

# DRIPLENS: A Unified Creator-Brand Collaboration Platform for the Indian Creator Economy

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**Abstract** - The fast-growing creator economy has changed how businesses market themselves online as well as how they create content and engage with their customers. Many existing platforms only offer limited features that focus on one specific purpose (e.g., social media, freelance job hiring, showcasing work). As a result, brands are often unable to find real creative talent beyond what can be seen from follower counts or algorithmically-based visibility. Creators currently face many different disjointed systems that make it difficult to communicate, network, showcase portfolios, and collaborate effectively. DRIPLENS proposes a solution for the Indian creator economy — a creator-brand collaborative platform that uses a portfolio-first and merit-based approach for discovering new creators using skills, portfolio quality, and professional credibility rather than social popularity metrics. The DRIPLENS platform integrates creator discovery, portfolio management, real-time communication, hiring workflows, and collaboration systems into one scalable system. The tech stack includes React and Vite for the front-end, Node.js and Express.js for back-end services, Socket.io for real-time communication, and Supabase PostgreSQL for authentication and database services. Future enhancements include AI-powered creator suggestions, escrow-based payment methods, multilingual support, and mobile application integration.

**Keywords** - Creator Economy, Collaboration between Creators and Brands, Portfolio Platform, Real-Time Communication, React, Supabase, Merit-Based Discovery

## I. INTRODUCTION

There has been a surge of activity in the creator economy, driven by the rise of social media, digital marketing, and online content creation. Creators are photographers, videographers, editors, designers, influencers, and digital artists, and they play a significant role in modern advertising and audience engagement. Many businesses turn to creators to help them build their online presence, facilitate engagement with their target audience, and promote products through digital campaigns.

Social media platforms like Instagram, LinkedIn, Fiverr, Behance, and Dribbble have enabled creators to showcase their work and build a global audience; however, their primary focus is on a single feature such as content sharing, portfolio display, freelance recruitment, or professional networking. Consequently, most creators use multiple disjointed platforms to manage communications, share portfolios, collaborate on projects, and execute hiring processes.

Existing systems place considerable emphasis on metrics such as follower count, engagement per post, and algorithmically driven visibility to determine creator talent. As a result, many talented emerging creators struggle with gaining exposure, even if they possess tremendous talent. Communication and collaboration processes are also generally disorganized and inefficient.

DRIPLENS is the first integrated creator-to-brand collaboration platform designed specifically for the Indian creator ecosystem. Its focus is on portfolio quality, professional

identity, merit-based creator discovery, and structured collaboration workflows as opposed to vanity metrics and algorithm-driven visibility.

DRIPLENS provides a single platform that enables creators to build a professional profile, upload their portfolio, find opportunities, communicate with brands, and engage in collaboration workflows. Brands can post project requirements, discover creators by niche/skill set, initiate communication, and manage hiring workflows efficiently.

DRIPLENS has six major objectives:

1. Build a single platform for creator-to-brand collaboration.
2. Provide creators with a system to manage professional portfolios.
3. Provide real-time communication and collaboration workflows.
4. Provide merit-based discovery mechanisms for creators.
5. Build secure, scalable architecture for the workflows.
6. Provide an easy-to-use platform optimized for Indian creators.

## II. LITERATURE REVIEW

### A. Instagram

Instagram is a popular social media platform used by creators and influencers to promote their work. Users can upload images and video, use features such as Reels and Stories, and engage with audiences through multiple interaction methods. However, creator exposure on Instagram is ultimately

determined by engagement algorithms, followers, and social rankings. Additionally, many aspects of creator-brand connections and collaboration are limited in how they can be managed within the Instagram interface.

### B. LinkedIn

LinkedIn is primarily used by recruiters, employers, and professionals for connecting, establishing professional brands, and communicating with others. Although LinkedIn has many benefits, it does not specifically optimize for creative portfolio presentations or creative collaboration workflow delivery.

