

Methodology to Profile SaaS Vendors in IT Industry: Analyze, Profile & Recommend Mechanisms to Increase Sum Under Management & Focused Spend Among SaaS Vendors

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ABSTRACT

Software as a service (SaaS) is a sub-category of the software in which an organization rent the software from a third party on a subscription basis. The role of strategic sourcing has changed in the last decade, it has happened so mostly due to the introduction of SaaS and many other cloud-based delivery models which have changed the way of an organization to select and deploy the technology. As in the past, the strategic sourcing teams used to send out very lengthy RFPs and had to review all the responses, which often took weeks or months of evaluation before reaching to a presentation of their findings and recommendations to their organization's executive team or the various internal stake holders. Almost two decades ago, for software the SaaS delivery model was introduced, the strategic sourcing team since then has shifted its focus and priorities. They had got no choice but only to adopt the new way of doing things as SaaS, which in elaboration meant adoption of further expedient process for internally evaluating the new technologies.

The research here is done on various SaaS vendors and their contracts with the organizations and how they can be profiled based on the provided data.

Keywords

SaaS, Spend Analysis, Vendor Management, Cost Reduction, Strategic Sourcing, Spend Under management

Introduction

For fundamental business technologies, there are various SaaS applications available, like customer relationship management (CRM), emails, sales management, human resource management (HRM), financial management, billing and collaboration. The need to install and run applications for organizations on their own computer or in their own data centers is removed by SaaS. This also then eliminates the hardware acquisition expenses and, maintenance and provisioning expenses, as well as the software licensing, their support and installations. Data and Analytics is central to any business strategy. Hence it is obligatory to understand the right target market profile. There are some other benefits of SaaS model which are as follows:

- Lower Per Solution Cost - One of the main reasons that sourcing teams and IT leaders are selecting SaaS sourcing solutions is the relative low cost of the model, especially when compared with the other on premise counter parts.
- Simplistic Implementation – When it comes to SaaS solutions the implementation is no more an issue. No one has to spend days or weeks or months for a single application implementation

and instead can just easily work with the vendor's services.

- Ability To Test Before Purchasing/Payment Flexibility - Customers can subscribe to a SaaS offering instead of buying a new software to install and additional supportive hardware for it. Generally, using pay- as- you- go model the payments for this monthly service are made. Recurring operating expense rather than transitioning costs allows better running of the various businesses and with better budgeting foreseen. To stop those recurring costs, purchasers can anytime discontinue the subscription of SaaS applications. In SaaS world, the test drive of the software is very common, and is usually done in the environment of the organization using the sandbox. This helps in ensuring that the solution is always a fit and is going to work seamlessly with another application as well before purchasing it.
- Accessibility and persistence: Users can access the SaaS applications from any Internet-enabled device and location as they are delivered over the internet.
- Seamless Scalability - SaaS being the cloud services offers high vertical scalability, which

provides the customers with more alternatives to access, or lesser, facilities or the paid attributes as per requirement.

- Automatic updates: Customers can just easily rely on a SaaS provider rather than purchasing new software to involuntarily perform upgrades. It helps in reducing the load on in-house IT staff.

In this paper various SaaS vendors are considered and their services provided to the organization is collected and the data of these vendors which gives the information such as contract terms, contract value contract period, purchase requisition, number of transactions, spend, application features, users, licenses, commodity, contract renewal and much more is captured using the Coupa and Spend HQ tools.

The goal of this study is to Analyze, Profile & Recommend mechanisms to increase Sum Under Management & Focused spend among SaaS Vendors, thus to develop a methodology to profile these vendors and rationalize them resulting in saving opportunities.

Literature Review

Spend Analysis is a basic process for structuring a fortunate sourcing program. If carried out correctly, spend analysis can provide the various spend patterns with comprehended and thorough visibility, creating a substructure with the help of which various saving opportunities can be recognized and with potentially realizing opportunities, smarter sourcing decisions for savings can be made as per the book of Kriti Pandit on Spend Analysis: The window into strategic sourcing.

By Spend analysis here it means gathering the disparate data from disparate systems into a single source to find potential cost saving opportunities and improving cost compliance.

In 2019, Lappeenranta University of Technology did a study on public procurement spend analysis to provide an offering for the ambiguous boundaries of procurement in the accounting terms. The writers here outline the pellucid monetary definitions for the boundaries of procurement and develop an approach, more clarified methodology of evaluating procurement spend.

