Defense in depth safeguard from vulnerability by involving various security measures. This concept came from the military where they use to setup multiple obstacles to slow down a attacking force. The same functionality is applied in moderns networking era by implementing few mechanisms like Firewall, access control, IDS/IPS, Cryptography, Digital Signature and many more (Cybersecurity Framework, 2023).

DID places a curial role in this digital world by providing measures which help the company from the data breaches (Cybersecurity Framework, 2023). To Know more about the DID framework the NIST (National Institute of Standard Technology) provides the framework of DID for small sector like how to be implementing security, risk management. By using this multiple security measures, organizations can improve their overall security stance and reduce the breaches (Defense in Depth: What is it and Why it Matters, n.d.).

Some of the security implementations that are used for on-premises and off-premises networks:

**On Premises: -**

**Network Segmentation: -** To Provide from the breaches and data damage in the network it divides into the smaller isolated segments and has it own security control mechanisms (Network Security Solutions for Enterprise, n.d.).

**Data Loss Prevention: -** It is a software that detects, configure, monitor, and prevents data from the file transferring, web trafficking's (Network Security Solutions for Enterprise, n.d.).

**Information Security and Event Management: -** Collects and analyzes security event logs from all over the network It also detects threats and send out alerts for further investigation (Network Security Solutions for Enterprise, n.d.).

**Off Premise: -**

**Cloud Security:** To ensure the confidentiality and privacy of cloud-stored data. cloud security covers encryption and secure configurations (Network Security Solutions for Enterprise, n.d.).

**Mobile Device Management: -**MDM is a security solution for manage and protecting mobile devices that access applications (Network Security Solutions for Enterprise, n.d.).

**Cloud Computing: -** The three levels of security are SAAS, PAAS, IAAS for the cloud-based software application to secure data (Network Security Solutions for Enterprise, n.d.).

# **References**

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