

Nagarjuna College of Information Technology



E-Governance Project Report Broadcasting Model (Group) CSC-366

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ABSTARCT:

This project, "Nepal Gyan Chautari," is the culmination of collaborative efforts by six students from Nagarjuna College of IT: Sadhana Khadka, Nishan Bhattarai, Lal Prasad Shrestha, Gaurav Dahal, Sijan Karki, and Tamanna KC. Designed as a broadcasting model, this initiative leverages the robust capabilities of WordPress to facilitate the dissemination of information and services. The website aims to serve as a dynamic platform for the public, providing access to vital information and interactive services that enhance the efficiency of public administration and citizen engagement. Through "Nepal Gyan Chau Tari," we strive to transform the landscape of e-governance in Nepal, making governmental processes more transparent, accessible, and responsive to the needs of the citizenry.

Utilizing the versatile and widely-accessible WordPress platform, our website acts as a pivotal tool for broadcasting important government information and services to the public. "Nepal Gyan Chautari" serves as a dynamic web platform that facilitates direct access to governmental information.

The project reflects a significant step forward in using technology to bridge the gap between the government and the public, empowering citizens through improved access to information and services.

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Introduction

Broadcasting Model:

In the realm of communication and information dissemination, the broadcasting model stands as a pivotal framework, especially within digital environments. Traditionally associated with media such as television and radio, broadcasting involves the transmission of information from a single source to multiple recipients (Metzger). This model is characterized by its one-to-many communication flow, where information is sent out to an audience without direct interaction during the transmission phase (Metzger).

In the context of e-governance, the broadcasting model is adapted to enhance how information is shared between government bodies and the public. Instead of passive consumption, modern digital broadcasting platforms enable a more dynamic interaction (Gawate). These platforms can disseminate not only static information but also allow for interactive services such as form submission, feedback provision, and real-time notifications, making governmental communication not just broad but also engaging.

Project Description:

Our project, "Nepal Gyan Chautari," utilizes the principles of the broadcasting model through a web platform developed on WordPress. This platform is designed to function as a comprehensive portal where citizens can access a wide array of governmental information and services. By leveraging the capabilities of WordPress, known for its flexibility and user-friendliness, "Nepal Gyan Chautari" aims to streamline the flow of information, thus improving transparency and efficiency in public administration. The project reflects our commitment to enhancing the interaction between the government and its citizens, providing a reliable and accessible online space where essential governmental resources are readily available.

Objective

- To Improve Accessibility of Government Information.
- To Enhance Public Participation with the governmental updates.
- To Increase Transparency in Governmental Processes.
- To Promote Digital Literacy and Usage
- To Ensure Scalability and Security of Governmental and Users data.

Project Rationale:

In today's digital age, the necessity for robust and transparent e-governance platforms cannot be overstated. Governments worldwide are transitioning towards more interactive and accessible means of communication with their citizens, aiming to improve service delivery and enhance public participation in governance. Nepal, with its growing digital infrastructure, is poised to leverage such technologies to bridge the gap between its citizens and governmental functions.

"Nepal Gyan Chautari" emerges as a critical response to several identified needs within this context. First, there is a pressing need to improve the accessibility of government information and services. Many citizens, especially those in remote areas, find it challenging to obtain timely and relevant government information that affects their lives. By centralizing this information on a single web platform, we aim to democratize access to crucial data and services, ensuring all citizens can participate fully in governance processes.

Second, the project addresses the issue of transparency. Effective governance requires that the actions of the government are open to scrutiny and that information is freely available to the public. A broadcasting model on a digital platform offers an unparalleled opportunity to publish government data, updates, and initiatives broadly, enabling transparency and fostering trust between the government and the public.

Third, in an era where user engagement is critical, "Nepal Gyan Chautari" provides an interactive space where citizens can not only receive information but also engage with it through features like feedback forms, forums, and direct inquiries. This interaction fosters a two-way communication stream, aligning with modern governance models that prioritize citizen engagement and participatory governance.