SaaS vendors' performance evaluation and scalability measurement is studied by San Jose State University, USA in 2011 in which the factors like system resource utilization, system performance evaluation, system load measurement, system capacity and scalability analysis are concluded.

In 2011, Changsha University of Science and Technology, China studied the analytical hierarchy process which can be used to choose the best SaaS vendors for the organizations. By establishing the hierarchy prototype, analyzation of the attributes and the attribute values calculation, the problem with various objectives for making a decision in choosing the best SaaS vendor for the organizations is solved.

The relationship between the SaaS software delivery model and the productivity of the software vendors is studied by National University of Singapore in 2009 using Cobb-Douglas production function to model, the functional relationship between inputs and outputs and employ the feasible generalized least squares method to evaluate the marginal product of each input factor.

The segments of the literature that have been examined provide the relationship of SaaS vendors with various attributes and the study of methods to analyze them. This study will aim to give a better methodology to profile the SaaS vendors for identifying saving opportunities and cost compliance.

Methodology

The organizations have experienced sharp increase in 3rd party SaaS vendor additions over past several years. Vendor profiling required to reduce wide vendor base and increase spend under management and thus to Develop a methodology to profile SaaS vendors.

Software is one of the most important commodities of sourcing, for which the vendor count keeps on expanding. Software as a service (SaaS) is a sub-category of the software in which we rent the software from a third party on a subscription basis.

Sourcing teams can use spend analysis on SaaS vendors. By Spend analysis here it means gathering the disparate data from disparate

systems into a single source to find potential cost saving opportunities and improving cost compliance.

To manage the spend of SaaS vendors, an approach is developed to analyze, profile and recommend mechanisms to increase focused spend by converging all the data of the vendors in a single sheet called Software Asset Management Sheet. For which different tools can be used like Coupa & SpendHQ to gather the information of the vendors and then cleansing the data to be consolidated into a central database which is further used for categorization based on the different anomalies found and then can be analyzed to find the potential saving opportunities.

Coupa Software is the cloud stage for business spend the executives (BSM). Coupa engages organizations around the globe with the clarity and control they need to spend more brilliant and more secure. Coupa Software is the cloud stage

for Business Spend. We amplify the estimation of each dollar associations spend today. Coupa's central goal is to empower associations to go through more intelligent and set aside cash by conveying the most imaginative, simplest to utilize, quickest to actualize and practical innovation on the planet.

SpendHQ is a spend examination programming that gives fast, precise and definite perceivability into your spend information. Our full-administration SaaS spend perceivability arrangement conveys noteworthy understanding for sourcing what's more, acquirement experts. SpendHQ is a quicker, less complex approach to accomplish genuine spend perceivability – for obtainment pioneers who realize they aren't seeing the entire picture.

The software asset management sheet consists of the data of various SaaS vendors including the information such as:

App Label	Vendor/Supplier	Annual spend
App Name	Coupa Spend	AP Spend
Purchase Requisition	Number of Transactions	Expense Spend
App features being used	Total Spend	No. of Transactions Last 12 months
Features not used	Total Transactions	Licenses
Users	Active Users	Creator
Business Owner	IT Owner	Subscription Type
Billing Frequency	Contract Start Date	Contract Renewal Date
Contract Notification Length	Contract Value	Business Unit
Single Sign-On	Holds PII	IT Supported
Business Goals	Date added	Status
App Category	App Subcategory	App Functions
Uploaded Doc Count	Last Transaction Date	Last AP Transaction Date
Last Expense Transaction Date	Tags	Payment Method
True Up	Next Action	Sign-On Mode
Contacts	Primary Cost Center	Launch URL
Competitors	PO Number	Commodity
Order Date	Overages	Per License Cost

The columns of the software asset management sheet are explained below:

1. **App Label:** The label of the application which provides the authenticity of the product being used by the organization.
2. **App Name:** The name of the app for which the information is gathered as it is being used by the organization.
3. **App Category:** The Category to which the app belongs to such as service design tools, data repository apps and much more.
4. **App Subcategory:** The categories are further divided into sub category, this is done to get a better understanding of the app, its service and its features.
5. **App Functions:** The various functions provided by the application or the service.

