

#### Journal of Sustainable Business and Economics

https://journals.bilpubgroup.com/index.php/jsbe

#### ARTICLE

# A Study on Technology Application and Performance of Small and **Medium-sized Enterprises in the Context of Cloud Computing** Application - A Case Study of Hotel Industry in Henan, China

Zhang Hui<sup>1\*</sup> Alireza Mohammadi<sup>2</sup>

#### **ABSTRACT**

This paper examines how the adoption of cloud computing affects the relationship between the technical and environmental capabilities of small and medium-sized enterprises (SMEs) in the tourism industry in Henan Province, China, thereby promoting the stable and sustainable development of the tourism industry, combining the laws of tourism market development, vigorously constructing a smart tourism project, guiding tourism cloud service providers to strengthen the cooperation and contact with the market's tourism enterprises, introducing and utilizing cloud computing technology, optimizing and improving the functions of various tourism services of the enterprises, and enhancing the processing and analysis of enterprise-related data to provide tourism information. Strengthen the processing and analysis of enterprise-related data to provide tourism information, and further study the adoption of cloud computing and its impact on small and medium-sized enterprises (SMEs) in terms of technology and business environment knowledge, so as to make the best enterprise management decisions and realize the overall enhancement of the enterprise's tourism brand value.

Keywords: SMEs; Cloud Computing; Technology Adoption; Performance; Henan Hotels

#### 1. Introduction

and medium-sized enterprises comprehensive bud-

AI technology, cloud computing, so that small get management gradually towards the "intelligent"

#### \*CORRESPONDING AUTHOR:

Zhang Hui, Faculty Of Creative Industries, City University Malaysia, Malaysia; Email: 120757493@qq.com

#### ARTICLE INFO

Received: 13 August 2024 | Revised: 14 August 2024 | Accepted: 21 August 2024 | Published Online: 16 December 2024 DOI: http://doi.org/10.26549/jsbe.v7i2.19486

Hui, ZH., Mohammadi, A., 2024. A Study on Technology Application and Performance of Small and Medium-sized Enterprises in the Context of Cloud Computing Application - A Case Study of Hotel Industry in Henan, China. Journal of Sustainable Business and Economics. 7(2): 69-75. DOI: http://doi.org/10.26549/jsbe.v7i2.19486

Copyright © 2024 by the author(s). Published by Bilingual Publishing Group. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (https://creativecommons.org/licenses/by-nc/4.0/).

<sup>&</sup>lt;sup>1</sup> Faculty of Creative Industries, City University Malaysia, Malaysia

<sup>&</sup>lt;sup>2</sup> City Graduate School, City University Malaysia, Malaysia

and "informationization" direction, but also makes the comprehensive budget management of decision-making support role and value creation role more and more obvious. Based on this, in the current cloud computing background, if enterprises want to get a better comprehensive budget management informatization construction results, it must be combined with their own internal management, to develop a set of more refined comprehensive budget management system, so as to make it possible to realize the production and operation of the comprehensive budget management informatization pattern, but also can effectively promote the enterprise's operating mode of the benign cycle, and at the same time more able to ensure the gradual implementation of the enterprise's strategic planning. The gradual implementation of strategic planning.

# 2. Characteristics of enterprise comprehensive budget management informatization construction under cloud computing

In the process of enterprise comprehensive budget management informatization construction under the cloud computing environment, its biggest feature lies in effectively guaranteeing the enterprise's basic development needs such as "strategy landing, resource allocation, performance appraisal, clear rights and responsibilities". From the current application of cloud computing modules, "software, platform and infrastructure services" are the three most common application modes, and these are the essential elements of the combination between cloud computing and enterprise comprehensive management informationization. From the point of view of the characteristics of the cloud computing environment, enterprises in the process of building comprehensive budget management informationization, the most important practice channels mainly include "software provided by cloud computing service providers, self-research or according to their own needs to buy third-party software company products" and other three modes [2]. Among them, the cloud computing software connected to the service provider and the server, can significantly reduce the cost of software use, research and development costs and maintenance costs, to provide enterprises with the necessary infrastructure and technical platform support.

