

BUSINESS SOFTWARE ALLIANCE
GUIDE TO SOFTWARE ASSET MANAGEMENT



CONTENTS

	Executive Summary	1
1	What SAM Is And Why It Is Needed	4
1.1	Introduction	4
1.2	What Is SAM?	4
2	Advantages Of SAM	8
3	Common Myths Related To SAM	9
4	International Standard On SAM	10
4.1	ISO 19770 On SAM	10
4.2	IS Governance Framework Entails SAM	10
5	Why Is SAM Critical	12
6	Who Is Responsible For SAM	14
7	How To Implement SAM	15
8	Benefits Of SAM	17
9	SAM Tools	20
10	SAM And Corporate Governance	22
10.1	Introduction To Corporate Governance	22
10.2	Corporate Governance And Software Asset Management	24
10.3	Software License Usage Is A Matter Of Organization Internal Control Policy	24
10.4	How IT Controls Impact Your General Internal Controls	25
10.5	Relevant Legislation Enforcing Corporate Governance	27
11	Copyright Protection Legislation In India	30
11.1	Infringement Of Software Licenses	30
11.2	Legal Implications Under Copyright Act, 1957	30



SAM Guide Executive Summary

SAM Guide Executive Summary

This summary provides an overview of the SAM Guide, including an overview of what SAM is, why it is important to implement it, implementation responsibilities, as well as SAM and corporate governance. However, it should not be seen as a substitute for the Guide itself. Please refer to the main text for amplification of these and several other issues.

Introduction to SAM: maximising value from software at acceptable cost and risk


Over the last few years, there has been a paradigm shift, with IT being treated as an asset. The ability to effectively manage software has become increasingly challenging, with loose monitoring and control over IT assets tending to raise costs, leading to the requirement of tools and processes to manage software licensing costs. And this gives rise to Software Asset Management (SAM).

Software Asset Management is a systems management discipline and includes the infrastructure and processes necessary for the effective management, control and protection of software assets within an organization, throughout all stages of their lifecycle. It encompasses management processes, tools, and strategies to get the best value from software assets at an acceptable risk and cost.

Implementing SAM thus leverages a wide range of IT processes, including software policy management, software performance management, license management and audit compliance, support automation, remote help desk support, security management, and business continuity planning.

IS Governance framework entails SAM

The IS Governance framework is based on the following standards: ISO 27001 (Information Security Management System), and BS 15000 (IT service management).



SAM procedure / process	Corresponding area in ISO 27001
SAM policy	Security policies
Competence, awareness and training	Security organization
Asset identification	Classification and control of assets
Verification and Compliance Process	Compliance


Why SAM is important: advantages, benefits, and risks arising from non-implementation

Advantages of SAM implementation

- Peace of mind: It provides assurance that the organization has a robust corporate governance framework, which ensures that they possess only legally licensed software, thus increasing the confidence across all levels of organization and shareholders.
- Reduced threat to information security.
- Budget management: It enables identification of software, not required and saving on the cost for those licenses while justifying the investment in technology assets.
- Technical support: There is considerable cost benefit as technical support and application/software support is available from vendors, thus eliminating all costs related to support set-up.
- Upgrade entitlements: The organization can ensure that the current version of the software is being used, thus they enjoy the full benefits of the features offered.

Benefits of SAM implementation

- Business practices are in line with applicable laws
- Adequate safeguards have been taken to cover the legal risks at appropriate software life cycle stages
- Policies and procedures are in tune with legal requirements.
- Personnel are aware of the legal risks posed by unauthorized/pirated software
- Regular monitoring is done to assess compliance

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- Reduces risk and liability for intentional or unintentional copyright infringements
 - Better software license management with reduced incidence of over- or under-licensing

Risks arising from non-implementation

SAM is now critical to successful business. The common risks of not having SAM include legal exposure, technical risks, business disruption, lost productivity and over expenditure. For instance, in the absence of a formal tracking mechanism, there may be an over-licensing issue for the software used, thus increasing the cost of IT assets.

Implementing SAM: functions and responsibilities

Senior management, personnel in charge of policies and procedures, the training function, the IT function, sourcing function and employees all play a part. While senior management provides sponsorship and organization's commitment to SAM, the IT function is involved in implementing appropriate tools for SAM implementation, monitoring software assets and providing an update to the Software Asset Manager/senior management to aid decision making (purchasing of additional licenses, etc) and so on.

Corporate Governance and SAM

As shown by recent studies, IT costs in 2010 will account for 50% of a company's total budget (source: Gartner "IT Asset Management: Client issues for 2004") and management of IT assets will become an increasingly strategic issue. At a corporate governance level, problems linked to IT asset management will gain importance and companies will find it ever more necessary to include an IT governance system in its governance system. The key component of a good governance system is compliance with laws and regulations. Companies must always be aware of the cost of non-compliance both at a purely "money" level and in terms of their image.

Relevant legislation enforcing Corporate Governance

- Indian Companies Act
- Clause 49 to the Listing Agreement of SEBI
- Sarbanes Oxley Act (SOX) of the US (Sections 302 and 404)
- The Indian Copyright Act, 1957



What SAM is and why it is needed

1 What SAM is and why it is needed

1.1 Introduction

Organizations the world over, have come to depend upon IT, and in particular software applications, for the productivity integral to success. Over the last few years, there has been a paradigm shift in IT buying and acquisition processes, IT management and vendor management, with IT being treated as an asset.