Lastly, the choice of WordPress as the development platform is strategic, considering its scalability, ease of use, and extensive support community. These attributes are essential for a government-related project, which must be robust, user-friendly, and adaptable to the changing needs of its users.

The rationale behind "Nepal Gyan Chautari" is rooted in these considerations, aiming to transform how Nepalese citizens interact with their government through technological innovation. This initiative not only supports the digital transformation goals of Nepal but also ensures that governance is inclusive, transparent, and responsive.

Development Technology:

WordPress:

Our project, "Nepal Gyan Chautari," harnesses the capabilities of WordPress, a highly versatile and open-source content management system (CMS). WordPress is renowned for its ease of use, extensive customization options, and robust community support (Gregersen). As a platform, it offers an intuitive administrative interface, making it accessible for users with varying levels of technical skills. Its scalability and extensive plugin architecture allow for extensive functional enhancements, making it ideal for projects that need to evolve over time with growing user demands and technological advancements (Gregersen). This adaptability is particularly beneficial for e-governance platforms that must cater to diverse user needs and comply with stringent security standards.

Theme:

- **News Card Theme:** We opted for the News Card theme, a responsive and versatile WordPress theme specifically designed for content-rich sites. It is particularly well-suited for broadcasting information due to its clean layout and easy navigation, enhancing the user's experience by providing a structured and engaging way to access a large volume of information ("NewsCard").

Plugins:

All in One WP Migration: This plugin is utilized for its robust backup capabilities, ensuring that data integrity is maintained and that the site can be quickly restored or migrated without technical hitches (WPvivid).

- **Functionality:** This plugin is essential for ensuring the flexibility and portability of the website, it allows administrators to export the entire WordPress site including database, media files, plugins, and themes without technical knowledge (Anmomosae). This capability is particularly useful for system upgrades, server switching, or backups, ensuring data continuity and system integrity in any operational environment.

Lite Speed Cache: To enhance website performance and loading speed, the Lite Speed Cache plugin is employed and this is crucial for improving the user experience, particularly when handling high volumes of traffic and data (Elmando).

- **Functionality:** Lite Speed Cache is known for its advanced cache-management tools and optimization features. It significantly improves the website's loading speeds by creating a cache of the static content, reducing the load on the server, and enhancing the user experience and is especially important for a content-heavy site like "Nepal Gyan Chautari," where quick access to information can enhance public satisfaction and engagement (Clarke).

Sassy Social Share: This plugin adds social sharing functionality to our site, allowing users to easily share articles and content with their networks, thereby increasing the reach and impact of government communications (Jacobdekker).

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Big Files Upload: Given the need to handle large file uploads, whether for document submissions or forms, the Big Files Upload plugin is critical and ensures that the platform can manage large files efficiently without compromising performance (Amorales).

- **Functionality:** This lightweight yet powerful plugin enables easy integration of social sharing buttons on your site. It supports sharing over a hundred social media platforms, including Facebook, Twitter, and LinkedIn and by facilitating social sharing, it allows users to disseminate information more broadly, effectively increasing the reach and impact of the content posted on the platform (Amorales).

Akismet Anti-Spam: To maintain the integrity of our platform and protect it from spam and abuse, Akismet Anti-Spam is used (Sadıkoğlu). It helps in automatically filtering out spam comments and posts, which is essential for maintaining the site's credibility and usability (Sadıkoğlu).

- **Functionality:** The Big Files Upload plugin is crucial for allowing users to upload large files up to several gigabytes directly through the WordPress interface. This is particularly important for e-governance applications where users may need to upload high-resolution images, documents, or other large data files for government processes, applications, or compliance documentation (Marenka).

Features of Nepal Gyan Chautari:

"Nepal Gyan Chautari" incorporates a variety of features designed to maximize usability, accessibility, and engagement. These features ensure that all users, regardless of their preferences or language skills, can effectively interact with the platform.

