

EFFECTIVE SAM

A recommended path to implementing SAM, which details the steps to reduce operational risks and financial exposure.

Executive Summary

With leading analysts reporting that software purchases now typically account for around 40 per cent of an organisation's annual IT spend, it is clear that both the management of these expensive assets is becoming increasingly important and that eliminating unnecessary spend should be a high-level priority.

The effective management of software licences ensures that organisations don't overspend vast sums on unnecessary licences and support agreements. Companies have contractual obligations in line with software licence agreements and if breached can leave themselves open to charges of misuse or even fraud by the vendors. The penalties in these circumstances can be significant.

This document outlines the recommended path to successfully implementing SAM by detailing the steps that are required to ensure your organisation significantly reduces operational risks and financial exposure.

Highlights

- SAM is the business practice that involves managing and optimising the purchase, deployment, maintenance, utilisation, and disposal of software applications within your organisation.
- SAM is now an integral part of a well-run organisation, assisting in reducing cost and risk and increasing operational productivity.
- SAM increases company profitability by reducing waste and increasing enterprise-level productivity.
- SAM mitigates the risk of illegal use of software, whilst significantly reducing disruptions and un-budgeted expenditure caused by vendor audits.
- SAM implementations progress more successfully when the support and commitment of a company director with legal responsibility for software assets is clearly defined.
- SAM is a critical requirement for organisations moving to the cloud, ensuring that you provision, configure and control your access to software used over the internet.

