

# **Exposure and Field Visits for Problem Identification**

## **TechXcelerate: Solving Business Challenges with Innovation**

*Submitted by*

**Logithkumar K R (7376231CD124)**



**BANNARI AMMAN INSTITUTE OF TECHNOLOGY –  
INSTITUTION'S INNOVATION COUNCIL**

**&**

**Industry Exploration and Collaboration Cell**

**Duration: 27/03/2025 – 01/04/2025**

## **ABOUT THE PROGRAM**

**Event Title: TechXcelerate: Solving Business Challenges with Innovation**

**Duration: 27/03/2025 – 01/04/2025**

The event aims to bridge the gap between real-world business challenges and innovative technological solutions. Participants will engage with business owners, professionals, and entrepreneurs to identify critical operational pain points. Through detailed research and analysis, they will propose cutting-edge tech-driven solutions that enhance efficiency, reduce costs, and streamline processes. This initiative not only fosters problem-solving skills but also sparks potential startup ideas, paving the way for impactful innovations in various industries.

## **ABOUT THE STUDENT**

<b>S.NO</b>	<b>Description</b>	<b>Details</b>
1.	Name of the student	<b>K R LOGITHKUMAR</b>
2.	Register Number	<b>7376231cd123</b>
3.	Department	<b>CSD</b>
4.	Year of study	<b>II</b>
5.	Contact Number	<b>9443696189</b>
6.	Mail id	<b>logithkumar.cd23@bitsathy.ac.in</b>
7.	Location	<b>Erode-11</b>

## **Survey Questions to Explore**

1. Do they struggle to manage tasks when overloaded with work? Do they need assistance, and what specific challenges do they face?
2. Are there human resource issues (e.g., scheduling, payroll, attendance) that could be automated with mobile apps or small software tools? Which tasks could be automated?
3. Could they enhance their business with branding or marketing (e.g., website, digital marketing, social media)? What opportunities exist?
4. Are there ways to reduce losses (e.g., electrical energy savings, minimizing resource wastage)? What could be improved?
5. Do they face supply chain challenges (e.g., order tracking, customer tracking, delivery delays)? What's the scope for tech solutions?
6. Are there stock management issues (e.g., tracking old stock, avoiding overstock)? How can technology help?
7. Could Generative AI predict or forecast needs (e.g., inventory, sales trends, customer demand)? What benefits could it bring?
8. Do they lose time on repetitive manual tasks (e.g., data entry, invoicing)? What tools could streamline these?
9. Are there communication gaps with clients, suppliers, or teams? How could tech improve this?
10. Do they struggle with financial tracking (e.g., expenses, profits)? What software could simplify this?

## Details of the Person details – 1

S.NO	Details	Remarks
1.	Name of the expert	VETRIVEL RAJA M
2.	Designation	Manager
3.	Industry/Company type	Vehicle sales Company
4.	Industry/Company name	VETRIVEL RAJA CARS
5.	Industry/Company location	THIRU.VI.KA. ROAD ,MUNICIPAL COLONY , VEERAPPAN CHATRAM, Erode, 638004
6.	Experience (in years)	7
7.	Contact Number	9655631000
8.	E mail iD	<a href="mailto:vcarserode@gmail.com">vcarserode@gmail.com</a>

9.	Domain expertise	Technical
10.	Educational Qualifications	BE in sri vasavi colledge
11.	Website link	NA
12.	Social Media Profile link 1	<a href="https://www.instagram.com/vr_cars_erode?igsh=aW11dGFjZGpsajZ4">https://www.instagram.com/vr_cars_erode?igsh=aW11dGFjZGpsajZ4</a>
13.	Social Media Profile link 2	NA
14.	Social Media Profile link 3	NA
15.	Social Media Profile link 4	NA
16.	Survey Question No 1	Yes, they often struggle when overloaded. In a car sales company, the team can face challenges such as managing customer leads, coordinating test drives, processing paperwork, and keeping up with follow-ups. They would benefit from streamlined workflows and digital tools to help prioritize tasks and reduce administrative burdens.
17.	Survey Question No 2	Their attendance management of employees may be automated along with their customer maintenance department
18.	Survey Question No 3	Their business can be enhanced with a website about their site which can be helpful for customers who are unaware of their current stock
19.	Survey Question No 4	Their water management is not very good they spend a lot of money to buy water to clean their cars. A water supply pipe line from the municipal may reduce their cost along with good management

