Academic Year : 2023-24			
SUBJECT: Cloud Computing			
CLASS: TE A	SEMESTER: VI		
ASSIGNMENT NO: OCW	DATE OF SUBMISSION:		
NAME OF STUDENT: Hardik Mahesh Kotangale		ROLL NO: 34	
TOPIC: Cloud-native applications and migration			
Reference Link: <a href="https://ieeexplore.ieee.org/document/8125545">https://ieeexplore.ieee.org/document/8125545</a>			

Cloud-native applications refer to applications that are built specifically for the cloud computing environment, using cloud-based infrastructure, platforms, and services. These applications are designed to take advantage of the scalability, flexibility, and availability offered by cloud computing, and they can be easily deployed, managed, and updated in the cloud.

Cloud migration, on the other hand, refers to the process of moving applications, data, and other IT resources from on-premise or legacy systems to the cloud. This migration can involve rehosting, refactoring, rearchitecting, or rebuilding applications, depending on the specific needs of the organization.

The migration involved a complete rewrite of the applications, using modern development frameworks and microservices architecture. The new applications were designed to be highly scalable and fault-tolerant, using AWS services such as Amazon Elastic Container Service (ECS) and Amazon Relational Database Service (RDS). The applications were also integrated with other AWS services such as Amazon Simple Queue Service (SQS) and Amazon S3 for data storage and messaging.

The benefits of cloud-native applications and cloud migration were immediate and significant. The new applications were able to scale easily to meet customer demand, with auto-scaling groups and load balancers built into the architecture. The applications were also more resilient and fault-tolerant, with automated failover and self-healing capabilities.

Overall, the cloud-native applications and cloud migration helped XYZ Inc. to deliver new features and functionality to their customers faster and more reliably, while also reducing their IT costs. This case study demonstrates the potential benefits of cloud-native applications and cloud migration for businesses looking to modernize their IT infrastructure and applications.

## **Conclusion:**

In conclusion, cloud-native applications, result in increased scalability, resiliency, and cost savings, demonstrating the potential benefits of cloud-native applications and cloud migration.

Name & Sign of Subject In-charge:	Marks:	