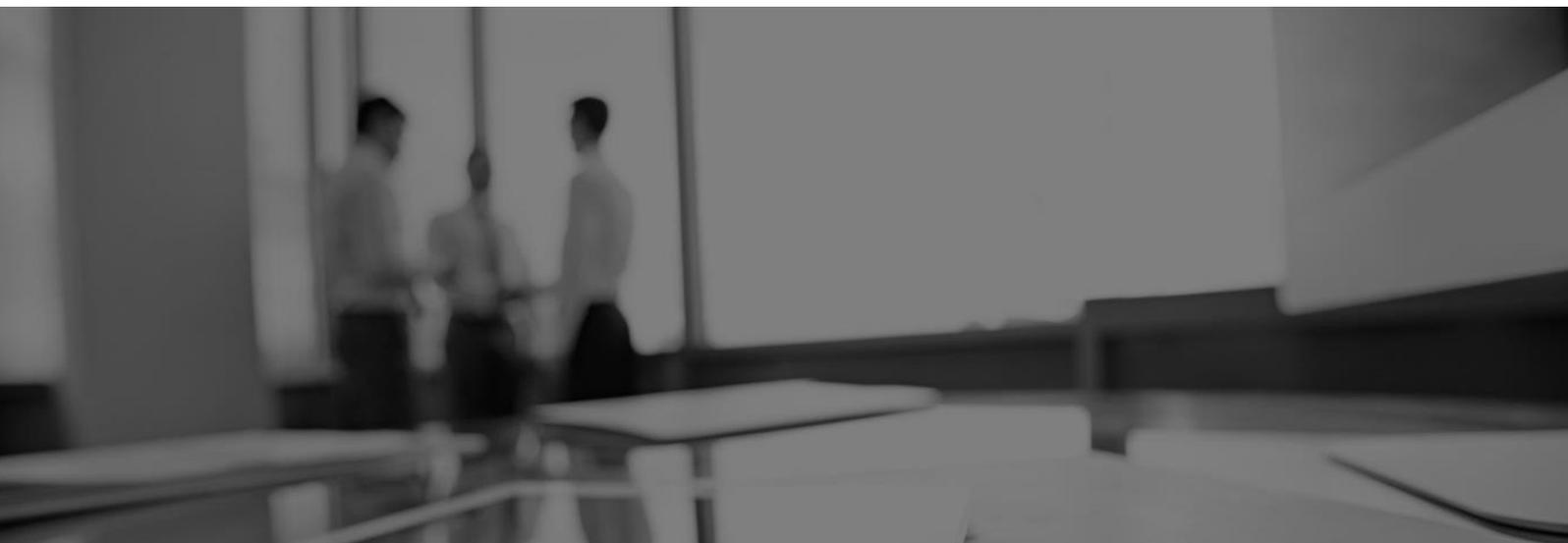


Table of Contents

Executive Summary	2
Highlights.....	2
Why do I need to manage my software assets?	4
So what must we do and in what order should we do it?	5
Okay, so what roles and responsibilities should we appoint?	6
So now I have appointed the roles, what next?	6
What executive benefits should I cite in the business case?	7
With reference to the SAM implementation plan, what elements must we consider?....	8
So with that said, what are the key product functional requirements?	8
Once the Licence Management system is in place, what next?	9
What must we do to ensure that we utilise the information?	10
Once we have implemented the process for SAM, how do we capture and report the financial gains achieved?	11
What savings can I expect?	12
Do I still need SAM if our company is migrating to Cloud Computing?	14
What if I do nothing?	15
Can you afford not to implement SAM?	15
Next Steps	15

Why do I need to manage my software assets?

SAM is a business process designed to reduce IT costs, limit risks related to the ownership and usage of software and increase corporate-wide efficiencies, especially in IT. It has become an integral part of a well-run organisation and is guaranteed to deliver significant benefits to any organisation.

After working on many large SAM projects, LMO has noticed that most organisations have fairly healthy and active change management and purchasing processes; however, nearly all fail to manage their software assets effectively.

This oversight is usually down to lack of time and/or skilled resources, coupled with personnel lacking motivation to manage the complexities of licence user rights. Most would rather implement and configure systems than take on the arduous task of verifying whether products are correctly licenced. Problem is, if you don't prioritise this requirement, your company will definitely become exposed.

IT management recognise the importance of making sure that all software deployed or used is correctly licenced, however in most cases, this requirement is firmly at the bottom of their to-do list. Unfortunately, this deferment of duty leads to serious consequences, not only putting the company at risk, but more importantly, increasing the cost of ownership.

By investing in SAM, you can exploit the operational benefits of having fully licenced and managed software. Implementing controls that reduce waste and maximise licence consumption is guaranteed to increase enterprise productivity and help you capitalise on the financial gains derived from these efficiencies. This in turn, will allow you to further invest into technology and drive the company's profitability.

The table below illustrates the ISO/IEC 19770-1 standard for SAM. It groups the required processes into key categories and provides guidance on which processes are necessary to satisfy your corporate governance requirements.

ISO/IEC 19770-1 Category	Process
Control Environment	Corporate Governance Process
	Roles & Responsibilities for SAM
	Polices, Processes, Procedures for SAM
	Competence in SAM
Planning & Implementation Processes for SAM	Planning for SAM
	Implementation of SAM
	Monitoring & Review of SAM
	Continuous Improvement of SAM
Inventory Process for SAM	Software Asset Identification
	Software Asset Inventory Management
	Monitoring & Review of SAM
	Software Asset Control
Verification & Compliance Processes for SAM	Software Asset Record Verification
	Software Licensing Compliance
	Software Asset Security Compliance
	Conformance Verification for SAM
Operations Management Processes & Interfaces for SAM	Relationship & Contract Management for SAM
	Financial Management for SAM
	Service Level Management for SAM
	Security Management for SAM
Life Cycle Process Interfaces for SAM	Change Management
	Acquisition
	Software Development
	Software Release Management
	Software Deployment
	Incident Management
	Problem Management
	Retirement

By using this table as a blue print, your organisation can achieve its SAM goals. It is, however, recommended that you perform a detailed review of your current environment, identifying any key areas of risk and highlighting any immediate counter-measures that can be implemented, to prevent worsening prior to implementing your SAM program.

So what must we do and in what order should we do it?

Fortunately, the first step is fairly straightforward and brings immediate return on investment.

