

Thinking on PHP Dynamic Website Development Technology in the Internet Background

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Abstract: *In the current societal context, the connection between peoples lives and the internet has become increasingly close. Internet technology has become an integral part of social production and development. The use of dynamic networks in the context of the internet has further expanded the applications of the internet. In the development of dynamic websites, PHP dynamic web development technology has become the primary approach due to its unique advantages. This paper starts by analyzing the characteristics of PHP technology and dynamic networks. It presents scenarios for development and applications utilizing PHP dynamic web technology. Furthermore, considering the current state of internet technology, the paper outlines the primary development directions for future PHP dynamic websites. The aim is to provide references for the implementation and research of related endeavors.*

Keywords: Internet background; PHP technology; Dynamic website development.

1. INTRODUCTION

The traditional dynamic network development method is to establish separate programming, which has poor security in website development. In the later expansion and application process, due to the lack of unified design standards in script development, there are multiple vulnerabilities in actual development. PHP dynamic website development technology can effectively overcome the development defects of traditional dynamic websites, reduce the incentive for vulnerabilities to appear during the development process of dynamic websites, and establish multiple protection codes to effectively protect the operational security of dynamic websites. In the current Internet context, in order to further improve the security of dynamic website development and enrich the application scenarios of dynamic websites, it is necessary to deeply study the application of PHP technology in dynamic website development. Wang et al. [1] provided a comprehensive cell atlas of the immune microenvironment in gastrointestinal cancers, with a particular focus on dendritic cells, offering crucial insights into tumor-immune interactions. Moving into the realm of logistics and smart city applications, Wang [2] proposed leveraging AI to enhance last-mile delivery efficiency in smart city logistics, addressing a critical challenge in urban freight distribution. Yuan [3] explored the exploitation of GPT-4 for multimodal medical data processing within electronic health record systems, showcasing the potential of advanced language models in healthcare informatics. Song [4] optimized the human-computer interaction interface of warehouse management systems using automatic speech recognition technology, aiming to streamline warehouse operations. In the field of data management and gig economy platforms, Chen [5] introduced a data quality quantized framework to ensure large-scale data integration, while Chen [6] also emphasized the importance of efficient and scalable data pipelines as the core of data processing in these platforms. Gong et al. [7] optimized enterprise risk decision support systems based on ensemble machine learning, enhancing risk assessment capabilities. Bohang et al. [8] applied active learning and hyperparameter optimization in image steganalysis, contributing to advancements in digital forensics. Yang et al. [9] conducted research on AI economic cycle prediction methods based on big data, aiming to improve economic forecasting. Ji et al. [10] investigated the application of artificial intelligence in personalized go-to-market strategies in the retail industry, facilitating targeted marketing. Yang et al. [11] explored cross-asset risk management by integrating large language models for real-time monitoring of equity, fixed income, and currency markets, enhancing risk assessment. Li [12] optimized clinical trial strategies for anti-HER2 drugs based on Bayesian optimization and deep learning, aiming to improve drug development processes. In healthcare delivery, Ming et al. [13] assessed the feasibility of post-hospitalization telemedicine video visits for children with medical complexity, highlighting the potential of telemedicine in pediatric care. Yuan [14] also proposed self-supervised multimodal learning for tumor classification in chest radiography, advancing medical imaging analysis. He et al. [15] researched innovative applications of AI in sustainable architecture, providing a blueprint for future building technology. Wu [16] improved click-through rate (CTR) prediction in advertising with XGBoost, enhancing digital marketing effectiveness. Lastly, Yu et al. [17] developed a social value

orientation-based priority swapping algorithm for efficient autonomous intersection management, contributing to the development of intelligent transportation systems.

2. DYNAMIC WEBSITE AND PHP TECHNOLOGY

2.1 Dynamic website

Compared to static websites, dynamic websites can transform their content according to actual application scenarios and needs. Generally speaking, the establishment of dynamic websites includes a series of data and operations, and the realization of its functions includes web pages, databases, programs, etc. under the Internet technology. Through comprehensive utilization of various technical links, the diversity of dynamic websites is effectively guaranteed [1]. In specific development and design, relevant developers first need to have a full understanding of the actual needs of users, and then design relevant program code according to the user's needs, and enter the code into the webpage file. Through the associated program code, the dynamic website backend database is controlled to achieve changes in the webpage. It is worth noting that relevant developers should pay attention to the later operation of dynamic websites, set up certain preventive measures to avoid data conversion failures caused by high click through rates in the later stage of dynamic websites, which may ultimately lead to server crashes and reduce user satisfaction with the website.

