



ARTIFLEX: REVOLUTIONIZING KNEE PAIN RELIEF WITH STYLE AND INNOVATION

Artiflex is a stylish, wearable knee band that combines advanced Low-Level Laser Therapy (LLLT) with smart diagnostics for targeted, non-invasive pain relief and enhanced mobility with the help of IOT and AI.

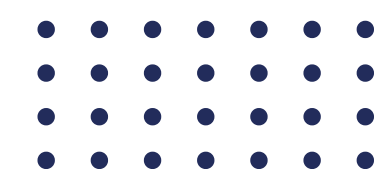
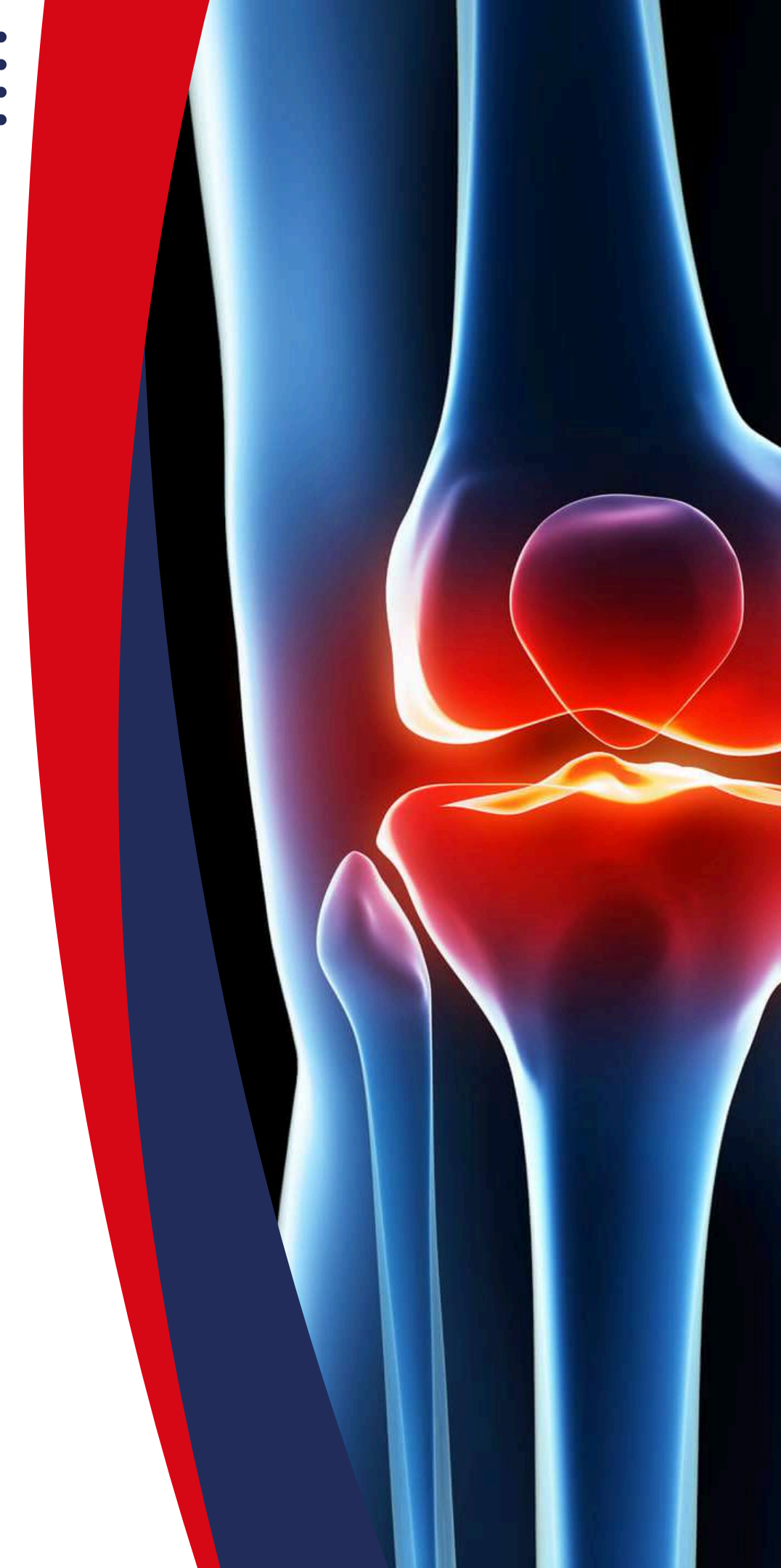
INCUBATED AT:

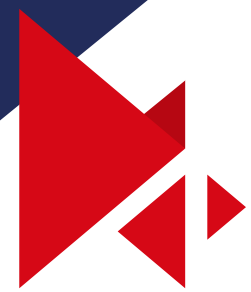
Karunya Technology Business Incubation Park(K-TBIP)
Karunya Institute of Technology and Sciences
Coimbatore – 641114



WEBSITE: [ARTIFLEXINDIA.MY.CANVA.SITE](https://artiflexindia.my.canva.site)

CONTACT: artiflexpro@gmail.com // [+91 9488436386](tel:+919488436386)





OUR CREATIVE



TEAM



**REGULLA MALLIKA
PRIYA HARSHINI**

Founder & Chief Executive Officer

30%

"I, Regulla Mallika Priya Harshini, with an AI and data science background, am the founder and CEO of Artiflex. My aim is to revolutionize the medical and health sector with innovative, cutting-edge solutions."



MOHAMMED SUHAIL

Managing Director &
Chief Technology Officer

30%

"I am Mohammed Suhail, the MD and CTO of Artiflex, leading the research team and managing daily activities and agendas. With a passion for biology and physics, I combine scientific expertise and business management skills to drive innovation and operational excellence."



ABHIJAYE

Chief Financial Officer

20%

"I, Abhijaye, the CFO of Artiflex, excel in financial management and technical contributions. With a biotech engineering background, I integrate financial expertise and medical device experience to drive effective change and innovation."



ARIES NATHYA

Chief Marketing Officer

20%

"I'm Aries Nathya A, the CMO of Artiflex. With a background in artificial intelligence and in marketing, I excel in strategic planning, and team leadership. My goal is to enhance our brand visibility and customer engagement using innovative, marketing strategies."

ABOUT OUR PRODUCT

Customers need Artiflex for **targeted, non-invasive knee pain relief**. Unlike medications or invasive procedures, Artiflex combines smart diagnostics with Low-Level Laser Therapy (LLLT) for effective pain management. Its stylish, comfortable design **ensures convenience**, making it the perfect solution for continuous, **on-the-go relief**.

CURRENT SOLUTIONS

- **Medications:** Temporary relief with potential side effects.
- **Physical Therapy:** Time-consuming and requires regular visits.
- **Invasive Procedures:** Expensive and involve recovery time.

WHY ARTIFLEX IS BETTER:

- **Targeted Relief:** Delivers precise Low-Level Laser Therapy (LLLT) directly to the pain source.
- **Smart Diagnostics:** Activates therapy only when needed, enhancing efficiency.
- **Stylish & Comfortable:** Lightweight, adjustable design for everyday wear, ensuring convenience and continuous relief.