Your company must ensure that the accountability for management of software assets is recognised at board level, and that appropriate mechanisms should be put in place to ensure the proper discharge of this responsibility (see ISO/IEC 19770-1: Control Environment). Furthermore, the company must ensure that roles and responsibilities for software are clearly defined, maintained and understood by all personnel that are potentially affected.

Assigning responsibility and accountability to all relevant staff will initiate the change of culture required to raise awareness of the need to control software assets. Many organisations already apply active management principles to hardware assets, but don't implement the same levels of controls to its software assets. By appointing owners to

continuously evaluate, update, adjust and improve software deployment, your company will see immediate cost savings on both hardware and software.

Okay, so what roles and responsibilities should we appoint?

The roles listed below are the minimum requirements required to complement your existing IT Asset Management and Commercial Management roles:

- **Company Director**
SAM implementations progress more successfully when the support and commitment of a company director, with legal accountability for software assets, is clearly defined.
- **Management Sponsorship**
If SAM is to succeed within your company, it requires sponsorship and commitment from senior management within IT and throughout the business. This will ensure visibility of SAM is maintained and the organisational culture is developed and resources obtained.
- **Software Asset Manager**
This person will have responsibility for the management of all software assets and associated SAM processes within the organisation. In small organisations the associated responsibilities could be assigned to an IT or Purchasing Manager.
- **Licence Administrator**
This person will be responsible for maintaining the licence management system, ensuring all licence records are effectively archived and checking all software used has a licence and that licence is correctly used.

So now I have appointed the roles, what next?

Once the relevant roles and responsibilities have been defined, your company should then define the Business Case for SAM, gather all requirements and determine the vision and strategy. During this period it is important that appropriate preparation and planning (see ISO/IEC 19770-1: Planning & Implementation Processes for SAM) is scheduled so that clear management objectives for SAM are developed and proposed for approval by the corporate board.

It is important at this stage that you avoid an 'off-the-shelf' solution, such as a service or technology that promotes SAM capabilities. Too many times have we seen businesses fail to achieve their SAM goals, because they did not take time to do a comprehensive review of their particular requirements.

It is important that your organisation reviews its existing processes and technologies and identifies what gaps and risks are posed from your current procedures. You might be surprised because you already having some of the required SAM technologies deployed, therefore, it could be possible to build on past investments and reduce your overall SAM implementation costs.

What executive benefits should I cite in the business case?

For a successful SAM business case, focus on the business benefits rather than the improvements to process activities. The following executive benefits will definitely be achieved by implementing SAM and should be clearly articulated in your business case:

- **Reduced Operational Costs**
By reducing the time it takes to gather information required to enable effective decision making. Having accurate and up to date information enables the management team to respond quickly and efficiently to operational demands.
- **Increased Company Profitability**
With software licensing now accounting for a good proportion of your IT budget, there has never been a better time to reduce your overall software expenditure. Understanding your effective licence position enables you to purchase more effectively, thus significantly reducing financial expenditure.
- **Reduced Operational Disruptions**
With vendors now actively seeking out organisations who do not manage their software assets effectively, it is highly likely that your company will be subject to significant operational disruptions as a result of an in-depth vendor audit. Maintaining your licence entitlements and continuing to verify your compliance position enables you to respond quickly and effectively to any regulatory request, thus reducing costly disruptions to your core business activities.
- **Improved Financial Control**
As with any other company asset, it is essential that your organisation implements effective financial controls to protect and maintain your software assets. Your organisation is contractually required to keep records and is just good corporate governance to ensure that this is being carried out.
- **Reduced Un-budgeted Expenditure**
Following a Vendor's audit, many organisations find they are subject to significant un-budgeted expenditure that has a negative impact on their profitability. Implementing effective SAM processes mitigates this risk and ensures that you minimise the threat of exceeding budgetary expectations.
- **Improved Supplier/Vendor Relationships**
Due to having limited controls of software assets, most organisations fear communicating with vendors and always feel on the back foot when negotiating new contracts or licence renewals. Having accurate and up to date information at your fingertips guarantees improved vendor relationships and provides greater purchasing control and effectiveness.

