



# Software Value Management and the Cloud

Paper nine

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## Software Value Management (SVM): A definition

**Software Value Management (SVM) is the practice of informed active governance over access, utilisation, licensing, and cost efficiency of software throughout its useful life within an enterprise regardless of the IT deployment models used or methods of access.**

Spanning procurement and contract management, rights management, deployment, compliance, cost efficiency, re-use, mobility and company policies, SVM covers the organisational use of IT via office based systems (on-premise), hosted or cloud services, and via mobile and home working (including BYOD).



### Scope of SVM

SVM is effectively made up of a range of processes or modules that together enable effective governance of the software estate:

- **Inventory:** A register of the Software installed on and/or accessed via the organisations IT infrastructure.
- **License Entitlement:** A register of Licenses held by the organisation clarifying usage rights of software.
- **Contract Management:** A facility to record, track, renew and amend contracts relating to the access to software licenses or services.
- **Vendor Management:** A facility to assess the value invested in specific vendors relating to all software titles and services delivered in order to drive effective and cost efficient procurement.
- **Usage Management:** The ability to track end user access and utilisation of software to determine organisational needs and trends.
- **Compliance Management:** The ability to determine compliance of software usage in light of current license agreements and contracts.
- **Policy Management:** The ability to establish and monitor compliance of end users and connected devices to organisational policies for software use.
- **Device Management:** The ability to recognise, audit and monitor compliance of devices interacting with the organisations IT (mobile/smart device/BYOD).
- **\*SP/Cloud Management:** The ability to record and track third party infrastructures utilised to deliver organisational IT including recording of licensing.
- **Business Intelligence:** The ability to analyse the data created from the above processes, to establish trends, create predictions and model scenarios for future outcomes.
- **Workflow Automation:** The ability to create tasks and actions, to notify relevant parties and to monitor achievement.

## 1. The current state of Cloud adoption

**There is always a lot of innovation in the world of technology but in this heightened time of austerity when everyone is trying to reduce cost, drive efficiencies and step up to even more aggressive competitive forces, for a CIO trying to work out how to navigate disruptive technologies or adopt Cloud Services it is becoming even more challenging.**

Rationally, Cloud should look very attractive to businesses on many levels. The promise of flexibility, ease-of-access, immediate scalability, agility and cost efficiency using pay-as-you-go practices almost makes it a no brainer for many organisations. The beauty of Cloud is that it can offer benefits to any size or type of company hence the already rapid adoption. However, when we dig more deeply most organisations are only using it for a part of their business applications i.e. email or CRM. Often more sensitive business applications such as HR or accounting solutions remain on-premise because it is proving somewhat difficult for companies to clearly assess the risk of accessing, managing and delivering these services in a secure, flexible, complaint and cost effective manner.

In White Paper 8, the Cloud Industry Forum's (CIF) research showed there are many concerns limiting the pace of adoption of Cloud Computing ranging from commercial confidence, service level agreements, contract lock in and fears relating to highly sensitive issues around data security, privacy and data sovereignty. The upshot is that for the foreseeable future, most companies will manage a hybrid environment of on-premise and hosted/Cloud Services that evolves over time.

“... any one organisation based on the different application areas and operational needs, are likely, over time, to have a combination of on-premise, hosted, SaaS and private/hybrid Cloud solutions. In fact, this is likely to become the norm and therefore a key issue in future IT strategy has got to be in demonstrating good governance of IT across a broad distributed network and variety of managed and unmanaged deployment options. As such, controls, end-to-end monitoring, alerting, reporting and transparency are going to be key to effective IT operations to ensure that in driving up efficiency and driving down costs, that new risks are not created due to lack of skills or tools to manage the new order of IT services.”

This approach will already be a key consideration for many large organisations. With huge software investments made in the past plus the experience of managing issues around software license compliance many companies are wary of adopting any new technology. No matter which services models an organisation is considering (SaaS, PaaS or IaaS) many IT departments have experienced first hand the challenges that can arise when you do not apply controls and procedures to manage and govern suppliers and contracts. This White Paper will focus specifically on the benefits and learning that can be applied to Cloud adoption by exploring the evolution of software compliance, the introduction of Software Asset Management and its development into Software Value Management for Cloud.



