Institute Name:
Institute of Aeronautical Engineering

Title of the Innovation/Prototype:
A MACHINE LEARNING MODEL FOR PRODUCT RISK MANAGEMENT

Team Lead Name:	**Team Lead Email:**	**Team Lead Phone:**	**Team Lead Gender:**
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FY of Development:	**Developed as part of:**	**Innovation Type:**	**TRL LEVEL:**
2023-24	Academic Research Assignment/Industry Sponsored Project	Service	1

Theme:
Other Emerging areas Innovation for Start-up,

Define the problem and its relevance to today's market / sociaty / industry need:
This model helps to identify the risk of product manufacturing and marketing.

Describe the Solution / Proposed / Developed:
A machine learning model is a program that can find patterns or make decisions from a previously unseen dataset. For example, in natural language processing, machine learning models can parse and correctly recognize the intent behind previously unheard sentences or combinations of words. This model helps to identify the risk of product manufacturing and marketing.

Explain the uniqueness and distinctive features of the (product / process / service) solution:
Machine learning has the potential to transform product risk management in industrial services. By analyzing large volumes of data and identifying patterns, these technologies can help businesses to identify potential risks and take proactive measures to mitigate those risks.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:
The experiments are conducted using different numbers of convolution layers with varying numbers and sizes of filters. The CNN models are trained on 50% of the dataset and tested on the remaining 50% of the dataset. Our model can achieve better performance than traditional ML approaches and has achieved an accuracy of 95%.

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

Has the Solution Received any Innovation Grant/Seefund Support?:
No

Are there any Recognitions (National/International) Obtained by the Solution?:
No

*Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:
No

Had the Solution Received any Pre-Incubation/Incubation Support?:
No

Video URL:
https://drive.google.com/file/d/10kBxSN8EvTUtHZdnsw4uDvM--LK55tiR/view?usp=sharing

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