With reference to the SAM implementation plan, what elements must we consider?

The basis of any good SAM program is to keep accurate and up-to-date software licence information, together with processes for controlling and maintaining its accuracy (see ISO/IEC 19770-1: Inventory Process for SAM). Not only does this allow you to archive effectively, but you can publish this information when required and clearly balance the equation between what you have installed and what you are allowed to install.

Many organisations have already implemented software inventory tools that can discover what software products have been deployed, however, these tools tend to fail in protecting and maintaining the organisation's licence entitlements. Many SAM Managers currently maintain a number of Microsoft Excel spreadsheets that provide information on what has been purchased, however, these documents are usually incomplete and require further specialist attention before they can be used to demonstrate a true representation of the organisation's installation rights and compliance position.

It is highly recommended that you implement or subscribe to a comprehensive licence management system that is managed and maintained by a qualified and dedicated licence specialist.

Having a comprehensive understanding of your effective licence position enables you to respond effectively to business requirements by providing critical information on compliance, licence availability and cost management, whilst also enabling your organisation to respond to regulators and vendors.

One major warning! During the documentation of your plan, you must consider resource availability. Licensing is complex, often seen by many as a 'black art', and it requires in-depth understanding of multiple licensing models and metrics. Careful assessment of your team's core competencies must be completed, as many projects fail because experienced software licence experts are not employed to complete the tasks required. In fact, most SAM projects now commission third party experts to assist, therefore, we recommend considering this option as the benefits associated to recruiting the services of a licence specialist definitely outweigh the costs.

So with that said, what are the key product functional requirements?

Implementing an effective licence management system, along with the policies and processes to maintain the information stored within, will provide your company with an essential foundation for implementing effective SAM.

Selecting the right tool, however, can be challenging and it is important that you don't choose a tool in isolation. It must be done in conjunction with the overall requirements for IT and procurement. This ensures that every SAM process is fully integrated with all management tools and each aspect of SAM will be implemented and adopted effectively.

Most asset management tools proclaim to incorporate the required functionality, however, nearly all fail to provide the necessary controls for SAM. In addition, inventory solutions have

been primarily designed to manage device requirements, including management of configuration, deployment/release and systems. Most have added features that enable you to archive licences and perform basic verification capabilities, but all rely heavily on the knowledge and skill of an end user to ensure that the outputs are accurate and trustworthy.

With this said, there are a few vendors who can deliver effective systems, for example Licence Dashboard, Flexera and Aspera are amongst a few that have dedicated licence management capabilities. It is important, however, to fully understand what platforms and metrics need to be measured and monitored, prior to selecting even one of these tools. It is highly recommended that your organisation conducts a comprehensive review of your software contracts, identifying what dependencies and constraints need to be managed and maintained.

For example, if you have a hybrid Microsoft Enterprise Agreement, offering application usage both via the cloud or a local installation, your organisation will need a system that can report and manage the relationship between user and associated devices, ensuring 'on premise' installations are correctly licensed via online subscriptions.

In addition, with increased reliance on complex data centre platforms, operated by advanced systems, licence management tools need to include extended management capabilities that control and monitor licence metrics related to capacity usage, rather than just installation.

To ensure you select the correct tool, it is essential that you review your existing contract agreements and identify all the associated licence dependencies, such as:

- **Licence Metric**
Per Install, Named User, Processor Value Unit (PVU), Processor & Core Based Licensing, Terabytes.
- **Licence Model**
Subscription, Licence with Maintenance, Maintenance Only.
- **Country of Usage**
Restrictions of usage, i.e. software can only be deployed in a specified region or country.
- **Licence Mobility**
Server application licence rights that allow you to deploy on premises or in the cloud.

Once you have identified the dependencies, you can cross reference your requirements with the functionality of available solutions and guarantee that you are best placed to implement a licence management system that meets your requirements.

