
CAPSTONE PROJECT

DIGITAL FINANCE ADVISOR

Presented By : Pavan Narayan Ingale
Student name : Pavan Narayan Ingale
College Name & Department : MIT AOE & ENTC

OUTLINE

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
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- IBM Certifications

PROBLEM STATEMENT

In today's data-driven world, **researchers, students, and professionals** face increasing difficulty in staying current with the **exponential growth of academic publications, technical papers, research datasets, and evolving domain knowledge**. The traditional approach of manually searching, reading, and synthesizing literature across various fields is **tedious, time-consuming, and inefficient**, often leading to overlooked insights or duplication of effort..

Proposed Solution:

By integrating **domain-specific data sources** with a language model's generative capability, this AI agent will significantly improve research efficiency, enable better knowledge discovery, and support innovation across disciplines..

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model

IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model

WOW FACTORS

- This AI-powered research agent is designed to **drastically reduce the time** required for comprehensive literature reviews, **enhance the depth and quality** of research insights, and **support early-stage researchers** in identifying meaningful directions for their work. By transforming how knowledge is accessed and synthesized, the agent also encourages **interdisciplinary collaboration**, making academic research more **accessible, personalized, and actionable**.

END USERS

- New Users
- Knowledge seekers
- Students
- Retired civilians

RESULTS

Agent preview



DigiAdvisor 11:57 PM

Welcome to DigiAdvisor

Aims to develop an intelligent virtual assistant that enhances financial awareness



Sample questions

How do I budget my monthly expenses



What is 50-30-20 budgeting rule ?



Type something...



RESULTS

Agent preview

PI You: 11:20 PM

How do I budget my monthly expenses

DigiAdvisor 11:20 PM

Here are some tips for budgeting your monthly expenses:

1. Estimate your monthly income and identify your monthly expenses.
2. Compare your income and expenses to see where you can make adjustments.
3. Create a budget plan that allocates 50% of your income towards needs, 30% towards wants, and 20% towards savings and debt paydown.
4. Be explicit about your goals and include them as line items in your budget.
5. Use a budgeting tool or spreadsheet to track your expenses and stay on top of your finances.
6. Consider packing your lunch instead of eating out every day to save money.
7. Give yourself a daily/weekly/monthly budget to ensure you're staying within your means.
8. Create a zero-based budget before the month begins and budget as a team if you're married or have a partner.
9. Prioritize the essentials and overestimate your expenses to avoid overspending.
10. Use a budget planner or online tool to help you create and stick to your budget.

Remember, budgeting is all about making a plan for how you want to use your money and sticking to it. By following these tips, you can create a budget that works for you and helps you achieve your

Type something...



RESULTS

Agent preview

or have a partner.

9. Prioritize the essentials and overestimate your expenses to avoid overspending.
10. Use a budget planner or online tool to help you create and stick to your budget.

Remember, budgeting is all about making a plan for how you want to use your money and sticking to it. By following these tips, you can create a budget that works for you and helps you achieve your financial goals.

► How did I get this answer?

PI You: 11:22 PM

What is 50-30-20 budgeting rule ?

DigiAdvisor 11:22 PM

The 50-30-20 budgeting rule is a popular budgeting framework that divides your net income into three categories: 50% for needs, 30% for wants, and 20% for savings and debt repayment. This rule helps individuals allocate their income effectively and make conscious financial decisions. It's essential to note that this rule is not a one-size-fits-all solution and may need to be adjusted based on individual circumstances.

► How did I get this answer?



Type something...



RESULTS

Deployed AI Agent

The screenshot displays the IBM watsonx DigiAdvisor interface. At the top, the header includes the IBM watsonx logo, an 'Upgrade' button, a help icon, a notification bell, and user account information for 'Pavan Ingale's Account' in 'Dallas'. Below the header, a breadcrumb trail shows 'Deployment spaces / FinAdvice / DigiAdvisor /'. The main section is titled 'DigiAdvisor' with a green checkmark indicating it is 'Deployed' and 'Online'. There are three tabs: 'API reference', 'Test', and 'Preview', with 'Preview' being the active tab. A 'New chat' button is located on the right. The chat history shows a user message at 12:01 AM asking 'How do I budget my monthly expenses'. The DigiAdvisor response at 12:03 AM provides a list of seven tips for budgeting. At the bottom, there is a text input field with the placeholder 'Type something...' and a send button.

IBM watsonx Upgrade ⓘ 🔔 Pavan Ingale's Account ▾ Dallas ▾

Deployment spaces / FinAdvice / DigiAdvisor /

DigiAdvisor ✓ Deployed Online

API reference Test **Preview**

New chat

P You 12:01 AM
How do I budget my monthly expenses

DigiAdvisor 12:03 AM
Here are some tips for budgeting your monthly expenses:

1. Estimate your monthly income and identify your monthly expenses.
2. Create a budget plan that allocates 50% of your income towards needs, 30% towards wants, and 20% towards savings and debt paydown.
3. Be explicit about your goals and include them as line items in your budget.
4. Use a budgeting tool or spreadsheet to track your expenses and stay on top of your finances.
5. Consider packing your lunch instead of eating out every day to save money.
6. Create a zero-based budget before the month begins and prioritize the essentials.
7. Overestimate your expenses to ensure you have enough money for unexpected costs.

Type something... ➤

CONCLUSION

- The AI Financial Literacy Agent serves as a **trusted digital companion**, guiding users through essential aspects of modern finance—such as **UPI usage, budgeting, safe online practices, and accessing government schemes**.
- It can **answer user queries, summarize financial documents**, and provide **step-by-step guidance** for digital transactions—all in **multiple languages** and adapted to the user's literacy level.
- By **automating financial education** and offering **instant, reliable, and culturally inclusive support**, this agent reduces dependency on in-person assistance and minimizes the risk of fraud..

FUTURE SCOPE

- Multilingual Research Support
- Voice-Activated Research Assistant
- Real-Time Collaboration Features
- Integration with Digital Grievance Redressal
- Integration with Publishing Platforms
- Personalized Financial Planning

IBM CERTIFICATIONS

- Screenshot/ credly certificate(getting started with AI)



Attach your RAG LAB certificate here



Git hub link : <https://github.com/Pavan7089/DIGiFiinance.git>



THANK YOU