INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL

Institute Name:
Malla Reddy College of Engineering for women

Title of the Innovation/Prototype:
AI-ENABLED SMART SYSTEM FOR CALORIES BURN PREDICTION

Team Lead Name:	Team Lead Email:	Team Lead Phone:	Team Lead Gender:
THOTA SATHWIKA	sathwikathota2005@gmail.com	7075583955	Female

Website (if any):
null

Startup/Venture Registered as:
Not Yet Registered as an entity

Does your Startup/Venture Recognized by DPIIT, Startup India?:
No

Name a Key Innovation which is Core to the Startup /Venture:
A key innovation at the core of the startup"AI-ENABLED SMART SYSTEM FOR CALORIES BURN PREDICTION"

Year of Started Receiving Pre-incubation/IncubationSupport for the Development of Innovation-Startup from the Institute (FY):	The Key Innovation which is Core to your Startup /Venture was Developed as:	Choose the Type of Innovation:	TRL LEVEL:
2024-25	Academic Requirement/Study Project	Service,Business/Management Innovation	4

The Sector/Domain of Focus of the Innovation/Startup / Venture:
Healthcare & Biomedical devices.,

Define the problem and its relevance to today's market / sociaty / industry need:
The startup's innovative solution in calories burn prediction addresses the increasing demand for personalized health and fitness tracking. By leveraging data and advanced algorithms, it provides individuals with accurate predictions of calories burned during various activities. The solution is particularly relevant to health-conscious consumers, fitness enthusiasts, and people managing weight or health conditions. It solves the problem of vague or generalized calorie burn estimates in fitness apps, offering a more tailored approach for users to optimize their workouts, improve health outcomes, and achieve fitness goals, thereby enhancing the effectiveness of their exercise routines.

Describe the Solution / Proposed / Developed:

Explain the uniqueness and distinctive features of the (product / process / service) solution:

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

Is there any IP or Patentable Component associated with the Solution?:
No

Did the venture/startup receive any innovation grant from the Institute?
No

Did the venture/startup receive any innovation grant from any external sources, so far?
No

Did the venture/startup raise any Angel/Venture Capital Investment so far?
No

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Are there any recognitions/awards received by the venture/startup for the innovation in National/International Competitions?:
No

Upload the Audited copy of the financial Statement clearly indicating the FY and Annual turnover amount of Rs. 50 Lakhs or above:
No

Define the Problem – Solution fit achieved/to be achieved by the Startup: Briefly explain the relevance of the innovative solutions are being offered by the startup and what/whose problem (Industry/Society/Market) these are solving:
The startup's innovative solution in calories burn prediction addresses the increasing demand for personalized health and fitness tracking. By leveraging data and advanced algorithms, it provides individuals with accurate predictions of calories burned during various activities. The solution is particularly relevant to health-conscious consumers, fitness enthusiasts, and people managing weight or health conditions. It solves the problem of vague or generalized calorie burn estimates in fitness apps, offering a more tailored approach for users to optimize their workouts, improve health outcomes, and achieve fitness goals, thereby enhancing the effectiveness of their exercise routines.

Define the Product-Market fit achieved/ to be achieved by the Startup: Briefly explain the readiness levels (Technology Readiness Level and Manufacturing Readiness Level) of innovations/solutions offered by the startup to meet the customer need/requirement.
The startup has achieved a high Technology Readiness Level (TRL), with its calories burn prediction algorithm being validated through real-world testing and user feedback. The solution is integrated into user-friendly apps, offering accurate, data-driven predictions for diverse activities. The Manufacturing Readiness Level (MRL) is also strong, as the technology has been scaled for deployment across various platforms and devices. With a refined and tested product, the startup is poised to meet the growing market demand for personalized fitness solutions. The next step is continuous refinement of the algorithm and expansion of features to further enhance user experience and satisfaction

Detail the potential market size and target customers/segment (Total Available Market -TAM, Serviceable Available Market - SAM, Serviceable Obtainable Market - SOM):
The Total Available Market (TAM) for calories burn prediction is vast, encompassing the global health and fitness industry, valued at over $100 billion. The Serviceable Available Market (SAM) focuses on fitness enthusiasts, health-conscious individuals, and those managing weight or chronic conditions, representing a $30 billion market. The Serviceable Obtainable Market (SOM) targets users of fitness apps, wearables, and health platforms, a rapidly growing segment expected to reach $5 billion. The startup's solution appeals to a broad demographic, including consumers seeking personalized fitness data, health professionals, and fitness app developers, positioning it for strong growth within this market.

Detail the Business fit achieved/ to be achieved by the Startup: Briefly explain the business model readiness level of innovations to be commercialized. Business Tractions Achieved for the innovation if any, briefly explain the customer tractions achieved for the innovations or solutions offered by the Startup as an attempt to commercialization:
The startup has reached a solid business model readiness level, with a subscription-based revenue model for its calorie burn prediction solution. It offers tiered pricing for individual users, fitness professionals, and app developers, ensuring scalability across various customer segments. Early business traction includes partnerships with fitness app developers and integration into wearable devices. Customer traction has been achieved through positive feedback from early adopters, with increasing user engagement and retention rates. The startup has also secured pilot projects with fitness centers, demonstrating its value proposition. Continued efforts will focus on expanding user base forging new strategic partnerships to drive commercialization.

Highlight any competitive advantages such as Intellectual property (IP) or any Unique Selling Proposition (USP) etc. associate with the product/service/business model/startup:
The startup's competitive advantage lies in its proprietary algorithm for accurate calorie burn prediction, developed through extensive data analysis and machine learning. This unique technology offers more precise, activity-specific estimations compared to generic models in existing fitness apps. Additionally, the integration with wearables and fitness platforms provides a seamless user experience. The startup's intellectual property (IP) is protected through patents on its prediction algorithms and data integration methods, giving it a significant edge in the market. Its USP revolves around personalized, real-time fitness insights that enhance workout efficiency, making it a valuable tool for fitness enthusiasts and health-conscious individuals.

Video URL:
https://www.mediafire.com/file/h9my3d9pf4sa2qe/VID-20250408-WA0005.mp4/file

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Innovation Photograph:
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