Once the licence management system is in place, what next?

Before you can achieve any benefits, you must first make sure that you have located all your licence evidence (proof of licence) and archive these records into your chosen licence management system.

This can be more difficult than it sounds because most organisations fail to maintain their purchasing or licence records. To ensure that you get a fair representation of your licence rights, you should again consider working with a third party specialist who is experienced in

distilling purchasing and licence records and, thereafter, identifying and maximising your effective licence position. Organisations that try to complete these tasks on their own, usually only locate up to 40% of their historic licence entitlements and end up re-purchasing licences that they already own.

After archiving your licence evidence and calculating your licence user rights, you will then need to identify what has been installed or consumed. Using your existing or new software inventory solution, you can extract the required data, remembering that this will now need to be a combination of hardware and software deployment information, as some licence user rights are now based on the system configuration (i.e. number of processors) rather than just on the number of installs.

Once you have identified what has been consumed, it is highly likely you will need to normalise the scanned data, removing all technical noise and identifying which software requires a licence. This cleansing process can be an arduous task, one that usually needs technical support. Many tools provide too much information and it is near impossible to simply allocate licence entitlements to software deployed, unless the scanned data has first been improved.

Following a cleansing process, the licence management system should then be able to reconcile your effective licence position (ELP). This baseline will enable you to understand your current compliance position, providing you with a clear understanding of your shortfalls and surplus licences.

Once you have established your organisation's ELP, you must ensure there is a continuing review of all verification and compliance processes, ensuring procedures are effective and that your ELP is always up to date and accurate (see ISO/IEC 19770-1: Verification & Compliance Processes for SAM)..

What must we do to ensure that we utilise the information?

To ensure that the ELP is used effectively, it is essential you implement complementary SAM processes to your existing IT Asset Management procedures, thereby ensuring that your organisation's ELP is considered and used throughout the change management, acquisition, deployment, retirement and contract renewal process (see ISO/IEC 19770-1: Life Cycle Process Interfaces for SAM).



Having access to this information during the software life cycle will enable you to purchase more effectively and ensure all surplus licences are being consumed in the most cost effective manner. In addition, ensuring that you are re-harvesting (re-using) licences when

devices have been decommissioned will significantly reduce your company's annual spend on software.

To truly maximise these savings, you need to ensure the appropriate skills and expertise are allocated to the upkeep of your ELP. Licence management is a resource intensive process and requires adequate skilled personnel dedicated to the management of day to day activities. It is recommended, that at least one member of staff is employed to manage the licence management system and there is adequate resource available to disseminate the company ELP. Without this, your organisation will never realise available savings.

Once we have implemented the process for SAM, how do we capture and report the financial gains achieved?

Reporting savings can be challenging, as many SAM processes rely on human intervention and manual tracking of the financial gains achieved, therefore, if you have a licence management system that is able to monitor and report such savings, then you are at a significant advantage.

For those that don't have this luxury, then you need to consider how you can compare baselines between two periods and report the following key performance indicators (KPIs):

- **Licence Optimisation**

This KPI provides a value of the total cost of avoidance within the current reporting period via improved consumption of licence entitlement. The SAM process should monitor new application installs or product usage across each business unit's estate and ensure that existing surplus licence rights are consumed instead of acquiring new licences. This activity reduces unnecessary expenditure and optimises existing investments, enabling you to maximise your IT budget, investing in technologies that increase productivity and economic growth.

- **Deployment Rationalisation**

This KPI provides a value of the total cost of avoidance within the current reporting period via controlling the deployment and retirement of software. The SAM process should continue to monitor removal of application installs or product usage across each business unit's estate and the associated procedures report the monetary value of licences re-harvested or reclaimed for future re-use. This activity should deliver similar benefits to licence optimisation and provide you with reassurance that licences owned are being consumed in the best possible manner.