The ability to effectively manage software has become increasingly challenging. The complexity of IT management increases in proportion to the size of the enterprise. Loose monitoring and control over IT assets, tend to raise the costs involved in Software Asset Management, leading to the requirement of tools and processes to manage software licensing costs.

Hence, the need for IS organizations to embrace Software Asset Management (SAM) as a discipline.

1.2 What is SAM?

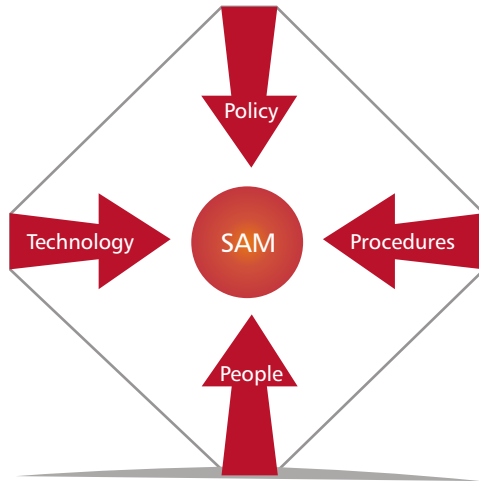
1.2.1 Software Asset Management (SAM) is a systems management discipline and includes the infrastructure and processes necessary for the effective management, control and protection of software assets within an organization, throughout all stages of their lifecycle. It encompasses management processes, tools and strategies to get the best value from software assets at an acceptable risk and cost.

1.2.2 In the absence of a formal asset management process, the organization would not be able to track all its software assets, versions installed, changes made, license status, software usage etc. For instance, a software/application in an organization undergoes a change through the change management process. In the absence of a formal software asset management process, the details associated with all changes will not be captured in a common database, to allow tracking of the changes made, e.g. version control details, details on implementation of changes, usage, licensing details (if any), etc. On the other hand, with a formal Software Asset Management process in place, these

details would be captured in a common SAM database to allow easy tracking of IT assets in the organization.


- 1.2.3 Implementing SAM would thus leverage a wide range of IT processes such as:
- Software policy management
 - Software performance management/change management
 - License management and audit compliance
 - Support automation
 - Remote help desk support,
 - Security management
 - Business continuity planning

1.2.4 The paradigm of SAM rests on four key components:



1.2.4.1 Policy

- The organization should formulate a Software Asset Management policy (SAM policy), which will outline the company's objective and goals towards managing software for maximum benefit, using only legally licensed software, and defining the company's procedure for acquiring legal software.

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- The number of policies formulated as part of the SAM policy may vary according to business needs, but the minimum requirement for all organizations is to have policies regarding software acquisition, use, copyright and licensing. The policies should state what kind of software is acceptable to use on the system, the roles and responsibilities of the people involved in the SAM process, the regulations for Internet and e-mail usage and a section on Intellectual Property Rights.
 - The formulation of the SAM policy would:
 - Denote the organization's commitment to formal Software Asset Management
 - Serve as a baseline document for IT asset management
 - Cover computing requirements of all business areas
 - Align SAM with the business strategy

1.2.4.2 Procedures


- On formalization of the SAM Policy, the management should appoint a team to oversee its implementation. The team would be responsible for providing a mechanism to implement the policy. They would also formulate a structured procurement process and procedure; and design software monitoring and control procedures.
- Management should also identify a person to be held responsible for managing SAM in the organization.

1.2.4.3 People

- In order to ensure complete coverage of the SAM process, the organization should pro-actively involve employees in the process.
- This can be achieved by:
 - Increasing the awareness on SAM through end user agreements and website postings
 - Communicating with employees on IPR issues and possible action
 - Providing training on SAM procedures

1.2.4.4 Technology

- Organizations can make use of technology to ensure smooth implementation of the SAM process. The SAM tools



available should be evaluated, to identify the tool most suited to the organization's need. Use of technology would:

- Act as enabler for the SAM process
- Automate the monitoring process
- Make use of tools to consolidate and review the software asset usage and licensing

1.2.5. The success of SAM is largely dependent on the following factors:

- Responsibility for software licensing lying with the IT Officer, Departmental Head and a Board Member.
- There is a written policy for software procurement (i.e. a formal purchasing policy) with identified vendors.
- End user responsibility is managed by formal disciplinary procedures, end user agreements and mutual understanding.

2 Advantages of SAM

- 2.1.1 Most organizations are focused on driving down operational costs, while maintaining their current levels of service, quality and competitiveness. Several organisations also deal with changing business models as a response to the general economic state of the region.
- 2.1.2 In the face of increasing proliferation of PCs and greater market breadth of various software, the cost of configuration, inventory management, software distribution and local support can be very large. Software Asset Management can help to protect a business from software piracy and under-licensing.
- 2.1.3 Advantages of implementing SAM also cover the following areas:
- Peace of mind: It provides assurance that the organization has a robust corporate governance framework, which ensures that they possess only legally licensed software, thus increasing the confidence across all levels of organization and shareholders.
 - Reduced threat to information security: Unauthorized software can contain viruses that may potentially damage individual PCs and networks.
 - Budget management: It enables identification of software not required and savings on the cost for those licenses while justifying the investment in technology assets.
 - Technical support: There is a considerable cost benefit as technical support and application/software support is available from vendors, thus eliminating all costs related to support setup at the organization level.
 - Upgrade entitlements: The organization can ensure that the current version of the software is being used, thus enjoying full benefits of the features offered.

