

Ideafy – AI Based Startup Analysis Platform

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Abstract—There are a lot of startups coming up and this has created a big need for tools that can help figure out if a business idea is good or not at a very early stage. The old ways of doing this like studying if something's possible asking people what they think and talking to experts take a lot of time cost a lot of money and are not easy for new founders to use. This paper is about Ideafy, a platform that uses intelligence to automatically look at business ideas and see if they are good. Ideafy collects information about startups through a website that has steps and then uses a special kind of artificial intelligence called Llama 3.3 70B model via Groq API to make a very detailed report. The report has parts like a summary for important people guesses about money looking at the market understanding competitors checking if a product is good and giving advice on what to do next. The platform is made with technology like React 19 Node.js, Express and MongoDB and it has a special page where users can see their information in graphs and charts. Users can also save their reports as PDF files share them with others make reports and log in securely. When we tried out Ideafy we found that it works fast is easy to use and really helps people make good decisions. This makes Ideafy an useful tool, for people who start businesses, people who invest in businesses and people who manage products.

Index Terms—Startup Validation, Generative AI, Llama 3.3, Groq API, Business Analysis, Full Stack Application, Decision Support System

I. INTRODUCTION

The startup world is really important for ideas and making the economy better. But a lot of startups do not make it because they do not understand their market, they are not good with money. They do not plan well.

Traditional ways of checking if a startup is an idea include:

- Looking at the market
- Checking if it makes sense
- Studying the competition

These ways work. They take a lot of time cost a lot of money and you need to know a lot about the area. So, a lot of startup founders just guess of really looking at the numbers. Lately something called Generative AI has gotten better. Can now help people make decisions. Big language models can look at business information. Give ideas about many things at the same time.

To solve these problems Ideafy is being made as a startup validation platform that uses AI. It can do a lot of things such as:

- Automatically check if a business idea is good
- Make reports that're easy to read
- Show information in a way that's easy to understand
- Make the process of checking a startup much faster from days to just seconds. Ideafy is really focused, on helping startups and startup validation is a part of what Ideafy does.

II. PROCEDURE FOR PAPER SUBMISSION

A. Review Stage

When we work on Ideafy we follow a plan to make sure everything works well. This plan includes

- looking at what we need to do
- designing the system
- building the thing
- testing to make sure it works

Users talk to the system by filling out a simple 4-step form that asks for

- a description of their business idea
- the market they want to sell to
- how they plan to make money
- how they will pay for things. When they want to do it

We check the information users give us and make sure it is correct before sending it to the Ideafy AI model.

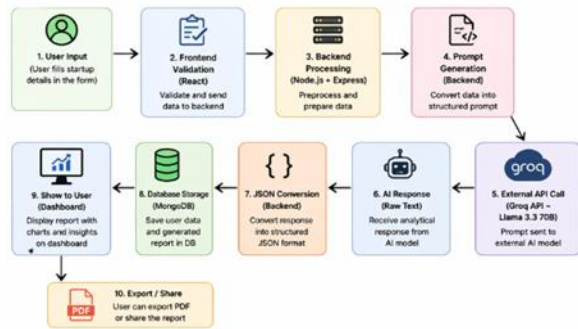


Fig.1.Workflow of Ideafy System

B. Final Stage

After we look at the information the Ideafy system makes a report that has

- an overview of the points
- a look at the money, including how much money the business can make, how much it costs to get a customer how much a customer is worth and how fast the business spends money
- a look at the market and the competition
- a check to see if the product is a good idea
- suggestions for what to do next

We show the report on a special page that users can interact with. They can

- save the report as a PDF file
- share the report with others by sending them a link
- make the report to get new ideas

C. Figures

Fig. 1 Shows what the whole Ideafy system looks like including the parts that users see the parts that do the work the parts that use the Ideafy AI model and the parts that store the information.

Fig. 2 Shows how the information goes from what the user types, to the report.

Fig. 3 Shows what the special page looks like with charts and parts of the report.

III. MATH

Although the system does not directly show equations it includes financial calculations, like:

- Customer Acquisition Cost
- Lifetime Value
- Revenue forecasts

• Burn rate

These numbers are created automatically by the AI model using what you enter and general industry information.

IV. UNITS

The system uses business units like this:

- Currency is, in Indian Rupees or US Dollars depending on what you enter
- Time is shown in months or years
- Percentages are used to show growth and market share. They are written with a percent sign

All values are adjusted to a standard and formatted properly before being shown.