CIF research shows there are many concerns impacting the growth in adoption of Cloud Computing ranging from service level agreements, contract lock in and charges to other highly sensitive issues around data security, privacy and data sovereignty

## 2. From on-premise to a new distributed environment

**The role of the IT department has evolved, no longer can they dictate to the business unit the technologies to use. Instead they need to continually demonstrate strategic business value and are an integral contributor to the commercial success of a company. On the face of it moving to the Cloud seems the obvious thing to do but the value of a CIO is in identifying the potential hazard before a decision causes havoc. For example, when moving to Microsoft Office 365 it has at least eight variants to choose from and all of these must be 'transitioned'<sup>2</sup> from existing Microsoft Office on-premise licensing programs. A CIO needs to make sure that any future decision moving to the SaaS product version of strategic software vendor will not result in different governance issues even if it shouldn't be a compliance problem. So given the real and perceived concerns around Cloud adoption and the pragmatic reality of managing a hybrid environment how can a CIO ensure they can live up to an increasingly challenging remit? To ensure success it will be critical to clearly assess for each project or application which scenario best achieves the objectives and how that fits within the wider and long-term IT strategy.**

The CIF have conducted considerable research over the last three years. Based on this research the following is a re-cap of some of the key issues IT leaders should evaluate as part of their foray into Cloud Services:

- 1 IT project/solution deployment options are increasingly flexible and diverse creating both a commercial opportunity and an IT management challenge.
- 2 Cloud should be considered a complementary solution option in many IT strategies, not a wholesale replacement for on-premise computing.
- 3 There is no nirvana Cloud solution that meets all organisational needs today. Rather organisations will typically find themselves managing a portfolio of deployment options at any given time from on-premise through to co-location, hosted services, managed services and Cloud solutions.
- 4 Cloud Computing should be assessed more in terms of organisational enablement and impact rather than in terms of technological change.
- 5 Cloud is best defined in terms of service delivery models (SaaS, PaaS and IaaS) and technical deployment models (private, public and hybrid).
- 6 The choice of service and/or Deployment Models for a specific Cloud solution will be influenced by a combination of technical, commercial, governance and legacy investment factors. The choice of Service/Deployment Model for a specific solution in one company may not be true for an organisation of similar size in another industry.
- 7 Legal and regulatory factors drive considerable uncertainty especially in regard to matters relating to Data Sovereignty and Security. Where relevant, this tends to encourage end users to seek the lowest risk deployment, which in the case of this research was to prefer UK hosted data.
- 8 85 per cent of organisations actively consider the option of Cloud Services to assess viability for new projects. Individuals accountable for IT strategy should ensure they update their assessment criteria to enable a practical determination of which deployment options are valid for any given IT project.
- 9 IT Governance needs to embrace the notion of services delivered on-premise and those delivered remotely, and where relevant the integration in between. IT departments need to determine the criteria to be complied with for monitoring, alerting and reporting for remote services. Appropriate tools and responsibilities need to be implemented to enable effective management of the distributed IT operations as a whole.

The various different technology delivery methods coupled with the current trends around remote working, mobile devices and social media means the next generation CIO needs to navigate multiple issues and deliver confidence that any business application moving to a service platform will not expose the organisation to risk whether it be unbudgeted spend, poor customer service or regulatory governance. The future CIO will need to recommend technology that drives differentiation for the business stakeholders, security for the shareholders and service/competitiveness for the end customers and moving forward the customers are going to be the employees as well as the consumers. The current day CIO needs to provide services and make decisions that appeal to a complex and varied audience!