- **Load Balancing**

This KPI provides a value of the total cost of avoidance within the current reporting period via load balancing available licence entitlement across other business units in your organisation. The SAM processes should monitor surplus licences within each legal entity and then transfer those licence entitlements to cover licence shortfalls within other business units. As with licence optimisation, this activity should reduce unnecessary expenditure and optimise current licence ownership.

In addition you will be able to control your organisation's software and licence inventories, combining all licence entitlement and software usage information into a

single reporting tool, making it easy to deliver effective licence management, reducing administrative costs and effort.

- **Improved Purchasing**

With enhanced visibility of your effective licence position, personnel responsible for purchasing can ensure all acquisitions of software are correctly specified and procured using the most cost effective volume licensing agreements, thereby maximising purchasing discounts and reducing risks of buying the wrong licences.

Having access to accurate licence management information is invaluable when renewing maintenance and support agreements. Purchasing and Legal will be notified in advance that a contract or licence agreement requires renewal, using the licence management system, you can verify whether a product continues to be used and confirm if a licence is still required.

- **Efficiencies and Savings**

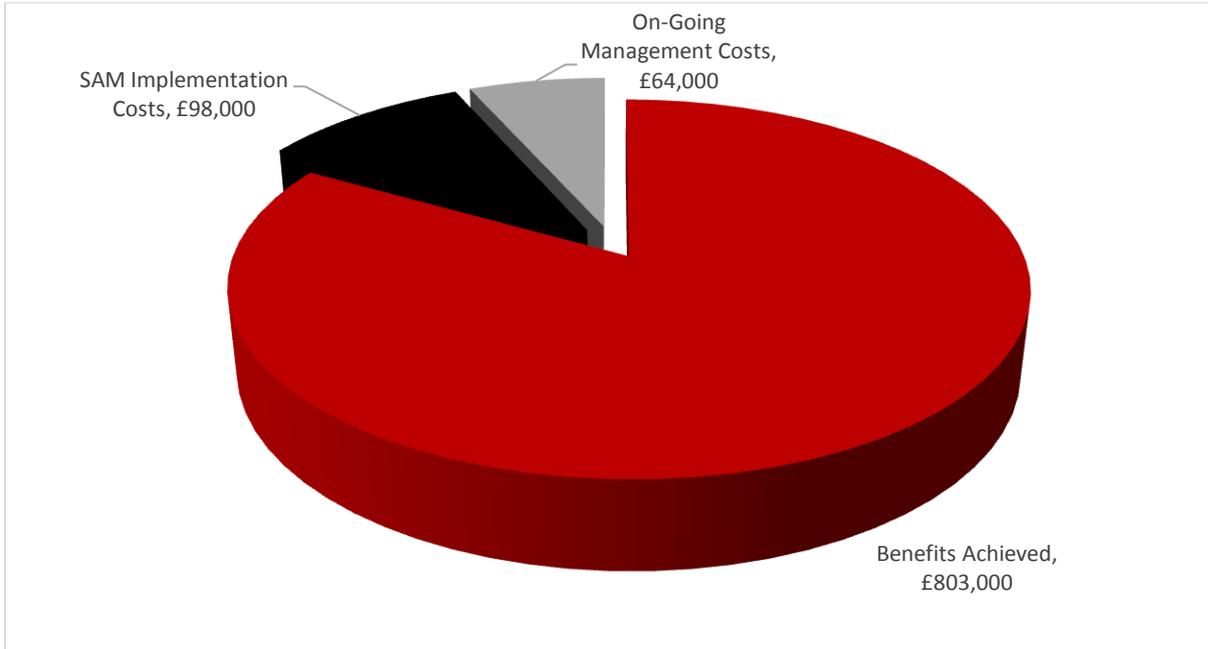
These activities will see efficiencies in the procurement cycle and, through reducing on-going maintenance commitments, lead to significant savings that can be further invested into your organisation.

All of the above are achievable and can be implemented, however, processes and discipline are required. Organisations that are successfully monitoring savings, have usually extended the reporting capabilities of their licence management system, invoking algorithms that calculate the financial impact between two reporting periods. It can be complicated, however, with the right expertise, it is achievable.