20.	Survey Question No 5	They face issues with their customer tracking and updating the customer and about the current stock. A custom application can be used to send details regularly with automated technology
21.	Survey Question No 6	Their stocks are registers in paper work in the register which is manually entered by an employee. So it is not feasible a application to keep check of their stock will be use ful
22.	Survey Question No 7	Gen ai can be used in the their desicion to buy the which types of cars
23.	Survey Question No 8	Yes they loose work time in keeping track of attendance for every day
24.	Survey Question No 9	The communication with the employees are done by whatsapp group which is not feasible a custom app to keep track and communicate with he client can help
25.	Survey Question No 10	They did not wish to share how they store their financial details
26.	Any other	Nil
27.	Date of the survey taken	02.04.2025

## Geotag Photos taken with Person 1





## Details of the Person details – 2

S.NO	Details	Remarks
1.	Name of the expert	MANI N
2.	Designation	Manager
3.	Industry/Company type	E-service Centre
4.	Industry/Company name	Mani net centre
5.	Industry/Company location	9P27+2HV, Gandhiji St, Municipal Colony, Muncipal Colony, Veerappanchatram, Erode, Tamil Nadu 638004
6.	Experience (in years)	10
7.	Contact Number	90954 63951
8.	E mail iD	<a href="mailto:maninetworld2018@gmail.com">maninetworld2018@gmail.com</a>

9.	Domain expertise	Technical
10.	Educational Qualifications	BE in sengunthar colledge of engineering
11.	Website link	NA
12.	Social Media Profile link 1	NA
13.	Social Media Profile link 2	NA
14.	Social Media Profile link 3	NA
15.	Social Media Profile link 4	NA
16.	Survey Question No 1	Many people struggle to manage tasks when overloaded with work, especially in fast-paced environments. When the workload becomes too heavy, it can lead to stress, missed deadlines, and difficulty maintaining work-life balance. Some may need assistance in prioritizing tasks, managing time effectively, or using productivity tools to stay organized. The specific challenges they face can vary, but common issues include handling multiple responsibilities at once, dealing with unexpected problems, and struggling to maintain focus under pressure. Support from colleagues, better task management strategies, and clear communication can help improve productivity and reduce stress.
17.	Survey Question No 2	Yes, several HR tasks can be automated using mobile apps or small software tools to improve efficiency. Scheduling and shift management apps can assign work and send reminders, while payroll software can calculate salaries and generate payslips automatically. Attendance tracking can be done via biometrics or GPS, reducing manual errors. Leave requests and approvals can be managed through an app, making the process faster. Additionally, performance tracking and expense reimbursements can be automated, saving time and ensuring accuracy.

18.	Survey Question No 3	Yes, businesses can greatly enhance their growth with branding and marketing strategies like websites, digital marketing, and social media. A professional website builds credibility and attracts customers, while digital marketing (SEO, ads, email campaigns) helps reach a larger audience. Social media platforms provide direct engagement with customers, boosting brand awareness and loyalty. Opportunities include influencer collaborations, targeted advertising, and content marketing to showcase expertise. Investing in branding and marketing can increase visibility, customer trust, and overall business success.
19.	Survey Question No 4	Yes, businesses can reduce losses by optimizing resource usage and minimizing waste. Implementing energy-efficient systems, such as LED lighting and smart power management, can cut electricity costs. Reducing material wastage through better inventory control and recycling programs improves sustainability. Automating processes can enhance efficiency and reduce human errors that lead to losses. Regular maintenance of equipment prevents breakdowns and costly repairs. Overall, adopting cost-saving strategies and sustainable practices can improve profitability and long-term business success.
20.	Survey Question No 5	Yes, many businesses face supply chain challenges like order tracking issues, customer management difficulties, and delivery delays. Late shipments, inventory shortages, and miscommunication can lead to inefficiencies. Tech solutions like real-time order tracking, automated inventory management, and AI-driven demand forecasting can help streamline operations. Customer relationship management (CRM) systems can improve communication and service. Additionally, using GPS and route optimization for deliveries can reduce delays. Implementing these solutions enhances efficiency, reduces errors, and improves overall customer satisfaction.
21.	Survey Question No 6	yes stock management can be done with the latest tech a custom application can solve that problem
22.	Survey Question No 7	Yes, Generative AI can predict and forecast needs like inventory levels, sales trends, and customer demand by analyzing past data and market patterns. It can help businesses optimize stock management, reduce wastage, and prevent shortages by accurately forecasting demand. AI-driven sales predictions allow companies to adjust pricing, plan promotions, and improve customer satisfaction. Additionally, it can personalize marketing strategies by predicting customer preferences. Overall, using Generative AI enhances decision-making, increases efficiency, and boosts profitability.
23.	Survey Question No 8	Yes, businesses often lose time on repetitive manual tasks like data entry, invoicing, and report generation, which can slow productivity. Automation tools like Robotic Process Automation (RPA), AI-powered chatbots, and cloud-based accounting software can streamline these tasks. For invoicing, tools like QuickBooks or Zoho Invoice can automate billing and payments. Data entry automation using OCR (Optical Character Recognition) and AI reduces errors and speeds up processing. By implementing these tools, businesses can save time, reduce human errors, and focus on more strategic tasks.