3 Common myths related to SAM

- SAM is only about software licensing.
- SAM involves all four aspects: policy, procedures, people and technology.
- None of the recognized names ever get caught.
- Leading companies have paid huge amounts to settle licensing claims.
- Someone else in the organization would be tracking software compliance.
- A designated person needs to be made responsible for procurement of software assets and ongoing compliance and monitoring requirements.
- We have volume license agreements, so we must be compliant.
- There are different variants of a volume licensing agreements. Most volume license agreements contain a standard audit clause.
- We will install an inventorying tool and we'll be compliant.
- A technological tool can only facilitate the process. Effective SAM implementation needs enterprise-wide commitment.
- We'll conduct this once and we'll be done forever.
- SAM is a continuous, iterative and evolving process.

4 International standard on SAM

4.1 ISO 19770 on SAM

4.1.1 The ISO 19770 Standard is the international standard on SAM. It is a two-part standard, the first part of which was published in May 2006. ISO/IEC 19770-1 :2006 was developed to enable an organization to prove that it is performing SAM to a standard sufficient to satisfy corporate governance requirements and ensure effective support for IT service management overall.

4.1.2 ISO 19770 is a two-part standard, covering:

- Business Issues (ISO 19770-1): Published in May 2006, it covers the processes and procedures for SAM planning, inventory control and software lifecycle management.
- Technical Issues (ISO 19770-2): Technical specifications and metrics. (Under development).

4.1.3 ISO 19770 has six main sections:

- Control environment, which deals with processes, procedures, roles and responsibilities.
- Planning and implementation, which deals with resources required, reporting structure, measurement and verification.
- Inventory, which deals with selection and confirmation of assets, monitoring of existence, usage and storage.
- Verification and compliance, which deals with processes to identify and match inventory to licenses.
- Operations management, which deals with documentary evidence of implementation, and management of relationships with vendors.
- Lifecycle, which deals with software lifecycle management.

4.2 IS Governance framework entails SAM

4.2.1 The IS Governance framework is based on the following standards:

- ISO 27001 Information Security Management System.
- BS 15000 IT service management.

These standards mandate compliance with regulatory requirements for restricting copying of software in organizations.

4.2.2 ISO 27001 and BS 15000 cover in detail the procedures/processes involved in SAM as described in the two tables below:

SAM procedure / process	Corresponding area in ISO 27001
SAM policy	Security policies
Competence, awareness and training	Security organization
Asset Identification	Classification and control of assets
Verification and Compliance Process	Compliance

Table 1: ISO 27001 and SAM

SAM procedure / process	Corresponding area in BS15000
Asset Identification and Database Management	Configuration Management
Asset Control, Status Accounting	Change Management
Logistics (Deployment) Processes	Release Management and Budgeting and Accounting for IT services
Contract Management and Outsourcing	Business Relationship Management
Vendor Management	Vendor Management

Table 2: BS 15000 and SAM



Why is SAM critical

5 Why is SAM critical

5.1.1 The common risks of not having SAM include:

- Legal exposure
- Technical risks
- Business disruption
- Lost productivity
- Overspending

5.1.2 Legal exposure

- Unlicensed software and Piracy implications:
 - Under copyright laws it is illegal to make or distribute copies of copyrighted material without authorization from the copyright holder, except to make a single backup copy for archival (Sections 14 and 52, Indian Copyright Act 1994) purposes.
 - In case any employee installs illegal software on the office network, the management is deemed responsible.
 - A minimum jail term of 7 days for copyright infringement or fines up to Rs.200,000 and a jail term of up to three years or both. (Section 63-B, Indian Copyright Act 1994).
- Industry groups against piracy are actively pursuing such cases and getting offenders prosecuted. These groups include:
 - Software Publishers Association (SPA)
 - Business Software Alliance (BSA)
 - NASSCOM

5.1.3 Technical risks

- Unauthorized software often contains malicious code (viruses, spyware, trojans), which may cause:
 - Damage to workstations and networks
 - Confidential data breach
 - Loss of integrity of critical systems
- Seemingly harmless programs may include spyware
 - AOL Messenger (VM Player)
 - DivX Player (GAIN bundle)



5.1.4 Business risks

- Non-compliance may result in legal action being taken resulting in the tarnishing of the image of the organization.
- Businesses running on unlicensed software cannot seek technical support from the software publisher.
 - Even in case of mission critical issues there would be little support.
 - Software upgrades/patches etc would not be available, increasing exposure to known vulnerabilities.
- Use of unlicensed software may lead to incompatibility between applications.

5.1.5 Business disruption

- Lack of technical support from the software publisher due to use of unlicensed software, can delay business use of the software until issue resolution.
- Legal action against the organization can disrupt normal business processes and affect the image of the organization.
- Version incompatibility of the software can lead to a disruption in the use of the application across the organization.