The new enterprise has to support an increasingly diverse range of IT platforms from on-premise to in-Cloud and accessed through a plethora of devices

<sup>1</sup><http://www.microsoft.com/en-us/office365/all-plans.aspx>

<sup>2</sup><http://www.directionsonmicrosoft.com/licensing/30-licensing/3190-cal-suite-bridges-for-office-365-illustration.html>

### 3. A background to Software Value Management

**At first look the CIO has a daunting hill to climb but in 2012 this role has 30 years of IT experience to draw from, especially when it comes to considering Cloud adoption. There may be specific issues associated with adopting Cloud Services but the enterprise world has been managing technology challenges for the last three decades. Companies had to move from main frames to desktop from snail mail to the internet and in general recognise the democratisation of key company functions such as production and publishing of content because of evolution instigated by software vendors such as Microsoft, Autodesk and Adobe. With the production of huge amounts of content (increasing all the time with the evolution of social media) CIO's have had to identify and manage multiple governance issues including security, personal privacy and general industry regulation.**

Over the same three decades the software industry has evolved at a phenomenal pace and delivered capability that CIO's wanted and needed to embrace. So successful were companies like Oracle and SAP that as their revenue streams grew so did their appetite to acquire competitors or new developers to help feed their evolution and ultimately their market CAP. The world of software publishing is predominantly US based and as such the pressure to achieve quarterly sales quotas to increase or maintain the company share price was paramount in the minds of the executive teams that led these software power houses. The same is still true today.

Until the late nineties the vendors had been riding high with consistent strong growth revenue streams, increasing share price spikes and revolutionary product road maps but as the old adage says, 'every dog has its day' and inevitably the software model couldn't maintain this performance. Software companies began to decline due to recessive economies and market saturation. Customer's realised they didn't need to annually upgrade to the latest version of the product, smaller companies needed more affordable ways to access solutions and as such the software vendors had to find new ways to drive revenue. Vendors invented various initiatives from expanding their sales channels through to promoting compulsory subscription levies on the price of the product. Probably the most impactful strategy some embarked upon was to focus efforts on larger customers who they considered had illegally utilised their products.

The Software Compliance team was born.

In some cases customers were knowingly purchasing and misusing software licenses but, especially within the corporate world, CIO's simply struggled with the internal complexity around their global organisations. Add to this the vendors convoluted and out-of-date software license agreements it made it virtually impossible to track a software compliance position. By stepping back to the late eighties when software vendors began their meteoric rise it becomes obvious that the rate of product development and software acquisition fuelled the situation many companies found themselves in of being non compliant. Today the vendors have a complex portfolio of products with many different legacy agreements each with alternative terms and conditions that then differ based upon whether the license is used on a desktop, in a data centre, on a multi processor server or across a virtualised network... this is before we consider the Cloud. To tackle this problem, software vendors created compliance teams with a mandate to begin auditing an organisation they suspected was under licensed.

The reality of what this meant and means to a CIO within a large enterprise company can be far reaching. At best it means they need to employ resource and develop internal procedures to manage the inevitable auditing processes that companies like Adobe, Autodesk, Microsoft, Oracle and SAP will request. At worst it means they could find themselves having to pay out additional sums of unbudgeted money or be exposed to the market for fraudulent behaviour that in turn could have implications to their company share price.



Software value management is an active programme that brings the disciplines and benefits of SAM to the realities of IT management in the 21 century

It should be said, typically the software vendors do want to maintain a good working relationship with their large customers and take a pragmatic commercial approach to the historic fee for non-compliant license usage in return for a long term contract that locks the customer in and secures future vendor revenue. Either way the CIO has lost control and is in a poor negotiating position. This change in the customer vendor relationship has spawned a new practice and International standard (ISO19770). The practice is called Software Asset Management (SAM) or IT Asset Management (ITAM).

Incredibly unlike other industries such as finance and retail the software industry is still largely unregulated. Apart from ISO19770-2 where vendors are encouraged to tag their code to help the audit process there is no standard methodology required in terms of how they license their software, how they audit potential targets or how they price their technology. There are no independent industry bodies that act as a bridge between hardware manufacturers and associated software agreements. The large enterprise companies have had to seek independent help to control the hugely complex task of managing licenses across a global software estate and the software vendors approach to their key customers has resulted in a shift in the way CIO's approach governance within their organisation.

Traditional software asset management has helped to an extent but the increasing complexities of the software delivery platforms (Cloud, mobile etc.) means large companies need to move beyond SAM to Software Value Management. In the early days it was enough to provide a simple snap shot picture of desktop licenses that corresponded to software purchased. However, in this new technology world software value management offers much more by delivering accurate clarity, control and governance for the CIO, enabling the correct strategic decisions to be made.