As a new business service model, the cloud computing platform's biggest technical characteristic lies in "connecting infrastructure and software before and after the service, and constructing the whole cloud computing model platform through the functions of access rights setting, module setting and data cloud storage". Enterprises in the cloud computing system, through the relevant cloud computing technology will be able to directly access a variety of data information and basic services, so as to continuously optimize their own departments, projects, products and operations of the comprehensive budget management program.

## 3. Cloud computing under the enterprise comprehensive budget management information construction principles

## 3.1 Budget target

In the cloud computing environment, the enterprise in the comprehensive budget target setting can not only integrate the original data of enterprise development, but also be able to fully competitive market environment and industry environment information fusion to the budget target setting process, so that not only to a great extent to meet the needs of the enterprise's strategic goal setting, but also more able to make its enterprises through the cloud computing terminal software to complete the comprehensive budget management information "upload and send". "Uploading", and then by the internal management of the enterprise will be the relevant information and the actual situation of the enterprise to analyze the combination, so as to clarify the future of the enterprise's comprehensive budget management development planning. This not only can gradually form a linkage between the various departments within the enterprise mode of work, and at the same time can ensure that the enterprise comprehensive budget management objectives of the strategic planning practices and economic development, and then constantly expand the enterprise in a fully competitive market, the development of the driving force and the industry's competitive advantage.

#### 3.2 Budgeting

In terms of comprehensive budgeting, the enterprise is not only able to analyze the enterprise's own historical data, business situation, external market information, strategic planning information, etc. through the cloud computing terminal platform to carry out all-round budget management objectives, but also able to further determine the future annual budget indicators and budget values under the support of cloud computing technology. This not only enables the internal management of the enterprise to optimize its budgeting process and budget approval process on the basis of the comprehensive budget quota standard, but also further strengthens the actual role of business departments and work plans in the comprehensive budget presentation.

In terms of budget allocation, the enterprise not only needs to combine its own organizational structure and business model to reconstruct the budget allocation of each department, but should also carry out "horizontal allocation" or "vertical extension" based on the results of the completion of the comprehensive budget in different periods, so as to make it possible for the comprehensive budget management to be compiled to the full budget of the enterprise. At the same time, "horizontal allocation" or "vertical extension" should be carried out according to the results of comprehensive budget completion in different periods, so as to enable comprehensive budget management to be compiled for each business item and production link within the enterprise.

This not only further clarifies the enterprise's job budgeting indicators, product budgeting indicators, production budgeting indicators, etc., but also enables each department to enhance the connectivity in budget data collection, so that the relevant calculation and allocation indicator data and budget allocation summary data can be submitted within a pre-

determined period of time with the support of cloud computing technology. This enables a more logical basis for overall budgeting data in the process of comprehensive budget management, thus ensuring the accuracy of comprehensive budgeting.

# 4. Enterprise comprehensive budget management informatization construction strategy under cloud computing

# 4.1 Improve the application effect of big data and cloud accounting means

From the current development trend of information technology, in the process of enterprise comprehensive budget management, to improve the application of big data and cloud accounting means, is bound to affect the final level of budget management informationization and refinement level. This not only enables enterprises to optimize the overall management of enterprises through information technology thinking, but also enables them to realize the real-time uploading and acquisition of information data of various aspects of comprehensive budget management under the support of cloud computing, cloud data, cloud accounting and other information technology.

In addition, the integration of big data technology and cloud accounting means, but also to promote the enterprise comprehensive budget management information data sharing, so that the data information of different departments can form a good interoperability effect. This not only can further improve the enterprise in the comprehensive budget management of information technology linkage pattern, at the same time can also make the enterprise management in the information technology means of comprehensive budget management progress for comprehensive monitoring and comprehensive supervision, so that the enterprise comprehensive budget management process management objectives can be on their own assessment and evaluation, data analysis to produce a positive effect. It can be seen that in the process of enterprise comprehensive budget management, cloud

computing and other information technology into its management practice, not only to a great extent to make up for the shortcomings of its traditional accounting data analysis, but also to further deepen the effective integration of science and technology and industry, which not only improves the enterprise in the process of comprehensive budget management of the data processing capacity, but also significantly improve its comprehensive budget management practice efficiency, thereby realizing the enterprise comprehensive budget management process management objectives can have a positive effect on their own assessment and evaluation, data analysis. Management of the practice of efficiency, so as to realize the integration of enterprise comprehensive budget management and the depth of the development of information technology.