5.1.6 Lost productivity

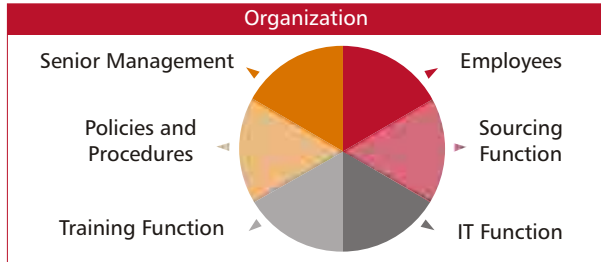
- There may be various versions of the software being used in an organization, due to lack of a proper monitoring mechanism. This would lead to a communication gap between users, affecting the productivity of the organization.
- File-sharing issues may go unnoticed, due to the inability to track all such instances.

5.1.7 Overspending

- In the absence of a formal tracking mechanism, there may be an over-licensing issue for the software used, thus increasing the cost of IT assets.
- The implementation of technical and application support would also increase the IT operation costs.
- There is a higher risk of spending on legal issues arising due to licensing, file-sharing, non-compliance etc.

Who is responsible for SAM

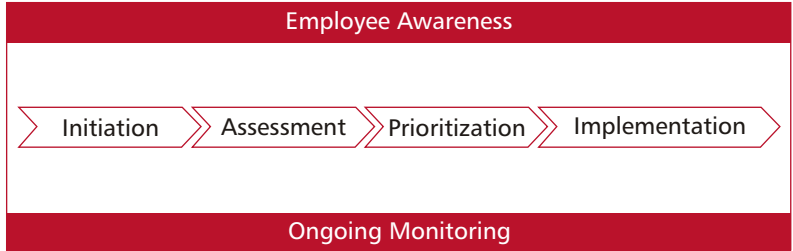
6 Who is responsible for SAM



- Senior Management
 - Provide sponsorship and organization's commitment to SAM
 - Ownership of SAM process by a senior management team member (Software Asset Manager)
- Policies and Procedures
 - Formalization of SAM policies with management commitment
 - Procedures for implementation of SAM - Software Asset Manager and IT
- Training Function
 - Imparting relevant knowledge to employees through training and workshops on SAM process and its importance. IT team can assist in designing the training module
- IT Function
 - Implementing appropriate tools for SAM implementation
 - Monitor software assets and provide an update to Software Asset Manager/senior management to aid decision making (purchasing of additional licenses, etc)
- Sourcing Function
 - Single window for procurement
 - Support in negotiations and contracting (considering organizations requirements with input from Software Asset Manager)
- Employees
 - Adhere to organization's policies and procedures
 - Follow SAM guidelines and procedures

How to implement SAM

7 How to implement SAM




7.1.1 The implementation of SAM involves four stages:

- Initiation
- Assessment
- Prioritization
- Implementation

These are complemented by an ongoing monitoring and employee awareness program that spans the entire cycle.

7.1.2 The initiation stage involves the following:

- Commitment and support of senior management
- Formulation of the SAM Strategy
 - Business Strategy: Tied to existing company strategies. E.g. becoming more competitive
 - Risk Based Strategy: Reducing enterprise risk and linking IT risks with business impact
- Formalizing the strategy:
 - Performing a Benefits Assessment: Questionnaires, consultants, management meetings
 - Structuring the SAM program: Project sponsor, decentralization
 - Determining principal objectives of the project
 - Identifying functionalities: Essential/Important! Desirable
 - Identifying methods for performance evaluation: KPIs and other metrics
- Policies and initial procedures
 - Obtain a formalized SAM Policy
 - Roles and responsibilities to be defined (SAM Organization)
 - Project sponsor

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- Directors and legal representatives
 - IT Asset Manager/ Software Asset Manager
 - Procurement team
 - Users and operators
 - Formalized SAM assessment procedures and guidelines

7.1.3 Assessment

- There are two main techniques for inventorying software:
 - Manual Inventory
 - Automatic Inventory by way of a software inventory tool
- Mapping of the licenses with the number of installations, would lead to a scenario where the organization is over licensed or under-licensed. Based on the scenario that arises, the organization can take appropriate steps.

7.1.4 Prioritization

- Based on the assessment, the management shall prioritize options considering the following:
 - IT strategy
 - IT budget
 - Usage pattern
 - Legal/Regulatory considerations

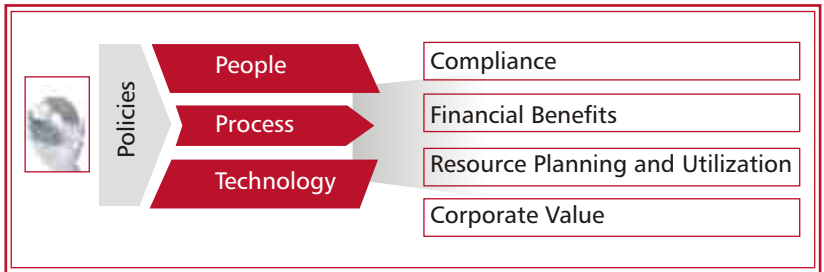
7.1.5 Implementation

- Implement technology by:
 - Implementing SAM tools
 - Buying new or surrendering existing licenses
 - Installing or uninstalling instances of software
- Implement people processes by training and awareness
- Implement processes and procedures such as:
 - Overall Management Process
 - Core Asset Management Process
 - Software Life Cycle Management Process
 - Relationship Process