What savings can I expect?

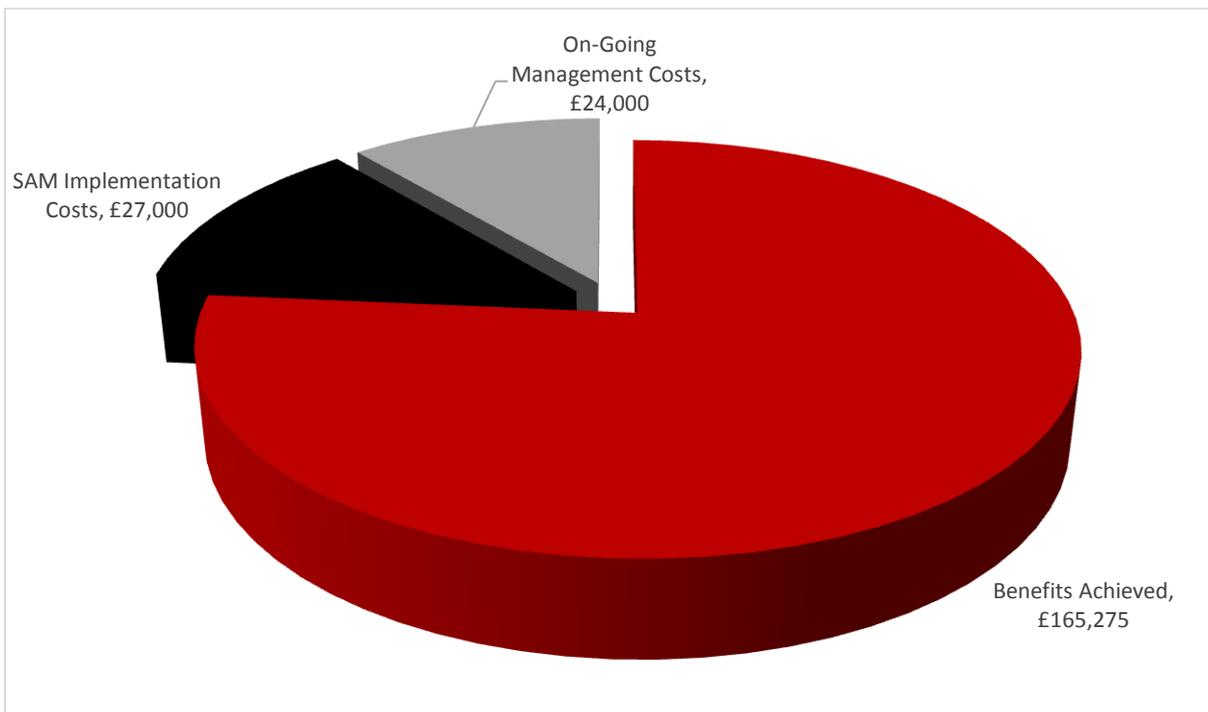
Most organisations overspend on software by as much as 30%. They buy too much, purchase through the wrong agreements and fail to re-harvest existing licences. From our experience, we have never seen an organisation fail to realise a significant return on investment.

Illustrated in the chart below, is an example of the savings achieved by an organisation that had 8,000 devices and, on average, had an annual spend of £523.53 per device. Importantly it already had good levels of control.



The chart illustrates a 19% saving in year one, with associated implementation and management costs of £162,000. In the second and subsequent year, ongoing savings are £209,500 (5%) per year with continued management costs of £64,000. The associated costs are a combination of internal and external third party expenditure.

Illustrated in the chart below, is an example of the savings achieved by an organisation that had 1,100 devices and, on average, had an annual spend of £601 per device.



The chart illustrates a 25% saving in year one, with associated implementation and management costs of £51,000. In the second and subsequent year, the ongoing savings are

£46,750 (7%) per year with continued management costs of £24,000. The associated costs are those attributed to external third party expenditure only (i.e. management has been outsourced).