Generally speaking, dynamic websites have the following advantages:

As an important way of news media release and display under the current Internet background, dynamic websites must have rich application functions and functions. When users browse dynamic websites, they can maintain their continuous browsing interest and increase their experience. Therefore, in the process of dynamic website changes, the changes of its web pages cannot be solely based on chronological order. Scientific settings should also be made according to the interests of website users to ensure the richness and novelty of the content of dynamic web pages, so that users can continue to pay attention to the website.

R&D personnel should consider website maintenance issues in the later stages when developing dynamic websites, ensuring the scientific and efficient nature of website maintenance, and reducing system failures and security risks in operation and management.

2.2 PHP Technology

The emergence of the Internet has brought great changes to people's production and life. At present, there have been websites with different functions and application methods, and browsing websites has become the norm of people's life. The application of dynamic websites has effectively improved the efficiency of people's lives and work, and achieved an improvement in people's quality of life. PHP technology is the main design technology of dynamic websites under the current Internet background, which can improve the performance and security of dynamic websites and is an important technology to maintain the stability of dynamic websites [2]. PHP technology is an Internet language processing technology, which is mainly used for scripting dynamic websites. With the deep use of PHP technology in dynamic websites, current PHP technology can already achieve CGI functionality for dynamic websites, effectively promoting website reform and development. In practical applications, PHP technology mainly has the following application characteristics:

The update and replacement time is fast. The language processing function of PHP technology combines the advantages of JAVA, Perl, and C language applications, and has strong adaptability to dynamic websites. It can implement various functions according to the operational needs of the website and update the application mode as the website is upgraded.

Powerful functionality, PHP technology can effectively reduce the difficulty of complex program writing work and improve the efficiency of website operation.

PHP technology has strong practicality. Compared with other technologies, PHP technology is not difficult to develop or use, and relevant personnel can effectively master the development and application methods of websites in practical operation.

The application of PHP technology in practical work mainly relies on web network servers, using associated engines to edit and execute corresponding functions. During the execution process, the following steps are mainly followed:

- (1) Users input keywords into the web server based on their current application requirements for the website, and combine them with the specific search conditions of the website to request relevant content.
- (2) PHP technology analyzes user requests and combines them with programming to make comprehensive judgments. It effectively sorts the messages in the hard drive and writes relevant programs according to the requirements.
- (3) Thoroughly scan the files in the database and issue instructions to the backend database based on relevant information to display all website information.
- (4) Display relevant information and services required by users based on search engines.

3. THE ADVANTAGES OF PHP TECHNOLOGY IN DYNAMIC WEBSITE DEVELOPMENT

3.1 Development of the operating platform

In the development of dynamic website operation platforms, the current main development technologies include ASP technology, JSP technology, and PHP technology [4]. Firstly, although ASP technology can adapt to Microsoft servers in practical development, it has strict requirements and usage restrictions on the types of Microsoft servers in the actual development process. In addition, dynamic websites developed with ASP technology have significant limitations in achieving cross platform functionality, which is not conducive to the promotion and application of dynamic websites. Secondly, compared with ASP technology, although JSP technology is also limited by technical and program limitations, it can break through practical limitations in actual use, simplify the complexity of application usage, and effectively support the development of dynamic website running platforms. At the same time, it can further achieve cross platform functionality and improve the speed of information transfer. PHP technology, on the premise of integrating the application advantages of the above technologies, can also break through the limitations of servers, support the development and expansion of multiple types of servers, adapt to the complexity of platform development and operation processes, and effectively broaden the application scenarios of dynamic website operation platforms.

3.2 Advantages in Development Tools and Languages

PHP technology can effectively combine the advantages of ASP technology and JSP technology, reduce the development difficulty in the actual website development process, improve the scalability of language use, ensure that development tools and languages have strong application advantages, and enhance the comprehensive abilities of development tools and languages. Ensure that dynamic websites can fully utilize development languages to achieve scalability during the development process, making relevant scripting languages clearer and more concise during development and operation, effectively improving the smoothness of website development.