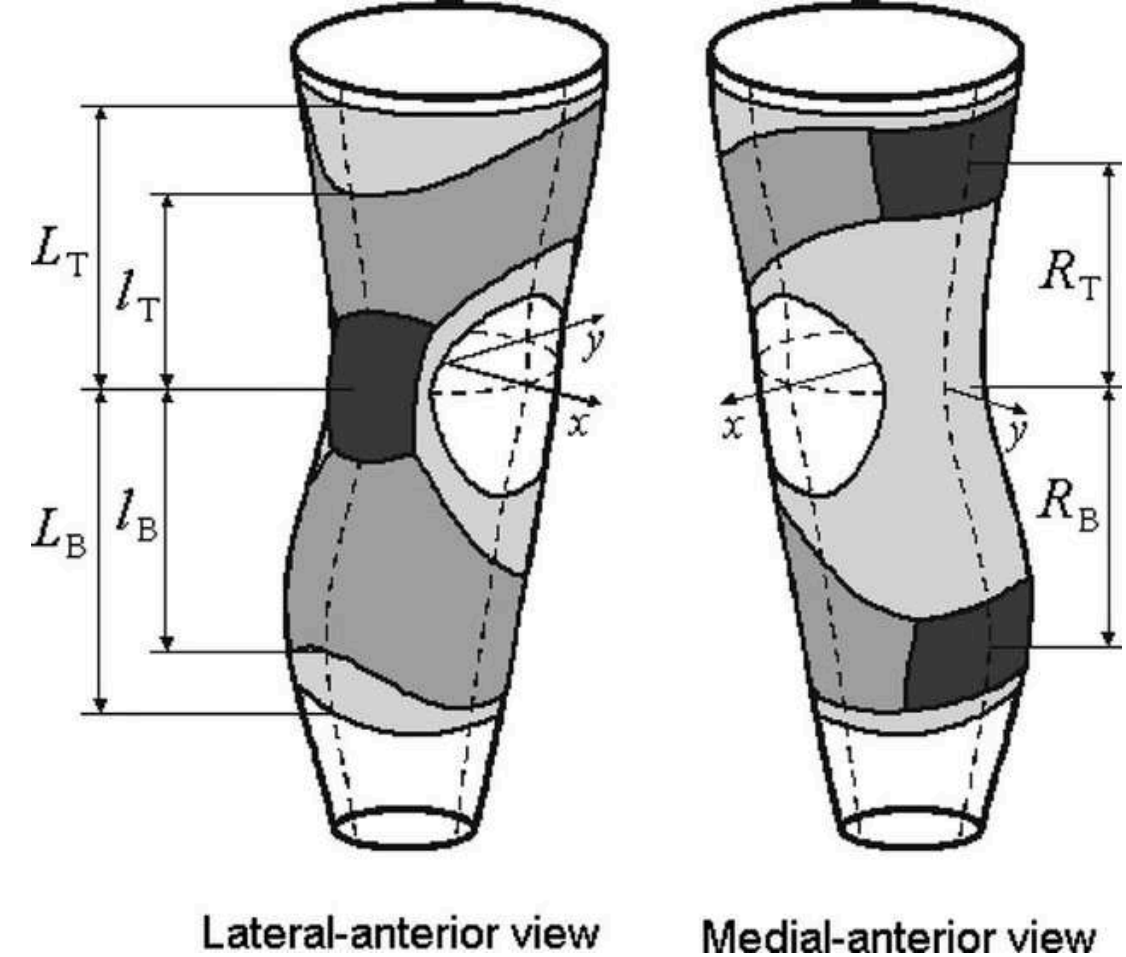


Figure: CAD Designed Product Sketch

MARKET POTENTIAL:

With a growing demand for non-invasive, home-based pain relief solutions, Artiflex taps into a large, expanding market, promising high returns on investment.

PRODUCT OVERVIEW

WHY CUSTOMERS NEED ATIFLEX?

Artiflex offers non-invasive, targeted knee pain relief through smart diagnostics and Low-Level Laser Therapy (LLLT). Its stylish, comfortable design ensures effective, on-the-go treatment, providing a **superior alternative** to medications and invasive procedures.

UNIQUENESS OF OUR PRODUCT:



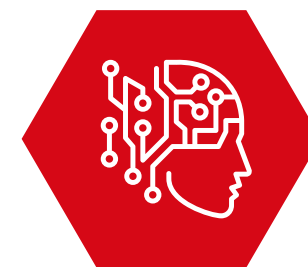
Scalable Market: Positioned to tap into the growing demand for innovative, home-based health solutions, promising substantial market growth and investor returns.



Cost-Effective Solution: Offers long-term savings by reducing the need for frequent doctor visits and medications.



Seamless Integration: Stylish design that blends effortlessly with everyday wear, ensuring users feel confident and comfortable.



Intelligent Activation: Automatically detects and treats pain, providing personalized relief when needed.

BUSINESS MODEL

VALUE PROPOSITION

Our device provides automated, precise, and non-invasive pain relief, improving patient care and reducing medical staff workload. It **lowers treatment costs by decreasing reliance on medications** and frequent doctor visits, while offering valuable data for better pain management and outcomes.



Revenue Streams

- Device Sales
- Leasing Model
- Subscription Services
- Maintenance and Support Contracts
- Data Analytics Services



Target Market

- Hospitals
- Pain Management Clinics
- Physical Therapy Centers
- Sports Medicine Clinics
- Elder Care Facilities



Marketing and Sales Strategy

- Educational Campaigns: Webinars, workshops.
- Thought Leadership: Medical journals, industry panels.
- Partnerships and Endorsements



Key Partnerships

- Healthcare Providers: Hospitals, clinics.
- Technology Partners: AI, sensor manufacturing.
- Research Institutions

