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# The Impact of Social Media on Startups and Investors: Insights from a MERN Stack-Based Web Application

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**ABSTRACT**

Social media has fundamentally transformed communication and business dynamics, particularly for startups seeking growth and investors exploring new opportunities. This paper explores the impact of social media in bridging the gap between startups and investors, focusing on a custom-built web application developed using the MERN (MongoDB, Express.js, React.js, Node.js) stack. The app facilitates posting content, real-time chatting, adding startup profiles, and organizing events—key features that simulate a social media platform for entrepreneurial collaboration. The study investigates how such features influence investor engagement and startup visibility, and highlights the potential for technological tools in enhancing startup ecosystems.

**Keywords**: MERN Stack (MongoDB, Express.js, React, Node.js), Document Authentication, , Real-Time Monitoring.

The impact of social media on startups and investors represents a transformative shift in the landscape of entrepreneurship and financing. With the advent of platforms such as Twitter, Facebook, and LinkedIn, startups can now connect with a wider audience, enhance brand awareness, and attract potential investors with significantly lower financial barriers than traditional methods allowed. This evolution has not only democratized access to investment opportunities but has also reshaped how entrepreneurs communicate their value propositions through authentic storytelling and real-time engagement with their target markets.

## 1.INTRODUCTION

In the digital age, social media has become a critical factor in entrepreneurial success. Startups use these platforms for brand building, funding, networking, and validation, while investors leverage them to discover, analyze, and connect with promising ventures. Despite its increasing importance, the structured integration of social media tools specifically tailored for startups and investors remains underexplored. This paper presents a web-based solution created using the MERN stack, simulating a social media environment that enables meaningful interaction between startups and investors. The study aims to assess the impact of such a system on startup visibility, investor decision-making, and overall communication dynamics.

Social media also provides various avenues for startups to find and engage with potential investors. There are two primary methods: online investing platforms and in-person events. Utilizing social media strategically can enhance these approaches, allowing entrepreneurs to identify and connect with investors who align closely with their business vision. One common mistake made by budding entrepreneurs is failing to define their ideal investor profile, leading them to indiscriminately seek funds from any available source. A more focused strategy, emphasizing the specific qualities and interests of ideal investors, can lead to more meaningful connections and successful funding outcomes.


Figure No. 1

## 2.LITERATURE REVIEW

The rise of social media and digital platforms has transformed the landscape of business communication, marketing, and entrepreneurial activity. Kaplan and Haenlein (2010) laid the groundwork for understanding social media by offering a comprehensive classification scheme and analyzing its impact on business strategy. Their work highlights both the opportunities and challenges of engaging users through these platforms, emphasizing the need for businesses to adopt a strategic approach to social media use.

Building on this, Fischer and Reuber (2011) explored how social interactions on Twitter influence entrepreneurial behavior. Their study found that interactions on social platforms can enhance effectual thinking—an approach to entrepreneurship focused on leveraging existing resources rather than predicting the future. This insight is particularly valuable for startups that rely heavily on real-time feedback and iterative development.

In the context of startup funding, Drover, Wood, and Zacharakis (2017) provided a structured framework categorizing the attributes of angel and venture capital investors. They identified key factors that influence investment decisions, such as investor experience, risk tolerance, and engagement style. Their findings are critical for entrepreneurs seeking to align their business models with the expectations of potential investors.

Complementing the theoretical insights, modern technological tools play a significant role in implementing these ideas. MongoDB, a NoSQL database, offers flexible schema design, scalability, and performance—making it ideal for dynamic applications that process large volumes of user-generated data. React.js, as detailed in its official documentation, allows developers to build interactive user interfaces efficiently, which is essential for delivering engaging social and business platforms. Similarly, Node.js and its web framework Express.js provide a powerful backend environment for handling concurrent requests and building RESTful APIs.

Together, these research studies and technical tools form a cohesive foundation for developing robust, interactive platforms that enable startups to thrive in a digitally connected world. The literature not only informs the strategic use of social media and investor engagement but also guides the technological implementation of modern web applications.

## 3.METHODOLOGY

The research follows a two-pronged methodology:
1. System Development: A social media-style web app was developed using the MERN stack to serve as a controlled platform for startups and investors.
2. User Feedback and Evaluation: The app was shared with a group of startup founders and investors. Surveys and interviews were conducted to collect qualitative and quantitative data regarding usability, visibility improvement, and networking efficiency.

Key Features of the Application:
- Post System: Startups can post ideas, achievements, funding needs, and progress updates.
- Chat Feature: Real-time messaging for investor-startup communication.
- Startup Profile Management: Startups can create detailed profiles including pitch decks, funding status, and business

models.
- Event Organizer: Admins and users can schedule pitch events, webinars, and networking sessions.

## 4.IMPLEMENTATION

The web application was built using:
- Frontend: React.js for a responsive UI/UX experience.
- Backend: Node.js and Express.js for API routing and logic.
- Database: MongoDB for storing user data, posts, and chats.
- Socket.IO: Implemented for real-time chat functionality.
- Authentication: JWT and bcrypt for secure user access.

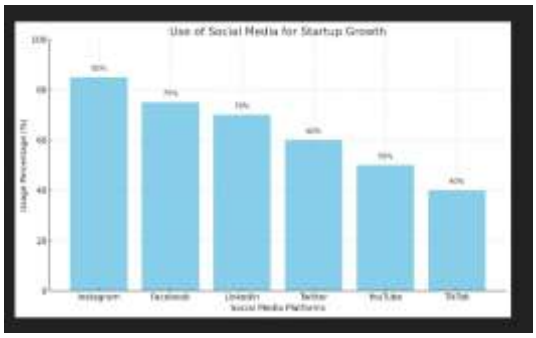
Workflow:
- Users sign up as either startups or investors.
- Startups create posts, update profiles, and join events.
- Investors explore posts, engage in chats, and bookmark interesting startups.
- The admin manages events and oversees activity logs.

## 5.RESULTS AND DISCUSSION

Initial feedback from 20 participants (10 startup founders and 10 investors) suggests:
- 75% of startups reported increased visibility through posts and profile features.
- 60% of investors felt the platform helped them better identify potential investment opportunities.
- Users appreciated the real-time chat and event organization feature for making interactions timely and productive.

Insights:
- A dedicated platform offers better context than general-purpose social media.
- Structured profiles and organized posts improve startup credibility.
- Real-time communication is crucial for investor follow-up and engagement.

Charts




## 6.CONCLUSION AND FUTURE SCOPE

This research affirms that social media-style platforms can significantly enhance the interaction between startups and investors. The developed MERN-based web application successfully demonstrated the utility of features like posting, chatting, and event organizing. Future improvements may include integrating AI-based recommendation engines, funding progress tracking, and video pitch tools to make investor matching more intelligent and interactive.

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