Key Features:

1. Display of Updated Information:

- Continuously updates users with the latest governmental information, policies, and services, ensuring that the citizenry is well-informed and can respond to changes promptly.

2. Search Button for Browsing Articles:

- Allows users to easily search and quickly access specific articles, documents, or topics from a vast repository of information, simplifying navigation and saving time.

3. Comments and Forums:

- Provides interactive tools for public engagement, enabling users to comment on articles and participate in forums. This fosters a dynamic dialogue between citizens and government officials, enhancing community involvement.

4. Information of Authority and Governmental Officers:

- Lists detailed contact information and profiles for various government officials, making it easier for users to reach out directly for inquiries or support.

5. Newsletter Subscription:

- Offers a subscription option for users to receive regular updates via email, keeping them informed about the latest news and essential updates without needing to visit the site frequently.

6. Dark Theme:

- Includes an optional dark theme to reduce eye strain and improve readability in low-light conditions. This feature is particularly beneficial for users who prefer a darker layout for comfort or aesthetic reasons.

7. Multi-Language Support:

- Supports multiple languages to accommodate Nepal's diverse linguistic population. This crucial feature ensures that all citizens can access the site in their preferred language, thus enhancing inclusivity and making the platform more accessible to a broader audience.

These features are carefully designed to enhance the user experience on "Nepal Gyan Chautari," making it not just a portal for information, but a comprehensive tool for facilitating active and inclusive civic engagement. Each feature contributes to a user-friendly, accessible, and effective platform that meets the diverse needs of its audience.

Methodologies:

Employing these methodologies, the development and implementation of "Nepal Gyan Chautari" can be guided by best practices in user experience design, software development, security, accessibility, and quality assurance, ensuring the platform's effectiveness, reliability, and usability.

1. User-Centered Design (UCD):

Methodology: User-centered design involves understanding the needs and preferences of users throughout the design process.

Application: Conduct user research, create user personas, and iterate designs based on user feedback to ensure the platform meets the needs of its intended audience.

2. Agile Development:

Methodology: Agile development emphasizes iterative and incremental development, where requirements and solutions evolve through collaboration between cross-functional teams.

Application: Break down the project into manageable tasks or user stories, conduct regular sprints to develop and test features, and adapt the project based on feedback from each iteration.

3. Information Architecture (IA):

Methodology: Information architecture involves organizing, structuring, and labeling content in a way that facilitates usability and findability.

Application: Create a hierarchical structure for organizing governmental information on the platform, implement intuitive navigation menus and search functionality, and optimize content labeling for easy access.

4. Responsive Web Design (RWD):

Methodology: Responsive web design focuses on creating web pages that adapt to various screen sizes and devices, providing an optimal viewing experience for users.

Application: Design and develop the platform using responsive frameworks and techniques to ensure it functions seamlessly across desktops, tablets, and smartphones.

5. Security by Design:

Methodology: Security by design involves integrating security measures into the development process from the outset, rather than as an afterthought.

Application: Implement security protocols such as data encryption, user authentication, and secure server configurations to protect sensitive user information and prevent cyber threats.

6. Accessibility Compliance:

Methodology: Accessibility compliance ensures that digital platforms are usable by individuals with disabilities, including those with visual, auditory, motor, or cognitive impairments.

Application: Adhere to accessibility standards such as the Web Content Accessibility Guidelines (WCAG), design interfaces with clear navigation and readable text, and provide alternative content formats for users with disabilities.