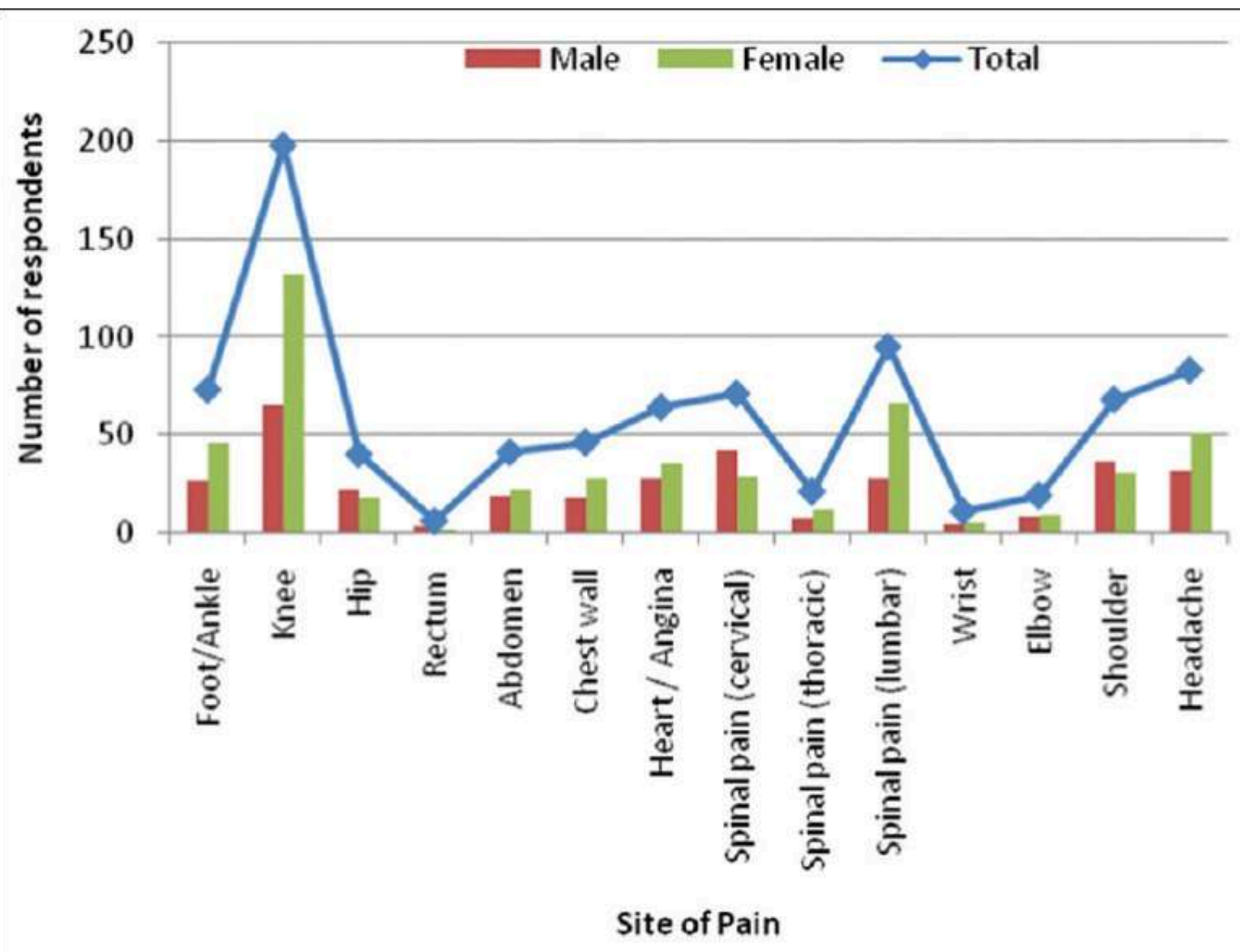
OTHER KEY ASPECTS: - ACCOUNT MANAGEMENT -CUSTOMER SUPPORT -FEEDBACKS

SIZE OF MARKET OPPURTUNITY



The Prevalence of Chronic Pain among Adults in India

This figure shows that site of pain is comparatively very higher in knees based on the data.



In India, **68.2% of people** suffer from acute joint pain, particularly in the knee. Our primary customers include the **elderly, arthritis patients, and those with joint pain**. Additionally, health sectors, medical clinics, and related industries will contribute to market growth. Artiflex offers a stylish, non-invasive solution that combines **smart diagnostics** with Low-Level Laser Therapy (LLLT) for effective pain management, providing convenience and **targeted relief**.