Benefits of SAM

8 Benefits of SAM

- 8.1.1 The single biggest challenge faced by organizations in the area of IT management, is to control the distribution or use of software, and comply with licensing requirements.
- 8.1.2 Challenges are also faced in the form of reduced employee productivity due to the proliferation of unsupported software downloaded from the Internet, an increased risk of contracting viruses or opening the environment to other security threats and the inability to adequately track and control the software in place leading to high and costly support requirements.
- 8.1.3 The most common benefit of SAM implementation is that organizations can accurately plan and budget for their software requirements (new software, license upgrades (or retirements) and support requirements).



8.1.4 Compliance

An effective Software Asset Management framework would ensure:

- Business practices are in line with applicable laws
- Adequate safeguards have been taken to cover the legal risks at appropriate software lifecycle stages (Contracting, Procurement)
- Policies and procedures are in tune with legal requirements
- Personnel are aware of the legal risks posed by unauthorized/pirated software
- Regular monitoring is done to assess compliance



Benefits of Compliance:

- Reduced risk and liability for intentional or unintentional copyright infringements
- Better software license management with reduced incidence of over-or under-licensing

8.1.5 Financial benefits

An effective Software Asset Management framework may lead to a reduction in software licensing costs through effective management of software in the following manner:

- A check is placed on over-licensing, thus reducing the number of licenses required
- Redundant applications are removed
- A formal purchase process is established, which offers better negotiating power
- Informed purchase decisions are made, based on facts not guesstimates
- Reduction in maintenance costs
- Lower technology risks and outages, leading to a reduction in losses
- Streamlining of software assets leading to better efficiency
- Reduction in losses from theft and misuse

8.1.6 Resource planning and utilization

A structured SAM program would quantify IT investments, objectively identify the business benefits and prioritize future investments, leading to:

- Structured software requirement analysis
- Structured license procurement
- Identification of software assets
- Monitoring of asset usage
- Apportionment of asset cost to respective user departments
- Better utilization of software assets
- Improved efficiency
- Justified investment in Technology
- Improved Quality Assurance through the above processes



8.1.7 Corporate value

IT strategy on Software Assets is a clear indicator of corporate intent, management's attitude towards technology and the capability to deliver expected results. These are as important as the financial numbers when showcasing an organization's culture and capabilities.

A SAM program reduces value risks that may arise by:

- Tarnished corporate image for using unlicensed/under-licensed software
- Severing of relationships by business partners
- Adverse credit rating
- Lower employee morale

9 SAM Tools

9.1.1 The implementation of Software Asset Management can be facilitated by use of IT Tools. The various tools and the features offered are described in the table below.

Tool Category	Features Offered
Asset Inventory Tools	<ul style="list-style-type: none"> • Allows management of inventory of software assets and licenses • Offers simple tools (Excel) to complex systems (GASP)
Asset Discovery Tools	<ul style="list-style-type: none"> • Identifies hardware and software installed in the company • Checks software on all platforms • Cannot work on stand-alone PCs • Does not work for new applications/ internally developed applications • One server application may be used by many users, since the tools looks at application instances
Metering Tools	<ul style="list-style-type: none"> • Checks use of software on workstations • Can be Passive (check usage) or Active (check licenses) • Sends exception reports (exceeding license limits) • Cannot be used for stand-alone PCs
License Management Tools	<ul style="list-style-type: none"> • Allows for management of license information • Periodically determines a need for each type of software license used • Traces the license requests with license's effective use • Identifies unused licenses
Contract Management Tools	<ul style="list-style-type: none"> • Manages all the issues related to software purchase contracts and their installation • Checks for terms of contract, their possible automatic renewal or expiry dates

Tool Category	Features Offered
Deployment Management Tools	<ul style="list-style-type: none"> ● Monitors software during the deployment stage ● Allows installation with related authorizations
Security Tools	<ul style="list-style-type: none"> ● Prevents the installation of unauthorized software ● Prevents changes in the released and authorized configurations
Procurement Tools	<ul style="list-style-type: none"> ● Allows for purchase of new licenses
Vendor License Management Technology	<ul style="list-style-type: none"> ● Uses Licensing keys ● Makes use of hardware dongles¹ ● Allows for online license management ● Performs Software Metering²

¹A dongle is a small hardware device that connects to a computer to authenticate a piece of software. When the dongle is not present, the software runs in a restricted mode or refuses to run. Dongles are used by some proprietary vendors as a form of copy prevention or digital rights management because it is much harder to copy the dongle than to copy the software it authenticates

²Software metering is done to determine what software is installed, understand the software usage, control software use (licenses, timekeeping, idle detection etc.), prevent unauthorized installation, and generate usage reports

9.1.2 Some sample tools available are:

- GASP enterprise suit [Attest systems]
- Microsoft SMS Server
- Key Audit [Key Server]
- Survey [Scalable Software]

1.1.2 Evaluating Tools

An organization that opts to use SAM Tools, should evaluate the tools available prior to purchase, in order to select one best suited to their needs. The tools should be evaluated based on the following aspects:

- Kind of functionality provided
- Cost per workstation/user
- Degree of customization possible (Reports generated, system parameters)
- Range of software detected (Microsoft, SAP, SUN, Oracle etc)
- Ease of use (GUI based control, visual reports)
- Support from the vendor

10 SAM and Corporate Governance

10.1 Introduction to Corporate Governance

10.1.1 The whole issue of corporate governance is of fundamental importance to companies. Companies that aim at being competitive in global markets use efficiency and quality as tools which are held to be important by investors but are not the only ones. Other tools which investors look for are transparency, compliance with laws, regulations and standards together with the good management of the company.