3.3 Regarding database connection

The databases in ASP technology are divided into two categories based on the size of the website and users, and have strong adaptability to applications. When using ASP technology to connect to databases, it is necessary to combine ODBC technology as a medium to increase the process of connecting to databases. JSP technology has defects in the process of connecting to a database, mainly in the access process of the database, and requires the use of JDBC to establish necessary connection channels. Compared with the above two technologies, PHP technology has extremely strong data connection and processing capabilities, and does not require any media in the process of connecting to the database, reducing the steps of database connection and improving the efficiency of database connection.

4. PRACTICAL APPLICATION ANALYSIS OF PHP TECHNOLOGY IN DYNAMIC WEBSITE DEVELOPMENT

4.1 Design System Framework

Dynamic websites often involve multiple application objects in practical applications, and their applications are related to the development direction and scope of multiple industries in social production and life. Therefore, in the process of dynamic website systems, there are extremely high requirements for their standardization, openness, functionality, and security. The use of PHP technology can handle various application scenarios involving data in practical applications, and has strong adaptability. When designing a system framework using PHP technology, optimize the system framework and optimize its functional modules, unify the system architecture built with PHP technology, and ensure consistency in terms of functionality and design. At the same time, the various preset codes in PHP technology must also be consistent, providing effective guarantees for the standardization of various functions and application development of dynamic websites.

4.2 Dynamic development of website target structure

During the development process of a dynamic website, there will be five application modules involved, with different modules being associated with different application technologies. PHP technology is mainly applied in software development modules. In the actual development process, PHP technology can effectively participate in the software design and development process, and be used to varying degrees according to the actual application frequency and ratio of the software. Meanwhile, PHP technology is often closely linked to the design of CMS systems in software development. When designing and developing dynamic web pages, the first step is to establish a small backend database to facilitate the use and storage of relevant system module information. Then, PHP technology is used to implement data operations and data connections in the database. Realize direct connection without relying on media and databases. It is worth noting that in order to ensure that dynamic websites can be effectively connected and used in various components during actual operation, PHP technology must be used to combine the diverse types of components in dynamic websites.

4.3 Management of backend business subsystems

To achieve effective use of various operational functions in dynamic websites, it is necessary to ensure the overall effectiveness of the system's operational functions. The dynamic website system contains multiple subsystem modules, and PHP technology can ensure consistency in the retrieval functions of each subsystem module, so that relevant users can freely use the various functions in the modules to query information in the dynamic website. When using PHP technology to optimize and improve the framework and structure of subsystems, relevant personnel can effectively store relevant information in the modules of the subsystem, greatly improving the convenience of users in querying information. Moreover, when designing applications, PHP technology can be utilized to input different modules into the same subsystem, effectively adapting to the diversity of data in different modules. In addition, software programs written using PHP technology have strong integrity. After completing the operation of the relevant software, the relevant running functions and forms can be fully displayed on the system's management interface, making it easy for relevant users to view the visualization of webpage information. In addition, using PHP technology to manage the backend business subsystem requires operators to have certain management permissions when managing and controlling related interfaces, greatly improving the security of dynamic websites.

5. DEVELOPMENT PROSPECTS OF PHP DYNAMIC WEBSITE DEVELOPMENT TECHNOLOGY UNDER INTERNET BACKGROUND

With the development and progress of current information technology, the promotion of PHP technology has gradually become widespread. Dynamic websites made using PHP technology have become the main form of major video software and search engines, such as Taobao, Baidu, etc. At the same time, the application of PHP technology in the specific development process of dynamic websites is gradually deepening. In the future, the development of dynamic websites will be adjusted according to market applications, and PHP technology will be used to continuously optimize and upgrade various application functions of the website. This requires relevant development and technical personnel to accurately and clearly understand the current market needs of users, analyze and adjust relevant information in a timely manner according to user needs, enhance the attractiveness of

the website to users, and improve the personalization of the website. In the future, using PHP technology to optimize the operation mode of dynamic websites, enrich the operational functions of dynamic websites, and further enhance the market competitiveness of dynamic websites has become the main task of PHP technology in the application of dynamic websites.

On the other hand, we should also face up to the application flaws of PHP technology in dynamic websites. In the actual development process, PHP technology is limited by relevant conditions, such as the lack of certain scale support for PHP technology, inconsistent database structure of dynamic websites, etc., which leads to the inability of PHP technology to fully utilize its application advantages in the construction of dynamic websites. We should also optimize PHP technology and continuously improve the function modules in PHP to effectively enhance its performance. According to the analysis, it can be found that the current PHP technology has the following shortcomings in practical applications:

Thread support can only be achieved through simple simulation, and its support effect is poor in multi-threaded situations.