Data Collection:

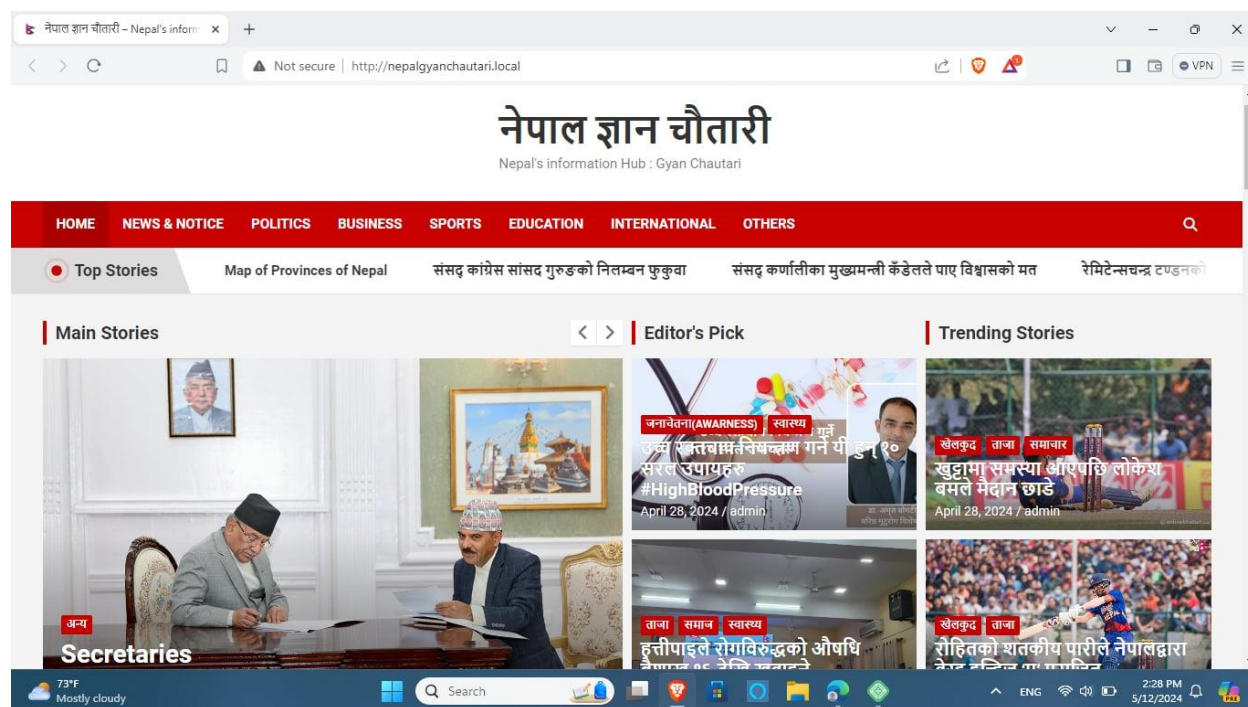
Primary Sources

Primary sources are original materials that provide direct, firsthand evidence about the subject you are studying (Mamgain). These sources are collected directly from the source or are original data not previously analyzed. For instance, conducting a survey to understand user satisfaction with an e-governance platform and interviewing government officials about the implementation challenges of digital platforms (Drew). Observing and recording user interactions with the platform during a pilot test to identify usability issues.

Secondary Sources

Secondary sources involve the analysis, interpretation, or synthesis of the primary data and these sources summarize, evaluate, or draw conclusions from primary data and are not evidence but rather commentary on and discussion of evidence (Hillier). Articles that review multiple e-governance projects to propose best practices also texts that compile studies on digital governance to discuss broader trends and outcomes and reports from consultancies that analyze data across multiple e-governance platforms to highlight effective technologies (Mathur).

UserInterface:



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"The Nepal Gyan Chautari" is a website that provides information on various aspects of Nepal, including different fields, cultural heritage, history, and news, as well as topics like science, technology, literature, and art. Various authors share their thoughts and experiences, providing education and inspiration to readers. It critically examines and discusses Nepal's social, political, economic, and cultural environment.