V. HELPFUL HINTS

A. Figures and Tables

The Ideafy dashboard helps users understand things better with:

- Line charts that show how money we think we will make
- Pie charts that show how much of the market we have
- Radar charts that compare us to companies

These charts use Recharts and the numbers change automatically based on data that Artificial Intelligence generates.

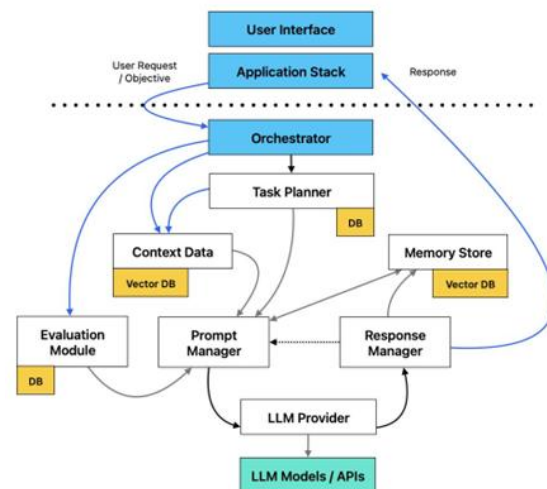


Fig.2.System Architecture of Ideafy Platform

B. References

We list all the tools and frameworks we use in the references section. We do it the way IJIRT says we should.

C. Abbreviations and Acronyms

- Artificial Intelligence is abbreviated as AI
- JSON Web Token is abbreviated as JWT
- Customer Acquisition Cost is abbreviated as CAC
- Lifetime Value is abbreviated as LTV

D. Equations

We use business math to figure out our financial numbers, inside the Ideafy dashboard even though we do not show the actual math equations. The Ideafy dashboard uses these numbers that are based on standard business formulas to help users understand Artificial Intelligence and Lifetime Value and Customer Acquisition Cost.



Fig. 3. Ideafy Dashboard

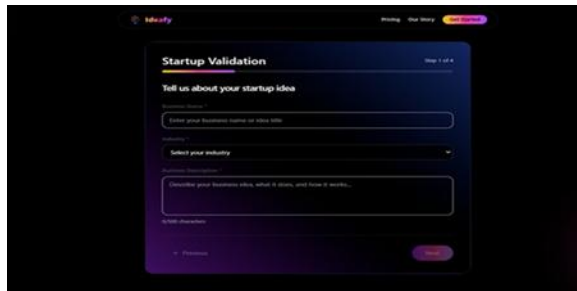


Fig. 4. Ideafy Form Page

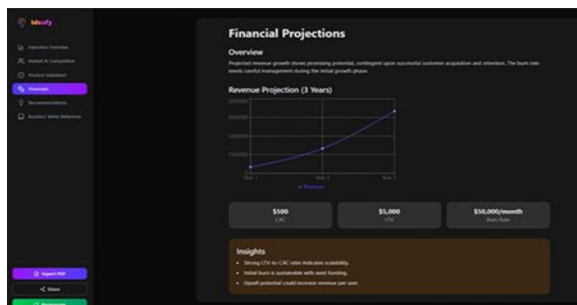


Fig. 5. Data Visualization Dashboard – Revenue Projection, Market Share, and Competitor Analysis

VI. PUBLICATIONPRINCIPLES

The Ideafy system contributes to research by:

- Automating startup validation using generative AI
- Providing structured, real-time business insights
- Reducing dependency on manual feasibility analysis
- Improving accessibility for non-expert users

The system is scalable and can be extended with real-time data sources and advanced analytics.

VII. RESULTS AND DISCUSSION

A. Functional Results

The system successfully:

- Accepts structured inputs
- Generates AI-based reports
- Displays insights visually
- Supports export and sharing

B. Performance Analysis

- Average response time: 1-3 seconds
- Efficient handling of multiple requests
- Fast AI inference using Groq API

C. Usability Evaluation

The system provides:

- Easy navigation
- Clear structured reports
- Mobile-responsive design

D. Discussion

Ideafy significantly improves startup validation by:

- Reducing analysis time
- Providing structured insights
- Improving decision-making

E. Limitation:

- Output depends on input quality
- No real-time external market data yet

VIII. CONCLUSION

Ideafy is a startup validation platform that uses generative AI to automate business analysis

It provides:

- Real-time insights
- Structured reports
- Interactive visualizations

The system improves accessibility and efficiency in startup validation.

Future work includes:

- Real-time market data integration
- Advanced financial modeling
- Investor matchmaking
- Mobile application development

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