Age groups	Total (n = 836)	Male (n = 245)	Female (n = 591)
18-40	243	68	175
40-60	274	80	194
60-80	319	97	222

Reference: Saxena AK, Jain PN, Bhatnagar S. The Prevalence of Chronic Pain among Adults in India. Indian J Palliat Care. 2018 Oct-Dec;24(4):472-477. doi: 10.4103/IJPC.IJPC_141_18. PMID: 30410260; PMCID: PMC6199848.

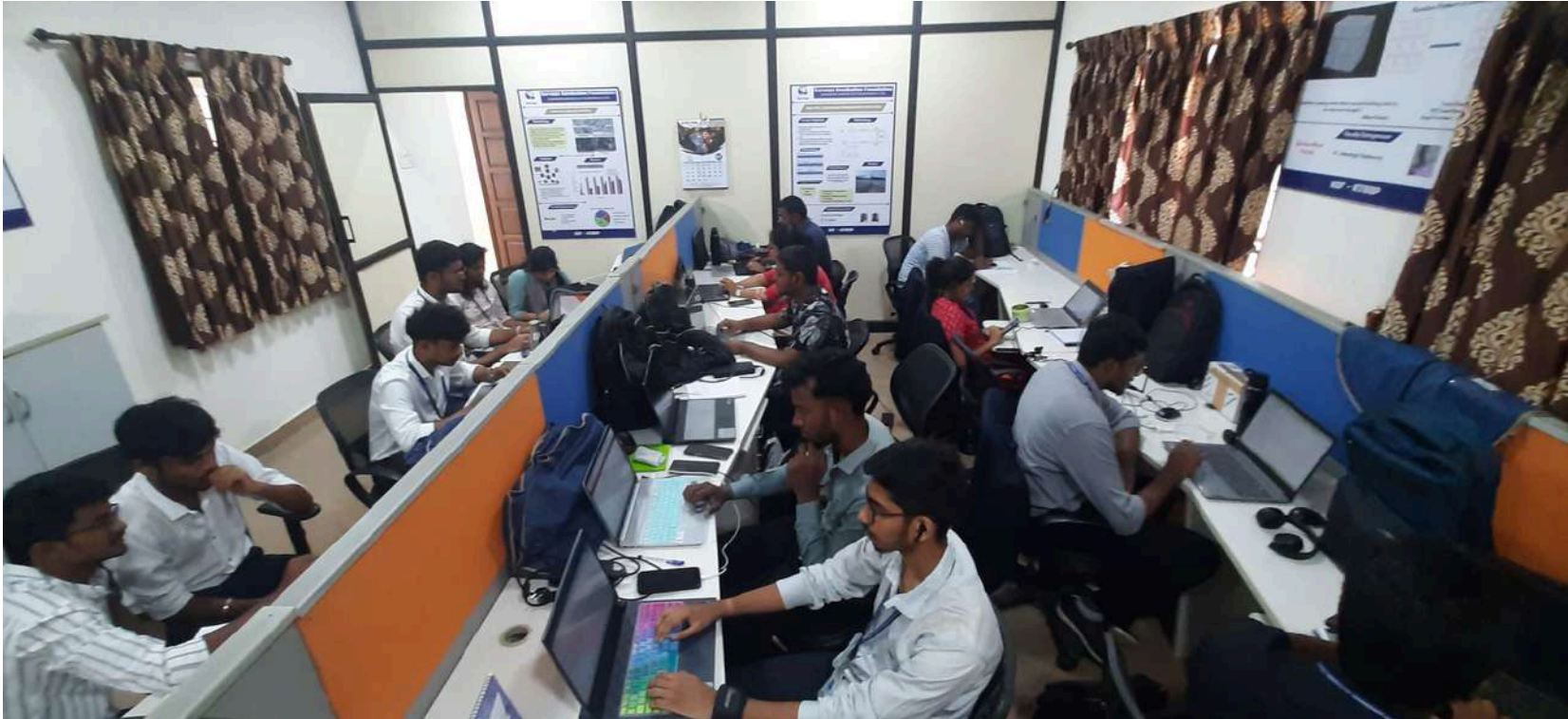
SIZE OF MARKET OPPURTUNITY

Based on the data from Saxena et al., and assuming the cost of Artiflex is ₹61,000:

In India, there are approximately 68.2% of adults suffering from chronic pain, equating to around **640 million potential customers**. If each customer buys our product at ₹61,000, this translates into a market potential of **₹39,040 billion per year**. In year 3, we plan to expand to the US and Canada, where the market size is approximately **100 million potential customers**. This equates to an additional **market opportunity of ₹6,100 billion (100 million x ₹61,000)***.