24.	Survey Question No 9	Yes, communication gaps with clients, suppliers, or teams can lead to delays, misunderstandings, and inefficiencies. Technology can improve this through collaboration tools like Slack, Microsoft Teams, or Zoom for real-time messaging and meetings. CRM software (e.g., Salesforce, HubSpot) helps businesses track customer interactions and maintain strong relationships. Supply chain management platforms enhance coordination with suppliers by providing real-time updates. Automated chatbots and email systems ensure timely responses. Overall, digital communication tools enhance efficiency, reduce errors, and improve business relationships.
25.	Survey Question No 10	Yes, many businesses struggle with financial tracking, including managing expenses, monitoring profits, and maintaining accurate records. Accounting software like QuickBooks, Zoho Books, or Xero can automate bookkeeping, generate financial reports, and track expenses in real time. Expense management tools like Expensify help businesses monitor spending and reimbursements efficiently. AI-powered analytics can also provide insights into cash flow trends and profitability. Using such software reduces errors, saves time, and improves financial decision-making.
26.	Any other	Nil
27.	Date of the survey taken	02.04.2025

## Geotag Photos taken with Person 2



## Details of the Person details – 3

S.NO	Details	Remarks
1.	Name of the expert	Gowtham
2.	Designation	Founder And Ceo