6. **Commodity:** The category or the pillar the app belongs to as per the defined commodities by the organization.
7. **Launch URL:** The web URL of the particular app to use it from.
8. **Vendor/Supplier:** The name and details of the vendor or the supplier who is contacted for the particular application.
9. **Contacts:** The contact details of the vendor or the supplier from who the service is rented on the contract basis.
10. **Competitors:** The other applications and services which provide the same features or fall into the same app category.
11. **PER LICENSE COST:** The cost incurred for only one licensed user while making the contract terms.
12. **Annual spend:** The annual spend gives the data on how much the spend is done on the app in a particular year.
13. **Coupa Spend:** The spend value which is given by the tool Coupa for a particular app in a particular period of time. Note: Different people can use different tools in their organization.
14. **AP Spend:** The amount of spend which is still to be paid by the organization to the supplier as it is accounted as a liability.
15. **Expense Spend:** The total spend on the application or the vendor for the used service.
16. **True Up:** The number of licenses is increased as per the requirement and the cost incurred for the same is known as true up spend.
17. **OVERAGES:** The spend which is incurred because of the extra usage of the app as not defined in contract, the users or the licenses number in the contract is less than the actual users of the application.
18. **Total Spend** : The spend which includes the actual payable amount value and the extra spends that occurred while using the service of the application.
19. **Payment Method:** The method of paying the vendor using AMEX card, or cash, or the card provided by the company or by the sourcing team.
20. **Billing Frequency:** The number of times a bill is generated for the app in the name of the vendor.
21. **Purchase Requisition:** The unique number which is generated or provided while making a request to purchase a particular product.
22. **PO NUMBER:** The unique number which is provided to the order while making the purchase of the application.
23. **Number of Transactions** : The number of transactions made to pay the whole amount to the supplier as the cost of the service.
24. **No. of Transactions Last 12 months:** The total number of transactions made to pay the amount to the supplier as the cost of the service in the last one year of 12 months.
25. **Last Transaction Date:** The date of the last transaction made in the name of the same vendor or the supplier for the application.
26. **Last AP Transaction Date:** The date of the last AP transaction made in the name of the same vendor or the supplier for the application.
27. **Last Expense Transaction Date:** The date of the last expense transaction made in the name of the same vendor or the supplier for the application.
28. **Total Transactions:** The total number of transactions made as whole for a particular application to the vendor by the organization.
29. **App features being used:** There are a lot of features an application provides to the user and these will be the ones being utilized.
30. **Features not used** : Some of the features being provided by the application will be useless for the user and hence a list
31. **Licenses:** When an application is rented for the use by an organization, it is done on basis of number of licenses which means that only 'n' number of users can use the application as per the contract.
32. **Users:** The particular number of users of the organization using the application, be it in one team or different teams for which the app service was taken.

33. **Active Users:** The users which actually are using the application service among the whole users of the organization for which the app was rented.
34. **Creator:** The employee who raises the purchase requisition for the particular application or the service needed for the work.
35. **Business Owner:** The team head of the employee who raises the purchase requisition for the particular application or the service needed for the work.
36. **IT Owner:** The head owner of the department of the employee who raises the purchase requisition for the particular application or the service needed for the work.
37. **Business Unit:** The business unit to which the employee who raises the purchase requisition belongs.
38. **Primary Cost Center:** The unique ID given to each department of the organization, by the organization.
39. **Holds PII:** The employee if holding any personal information of the contact details of the vendor.
40. **IT Supported:** The department supporting the application being rented for the service.
41. **Subscription Type:** It defines the nature of the subscription based on which the application or the service is rented for. It can be annual or monthly based.
42. **ORDER DATE:** The date when the purchase requisition was raised by the employee.
43. **Contract Start Date:** The date of the start of the contract term for the usage of the service.
44. **Contract Renewal Date:** The date of the end of the contract term for the usage of the service, and so as to renew it if needed.
45. **Contract Notification Length:** The length of the contract signed should be notified before ending it.
46. **Contract Value:** The amount or the spend mentioned in the contract for the purchase of the particular number of licenses of the app.
47. **Sign-On Mode:** This provides the authenticity to the users of the organizations using the service.
48. **Single Sign-On:** The users are provided with login ID and passwords for the authentication while using the app.
49. **Business Goals:** The goals an organization means to achieve using the service of the app.
50. **Date added:** The date updating in the contract if required.
51. **Status:** The status of the delivery of the service when the purchase requisition has been made.
52. **Uploaded Doc Count:** The document count need to be updated if needed.
53. **Tags:** The tags tagged along with the application user.
54. **Next Action:** The action which needs to be taken based on analyzing the data of the vendor and the application used by the stake holders.
 - By studying the first 11 parameters, you can get all the information about the vendor or the supplier and the app that they are providing and its value in the market as well as its competitors so that you can select the best suitable application for your organization work based on the features it provides and also on the basis of the comparison of the cost of the apps.
 - By studying the next ten parameters, you can get the data that how much your organization spends on it and how frequently its used. Is it being used correctly to its limit or not. The licenses which are bought for a particular app are appropriate or not or the value should be more or less as per the usage so that extra spend can be saved by saving the true ups and overages spends.
 - By studying the next eight parameters, you can get the information of a particular order or track it if it is needed and also get all the information about the transactions being made in the name of the supplier.

