appears to be critical.
2. Both for B2B (small US hospitals) and B2C (gen. pop.): An integrated, truly drop-in (minimum building modification without CapEx) , turn-key, and near autonomous equipment (hardware + AI software) which would require minimum intervention by specialist physicians during regular operation appears to attract interest.
3. For B2C (gen. pop.): Market research is needed



Actionable health
insights provided
to the user