

Application Of Cloud Computing

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Abstract

Cloud computing is a modern information technology that enables users and organizations to access computing resources, applications, storage, and services through the internet without requiring extensive physical infrastructure. It has transformed the way data is stored, processed, shared, and managed across different sectors. The applications of cloud computing are rapidly expanding in education, healthcare, banking, business, government, research, entertainment, and software development. In education, cloud-based platforms support online learning, virtual classrooms, digital libraries, and collaborative academic activities. In healthcare, cloud computing facilitates electronic health records, telemedicine, medical data management, and secure information sharing. Businesses utilize cloud services for data storage, customer relationship management, enterprise applications, analytics, and remote collaboration. Cloud technology also supports banking and financial services by providing scalable computing resources, digital transactions, data analysis, and disaster recovery solutions. In scientific research, researchers can use cloud-based infrastructure for large-scale data processing, simulations, and artificial intelligence applications. Government organizations employ cloud platforms to deliver digital services and manage large databases efficiently. Furthermore, cloud computing plays a significant role in software development by providing flexible environments for application development, testing, and deployment. Its major advantages include scalability, accessibility, flexibility, cost efficiency, and improved resource utilization. However, issues such as data security, privacy, network dependency, and service availability must be carefully addressed. Overall, cloud computing has become an essential technology for supporting digital transformation and improving the efficiency, accessibility, and scalability of modern computing services.

Keywords: Cloud Computing, Cloud Services, Data Storage, Internet Technology, Scalability, Data Security, Virtualization, Digital Transformation, Cloud Applications, Remote Computing.