This information is recorded so that the data of a supplier can be easily cumulated.

- By studying the next two parameters, you can make out which features of the app are actually worthy for the stakeholders and which are not and based on that you can make your contract or save the cost.
- By studying the next three parameters, you get the data on number of licenses bought for the users and also the active users number and you can make the right choice of selecting the license number the next time you make a contract based on the actual license utilization.
- By studying the next seven parameters, you get the data of which team is actually using the app or the person who has raised the purchase requisition so that if different teams need the same software then the contract can be made cumulated and some cost can be saved.
- By studying the next six parameters, you get all the information of the contract, its type, its validity so that if it needs to be renewed, it can be done on time and if it needs to be extended based on cost savings, the decision for the same can also be made.
- By studying the next few parameters, you can get the data on the authenticity of the app and who in the organization has the access to it.

In the last parameter, you need to add if you found any anomaly or something which could be done to save the cost or improve it or maybe if the vendor is not at all required or its competitor already exists in our list and its cheap. So actions like that.

Spend analysis is the way toward distinguishing, gathering, purging, gathering, sorting and investigating your association's spend information. This is finished with the objective of diminishing obtainment costs and improving efficiencies by expanding perceivability and straightforwardness.

Steps of the approach are as follows:

Step 1: Data Extraction

For this very first step data was collected from sources using the tools Coupa & Spend HQ and then consolidated the data into one central database called software asset management sheet.

Step 2: Data Cleansing

In the second step, cleansing of the data is done as per the requirement of the analysis and all the outdated and messy sources of information are removed and transformed into a clean and consolidated data.

Step 3: Data Categorization & Enrichment

Third step includes the Performing of the spend analysis and classifying the data into clear and defined categories based on different disparities found in the data and categorizing them into different buckets.

Step 4: Reporting and Analysis

The last step comprises of Analyzing the data for potential realizing opportunities based on which smarter decisions can be made by the sourcing team resulting in effective savings.

Based on the categorization, the vendors are categorized into 6 buckets:

- Spend Disparity
- Credit Card Spend
- Mis-categorization
- Dormant Suppliers
- Application Alternatives
- Mis-usage

The findings or the buckets based on the categorizations are explained as follows:

- **Spend Disparity:** Huge vendor base has spent disparity which means the spend taken for these vendors from two sources is divergent. These sources are Coupa and SpendHQ. This happens because SpendHQ is a SAP (systems, application, and products) enterprise resource planning software and takes time to reflect the change in the data whereas Coupa works on real time data. **Coupa** is the procurement tool for our strategic sourcing team used to request and

approve software or other significant purchases, whereas **SpendHQ** is a spend analysis software that provides rapid, accurate and detailed visibility into enterprise spend data built for procurement.

- Credit Card Spend: Some vendors are subscribed using the corporate card given by VMware which is categorized as Credit Card Spend and can be done directly by the stake holder.
- Mis-Categorization: A few vendors of the focused base are incorrectly classified or mis-categorized while making purchasing transactions. For example: A Vendor is mentioned under commodity subscription sales and another vendor B is under Demand generation which are not related to Hosted/SaaS.
- Dormant Suppliers: Dormant Suppliers are the vendors, the applications for which have not been used in the last year and are idle.
- Application Alternative: Alike applications are available with VMware for some of the SaaS vendors and so they have been put in the category Application Alternatives.
- Mis-usage: Some vendors' applications license users are less as compared to the actual active users depicting mis usage of the contract of the application.

Conclusion

The outcomes of the findings are as some actionable areas are categorized in the Software Asset Management Sheet which can be worked upon and some potential optimization measure can be taken on them to reduce the cost or number of suppliers.

Recommendations on the Software Spend Leakage are given based on the ease of complexity. By ease of complexity, it means it is comparatively easy to take actions on these as they are aligned with the Procurement Process & Purchasing Policies of the organization and go along with the vision and mission of Sourcing & Operations team.

Similar research can be done on other IT Infrastructure or other Sourcing areas to reduce the number of suppliers and spending

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