The Level of Awareness of Cloud Computing among Staff in Hotel Establishments in Osun State, Nigeria

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Abstract- ***This research investigated the extent of cloud computing awareness among employees working in hotel establishments across Osun State, Nigeria. The study aimed to evaluate the current status of cloud technology adoption in the local hospitality sector, with emphasis on employee knowledge, usage levels, and perceived opportunities and obstacles. A structured questionnaire was administered to 202 staff members drawn purposively from six hotels across the state's three senatorial districts. Data were analyzed using descriptive statistics and ANOVA to test hypotheses. Results indicated that 52.46% of respondents were female, while 45.90% held tertiary education qualifications. The largest group (37.70%) fell within the 20–35 years age range. Most participants (40.5%) were employed in medium-scale hotels, and 65.4% had over a decade of industry experience. Furthermore, 63.24% of surveyed hotels were ranked as three-star. Awareness results showed that 63.24% of respondents had prior knowledge of cloud computing, with 50.27% actively making use of it. Databases (mean = 3.74), email platforms (3.40), and mobile applications (3.27) recorded the highest levels of familiarity. Among service providers, Amazon Web Services (AWS) emerged as the most widely recognized (mean = 3.36), followed by Google Cloud Platform (3.21) and Alibaba Cloud (3.20). No significant variation in adoption levels was observed across the sampled hotels (p > 0.59). Identified obstacles included limited financial resources, excessive energy use, risks of system breakdowns, and unreliable internet connectivity. The study recommends consistent staff training on cloud technologies, strict adherence to best practices among ICT professionals, and deliberate management adoption of cloud services to boost competitiveness. The findings contribute to understanding the current adoption landscape and highlight practical steps to strengthen cloud utilization in Osun State's hospitality sector.***

Index Terms- ***Cloud Computing, Awareness, Hotel Industry, Hospitality.***

I. INTRODUCTION

Nigeria's hospitality sector is a significant contributor to national economic development, enriched with diverse culture, natural attractions, and an expanding tourism industry. With rapid global technological progress, the performance and competitiveness of hotels in Nigeria depend on their ability to embrace digital solutions. Cloud computing has become a transformative tool capable of enhancing operational efficiency, reducing costs, and improving guest satisfaction (Srinivasan, 2021; Gupta & Sharma, 2018). Nonetheless, limited research has explored the level of cloud adoption in Nigerian hotels, particularly in Osun State.

II. LITERATURE REVIEW

The impact of cloud computing has been studied across various industries because of its ability to transform operations. Gupta and Sharma (2018) identified scalability, affordability, and improved service delivery as major benefits in hospitality settings. Similarly, Srinivasan (2021) emphasized how cloud adoption boosts efficiency and competitiveness within the sector.

In Nigeria, Osuolale et al. (2020) observed that awareness of cloud services is growing but still hindered by inadequate internet facilities and high operating costs. Adebayo (2017) reported that challenges such as data security issues and erratic electricity supply remain common barriers. Al-Sharairi and Thnaibat (2018) further highlighted a shortage of technical expertise in developing countries as a factor delaying integration.

Comparative studies show that in developed countries, hotels widely use cloud solutions for property management, customer data handling, and real-time analytics (Artur, 2024). In contrast, Nigerian-focused research remains sparse, particularly at the regional level. This study therefore seeks to fill that gap by assessing awareness of cloud computing among hotel employees in Osun State.

III. METHODOLOGY

Purposive sampling was employed to select six hotels located in Osogbo, Ife, and Ede. A total of 202 respondents were surveyed, covering departments such as ICT, administration, food and beverage, housekeeping, and customer service. Primary data were gathered through structured questionnaires, supplemented with secondary materials from books and journal publications. Data were analyzed using descriptive statistics, while ANOVA was applied for hypothesis testing.

IV. RESULTS

The survey revealed that 63.24% of staff had heard of cloud computing, with 50.27% indicating active use. Databases recorded the highest familiarity (mean = 3.74), followed by email services (3.40) and mobile apps (3.27). AWS was the leading recognized service provider (mean = 3.36). Analysis showed no significant variation in adoption across the selected hotels ($p > 0.59$).

V. FINDINGS

Findings from this study correspond with earlier works by Osuolale et al. (2020) and Forbes (2024), which reported moderate awareness levels among Nigerian hospitality workers. Challenges such as high costs and poor internet access remain consistent with those highlighted by Adebayo (2017) and Enterprise Cloud Challenge (2023). However, while Artur (2024) identified email as the most familiar application globally, this study found databases to be most prevalent among hotel staff in Osun State. Furthermore, AWS's leading role as the most recognized provider aligns with global adoption trends (Bakhyt, 2023).

CONCLUSION

The study concludes that awareness of cloud computing among hotel employees in Osun State is moderate, with databases and AWS emerging as the most familiar application and service provider respectively. Financial limitations, inadequate infrastructure, and low awareness remain major barriers, signaling the need for targeted solutions.

RECOMMENDATION

1. Hotels should regularly organize training and workshops on cloud technologies for their staff.
2. ICT departments should align with global best practices in adopting and managing cloud systems.
3. Collaborations with government bodies and private investors should be explored to address infrastructural and financial challenges.
4. Hotel management should strategically integrate cloud-based services into their operations to improve service quality and maintain competitiveness.

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