10.1.2 Furthermore, while corporate governance is a priority for companies, it is also very important for markets and institutions. In fact, these bodies have taken steps to encourage the spreading of the corporate governance culture, firstly, through codes of conduct and also by reviewing laws and regulatory systems.


10.1.3 Given the different impact of economic factors on the different types of companies, the concept of corporate governance is suitably structured and based on specific application parameters. However, the basic concept is common for all companies: they must be governed protecting the shareholders' and other stakeholders' interests, therefore they must have an independent board of directors able to strategically control operations and ensure that transactions are performed transparently, efficiently and in full compliance with their strategic objectives and relevant legislation.

10.1.4 Greater use of information technologies and internal communication systems are being made a corporate governance tool. This is because technologies can assist the greater involvement of shareholders and stakeholders in the running of a company while also protecting their rights.

10.1.5 How can corporate governance be defined?

"Corporate Governance is the range of processes applied to direct and manage a company's operations, summing:

- Attainment of its objectives
- Maintenance of practices that comply with expectations
- Transparency with shareholders and stakeholders



With the objective of protecting and increasing over time, the value for the shareholders and stakeholder³.”


- 10.1.6** However, limiting the concept to the straightforward definition of good corporate governance significantly reduces its importance. Operating efficiencies are achieved through a number of activities that give reasonable guarantee of attaining objectives: from the manner in which the objectives are communicated to the methods used to measure their realisation, from planning to first line controls, tools to recruit the personnel able to follow the objectives to methods to ensure that such personnel are motivated and effectively engaged to this end. Therefore, the first step to measure efficiency and effectiveness on an ongoing basis is to establish the basis on which the good management of the company will be based.
- 10.1.7** Internal controls are seen as the tool used by management to monitor operations. A good corporate governance system allows attainment of the right balance between economic and social objectives and between company and individual objectives. Ineffective corporate governance creates uncertainty among investors who find it difficult to monitor their investments thus holding them to be more risky. This means greater costs for the company in terms of interest paid on bank credit. PR to improve its image, etc.
- 10.1.8** Corporate governance comes into place by creating certain internal control bodies charged with interacting with company management responsible for its strategies and operations. These bodies are independent from the operating departments and also communicate with the stakeholders ensuring the continuous monitoring of operations and the protection and growth of the company's value.

³Source: International Capital Market Group



10.2 Corporate Governance and Software Asset Management

- 10.2.1 As shown by recent studies, IT costs in 2010 will account for 50% of a company's total budget (source: Gartner "IT Asset Management: Client issues for 2004") and management of IT assets will become an increasingly strategic issue.
 - 10.2.2 At corporate governance level, problems linked to IT asset management will gain importance and companies will find it ever more necessary to include an IT governance system in its governance system.
 - 10.2.3 The key component of a good governance system is compliance with laws and regulations. Companies must always be aware of the cost of non-compliance both at a purely "money" level and in terms of their image. For example, payment of civil, administrative or even criminal sanctions can create considerable discomfort for company management as it can cause problems of credibility with its shareholders and stakeholders, such as customers, vendors, banks, investors, etc. For this reason, Software Asset Management, or more generally, IT Asset Management, assists a company in maintaining a good governance system and a positive image of a company which is leading the field in terms of governance, control and compliance.
- ## 10.3 Software License usage is a matter of organization internal control policy
- 10.3.1 Software license cost is a normal operating cost for a company, that too a material one. Recent study shows that IT costs in 2010 can account for almost 50% of its operating cost (source: Gartner "IT Asset management"). Incorrect accounting of software cost can significantly impact the true and fair nature of financial statements (FS).
 - 10.3.2 For example if a company is using unauthorised software, it is highly susceptible to a claim by the software seller. This claim is a "Contingent Liability" as per the Generally Accepted Accounting Principle (GAAP) and needs to be disclosed in the FS as per company law. If a company is not properly maintaining its software on a regular basis, then in the year of renewal, there will be a big charge to the Financial Statement, distorting the true picture of that year. This again is a violation of the GAAP.




10.3.3 The effect of the bad management of software costs on equity and profit or loss for the period can thus clearly be seen and this has direct consequences on the taxes to be paid and the possibility of paying dividends to shareholders.

10.4 How IT controls impact your general internal controls

10.4.1 The key role played by IT in a company's business transactions is such that an auditor cannot comment on the reliability of an internal control system on the financial statements without having ensured the adequate level of reliability of the information systems.