### C. Fiverr

Fiverr is a freelance marketplace platform that enables creators to provide digital services globally, supporting project-based hiring, freelancer ratings, and monetization opportunities. However, Fiverr suffers from excessive marketplace competition and heavy dependency on reviews and ratings. Beginner creators often struggle to gain visibility due to marketplace saturation.

### D. Behance

Behance is a professional portfolio-oriented platform widely used by photographers, artists, and designers to exhibit creative work. While it excels at high-quality portfolio presentation and creative exposure, Behance does not support integrated communication with clients or prospective employers, and has no built-in functionality to manage collaboration processes.

### E. Dribbble

Dribbble is geared towards creatives as a place for designers and artists to showcase their work, share inspiration, and build networks. While the platform is advantageous, there are only limited ways to collaborate with brands and not many systems to help with projects from start to finish, hire creators, or manage scalable communication workflows.

### F. Research Gap

The review of literature indicates that current creator platforms primarily serve single, fragmented functions such as social networking, freelance hiring, portfolio showcasing, and professional networking. There does not seem to be an efficient method of integrating all creator workflows in a common system that facilitates creator discovery, communication, collaboration, portfolio management, and hiring.

Significant research gaps identified include:

- Fragmented creator workflows
- Visibility systems reliant on algorithmic decision-making
- Poorly integrated communication systems
- Weak collaborative workflows
- Limited visibility for new and emerging creators
- Little or no support for Indian or regionally-based creators

## III. PROPOSED SYSTEM

DRIPLENS is a portfolio-first creator collaboration platform for the Indian Creator Economy that simplifies interaction between creators and brands. The platform creates an organized ecosystem through integrated workflows, making it easier than ever for brands and creators to find, communicate, and collaborate with each other.

The two main types of users on the DRIPLENS platform are: (1) Creators and (2) Brands.

The DRIPLENS platform allows Creators to:

- Create a professional profile
- Post a portfolio with photos and videos of past work
- Discover new ways to work with brands
- Apply for campaigns by submitting portfolio links and introductory letters
- Communicate directly with brands through real-time messaging
- Build a professional reputation through successful project completion

Brands can:

- Create a brand profile
- Post project opportunities (campaigns with details and budgets)
- Search for creators based on project needs
- Shortlist applicants before communicating with them
- Manage the workflow for hiring candidates for campaigns

Both parties go through an authentication and onboarding process that includes uploading their portfolio, completing personal profiles, and creating opportunities for creators. Once registered, the platform supports a simple workflow to create and manage project opportunities through real-time messaging and meeting integration.

Future plans for DRIPLENS include an escrow-based payment system to facilitate payments between creators and brands, AI-based creator recommendations, multi-language support, and mobile app functionality.

## IV. SYSTEM ARCHITECTURE

DRIPLENS consists of a complete web application ecosystem based on modular components: frontend, backend, database, authentication, and communication service domains.

### A. Frontend Component

The frontend has been designed using React and Vite to create a responsive and highly interactive user experience (UX). Tailwind CSS was utilized for utility-based styling and responsive layouts. Frontend modules include Authentication Pages, Creator Dashboards, Brand Dashboards, Portfolio Interfaces, Messaging Interfaces, and Opportunity Management Systems.

### B. Backend Component

The backend has been developed using Node.js and Express.js and follows a layered design architectural pattern (n-tier). Backend services include Authentication Workflows, Portfolio Management, Messaging System, Hiring Workflows, API Management, and Role-based Access Control. REST APIs have been implemented for secure communication between the frontend and backend service components.

### C. Database Component

The primary database infrastructure for DRIPLENS is based on Supabase PostgreSQL, storing User Profiles, Portfolio Items, Messages, Hiring Requests, and Collaboration Records. Row Level Security (RLS) policies have been created to protect sensitive user information and regulate unauthorized access.

#### D. Communication Component

The communication component has been developed and implemented with Socket.io to provide real-time communication workflows including Real-time Messaging, Live Notifications, Creator-Brand Communication, and Real-Time Status Updates. Google Meet Integration is available for virtual collaborative meetings.