*- This is the overall market but it will highly vary according to the **purchasing power** and other variables. Hence a in-house **Market Study** is required

CURRENT TRACTION



STUDENT INCUBATES CENTER - **KTBIIP**



DR. H. VICTOR DU JOHN
ASSISTANT PROFESSOR, DEPARTMENT OF ECE,
KARUNYA DEEMED UNIVERSITY



"I have been suffering from acute joint pain for the past 5-7 years. The concept of the automated pain relief device is truly innovative. I love the idea of having consistent and effective pain relief at my fingertips. It's exciting to think about how this device can improve daily comfort and quality of life."





COMPETITIVE LANDSCAPE

DIRECT COMPETITORS

- **TENS (Transcutaneous Electrical Nerve Stimulation) Units:** Use electrical impulses to provide pain relief
- **PENS (Percutaneous Electrical Nerve Stimulation) Units:** Similar to TENS but involves needles to deliver electrical impulses closer to nerve endings.
- **Quell Wearable Pain Relief Technology:** A device that uses nerve stimulation to provide pain relief.
- **ActiPatch:** A wearable device that uses electromagnetic fields to reduce pain and inflammation. Provides continuous pain relief through non-invasive means.
- **NeuroMetrix:** Develops wearable neurostimulation devices for chronic pain management.

INDIRECT COMPETITORS

- **Pain Medications:** Opioids, NSAIDs, and other pharmaceuticals are the traditional approach to pain management.
- **Physical Therapy and Chiropractic Care:** Non-invasive treatments that include exercises, manual therapy, and other techniques to alleviate pain and improve mobility.

DIFFERENTIATION SUMMARY

Our product stands out due to its **unique combination of advanced pain detection through sensors**, AI-driven analysis and decision-making, automated and precise laser therapy, **non-invasive nature**, and comprehensive integration into a **single, user-friendly device**. These features collectively provide a highly effective, safe, and convenient solution for pain management, setting it apart from both direct and indirect competitors in the market.

FINANCIALS CURRENT AND PROJECTIONS

PRIMARY EXPENSES				
RAW MATERIAL EXPENSES				
SN NO	COMPONENTS	MODEL NAME	QUANTIT	COST
1	Laser Diode	ROHM RLD82NZJ1-00A	10	24,321.10/-
2	Pressure Sensor	Piezoelectric Pressure transducer	1	2,794.00/-
3	Thermocouple	type J	1	760.65/-
4	Galvanic Skin Response Sensor	101020052LM324	1	904.70/-
5	Micro controller	Arduino nano	1	356.00/-
6	Lithium Battery	EVEL91BP2	2	469.00/-
7	fabric material	neoprene	1	4,343.00/-
8	Thermal pad	APT2560	3	1,287.00/-
9	Wires	15m in length	1	315.00/-
TOTAL EXPENSES:				35,550.45

***PRICES ARE SUBJECT TO DECREASE ONCE MASS-PRODUCTION STARTS AS MATERIALS AND PROCESSES WILL BECOME MORE COST EFFECTIVE**

COMPANY EXPENSES	
Rental Expenses	Rent cost
Workspace	10,000/-
GST	
MEDICAL DEVICE	18%
ARTIFLEX SINGLE PRODUCT(TAX)	4,581/-
THE COST OF PRODUCT:	
	61,000/-
EXPECTED COST OF PRODUCT	
TERMS (In years)	Expected cost
1 year	3,660,000/-
2 year	7,320,000/-
3 year	10,980,000/-
EXPECTED PROFIT AFTER THREE YEARS:	
	10,80,000/-
REVENUE PER TRANSACTION:	
	21,000/-

FINANCIALS CURRENT AND PROJECTIONS

Capital Expenditure (CAPEX)

1. Research and Development (R&D):

- Initial prototype development.
- Acquiring laser diodes and smart sensors.
- Cost: ₹20 lakhs

2. Manufacturing Setup:

- Equipment and machinery for production.
- Establishing a production line.
- Cost: ₹50 lakhs