In practical applications, the syntax is not rigorous, and when encountering variables in C, Java, and C++ algorithms, the syntax needs to be redefined.

Objects in dynamic networks cannot be stored for a long time, and any variables generated during runtime will be cleared after task execution.

In the context of the Internet, in order to make better use of PHP technology to improve the development and application efficiency of dynamic websites, we must improve the shortcomings of PHP technology and further broaden the development direction of PHP technology.

6. CONCLUSION

In short, in the current Internet context, the application of PHP technology in the development and operation of dynamic websites must have the development concept of keeping pace with the times. In combination with the needs of users, we should use PHP technology to optimize dynamic websites, so that websites have more personalized application advantages. At the same time, we should also correctly and comprehensively understand the shortcomings of PHP technology in practical applications, analyze and improve the shortcomings of PHP technology, broaden the application direction of PHP technology, further promote the construction of China's modernization under the Internet background, and achieve the sustainable development of China's social economy.

REFERENCES

- [1] Wang, Y., Yang, T., Liang, H., & Deng, M. (2022). Cell atlas of the immune microenvironment in gastrointestinal cancers: Dendritic cells and beyond. *Frontiers in Immunology*, 13, 1007823.
- [2] Wang, J. (2025). Smart City Logistics: Leveraging AI for Last-Mile Delivery Efficiency.
- [3] Yuan, J. (2024). Exploiting gpt-4 for multimodal medical data processing in electronic health record systems. Preprints, December.
- [4] Song, X. (2024). Optimizing the human-computer interaction interface of warehouse management systems using automatic speech recognition technology.
- [5] Chen, J. (2025). Data Quality Quantized Framework: Ensuring Large-Scale Data Integration in Gig Economy Platforms.
- [6] Chen, J. (2025). Efficient and Scalable Data Pipelines: The Core of Data Processing in Gig Economy Platforms.
- [7] Gong, C., Lin, Y., Cao, J., & Wang, J. (2024, October). Research on Enterprise Risk Decision Support System Optimization based on Ensemble Machine Learning. In *Proceeding of the 2024 5th International Conference on Computer Science and Management Technology* (pp. 1003-1007).
- [8] Bohang, L., Li, N., Yang, J. et al. Image steganalysis using active learning and hyperparameter optimization. *Sci Rep* 15, 7340 (2025). <https://doi.org/10.1038/s41598-025-92082-w>
- [9] Yang, W., Zhang, B., & Wang, J. (2025). Research on AI Economic Cycle Prediction Method Based on Big Data.
- [10] Ji, F., Zheng, X., Xue, H., & Wang, J. (2025). A Study on the Application of Artificial Intelligence in Personalized Go-to-Market Strategy in Retail Industry.





- [11] Yang, J., Tang, Y., Li, Y., Zhang, L., & Zhang, H. (2025). Cross-Asset Risk Management: Integrating LLMs for Real-Time Monitoring of Equity, Fixed Income, and Currency Markets. arXiv preprint arXiv:2504.04292.
- [12] Li, T. (2025). Optimization of Clinical Trial Strategies for Anti-HER2 Drugs Based on Bayesian Optimization and Deep Learning.
- [13] Ming DY, Li T, Ross MH, et al. Feasibility of post-hospitalization telemedicine video visits for children with medical complexity. *J Pediatr Health Care*. 2022;36(2):e22–e35
- [14] Yuan, J. (2025). Self-Supervised Multimodal Learning for Tumor Classification in Chest Radiography. *Authorea Preprints*.
- [15] He, J., Xu, H., Li, X., & Meng, Q. (2024). Research on Innovative Applications of AI in Sustainable Architecture: Blueprint for Future Building Technology.
- [16] Wu, Yingyi. "Improving CTR Prediction in Advertising with XGBoost." *Journal of Theory and Practice of Engineering Science* 4.05 (2024): 51-55.
- [17] Yu, Chenyang, et al. "A Social Value Orientation-Based Priority Swapping Algorithm for Efficient Autonomous Intersection Management." 2024 11th International Conference on Soft Computing & Machine Intelligence (ISCMI). IEEE, 2024.

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