For today's CIO Software Value Management moves beyond counting licenses and delivers the CIO business intelligence to help them make strategic decisions, an imperative when considering new technology. Initially CIOs only had to ensure they were compliant but in today's current economic climate software value management provides multiple benefits. Whether it is delivering back to a CIO the confidence to negotiate with a global vendor from a defensible position of software license information or to scenario model the implications of moving a particular business application to Cloud the ability to have a holistic view of an entire global software estate (AdobeOracle, SAP etc.) enables any IT stakeholder to navigate difficult business decisions. The CIO is secure in the knowledge that sensitive data (all accessed using software) is safe and governance today and tomorrow can be maintained.



Today the global vendors have a complex portfolio of products with many different legacy agreements each with alternative terms and conditions that then differ

## 4. Software Value Management for Cloud

When a CIO reflects upon the concerns of moving to SaaS or the Cloud many of them are the same concerns they face with software compliance. Essentially a CIO needs to feel confident there are mechanisms in place to maintain control over business critical assets that are secure and can be governed to reduce risk of any kind of exposure, particularly financial exposure. Whether it's SaaS, PaaS or IaaS, the CIO needs to evaluate the risk versus the benefit of handing over (if relevant) control to a third party. As illustrated by the evolution of the software compliance once a large company loses control through poor governance they are weakened in terms of their negotiation, financial exposure and business agility. When considering a Cloud strategy the concerns can be extrapolated out to include, traceability, asset availability and disaster recovery. However, it should also be noted that IaaS and PaaS service models may not involve handing over responsibility for licensing to a service provider other than at an operating system level,

Software Value Management provides data to help address many traditional asset concerns, looking forward Software Value Management for Cloud has the ability to move beyond on-premise license data and enable complete control over a hybrid technology platform – on-premise and Cloud.

Below are some of the combined issues that Software Value Management for Cloud will address:

- 1 **Transparency** Today software vendors can often hold all the cards. With perpetual licenses, vendors rely upon customers having to purchase software products made up of multiple features, many of which go unused unless the majority of staff are 'power users'. Furthermore, vendors can lock customers in with compulsory subscription fees. Theoretically with a subscription service customers should only need to purchase the functionality they use, for the number of users they require and for the term required. For a SaaS model this is more straightforward whereas a PaaS or IaaS solution the devil is in the detail of the set up and configuration and who is managing the licensing. However, this relies on the customers being able to monitor exactly what they need and use. Professional vendors will also be keen to offer a transparent picture – after all it could have huge implications to their future pricing models, revenue streams and customer loyalty.
- 2 **Vendors** Vendors replicating pay-as-you-go pricing models is probably some way off but there are still important reasons for customers to monitor their license usage today.

Firstly, in order to negotiate an appropriate service level agreement with a Cloud Service Provider (CSP) customers need the data illustrating what software services they are using. This data could help avoid having to sign up to an unnecessary lock in contract or being able to hold the CSP/software vendor accountable to the terms of their service agreement. The more data the customer has access to the more control they have over the relationship. This is especially important when devolving, where possible, control of business critical applications to a third party.

Equally, correctly managed this data could provide customers with the opportunity to learn from software compliance practices and position themselves with leverage and control as to how the vendors or CSP's evolve their future SaaS proposition. Traditional software vendors have made it difficult for new pricing models to break into the market. Currently pricing is controlled by the CSP/software vendors but arguably if the customers can monitor accurate usage they can begin to negotiate a different pricing scenario with the vendor or arguably move to a new competitor prepared to develop applets or offer true pay-as-you-go functionality.

Secondly consider that the global vendors want to attract their largest customers to adopt their SaaS or Cloud offerings. This inevitably will result in customers having to maintain a hybrid software estate using on-premise and Cloud licensing. Today vendors are keen to offer flexible global contracts to encourage hybrid adoption. However, be mindful of the past. US publicly quoted companies rely on incremental revenue growth. Unless a customer can monitor and track the complete license estate there is the potential to lose control over future negotiations if vendors are forced to change SLA's in order to provide growth for dwindling revenue streams.