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Pushpa Kamal Dahal 'Prachanda'

Prime Minister

Biography

Rt. Honourable Pushpa Kamal Dahal 'Prachanda', the Prime Minister of Nepal, assumed the office for the third time on 26th December 2022. He won the vote of confidence in the House of Representatives on 10 January 2023 as almost all political parties supported him. Prachanda got historic 268 votes out of the present 270 members of the House.
Earlier, Prachanda served as the first ever Prime Minister of the Federal Democratic Republic of Nepal in 2008 to 2009 and for the second term from 2016 to 2017.
Currently he is also the chairman of Nepal Communist Party (Maoist Center) and a member of the House of Representative from Gorkha-2 Constituency.

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Conclusion:

In conclusion, "Nepal Gyan Chautari" represents a significant step towards transforming governance in Nepal. By leveraging the broadcasting model within a digital framework, we aim to bridge the gap between citizens and government, foster transparency, and promote active civic engagement. With its user-centric design and robust technological foundation, our project is poised to make a meaningful impact on how governmental information is accessed and utilized. We are confident that "Nepal Gyan Chautari" will contribute to the digital transformation of Nepal's governance landscape, paving the way for a more transparent, inclusive, and responsive government.

References (MLA):

- [1] M. J. Metzger, Broadcasting versus Narrowcasting. 2014. doi: 10.1093/oxfordhb/9780199793471.013.62_update_001.
- [2] K. Gawate, "E-governance Models," SlideShare, Oct. 20, 2015. <https://www.slideshare.net/karishmagawate/egovernance-models>
- [3] "Research Rabbit." <https://www.researchrabbitapp.com/collection/public/EZRQJWEQL1>
- [4] E. Gregersen, "WordPress | Definition, History, & Facts," Encyclopedia Britannica, Aug. 09, 2012. <https://www.britannica.com/technology/WordPress>
- [5] "NewsCard," WordPress.org, Oct. 01, 2023. <https://wordpress.org/themes/newscard/>
- [6] "WordPress Backup And Migration Plugin - WPvivid," WPvivid, Apr. 25, 2024. <https://wpvivid.com/>
- [7] Anmomosae, "All-in-One WP Migration and Backup," WordPress.org, Apr. 23, 2024. <https://wordpress.org/plugins/all-in-one-wp-migration/>
- [8] Elmando, "LiteSpeed Cache," WordPress.org, Apr. 25, 2024. <https://wordpress.org/plugins/litespeed-cache/>
- [9] L. Clarke, "WpW: LiteSpeed Caching 101," LiteSpeed Blog, Feb. 13, 2018. <https://blog.litespeedtech.com/2017/07/19/wpw-litespeed-caching-101/>
- [10] Jacobdekker, "Social Sharing Plugin – Sassy Social Share," WordPress.org, May 02, 2024. <https://wordpress.org/plugins/sassy-social-share/>
- [11] Amorales, "Big File Uploads – Increase Maximum File Upload Size," WordPress.org, Oct. 25, 2023. <https://wordpress.org/plugins/tuxedo-big-file-uploads/>
- [12] Y. Sadıkoğlu, "Akismet Anti-Spam," Dopinger Blog, Dec. 11, 2023. <https://www.dopinger.com/blog/akismet-anti-spam>
- [13] G. Mamgain, "Primary Data and Secondary Data: Sources with Examples," EduKedar Project, May 01, 2023. <https://edukedar.com/primary-data-and-secondary-data/#gsc.tab=0>
- [14] C. Drew, "11 Primary Data Examples (2024)," Helpful Professor, Nov. 29, 2023. <https://helpfulprofessor.com/primary-data-examples/>
- [15] "What is Secondary Data? [Examples, Sources & Advantages]," CareerFoundry, Nov. 30, 2022. <https://careerfoundry.com/en/blog/data-analytics/what-is-secondary-data/>
- [16] D. Mathur, "Secondary Data Collection Methods," Harappa, Jan. 22, 2022. <https://harappa.education/harappa-diaries/secondary-data-collection-methods/>