**ARDHI UNIVERSITY**



**SCHOOL OF EARTH SCIENCE, REAL ESTATE, BUSINESS AND INFORMATICS (SERBI)**

**DEPARTMENT OF COMPUTER SYSTEMS AND MATHEMATICS**

**BACHELOR OF SCIENCE IN INFORMATION SYSTEMS MANAGEMENT**

**IS353 INFORMATION SYSTEMS AUDIT AND CONTROL**

**THIRD YEAR.**

**ASSIGNMENT 1**

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With respect to organization controls over information and processes, discuss the following in details about software licensing controls. Provide clear examples to support your explanations.

ANSWER.

Software licensing control refers to the management and enforcement of software licenses, which govern how the software can be used, distributed and accessed. It involves implementation mechanism to ensure that users adhere to terms and conditions of the licensing agreement, such as limiting the number of installations, preventing unauthorized copying, and enforcing usage restrictions. This can be achieved through various techniques like product activation, license key, online activation and Digital Rights Management (DRM) Systems. When discussing software licensing controls within the context of organizational controls over information and processes, it's important to consider how software licenses regulate the use, distribution, and management of software assets within an organization (Shumkova et al., 2020). The following are the various aspects of software licensing controls which are.

Compliance Management. Software licenses help organizations ensure compliance with legal and contractual obligations related to software usage. By defining the terms and conditions of software usage, licenses establish clear guidelines that users must adhere to. It involves monitoring and enforcing these guidelines to prevent unauthorized use or distribution of software. For example, an organization purchases a license for a project management software tool. The license agreement specifies that the software can only be used by employees within the organization and prohibits sharing login credentials with external parties. The IT department implements measures to monitor user access and usage patterns to ensure compliance with these terms. (Tang et al., 2020)

Asset Management. Software licenses are essential for managing software assets effectively within an organization. License agreements provide details about the number of authorized installations, permitted users, and usage restrictions. Proper asset management involves tracking software licenses, maintaining an inventory of software installations, and ensuring that the organization stays within the bounds of its license agreements. Example, A company invests in a suite of graphic design software for its design team. The IT department maintains a central database that records the number of licenses purchased, installations across different devices, and user assignments. Regular audits are conducted to reconcile software usage with the number of licenses owned.

Risk Mitigation. Software licensing controls help mitigate various risks associated with non-compliance, unauthorized use, and software piracy. By enforcing licensing agreements and implementing appropriate controls, organizations can reduce the likelihood of legal disputes, financial penalties, and reputational damage resulting from non-compliant software usage. Example, A multinational corporation operates in regions with strict copyright laws. To mitigate the risk of copyright infringement and software piracy, the organization implements a comprehensive software asset management program. This program includes periodic license audits, employee training on software usage policies, and robust access controls to prevent unauthorized installations.

Cost Optimization. Effective software licensing controls contribute to cost optimization by ensuring that organizations only pay for the software they need and use. By understanding their licensing agreements and optimizing software deployments, organizations can avoid unnecessary expenses associated with over-licensing or underutilization of software assets. Example, a startup company invests in software licenses for project management, collaboration, and productivity tools to support its growing workforce. By conducting a thorough analysis of its software usage patterns, the company identifies opportunities to consolidate licenses, switch to more cost-effective subscription plans, and negotiate volume discounts with vendors, resulting in significant cost savings. (Cohen et al., 2020)

License auditing. It is the process of systematically reviewing an organization's software inventory, usage data, and licensing agreements to ensure compliance with software licensing agreements and policies. Regular audits are necessary to verify that the organization is compliant with software licensing agreements. During an audit, the organization reviews its software inventory, usage data, and licensing agreements to ensure that everything is in order. For example, a company might conduct quarterly audits where they compare the number of software licenses purchased with the actual usage to identify any discrepancies.

Conclusively, software licensing controls play a crucial role in governing the acquisition, usage, and management of software assets within organizations. By implementing robust controls, organizations can ensure compliance with legal and contractual obligations, effectively manage software assets, mitigate risks, and optimize costs associated with software usage.

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