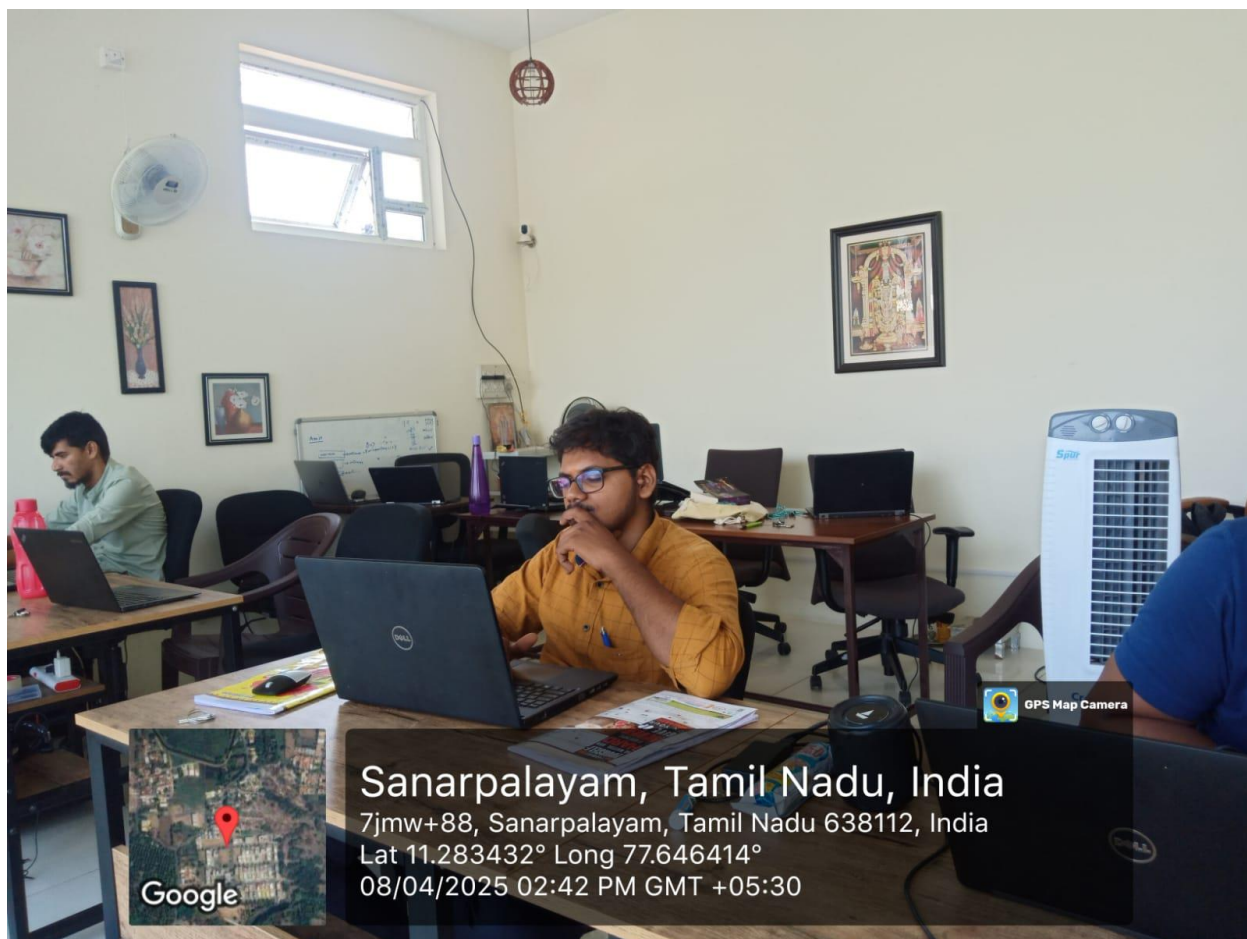
3.	Industry/Company type	Web application development company
4.	Industry/Company name	Web Design Magics
5.	Industry/Company location	Bangalore and Erode
6.	Experience (in years)	10
7.	Contact Number	99 45 11 44 23
8.	E mail iD	<a href="mailto:webdesign.magics@gmail.com">webdesign.magics@gmail.com</a>
9.	Domain expertise	Technical
10.	Educational Qualifications	BE
11.	Website link	<a href="https://www.webdesignmagics.com/index.html">https://www.webdesignmagics.com/index.html</a>
12.	Social Media Profile link 1	<a href="https://www.facebook.com/DesignMagics">https://www.facebook.com/DesignMagics</a>
13.	Social Media Profile link 2	<a href="https://x.com/WebDesignMagics">https://x.com/WebDesignMagics</a>

14.	Social Media Profile link 3	NA
15.	Social Media Profile link 4	NA
16.	Survey Question No 1	Yes, they struggle to manage tasks when overloaded with work. They clearly need additional workforce to help manage the high workload. Specific challenges include delays in follow-ups, stock updates, and paperwork.
17.	Survey Question No 2	No, there aren't any pressing human resource issues that require automation. The current systems for scheduling, payroll, and attendance are effective. Additional mobile apps or software tools are not needed at this time.
18.	Survey Question No 3	They already have a website, but there's more to explore. Content marketing and influencer partnerships offer further growth opportunities.
19.	Survey Question No 4	They can reduce electrical energy they use by shedding their works in certain places in a day there many unused rooms with the air conditioners for only two or more employees
20.	Survey Question No 5	No, they do not face significant supply chain challenges. Order tracking, customer tracking, and delivery are efficient. There is limited scope for tech solutions in this area.
21.	Survey Question No 6	No, they do not have significant stock management issues. Their tracking of old stock and prevention of overstock is efficient. Therefore, the need for technological solutions in this area is minimal.
22.	Survey Question No 7	They haven't used the gen ai in their website so it can be useful to predict the highest demand for the type of ideas.
23.	Survey Question No 8	No they have an excellent management on their data entry with biometrics
24.	Survey Question No 9	yes they communicate with clients manually which takes time and makes it harder

25.	Survey Question No 10	No they keep their finance tracking secure but they did not shore with us
26.	Any other	they need good work force with minima salary they can hire freshers with good technical knowledge but they need to advertise their company in the colledge campus first and integrate with the students with various networks,for that they need a profile to attract colledges with social media posts and posters
27.	Date of the survey taken	02.04.2025

## **Geotag Photos taken with Person 3**





## Problem and Solution - I

### I. Business Challenges Identified (Max 100 words)

VETRIVEL RAJA CARS faces multiple operational inefficiencies, especially in task management, manual stock tracking, employee attendance, customer follow-ups, and communication. The reliance on paper-based records and WhatsApp groups limits productivity. Marketing is

underutilized, with no website presence. Additionally, water usage for car cleaning is costly and unmanaged, and customer engagement lacks automation.