3. Intellectual Property:

- Patents, trademarks, and legal fees.
- Cost: ₹10 lakhs

4. Office and Facilities:

- Office space, labs, and storage facilities.
- Cost: ₹10 lakhs

5. Marketing and Launch:

- Initial marketing campaigns and launch events.
- Cost: ₹15 lakhs

Total CAPEX: ₹105 lakhs

Operational Expenditure (OPEX)

1. Salaries and Wages:

- Employees' salaries (engineers, marketing staff, etc.)
- Monthly Cost: ₹3 lakhs

2. Production Costs:

- Raw materials and manufacturing expenses.
- Monthly Cost: ₹2 lakhs

3. Marketing and Sales:

- Ongoing marketing campaigns and sales activities.
- Monthly Cost: ₹1 lakh

4. Maintenance and Utilities:

- Maintenance of equipment and facilities.
- Monthly Cost: ₹50,000

5. Research and Development (R&D):

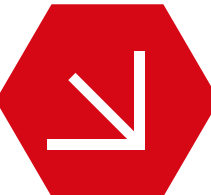
- Continuous product improvement and innovation.
- Monthly Cost: ₹1 lakh

Total Monthly OPEX: ₹7.5 lakh

***THIS IS WHAT WE PROJECT THAT WILL HAPPEN IN THE NEXT 3 YEARS AS WE GET ENOUGH INVESTMENTS**

CURRENT EQUITY STRUCTURE

shareholder	Role	Proposed Investment (₹)	Equity (%)	Notes
Regulla Mallika Priya Harshini	FOUNDER & CEO	20,000	30%	Oversees the whole company, responsible for the decisions made in Company.
MOHAMMED SUHAIL	MANAGING DIRECTOR & CTO	20,000	30%	Oversees the day-to-day activities of the company and lead researcher.
ABHIJAYE	CFO	20,000	20%	Take cares of the finances and responsible for the procurement of the materials needed.
ARIES NATHYA	CMO	20,000	20%	Binds together the company and outsources the required human resources.
KARUNYA UNIVERSITY	INVESTOR	1,20,000 (NOT CONFIRMED)	YET TO BE DECIDED	Discussions Under way.
Total	-	2,000,000	100%	-



We are currently seeking additional funding to accelerate the development and market expansion of Artiflex. This investment will enable us to enhance our product features, scale production, and execute our go-to-market strategy more effectively.

Current investment - **Rs.10,000** (For Workspace, R&D, Prototyping)



FUNDING NEEDS, USE OF FUNDS & PROPOSED VALUATION

Funding Requirements:

- Amount to Raise: ₹90 lakhs
- **Planned Usage:**
 - R&D and Product Enhancement: ₹20 lakhs
 - Manufacturing and Production Scaling: ₹50 lakhs
 - Marketing and Sales Expansion: ₹15 lakhs
 - Operational Costs: ₹5 lakhs

Duration and Achievements:

- Duration: 12 months
- Achievements:
 - Customer Base: Reach 10,000 customers.
 - Revenue Generation: Achieve ₹610 lakhs in revenue.

Follow-on Capital:

- Future Funding Needs: Series A round of ₹200 lakhs.

Valuation:

- Proposed Valuation for this Round: ₹450 lakhs

Overall Goal:

Utilize the funds to enhance product development, scale production, increase market presence, and streamline operations, aiming to reach 10,000 customers and generate ₹610 lakhs in revenue within 12 months.

***This is just a vague estimate, when the preliminary investment comes in, detailed report will be created**



EXIT OPTIONS

1. Acquisition:

- **Potential Buyers:**

- Larger medical device companies looking to expand their product portfolio.
- Healthcare technology firms interested in integrating advanced knee pain relief solutions.

- **Examples of Exits:**

- Smith & Nephew acquired Blue Belt Technologies, a robotics-assisted surgery firm, to enhance their orthopedics division.

2. Strategic Partnerships:

- **Potential Partners:**

- Major healthcare providers and hospitals that may integrate our technology into their treatment options.

- **Examples of Exits:**

- Medtronic's acquisition of Mazor Robotics for its spine surgery guidance systems.

3. Initial Public Offering (IPO):

- **Considerations:**

- If the company achieves significant market penetration and revenue growth, we may consider going public.

- **Examples of Exits:**

- Fitbit's IPO in the wearable technology space, leading to a successful exit for early investors.



Thank You



for attention



Our Phone
+91 9488436386



More Information
artiflexpro@gmail.com



Our Website
artiflexindia.my.canva.site



Artiflex
Light up your knees

