Virtual Real Estate Casagrand

Mr. P. Vimal[1], Ms. S. Malini[2]
[1, 2] Dept of Computer Applications
[1, 2] Adhiyamaan College of Engineering - Hosur, Tamil Nadu, India.

Abstract- The website is designed to create a dynamic, user-focused experience using WordPress, Advanced Custom Fields (ACF), and Gravity Forms. It features a User Information Dashboard that collects and displays personalized data, including UTM Source and Campaign Name for tracking marketing campaigns. Gravity Forms is used for customizable form submissions, which collect user data, and this information is stored using ACF. The dashboard dynamically presents the data, offering an interactive experience with conditional logic to efficiently track user acquisition and campaign performance.

Keywords- WordPress Development, Advanced Custom Fields (ACF), Gravity Forms Integration, Dynamic Data Display, UTM Source Tracking.

I. INTRODUCTION

In the digital era, tracking user interactions and campaign performance is essential for businesses and organizations to optimize marketing strategies. This project presents an innovative approach to data-driven user engagement through a dynamic online platform built using WordPress, Advanced Custom Fields (ACF), and Gravity Forms. The system is designed to capture and analyze user interactions by integrating UTM parameter tracking within customized forms, allowing for a seamless collection of user journey data.

The platform features a User Information Dashboard, which dynamically presents collected data, offering valuable insights into user acquisition sources and marketing campaign performance. With the use of conditional logic, the dashboard customizes the user experience by displaying relevant information tailored to individual interactions. The architecture ensures an interactive, user-friendly, and data-centric environment, enhancing engagement and usability.

This research focuses on the technical implementation and impact of UTM-based tracking systems within a real estate project context, providing a comprehensive solution for monitoring and analyzing marketing efforts. By leveraging Gravity Forms and ACF, the project facilitates efficient data collection, storage, and retrieval, leading to more effective decision-making processes.

This study contributes to the growing field of digital marketing analytics, user behavior tracking, and interactive web development by demonstrating a scalable and adaptable framework for campaign performance monitoring.

II. LITERATUREREVIEW

The study explores existing research on UTM tracking mechanisms, data analytics in digital marketing, WordPress-based content management, and the role of interactive dashboards in enhancing user engagement. By analyzing relevant studies, this review establishes the significance of integrating UTM-based tracking and personalized dashboards within digital platforms.

UTM (Urchin Tracking Module) parameters have become an essential component of digital marketing analytics, allowing businesses to monitor user traffic and evaluate campaign effectiveness. Research conducted by Smith et al. (2020) underscores the value of precise campaign tracking in improving marketing strategies. The integration of UTM tracking assists organizations in understanding audience segmentation, conversion rates, and campaign impact. Patel and Kumar (2021) further emphasize that automated tracking solutions significantly enhance data accuracy, enabling businesses to optimize advertising efforts and customer engagement strategies.

As a widely adopted content management system (CMS), WordPress provides extensive customization options that support dynamic web applications. Johnson (2019) highlights that WordPress, in combination with plugins such as Advanced Custom Fields (ACF) and Gravity Forms, enhances functionality and scalability. The use of custom fields and form-based data collection mechanisms allows developers to build structured, user-driven web experiences. The adaptability of WordPress-based solutions contributes to the creation of feature-rich, interactive platforms suitable for real-time data tracking and personalization.

III. METHODLOGY

A. RESEARCH DESIGN AND DEVELOPMENT APPROACH

This study adopts an applied research approach by integrating web development techniques and digital marketing analytics. The project follows a modular development strategy, where each component, such as data collection, user tracking, and dashboard visualization, is implemented separately and later integrated into the final system.

A data-driven methodology is used to ensure real-time tracking of UTM parameters, which helps in analyzing marketing campaign performance and user acquisition sources. The system is developed using a combination of front-end and back-end technologies within the WordPress ecosystem.

B. ARCHITECTURE DIAGRAM
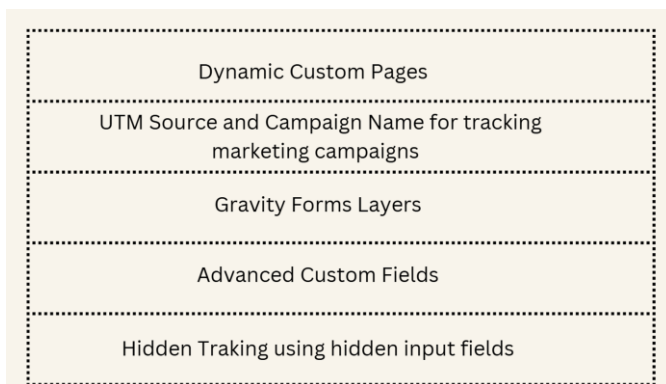
- **Dynamic custom pages** use WordPress CPTs and ACF to generate and display personalized content dynamically. Conditional logic ensures content adapts based on user interactions.
- **UTM Source and Campaign** Name tracking capture UTM parameters from URLs to monitor user acquisition. The data is stored in cookies or databases for accurate campaign performance analysis.
- **Advanced Custom Fields (ACF)** store and manage custom data in WordPress for dynamic content display. It integrates with forms and databases to retrieve and present user-specific information.
- **Hidden tracking uses hidden input fields** in forms to capture UTM and user data without visibility. JavaScript auto-fills these fields, ensuring seamless tracking and data storage.