10.4.2 One of the important IT controls pertains to the control related to the maintenance of the IT infrastructure. One of the control objectives for this area is actually to ensure that all the IT assets (hardware and software) are properly protected, ie, that they cannot be modified without prior authorisation. With respect to software assets, SAM makes it easier to ensure that only authorised software is installed on PCs and servers. SAM's logistic process enables checking that software purchased is original and that the company has the authentic software licenses (verification and compliance process). With the Status Accounting process, SAM assists management of software changes to initial configurations as all the changes need to be approved and the SAM database must keep track of them.

10.4.3 The Access to Programs and Data area consists of program and data checks to prevent unauthorised access. These controls are of an organisational nature and include security policies and procedures establishing conduct codes to be adhered to by all employees for the use of information technologies and information controls, such as the use of firewalls, ciphering systems and access rights. SAM again helps with additional controls further to those that a company can implement to ensure better compliance with the Sarbanes-Oxley law. SAM guarantees that the software is as protected as possible from unauthorised access with procedures that keep the security patches of the software and hardware updated. Its policy includes how to use the software in line with security standards and to ensure compliance with software-related regulations. The policy also establishes guidelines which enable control of



access to the company's software programs, appropriate use of the Internet sharing of files, downloading of programs from the Internet and the use of pirate software.

- 10.4.4** Within the sphere of IT Application controls, the area with the greatest influence on the SAM process is the assets process. Software assets must be managed correctly. Their correct management can be assisted by the SAM database as this allows the collection of all the management and accounting information about software assets and, therefore, the constant availability of reliable and complete information. The database should include all of the following information:
- License serial number
 - License status
 - Links with the serial number of the PC or server using it
 - Original cost of the license
 - Annual amortisation charge and accumulated amortisation
 - Associated cost centre
 - Purchase order number and date
 - Initial validity date
 - Invoice number and date
 - License duration
 - Date of expiry
- 10.4.5** Thanks to the correct management of this information, a company can be sure of accurate and complete data about the value of its software (original cost), its recognition in the correct period (invoice dates), complete registration (each licence is traced in the database), calculation of amortisation (all charges are recorded for each license), the sale of software (license status and date of expiry), etc. The SAM database is an effective tool for the checking of management of software asset information and management of the related accounting data.
- 10.4.6** Thus from the above discussion it is clear that IT controls greatly impact the general internal control environment in any organisation. Accordingly, SAM becomes a critical tool in the hands of the Chief Information Officer to ensure that IT controls are working properly.



10.5 Relevant legislations enforcing Corporate Governance

Indian Companies Act

- 10.5.1 As per the Companies Act, 1956, auditors are required to comment in their audit report on the adequacy of the internal control environment in an organization as mentioned below:

"Is there an adequate internal control procedure commensurate with the size of the company and the nature of its business. Whether there is a continuing failure to correct major weaknesses in internal control."

- 10.5.2 In case of weak IT controls, the auditors may take a view that the general internal controls may be impacted due to the inherent weaknesses of the IT control.

- 10.5.3 Schedule VI, Part I to the companies Act requires the financial statement to disclose the Contingent Liability of the company if any. Demands that can be made by the software vendors for over-deployment of software fall within the definition of Contingent Liability.

Clause 49 to the listing agreement of SEBI


- 10.5.4 Clause 49 to the Listing Agreement with the Securities and Exchange Board of India (SEBI) contains various requirements to be fulfilled by a listed company. These requirements primarily revolve around the internal control systems in an organisation and are aimed at ensuring that all control weaknesses are brought to the attention of the audit committee. These requirements are mentioned below:

- 10.5.5 Role of the Audit Committee includes

"Reviewing, with the management, the adequacy of the internal control systems."

- 10.5.6 Audit Committee to undertake mandatory review of the following information:

"Internal audit reports relating to internal control weaknesses."



10.5.7 Management Discussion and Analysis to include a discussion on internal control system

"As part of the directors' report or as an addition thereto, a Management Discussion and Analysis report should form part of the Annual Report to the shareholders and should include discussion on internal control systems and their adequacy. "

10.5.8 The CEO and the CFO shall certify to the Board that to the best of their knowledge and belief:

"The financial statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading."

"There are no transactions entered into by the company during the year which are fraudulent, illegal or violative of the company's code of conduct."

"They accept responsibility for establishing and maintaining internal controls and that they have evaluated the effectiveness of the internal control systems of the company and they have disclosed to the auditors and the Audit Committee, deficiencies in the design or operation of internal controls, if any, of which they are aware and the steps they have taken or propose to take to rectify these deficiencies."


Sarbanes Oxley Act (SOX) of the US

10.5.9 SOX is a law issued by the US congress in July 2002 and radically changes the legislative framework governing US listed companies. Its objective was to strengthen companies' corporate governance cultures and verify the management's awareness of its responsibility for the internal control system. It stresses the importance of monitoring processes that have the greatest impact on the preparation of FS.

10.5.10 The following sections of the SOX are relevant from an internal control perspective:

Section 302

"Senior management be responsible for definition and



ongoing upgrading of internal control system to ensure that FS are prepared correctly in line with accounting standards."

"Senior management is also responsible for communication of information every time the internal control system is modified and effect on FS is material."

Section 404

"At least once a year, senior management makes a statement that it has set up an adequate internal control system."

"The senior management should identify the framework it intends to use for the preparation of the FS."