## **II. Examples of Businesses that Faced Similar Challenges (Max 100 words)**

Car dealerships like Truebil and Cars24 overcame similar issues by implementing CRM systems, digital stock management, and branded websites. Small auto retail businesses improved efficiency through mobile apps for staff coordination and marketing tools for lead generation. Even small-scale businesses in Tier-2 cities have transformed operations using cost-effective SaaS platforms and IoT-driven resource monitoring.

## **III. List of Technologies and How They Helped**

- CRM Software (Zoho CRM, Salesforce): Automates customer follow-ups and test drive scheduling.
- Inventory Management Tools (inFlow, Sortly): Tracks stock digitally, reduces errors.
- Attendance Apps (Keka, Zoho People): Automates employee attendance logging.
- Web Development (Wix, WordPress): Improves online presence and builds trust.
- WhatsApp Business API / Custom Chat Apps: Streamlines communication.
- AI Forecasting (T5, GPT, etc.): Assists in demand prediction and stock purchasing.
- IoT Water Flow Meters: Helps monitor and optimize water consumption.

## **IV. Proposed Technological Solutions (Max 150 words)**

To streamline operations, a custom all-in-one mobile/web application is proposed with modules for digital stock tracking, employee attendance, customer engagement, and automated follow-ups. A simple website showcasing current stock with a booking form can boost online visibility. Generative AI models can help predict which car types to stock based on customer interest trends. Installing an IoT-based water monitoring system can drastically reduce cleaning costs. A centralized internal communication tool (integrated chat or Slack alternative) will replace fragmented WhatsApp discussions. These solutions are scalable, feasible for mid-sized dealerships, and can be implemented in phases with minimal training.

## **V. Key Learnings & Reflections**

1. **Personal Insights Gained:**  
Discovered how deeply tech can transform even traditional businesses like car dealerships.
2. **Skills Developed:**  
Developed skills in survey analysis, identifying pain points, and mapping technology to business needs.
3. **Future Scope & Recommendations:**  
Recommend gradual adoption of tech, starting with digital inventory and customer CRM, followed by marketing tools and AI models.

## **VI. Conclusion (Max 100 words)**

The survey revealed significant manual inefficiencies in VETRIVEL RAJA CARS that can be addressed through targeted digital transformation. From inventory tracking to communication and customer engagement, affordable tech solutions can drastically improve productivity and growth. Implementing the proposed solutions can enhance decision-making, reduce operational costs, and open new avenues for business expansion.

## **Problem and Solution - II**

### **I. Business Challenges Identified (Max 100 words)**

Mani Net Centre, an e-service business, faces operational challenges such as repetitive manual work (data entry, invoicing), inefficient HR and attendance management, lack of branding, and unoptimized communication with clients and staff. Financial tracking is not automated, and resource wastage (energy, materials) adds to expenses. The absence of a website or digital marketing limits customer outreach. Additionally, outdated stock and customer management processes hinder productivity. These challenges point toward the need for digitization, automation, and branding solutions.

### **II. Examples of Businesses that Faced Similar Challenges (Max 100 words)**

Similar digital service centers and cyber cafes in semi-urban areas have modernized by adopting tech tools. For example, Digital Seva Kendras and Common Service Centres (CSCs) overcame

inefficiencies through attendance apps, online customer booking, and automated invoicing systems. Small accounting firms and DTP centers improved client communication and task tracking with CRM and cloud software. Branding through Google My Business and social media increased their visibility and helped retain clients.

### **III. List of Technologies and How They Helped**

- Task Management (Trello, Notion, Todoist): Helps prioritize and assign responsibilities efficiently.
- HR Automation (Zoho People, Keka): Automates attendance, payroll, and leave tracking.
- Accounting Tools (Zoho Books, QuickBooks): Streamlines invoicing, expense tracking, and report generation.
- CRM Tools (HubSpot, Zoho CRM): Tracks customer interaction, improves service consistency.
- Digital Marketing Tools (Canva, Mailchimp, Meta Ads): Enhance visibility and branding.
- AI Tools (ChatGPT, Jasper AI): Automate content writing, customer support, and insights generation.
- RPA and OCR Software: Automates data entry, document handling, and reporting.
- Collaboration Tools (Slack, Zoom): Bridges communication gaps with clients and staff.