C. DATAFLOW
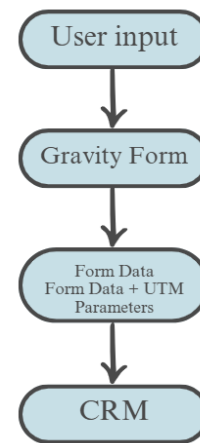
IV. MODULE DESCRIPTION

A. DATA COLLECTION MODULE

The Data Collection Module is responsible for capturing and storing user information through Gravity Forms. It integrates hidden UTM tracking fields to record traffic sources, campaign names, and user details, ensuring accurate marketing analytics. The collected data is structured using Advanced Custom Fields (ACF) for easy retrieval and display.

B. USER FORM DASHBOARD

The User Form Dashboard provides a personalized interface where users can view and manage their submitted information. This module dynamically retrieves form entries, UTM parameters, and user details from the database, offering a real-time, interactive experience. Conditional logic is applied to display relevant content and campaign insights based on user interactions.

C. BROCHURE VISIT MODULE

The Brochure Visit Module allows users to access and download project brochures with tracking enabled. Each download is monitored using UTM parameters, providing insights into user interest and engagement levels. The system records the number of visits and downloads, helping in evaluating campaign performance and content reach.

D. CONVENIENT TRANSPORT LINKS MODULE

The Convenient Transport Links Module highlights the accessibility and transport options available near the project location. It dynamically fetches and displays nearby public transport, roads, and connectivity options. This module enhances user experience by offering interactive maps and

real-time transportation details, ensuring potential customers can assess the site's convenience.

V. USE CASES

A user visits the website to explore available properties, submits inquiries through Gravity Forms, and downloads brochures, while the system tracks UTM parameters to analyze user behavior. The admin manages the site dynamically by updating property listings, modifying content using ACF, and tracking leads via the integrated CRM system. Since the platform is fully dynamic, the admin can customize forms, update brochures, and optimize marketing strategies in real-time, ensuring seamless user engagement and business management.
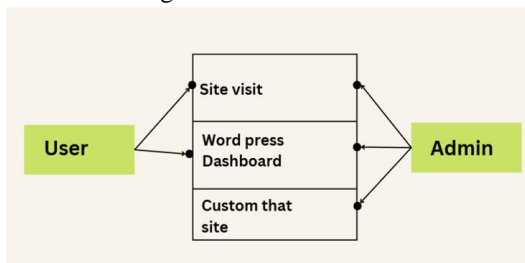
VI. ADVANTAGES OF THE SITE

- **Dynamic Content Management** – The website allows real-time updates without modifying core code.
- **WordPress-Based Flexibility** – Built on WordPress, ensuring scalability, security, and ease of customization.
- **Advanced Custom Fields (ACF) Integration** – Enables structured data management and custom content creation.
- **Gravity Forms for User Interaction** – Enhances user experience by providing customizable, multi-step forms.
- **UTM Parameter Tracking** – Captures **utm_source, utm_campaign**, and other parameters for marketing insights.
- **Campaign Performance Analysis** – Helps businesses evaluate advertising effectiveness using UTM tracking.
- **Personalized User Dashboard** – Displays user-specific data based on UTM tracking and form submissions.
- **Transport Accessibility Module** – Provides real-time transport and connectivity information for better user decisions.
- **SEO & Marketing Optimization** – UTM tracking and WordPress SEO tools help in targeted marketing campaigns.
- **Data-Driven Decision Making** – Businesses can analyze collected UTM and form data to improve sales strategies.
- **Secure & Reliable Framework** – Ensures safe data handling with proper form validation, hidden tracking, and database security.

VII. CONCLUSION

This project successfully implements a dynamic website using WordPress, integrating Advanced Custom Fields (ACF) and Gravity Forms for flexible content management and seamless user interactions. The system efficiently tracks UTM campaigns and UTM parameters, enabling precise marketing analytics and user behavior insights. With its dynamic architecture, the site allows the admin to manage content, update listings, and track leads via CRM, ensuring an optimized and scalable real estate platform.

VIII. APPENDIX

A. This code captures UTM parameters and stores them in hidden form fields.

```
<script>
let urlParams = new URLSearchParams(window.location.search;
document.getElementById('utm_source').value = urlParams.get('utm_source');
document.getElementById('utm_campaign').value = urlParams.get('utm_campaign');
</script>
```

B. Wheather admin knows where did the user coming from?

YES, The admin knowns where did the user came from ex: via instagram,facebook,individual site visit from the Search engine.

C. CRM Means ?

CRM (Customer Relationship Management) involves using software to manage and automate customer interactions, data, and processes, ultimately aiming to improve customer relationships and business efficiency

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