"The senior Management should disclose a detailed written statement that the system works efficiently."

10.5.11 It is evident from an analysis of the Indian Companies Act and the relevant provisions of the Clause 49 and SOX that inadequate or weak internal control systems in an organization can have serious implication for the senior management from a regulatory perspective. IT controls being an integral part of the general controls, also need to be strengthened. SAM goes a long way in ensuring that the IT controls meets the objective that corporate governance regulations intend to achieve.

11. Copyright protection legislation in India

11.1 Infringement of software licenses

11.1.1 Software is a form of intellectual property and is protected under copyright laws. Copyright is a right conferred by law to the owner of software for protecting the software against unauthorized usage, copying or distribution.

11.1.2 The Indian Copyright Act, 1957 expressly provides that copyright subsist in original literary works under Sec. 13(1)(a). Read with Sec. 2(0), which defines "literary work", and Sec. 2(ffc), which defines a "Computer Program", a software program is treated as a literary work and qualifies for copyright protection under the Act.

11.1.3 Software is sold under a license. The license implies that the buyer does not buy the right to the software but only a right to use the software as per the terms of the License Agreement.

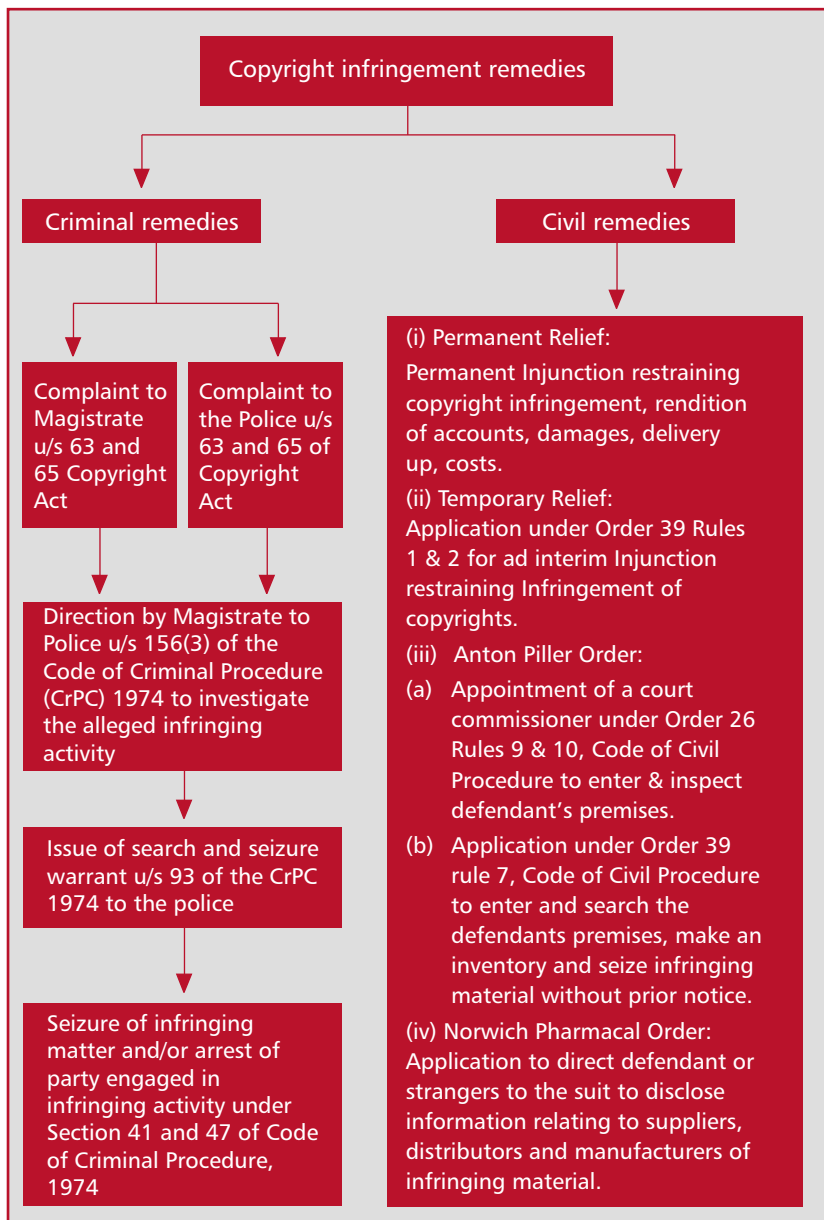
11.1.4 Infringement of copyright in software can occur, among other acts, by:

- Unauthorized use, which includes overuse/misuse of licenses.
- Making or selling or distributing unauthorized copies without a corresponding license.
- Making an unauthorized derivative work e.g. a software based on a licensed software.
- Any other act, which is prohibited by the software license granted by the owner.

11.2 Legal implications under Copyright Act, 1957

11.2.1 There are both civil and criminal remedies available to a software owner against copyright infringement. The provisions of the Copyright Act can be used along with the Code of Civil Procedure and Code of Criminal Procedure to obtain civil and criminal remedies for copyright infringement against parties involved in infringement of their rights.

11.2.2 The diagram on the next page describes in detail the various options available to a software owner against copyright infringement and software piracy.





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