# 4.2 Strengthen the dynamic supervision of budget implementation

For the enterprise comprehensive budget management, strengthen the dynamic supervision of budget implementation, the key link is to ensure that the information technology management tools and enterprise budget management objectives of the suitability and integration, so as to make the enterprise internal departments of the comprehensive budget management work can be implemented. Based on this, in the process of information-based budget management, enterprises should not only optimize the implementation of the budget, and at the same time more through the construction of information-based comprehensive budget management system, to effectively solve the problem of "budget implementation in the form of" [6]. This will not only enable the enterprise to fully discover its own problems related to budget implementation and dynamic supervision, but also be able to formulate solutions to problems in a timely manner, thus strengthening the enterprise's resilience in the process of comprehensive budget management.

In addition, under the support of cloud computing technology, the internal management of the enterprise can also build up a "budget data analysis

model" for the enterprise itself through the dynamic supervision of budget execution, which can not only promote the real-time development of dynamic supervision, but also further strengthen the enterprise's own ability to analyze and process the cloud computing data. Solve the problems of budget implementation, resolve the enterprise budget risk caused by comprehensive budget management, so as to optimize the enterprise's economic internal consumption and abnormal data feedback and other work.

# 4.3 Improve the degree of informatization of comprehensive budget management goal-setting and preparation

Thanks to the informationization support of cloud computing technology, in the process of building a comprehensive budget management informationization framework, the enterprise can not only effectively improve its information collection level for the external environment and industry development dynamics, but also more conducive to the internal management of the enterprise on this basis to formulate a more scientific and reasonable budget development decisions, so as to avoid additional budget management objectives in the process of formulating and compiling Development risk. Based on this, in the process of improving the degree of informatization of comprehensive budget management goal-setting and preparation, enterprises should not only pay attention to the "sharing" and "integration" of the enterprise cloud platform, but also increase the use of highly sophisticated big data processing technologies such as Hadoop, Drill, HPCC, and so on. The application of high-precision big data processing technology, and its application in data analysis and evaluation of results, so that not only can make it gradually through the structured, semi-structured, unstructured data logical relationship verification to deepen the information mining power of the comprehensive budget management data and information analysis, but also on the basis of which the market competition demand and the market share of the economy to make a reasonable prediction. This not only can provide more data and information support for the enterprise comprehensive budget management goal-setting and preparation, but also can make the enterprise in such a process to continuously improve its own data information processing capabilities, so that it can continue to highlight its own information technology comprehensive budget management advantages in the future completely competitive market.

# 4.4 Optimize the comprehensive budget management information assessment system

The key to optimize the informationized appraisal system of comprehensive budget management lies in that the enterprise managers should make the enterprise's general management system more effective.

# **5. Application of Cloud Computing in Smart Tourism**

As an important development trend of the tourism industry in the future, smart tourism essentially refers to the construction and operation of the tourism industry through the scientific use of advanced technology and intelligent management means, in order to promote the orderly development of various work links, and provide more high-quality and convenient services for different levels of tourism customers. Cloud computing, as an emerging communication technology in modern society, is widely used in different industry sectors, through the organic combination of cloud computing technology and smart tourism, can give full play to their respective advantages and roles, maximize the comprehensive development of the tourism industry, and promote the informationization and intelligent development of smart tourism

# 5.1 Efficient and safe data processing and analysis

Cloud computing itself, as an advanced information and communication processing technology, can assist the intelligent tourism management to process and analyze the massive data, dig out the more valuable data information, and at the same time, it can also be a safe storage of this part of the data information. In this way, the senior leaders of the enterprise can extract data for reference and analysis at any time before making management decisions, creating real value for the enterprise.

# **5.2 Optimization and integration of tourism data resources**

Based on the application of cloud computing technology, tourism enterprises can effectively combine the real and virtual information data of the enterprise, provide consumers with better quality services, and maximize to meet the needs of different levels of users of tourism experience services. For example, tourism enterprises in the application of cloud computing technology, enterprise service objects can use different terminals to obtain tourism-related support services, convenient for users to eat, live and travel, greatly improving the service level of tourism enterprises, thus attracting more potential users.