### **IV. Proposed Technological Solutions (Max 150 words)**

To modernize Mani Net Centre's workflow, a custom dashboard combining task management, CRM, invoicing, and HR features is proposed. A simple website will display services, accept inquiries, and enhance visibility. Attendance and payroll can be automated using mobile HR apps, saving time and reducing errors. Introducing cloud accounting software like Zoho Books will streamline invoicing and expense tracking. Generative AI models can support personalized email replies and marketing content. RPA bots can take over repetitive data entry tasks. Collaboration tools like Slack or Google Workspace will improve internal communication. These cost-effective tools are easy to integrate and scale for future needs.

### **V. Key Learnings & Reflections**

1. **Personal Insights Gained:**  
Learned how essential even small digital upgrades can be in e-service businesses for achieving scalability and efficiency.
2. **Skills Developed:**  
Enhanced understanding of business-tech alignment, client interviewing, and solution mapping.
3. **Future Scope & Recommendations:**  
Recommend building a customer support chatbot, regular social media presence, and onboarding analytics to refine service delivery.

## **VI. Conclusion (Max 100 words)**

The survey of Mani Net Centre revealed a high potential for improvement through digital transformation. Key inefficiencies in manual processes, HR, finance, and marketing can be solved with cost-effective tech tools. By implementing automation, cloud-based services, and digital marketing, the center can improve productivity, reduce errors, and expand its customer base. These solutions offer long-term sustainability and business growth.

## **Problem and Solution - III**

### **I. Business Challenges Identified (Max 100 words)**

Web Design Magics, a web application development firm, struggles with workforce overload, especially during high-demand periods. Key issues include delays in task follow-ups, stock updates, and paperwork. Though internal HR and inventory systems are efficient, the company lacks automated communication tools and underutilizes Generative AI for business forecasting. A need for cost-effective hiring, especially through college partnerships, was highlighted. Current branding is limited to a website and basic social presence, with more potential in content marketing and influencer outreach.

### **II. Examples of Businesses that Faced Similar Challenges (Max 100 words)**

Startups like Freshworks and Zoho once faced similar workforce and branding issues. They overcame them by hiring interns and freshers from engineering campuses through campus drives and offering mentorship in return for affordable talent. Agencies such as

PixelCrayons improved communication by adopting CRM platforms and integrating automation tools for follow-ups. Many small development firms leveraged content marketing and social media branding to attract both clients and job seekers.

### **III. List of Technologies and How They Helped**

Generative AI Tools (ChatGPT, Jasper): For content generation, demand prediction, and idea validation.

CRM Systems (Zoho CRM, HubSpot): Automate client follow-ups and reduce manual communication.

AI Chatbots (Tidio, Drift): Enhance real-time communication on websites.

Campus Hiring Platforms (Superset, Internshala): Connect with student networks and colleges.

Social Media Scheduling Tools (Buffer, Hootsuite): Streamline consistent branding on social platforms.

Design Tools (Canva, Figma): Create college-focused promotional material like posters and reels.

### **IV. Proposed Technological Solutions (Max 150 words)**

To manage workload and scale efficiently, Web Design Magics can adopt a task management and CRM system to handle client follow-ups and workflow bottlenecks. Integrating a Generative AI-based assistant on their website can guide visitors, predict project trends, and suggest web ideas in real-time. To address hiring needs, the company should use college-focused recruitment platforms and design branded campus promotional content with tools like Canva. Content marketing can be expanded through AI-generated blogs, reels, and collaborative posts with student influencers. Additionally, optimizing resource usage through smart scheduling of workspace zones (e.g., A/C usage) will reduce operational costs.

### **V. Key Learnings & Reflections**

Personal Insights Gained:

Understood how technical startups, even with existing systems, can benefit greatly from external branding, predictive AI tools, and structured recruitment strategies.

**Skills Developed:**

Learned to analyze advanced tech-business alignments and recommend scalable outreach strategies.

**Future Scope & Recommendations:**

Recommend building a student internship network, investing in influencer marketing, and deploying predictive AI tools for creative content planning and customer analysis.

**VI. Conclusion (Max 100 words)**

Web Design Magics demonstrates effective internal management but lacks external communication efficiency and optimized workforce expansion. By adopting CRM and AI tools, the company can streamline client handling and forecast market trends. Strategic branding through content marketing and college partnerships will aid in affordable talent acquisition. These enhancements will ensure sustainable growth and better workload distribution.