On average, these are the likely savings your organisation can expect. The companies selected to illustrate each scenario above, were chosen because they both fall within the average saving category.

Do I still need SAM if our company is migrating to Cloud Computing?

Up to now, SAM has been seen as framework that controls compliance requirements of software deployed on a company's network and that Cloud computing will mitigate the need for SAM. Those that believe in this to be true are, unfortunately, in for a shock. SAM is an essential requirement for managing the new complex concepts of cloud and, even though it has to adapt, SAM is still a necessary requirement when a company moves to the Cloud.

Cloud computing does solve some licencing compliance challenges, however, there is no doubt, it also creates its own. Cloud environments can be provisioned and accessed in minutes, therefore, it is prone to significant risk caused by end users bypassing tradition procurement and deployment rules, ultimately leading to software usage being over distributed or abused. In addition, with limited access to usage information, many organisations over-subscribe to services which leads to licencing costs spiralling out of control.

SAM, therefore, needs to quickly adapt and manage these new risks ensuring total cost of ownership is effectively monitored and controlled. Organisations should be quick to monitor and control issues such as sharing user accounts, unauthorised users (i.e. contractors and customers) access and over paying for services that are not used or required. In addition, other technical advancements, such bring your own device (BYOD), will need to be included in the SAM scope, ensuring that access to Cloud services via tablet or other mobile devices are effectively tracked and licenced correctly.

In addition to end user challenges, SAM must consider any liability generated from the environments in which Cloud services are delivered from, ensuring that the Licencing implications have been fully considered. Many Cloud based solutions require the organisation to subscribe to an infrastructure required to deliver the Cloud service, with costs being calculated based on the underlying hardware consumed (i.e. processor, virtual processor, cores). SAM controls, therefore, need to be introduced to monitor this usage, alerting you to any automatic increase in capacity requirements. Without monitoring this usage, you could be exposed to significant cost implications.

With most vendors now offering hybrid software licence agreements, allowing a mixture of on premise and online services, the need and complexity of managing your compliance has significantly increased. This increase in complexity must be managed and controlled, if not, it is highly likely that your organisation will become financial exposed and the multiple benefits that you were trying to recognise by migrating to Cloud could become overpowered by the risks generated through misuse and oversubscription.

SAM is an integral part of your transition to the cloud and the benefits far exceed the costs of implementing the processes required to monitor and control the provisioning of such services. Without it, you will simply spend more and lose control of who and how the services are being accessed.

What if I do nothing?

Contractually, under most volume licencing schemes, your company must keep records relating to the products it has and any affiliate participating under a licence agreement install or use. A vendor has the right to verify compliance with any licence agreement at their expense. If the verification reveals unlicensed use of products, the vendor will request you reimburse the costs incurred during the verification and acquire the necessary additional licences as single retail licences within 30 days.

Gartner now state that an organisation has a 68% chance of receiving at least one audit request in the next 12 months, therefore, it is highly likely your organisation will be contacted.

In summary, continued failure to manage your software assets can lead to major business risks, such as increased management costs, increased operational disruptions, unbudgeted and unnecessary expenditure, missed discounts.

Can you afford **NOT** to implement SAM?

Next Steps

Software Asset Management (SAM) is an intricate process but, as in other areas of business and commerce, it can be made simpler by deploying the right technology and engaging with a trustworthy third party who has the experience and skills to deliver your requirements. Like with accounting, enlisting the services of experts brings with it; piece of mind, reduced stress and certainty that you have accurately calculated your compliance position, whilst having satisfaction in the knowledge that every item of expenditure is being put to good use. In short, you can be wholly confident that everything is as it should be!

To learn more about how our services can help you take control of software Licencing and deliver significant cost savings to your organisation, please:

Contact Us

Speak to one of our licencing experts today:

 **+44 1904 567 997**

 <http://www.lmoconsultancy.com/contact-us/>