# 6. Cloud computing in the wisdom of tourism in the application of innovation

# 6.1 Application of cloud computing in intelligent tourism operation and management

Intelligent tourism operation and management involves content mainly including resources for tourism users, travel, hotels and sightseeing attractions route planning, etc., in this management process will produce a large amount of data, requiring the relevant staff to take advanced management techniques and methods to comprehensively improve the level of wisdom of tourism management. Tourism enterprises can introduce the application of cloud computing technology to effectively build up a smart tourism management cloud platform that meets the characteristics of the enterprise's own development needs, based on the cloud platform for daily operation and management to complete the different functional services for market users to meet the different

needs of users. Cloud computing technology to build a smart tourism management platform not only has a high level of data processing and analysis capabilities, can guarantee the smooth progress of the smart tourism management business, but also can help enterprises effectively solve a large number of data security storage and protection work, to avoid the occurrence of user information data leakage and theft problems, affecting the reputation of the enterprise itself. In the construction of intelligent tourism cloud service platform, the government should strengthen the scientific guidance to the market tourism service providers, guide them to combine the law of tourism market development and tourism enterprise management needs, reasonably design the intelligent tourism cloud service platform with perfect functions, learn from the introduction of the use of more advanced informatization technology, and lay a good foundation for the development of a new situation of intelligent tourism in China.

# **6.2 Application of Cloud Computing in Smart Tourism Business**

In the new period, the core content of smart tourism business development mainly covers smart tourism industry alliance, smart tourism marketing platform, and online promotion and marketing of tourism products. Tourism industry development process exists in the distribution of tourism resources is too dispersed, the tourism market service enterprises a huge number of characteristics, these characteristics will lead to difficulties in realizing the entire tourism market centralized wisdom management development, need to rely on the application of cloud computing technology to effectively enhance the wisdom of China's tourism business, the level of information technology development. The application process of China's intelligent tourism business innovation and development mode is to build an integrated intelligent business trading platform by the market intelligent tourism business cloud service providers, to provide online payment, security and identity identification and authentication and other business functions for the majority of tourism service enterprises in a scientific and effective manner, so that the legitimate rights and interests of the different parties involved in the tourism business services can be fully guaranteed, and to promote the construction of the tourism industry for the harmonious and stable development of the tourism industry.

#### 7. Conclusion

In summary, under the support of cloud computing technology, enterprises can build an information-oriented comprehensive budget management system in the process of comprehensive budget management, which can provide enterprises with extremely accurate budget control data, programs and analysis results. This not only can fully reflect the many economic relationships within the enterprise, but also to optimize its own economic activities. It can be seen that cloud computing technology not only allows enterprises to comprehensive budget management work to obtain more basic services and the underlying data, but also to promote the development of enterprises in the cloud computing service platform more in line with their own strategic development, the adoption of cloud computing is the mediator of the relationship between the technical capabilities of small and medium-sized enterprises in the tourism industry and the environmental capacity for policymakers and practitioners in Henan Province, China, to provide the basis for insight, and at the same time, cloud computing technology also improves the environmental and technological capabilities of enterprises and the environment. computing technology also enhances the advantages of environmental and technological expertise.

### References

- [1] Lai Xiongyan. Analysis of Comprehensive Budget Management in Small and Medium-sized Enterprises--Taking Liuzhou Iron and Steel Company as an Example [J]. Modern Industrial Economy and Informatization, 2023,13(01):205-207.
- [2] Deng Bohai. Problems, Causes and Policies of

- Comprehensive Budget Management in China's Enterprises--Taking Hainan Tong'an Industrial Co. as an Example[J]. Investment and Cooperation, 2022(06):115-117.
- [3] Zheng Faqiang. Discussion on the Problems and Optimization Strategies of Comprehensive Budget Management in Small and Medium-sized Enterprises under the Background of Informationization[J]. Enterprise Reform and Management, 2022(10):127-129.
- [4] Chen Yani. aPaaS technology on the enterprise comprehensive budget management informa-

- tionization construction research [J]. Modern Marketing (Lower Decade),2022(04):161-163.
- [5] Lin Yonghuan. The Practice of Building a Comprehensive Budget Management Information System--Taking Enterprise A as an Example[J]. China Accountant General, 2021(12):44-46.
- [6] Lin Bo. Research on rationalization suggestions on how to do a good job of comprehensive budget management in automobile manufacturing enterprises[J]. Economic Management Digest, 2021(24):86-87.