**Security:** is one of the major challenges for cloud-based projects face. Data protection, storage, and processing of data in unknown locations increase the trust deficit with customers. Compromised credentials, human error, account hacking, and data breaches are some of the major concerns in the cloud.

**Cost and Management:** An organization can easily increase its processing power without incurring significant costs for new hardware. Instead, businesses can use public providers' pay-as-you-go models to access additional processing. However, defining and forecasting quantities and costs can occasionally be challenging due to the on-demand and scalable nature of cloud computing services.

**Lack of Technical and manpower:** Lack of resources and/or expertise is one of the issues businesses and organizations are currently having with cloud computing. Organizations are increasingly loading up the system with more workloads as cloud technologies continue to advance quickly. These factors make it difficult for organizations to keep up with the tools. Additionally, the demand for expertise is still rising. By providing IT and development staff with additional training, these difficulties can be reduced.

**Compliance:** is one of the risks that cloud computing is currently facing. Anyone using backup services or storage has a problem with that. A company must comply with official rules and laws each time it transfers data from internal storage to the cloud.

**Performance:** An organization becomes reliant on the service providers once it migrates to the cloud. The following significant obstacles to the switch to cloud computing build on this collaboration. Nevertheless, this partnership frequently gives companies access to cutting-edge technologies that they otherwise wouldn't have. On the other hand, when the provider performs poorly, the organization's BI and other cloud-based systems are also impacted. You experience downtime when your provider does.

**Private cloud:** Building a private ecosystem may not be a top priority for many businesses, but for those that are likely to use such a solution, it quickly emerges as one of the biggest problems with cloud computing, so private solutions should be carefully considered. Having all the data in-house is a major benefit of establishing an internal or private cloud. But in order to move to cloud computing, IT managers and departments will have to build and glue it all together on their own, which can be very challenging.

**Migration:** One of the main issues facing the cloud computing industry in recent years has been migration. This is how an application is moved to the cloud. Although moving a new application is a simple process, there are numerous cloud challenges when moving an existing application to a new environment. Over half of the top companies that are currently moving their applications to the cloud report that the process is more challenging than anticipated and that the projects are running over schedule and budget. What issues arise when storing data in a cloud-based ecosystem? The most frequently cited were:

1. thorough troubleshooting
2. slow data transfers
3. migration officers
4. Cutover difficulty
5. Application sluggishness
6. after migration, cost-optimization.