Essentially a CIO needs to feel confident there are mechanisms in place to maintain control over business critical assets that are secure, compliant and available at favourable costs regardless of the IT deployment models used

**3 Governance** This is arguably the biggest area of concern for CIOs. The ability to offer C level stakeholders' clarity and control over all elements of their business even in the hands of third party relationships will accelerate Cloud adoption. Intelligence that illustrates traceability of data across third party eco systems, information around data sovereignty, processes with regard to disaster recovery and general liability are going to be critical to reducing any risk or exposure within an organisation. Another tick in the box for customer governance and to build customer confidence in transitioning to Cloud will be the adoption of Cloud vendor certification. Unlike the traditional software industry CIF's certified Code of Practice offers customers some confidence on best practice and reassurance that the Cloud vendors are following stated guidelines to help customer change from on-premise to Cloud Services by identifying if the vendors they are working with have full traceability, accountability and capability to support the customer in the use of their software.



**4 Efficiency** Immediately after the 2008 market downturn the remit for all global companies was to cut cost... for many with a sledge hammer. Cost cutting exercises weren't particularly sophisticated. However, as we've moved into 2012 companies are still very cost conscious but there needs to be more due diligence about how resources are utilised and cutting costs in one area of the business doesn't mean it goes back to the bottom line. The funds are more likely to be re-diverted to ensure a strategically important project can be accelerated. The whole notion with regards to perceived value is changing both from a customer perspective and from a supplier perspective. In the past software vendors produced a product with a myriad of features and offered a standard price. Irrespective of whether a customer used most of the functionality they had to pay the published fee. With the move to SaaS and other Cloud models the same could apply with vendor contracts locking customers into functionality they don't need. The key take away is that organisation's need to have complete clarity over what software they are utilising to ensure they can control their vendor negotiation.

Another tick in the box for customer governance and to build customer confidence in transitioning to Cloud will be the adoption of Cloud vendor certification

These concerns share a similar thread. The key issue for CIO's transitioning to Cloud is maintaining control over their assets and vendor relationships. In the past it was a lack of control that enabled the global vendors to establish revenue growth from non compliance and it is this experience that CIO's can learn from. Given the similarities between Software Value Management and issues around the Cloud there is an opportunity for customers to learn and ensure that in the future the vendors do not hold all the cards but instead take control back. By tracking and monitoring data around license usage, data sovereignty and vendor accountability the customers can be in a stronger negotiating position and potentially create competitive pressure to improve pricing models around pay as you go software functionality or mobile applets.

## The software vendors

So far this paper has focused on the implications to the enterprise when moving to the Cloud. However, a Software Value Management approach for Cloud adoption is also beneficial to the software vendors. As highlighted numerous times the global vendors are focused on revenue growth and their future growth is reliant upon adoption of their service offerings. Many vendors recognise the reticence shared by large customers to move to Cloud. If their customers were to use Software Value Management as an approach to reduce concern and accelerate adoption of their new services it would be mutually beneficial to the enterprise CIO, the vendor VP, shareholders and the consumers.



## 5. Next Steps

It is clear there are many considerations when adopting Cloud within a global company. With particular focus on SaaS but also pertinent to PaaS and IaaS below are five steps to prepare:

- 1 The first project** Identify the first software vendor, project or business application to move to SaaS/Cloud. This includes obvious due diligence regarding exposure, TCO and return versus investment but the primary goal should be to identify a project from which to learn and to evaluate the customer vendor relationship. The main element to measure will be how the mega software vendors structure their service agreements and the potential areas that could create exposure in the future i.e., if Adobe acquired additional SaaS technologies – will these agreements come under the established contract already agreed?
- 2 Software Value Management for Cloud** Employ expertise to help evaluate your existing global software estate. By gaining an understanding of the existing license investments there is an opportunity to help prepare and ultimately negotiate more appropriate and flexible agreements. This will help in reducing future exposure when moving from the existing perpetual licenses to new vendor SaaS offerings. Software vendors are likely to be keen to migrate their largest customers over to SaaS, it's a new revenue stream and the more customers migrated the more intelligence they have to help them evaluate and plan future pricing models. Unless the customer has some insight into their existing software investment they will have no barometer from which to evaluate whether or not to be a pioneer in adopting SaaS or whether it's better to wait and see how the market evolves.
- 3 Code of Practice** Ascertain whether the software vendors have certified their solution against the CIF Code of Practice. This will help identify how relevant and robust their SaaS service is against your needs. In the past the vendors had the challenge to manage revenue expectations from their largest customers in terms of license compliance when it was mainly due to the fact large customers had insufficient governance in place to manage their license usage rights. In the new world of Cloud the responsibility can move to the vendors (dependent on the model) to ensure that their software services protect their customers. However, it will be critical to understand how they intend to do this from the contract terms and conditions to the third party relationships they have in place. Especially important will be to understand how a customer can exit an agreement if the vendors is unable to deliver against the service.
- 4 People** The Cloud world offers huge benefit to any organisation but only if it is managed and understood. Ensure the relevant business stakeholders recognise the value of taking on a SaaS or Cloud approach and communicate expected success gates to help maintain support. As the saying goes, 'we don't know what we don't know' and in the early days of Cloud adoption it will be important to have business owners bought into SaaS and willing to evaluate and learn. This early learning will ultimately ensure control without which new risks and exposure can surface.
- 5 Continually review, measure and assess** In the short-term enterprise reality will be a hybrid platform environment difficult for any CIO to manage and navigate. They may be sourcing and managing SaaS, Cloud and perpetual licenses from the same software vendor across desktop, data centre and mobile platforms. In order to mitigate risk or to ensure the optimal relationship the enterprise needs to negotiate from a position of power. They are only able to achieve this using Software Value Management for Cloud by utilising a platform that provides business intelligence across their global software estate.



## Summary

**Cloud is not going away but what we have learnt is that some key applications are suitable to the move to the Cloud, while others are not yet at that stage of maturity. This leaves businesses with a dilemma on how to manage the contractual requirements and potential exposure of a distributed environment.**

Software Asset Management continues to play a key role in ensuring compliance and best practice for traditional licensing but the changing world of licensing requires a new order to manage it. Software Value Management now offers the business the ability to identify the impact of this new order on their business before they consider the move, but more importantly, then allows a governance framework for which cost and efficiency benefits can be driven. Furthermore, it puts the business in the driving seat when it comes to negotiating with the software vendor. For the first time the CIO will not be reactive to vendor requirements, but will be proactively managing licences, contracts and relationship across all software delivery platforms and delivering true value back to the business.

The opportunity for the vendor is to embrace this change. Cloud lends itself to relational selling. The subscription nature of contracts means that customers will be looking to see continual value from a vendor over a number of years. To protect these relationships, many vendors are looking to create contractual barriers to exit. Rather than barriers, by supporting Software Value management in their customer base, they create a mutually beneficial relationship where customers continue to subscribe because they value not only the software, but they also value the integrity of the vendor. As Cloud brings greater competition to the software market, long term customer loyalty is more important than short term customer lock-in. A point I'm sure that all CIO's would agree on.

By providing members with a new industry forum called Software Value Management for Cloud, CIF hope to offer our members (users and vendors) a solution that will enable clarity and control around Cloud management. In doing so the industry can understand how to manage and implement software governance that in turn will reduce risk and optimise future adoption of Cloud based software services that will be beneficial to Business and Vendor alike.





**The Cloud Industry Forum (CIF)** was established in direct response to the evolving supply models for the delivery of software and IT services. Our aim is to provide much needed clarity for end users when assessing and selecting Cloud service providers based upon the clear, consistent and relevant provision of key information about the organisation/s, their capabilities and operational commitments.

We achieve this through a process of self-certification of vendors to a Cloud Service Provider Code of Practice requiring executive commitment and operational actions to ensure the provision of critical information through the contracting process. This Code of Practice, and the use of the related Certification Mark on participant's websites, is intended to provide comfort and promote trust to businesses and individuals wishing to leverage the commercial, financial and agile operations capabilities that the Cloud based and hosted solutions can cover.

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