### V. METHODOLOGY

A modular and systematic approach was taken when developing DRIPLENS, which included researching and analyzing other creator platforms to assess what was missing in those workflows as well as in creator platform features during the research and analysis phases. Analyzing requirements for both functional and non-functional aspects also took place during this phase.

The front-end application was created using React and Vite; Node.js and Express.js were used to create the backend application. Supabase services supported authentication, storage, database management, and real-time communication.

The development of DRIPLENS was completed by splitting into several modules: Authentication module, Portfolio management module, Creator discovery module, Messaging module, Hiring workflow module, and Collaboration module. All modules went through a continuous testing and evaluation cycle throughout development to ensure functional correctness, responsiveness, workflow integrity, and security.

### VI. EXPERIMENTAL RESULTS AND ANALYSIS

This section describes the functional, responsive, communication workflow, and authentication testing phase of the developed platform.

#### A. Functional Testing

The following modules have been successfully implemented and tested: Authentication system, Role-based access control, Portfolio upload workflow, Creator discovery system, Messaging workflow, Hiring platform, Protected routing, and Meeting sync functionality.

TABLE I. Functional Testing Results of DRIPLENS Platform

Module	Expected Result	Status
Authentication System	Secure login and signup	Pass
Portfolio Upload	Upload and manage portfolio content	Pass
Creator Discovery	Display creators based on niche and skills	Pass
Messaging System	Real-time communication	Pass
Hiring Workflow	Collaboration request management	Pass
Protected Routes	Restrict unauthorized access	Pass
Meeting Integration	Virtual collaboration support	Pass

#### B. User Interface

The platform provides Responsive Layouts, Mobile-first Navigation, Smooth User Experience, a Minimal Interface Style, and Implementation with Accessibility as a priority. With the use of Reusable React Components and Tailwind CSS, the platform's frontend provides consistency and scalability.

#### C. Communication System

The use of Socket.io enabled the platform to provide Real-time Messaging, Instantaneous Communication Updates, and Live Workflow Collaboration. The implementation of the communication system allows for an increased level of efficiency when creators and brands are working together.

#### D. Security System

The security features of the platform provide: JWT-Based Authentication, Role-Based Access Control, API Validation, Secure Storage Policies, Row Level Security, and Rate Limiting Middleware. By using these mechanisms, the platform has enhanced security and is better able to protect users' information.

### VII. ADVANTAGES OF DRIPLENS

There are numerous advantages associated with DRIPLENS, including:

- Unified ecosystem for all creator brands
- Discover creators based on portfolio rather than just social engagement metrics
- Merit-based visibility structure
- Real-time communication workflows
- Easy onboarding process for beginner creators
- Designed for mobile first
- Optimally designed for the Indian market
- Provides creator support in their respective regions
- Supports a scalable architecture
- Supports an integrated collaboration system

In contrast to other creator platforms, DRIPLENS is focused on professional collaboration and workflow efficiency as opposed to traditional social engagement metric platforms.

### VIII. FUTURE PROJECTION

The future plans for DRIPLENS include:

- AI-powered creator recommendation system
- Escrow-based payment system integration
- Native mobile applications
- Creator Verification System
- Analytics Dashboard
- Multilingual Services
- AI-supported portfolio recommendations
- Community Collaboration System
- Secure Dispute Management System
- Regional creator discovery

The platform's architecture will enable future scalability in many creative fields such as videography, editing, graphic design, and digital content creation.

## IX. CONCLUSION

DRIPLENS is a scalable platform for the creator economy that provides a complete ecosystem for managing brand partnerships. While many issues exist with current creator platforms, DRIPLENS seeks to resolve those issues by offering an efficient workflow for creators to collaborate with brands while building their portfolios and communicating with other creators within the same platform.

DRIPLENS was able to successfully utilize modern full-stack technology including React.js, Node.js, Socket.io, and Supabase PostgreSQL. The developers demonstrated functionality in terms of stable communication, secure authentication, responsive user interface, and scalability.

DRIPLENS has established a strong foundation for developing a professional creator ecosystem that focuses on the value of the contributor's skills and portfolio, not the contributor's social status.

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