MSME Innovation Scheme
Proposal for the Idea Hackathon:

1.0 **Title of the proposed idea:** READ BOOKS IN VR

2.0 Problem Statement:

In today's generation, books are becoming more and more extinct. No one is interested in attaining knowledge by reading books. No one is reading books in this online world. Young generation is more addicted to games and they don't know the value of books.

3.0 Innovative solution arrived for the problem:

We have introduced an interesting idea **"VR BOOK"**. VR Book is an application for reading digital books in beautiful and immersive VR Environments. Our application will allow you to upload your books, assign a VR Environment and enjoy reading. Thus, it will increase the value of books and will also attract a huge market. If books are given in VR, today's younger generation will experience a real time environment of books thereby will also gain a good knowledge.

4.0 Newness / Uniqueness of the innovation:

Reading books in VR makes everyone to read books. Also reading books in VR makes us to understand more better. The main objective of our project is to provide a real time environment to a book. The user who are reading the book should wear the VR glass or VR box. Once the user wears the VR glass, he/she will be start experiencing the real time environment of the book he is reading.

Features:

- Beautiful reading environments that make us feel like we are really there.
- Support all kind of books.
- Text will also be played as audio.
- Supports most Bluetooth controllers for additional ways to read.

5.0 Concept and Objective:

Our project runs in a text-to-video algorithm. It is such that if we give a text, the video for the text will be automatically generated. The generated video is then converted into VR. Then using text-to-speech API (Google API) the audio will be generated for the text in the book. Using this, once the user connects the API to the book, he will be experiencing a real time environment of the book. Before experiencing the real-world environment, the book should be trained by our model. We will be giving a QR code, scanning the QR and wearing the VR glass will makes the user to experience a real-world environment. It's all about the date we are training. More the number of data, more the accuracy.

6.0 Core Team:

i. **Name: SURYA NARAYANAN CS**
ii. **Stream: ECE**
iii. **Qualification: B.E**

7.0 Mentor Details:

i. **Name: ANAND R**
ii. **Qualification: B.E, M.Tech.**
iii. **Designation: Assistant Professor**
iv. **Experience: 5 years**

8.0 Specify the potential areas of application in industry/market in brief:

Virtual reality in education is being adopted at large for almost all people of all age groups. Virtual reality is a great tool to give people a fresh perspective and real-life experience of the thing they are trying to understand without even being there directly. This can also let the users have the experience of the past events and allow them to have a look at all these by just being from where they are. So, it will be easier for us to scale this as a product.

9.0 Briefly provide the market potential of idea/innovation:

As our product is a unique, cost efficient, and more attracting, market potential of our product will be high. Our software be purchased in the large amount by book companies and all the other companies in the education innovation sector. Since our project is education-based project**,** we mainly focus on education sector-based places to market our product. Our project can be used by all kind of people especially in the education sector. We are in the plan of also approaching schools which will help the students to understand more better.

10.0 Current Development and Status of the idea: Technology Readiness Level (TRL)
(Mention whichever TRL is applicable from the table)

TRL3 - Applied research - First laboratory test completed - Proof-of-Concept.

TRL	Description of the Technology Level	
TRL 0	Idea	Unproven concept, no testing has been performed
TRL 1	Basic research	Principles postulated observed and no experimental proof available.
TRL 2	Technology formulation	Concept and application has been formulated.
TRL 3	Applied research	First laboratory test completed - Proof-of-Concept.
TRL 4	Smale scale prototype	Built in a laboratory environment.
TRL 5	Large scale prototype	Tested in intended environment
TRL 6	Prototype System	Tested in intended environment close to expected performance.
TRL 7	Demonstration system	Operating in operational environment at pre-commercial scale.

TRL 8	First of a kind commercial system: Manufacturing issues solved.	Manufacturing issues solved.
TRL 9	Full commercial application	Technology available for consumers.

11.0 SWOT analysis:

i. **Strengths:** Since our product is essential, cost efficient and easily wearable device, our product will be attracted by a greater number of peoples and a greater number of workplaces like book companies etc.

ii. **Weakness:** Our idea is new and we can't find any references online. It requires a lot of time and commitment and our team is ready to do our whole work on this project and we have started the project.

iii. **Opportunities:** Book companies, news paper companies, Companies in the education innovation sector, schools etc.

iv. **Threats/Challenges:** Collecting data is a major challenge for our team. More the number of data, more is the accuracy of the VR. We have started collecting data. We will complete the process soon.

12.0 Expected time of completion of the project: 6 months

13.0 **Key activities and time schedule:** Development of complete prototype will take around 2 months. As the process involves:

1. Database Creation
2. Training of data
3. Pre-processing
4. Feature Extraction
5. Recognition

And developing the actual product with an attractive design will take around a month after completing the prototype.

14.0 Fund requirement:

Particulars/ items	Amount in Lakh Rs.	Remarks
Technology related expenditure towards machine usage charges etc., Electricity charges, Raw material, Testing/Calibration charges, Other charges essential for development of idea.	**200000**	**We need to buy some of the dependencies and some subscriptions.**
Charges for mentor/hand holding support team	**-**	**-**
Traveling expenses or any other expenses not covered in the above items	**75000**	
Total	**275000**	

15.0 Any awards for this idea / innovation? If so, give the details:

No. We are proposing this idea first time only in the MSME incubation. We have started working on the project.