



Dalton Paurom

# The Fulfillment and Satisfaction of Companies Using Software as a Service for a Sales and Marketing Platform

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## ABSTRACT

Author	Dalton Paurom
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The aim of thesis was to examine the fulfilment and satisfaction of companies when using Software as a-Service (SaaS) consisting of five domains: value of SaaS to the company, satisfaction with SaaS, employee engagement, reasons for SaaS implementation, and challenges met. The study also examined how companies' profile, the format of SaaS subscribed/purchased, industry the company operates, cost of SaaS, total number of employees, and number of years in operation as rival explanatory variables to the companies' fulfilment and satisfaction.

In addition, the inclusion of the rival independent variables will add rationale of the hypothesized relationship between the platform subscribed/purchased and user fulfilment and satisfaction with SaaS platforms. The study conducted an online survey with the use of self-prepared survey questionnaire for which only four participants responded. On this account, the study used IBM SPSS to do bootstrap calculation for comparison of means and confidence interval and their significance at .05 confidence level.

The data from survey questionnaire was found valid at level with Cronbach consistency coefficient average for all domains of 0.92. Simple frequency distribution was used to describe the profile of the companies.

The findings showed that the companies were satisfied and fulfilled with SaaS particularly of the Salesforce Customer Success Platform and WordPress. Only the type or format of SaaS made significant effect in all domains of fulfilment and satisfaction, out of the five company profile variables. The study concluded that the format of SaaS is a significant factor in determining customer fulfilment and satisfaction. This can be attributed to better services offered in terms of encrypted cloud-based enterprise resource planning (ERP), order management, customer relationship management (CRM), and e-commerce application services. However, the study does not describe the technical configuration of SaaS in terms of customer fulfillment, but it only discusses the customer success perspectives. At the same time, the software operates entirely on the cloud and does not provide offline access to its software, and the software is inoperable without a subscription.

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# 1 INTRODUCTION

Every company that sells its products or services must ensure its customers' "fulfilment and relations" are met. Computing technologies capable of identifying and analyzing business data designed to provide current, historical and predictive views of internally structured data for products/or services is a component of business intelligence that needs to be considered. The lack of thereof, a company may not have external control coming from pressures from customers, changes in market, competition, government regulations and more.

On the other hand, software companies have been developing, selling and enabling software business solutions for many years that have helped companies make effective and efficient decisions attributable to information gain from software business solutions. Such development has come down today as a "Software as a Service" or SaaS in short. It is a method of enabling a software solution to customer-companies in a subscription model that departs from the "old" model of selling a perpetual license, but, by enabling a cloud-based solution to customers, it allows companies to "rent" the solution and they are then able to use the Software as a Service only for the period they have rented it for. The vendor enabling the solution also provides not only the solution itself, but also the infrastructure that supports it. This model allows companies to offer their products as services instead of physical objects, moving the economy to a subscription model (Forrester Research Forrester Research, 2014).

The key implication of this new model is its important shift in the engagement model between the software vendor and its customer-companies. In a SaaS model, the customer pays relatively a smaller rent for the software every month. The software vendor must therefore ensure the customer is using the solution and seeing value from it if they want to ensure the customer continues to pay their rent. This fundamental shift in the software industry's operating model revealed a need for a business solution at the company to own and ensure that success of its customers (Bliss, 2006; Prohorchik, 2017).

Whereas the trend towards SaaS has been going on since the beginning of the 21st century (Barret, 2010), however, the need for much stronger focus on customer success through the creation of the field of customer success only began around 2010–2012 (Manning and Bodine, 2012). This can be attributed to the fact that customer success management is an

emerging field of business such that its organizational configuration and activities are still evolving (Forrester Research, 2014). Hence, large amounts of differences with respect to the incorporation of its scope of responsibilities, reporting configuration, terminologies used for describing its activities, metrics used for measuring performance and more still need to be explored. On that account, the objectives of this research are as follows: to determine customer's usage, overall customer satisfaction, and revenue generation from the vendor's solutions. This may help identify opportunities and challenges from the way the customer engages with the solution and provide recommendations to resolve challenges and foster expansion of the usage as well as the value from the solutions to both software vendor and customer.

### **1.1 Scope of the Study**

The scope of the study covers companies using SaaS. Since the location of companies implementing the software cannot be determined, the study used social media, and other cloud computing platforms to contact “would be” companies using SaaS. This thesis examines the relationship between companies' profile variable and fulfilment and satisfaction in implementing SaaS.

### **1.2 Topic Selection**

The topic is an emerging concern particularly on the case of company's success using SaaS and the large amount of differences with respect to the incorporation of its scope of responsibilities, reporting configuration and terminologies used for describing its activities, metrics used for measuring performance.

### **1.3 Purpose of the Study**

Initially, the primary purpose of the study is to examine the effect of the companies' choice of SaaS marketing platform on their customer fulfilment and satisfaction with the software. However, the choice of a platform could as well be influenced by other factors, so eventually the study will include other factors such as the cost of SaaS; the companies' total number employees, type of industry the companies are operating in and the number of years of operations since these are concluded by the study to exert influence on the

choice of SaaS platform. The inclusion of these factors therefore can justify further whether the choice of a platform indeed makes a difference in the end-users of SaaS' fulfilment and satisfaction after controlling for the effect of each of the factors. In such a case, the results of the study may serve as initial findings from which future related studies may be carried out.

#### **1.4 Limitation of the Study**

The study is limited to only four participant companies which responded to the online survey. To resolve the issue, the study made use of bootstrap resampling on the items of the independent and dependent variables with 500 resampled samples.

#### **1.5 Structure of the Thesis**

The first part of the thesis includes the introduction. It covers the study topic and the reason for choosing it, the purpose of study as well as the structure and the limitations of the study. The second part consists of the theoretical framework where theories in this specific field of study are explained. The theoretical framework consists of four sections. The first section deals with the basic SaaS application while the second deals with definition and categories of cloud computing. The third section deals success factors of SaaS and the fourth section deals with benefits and challenges with SaaS.

The third part consists of methodology and the implementation of methodology. This part deals with the research design, selection of respondents and sampling design, scoring procedure, statistical treatment of data. The fourth part consists of the analysis of data and its result. It also shows the results of testing the hypothesis on the relationships of the variables. This part initially starts with description of each variable using descriptive statistics and followed by inferential statistics to test the hypothesis of the study.

#### **1.6 Validity and Reliability**

In order to ensure the validity of the research, a few measures were taken. Initially, a draft of the research plan with the survey questionnaire was submitted to the supervisor of the thesis during the research proposal writing. The supervisor's correction and revisions were solicited. The research plan as well as the survey questionnaire was accepted. The questionnaire was finalized and verified under the supervision of the supervisor. Before

handing the questionnaire to the participants, a pilot test was conducted to the participants themselves. Fortunately, the instrument was found valid using Cronbach alpha consistency coefficient from resampled data using bootstrap resampling techniques.

## **2 THEORITICAL FRAMEWORK**

### **2.1 Basic Application of SaaS**

This section begins with a brief description of the basic operation of SaaS and then proceeds to the formulation of the theoretical framework. For the purposes of the study, Software as a Service (SaaS) is defined as the use of services, computer programs and the like that are on the internet rather than ones that customers buy and install on their computer. SaaS is a specific form of cloud computing sometimes referred to as "on-demand software" also referred to as "software plus services" by Microsoft.

SaaS applications are also known as Web-based software, on-demand software and hosted software (SaaS: Beginners Guide, 2018). The term "Software as a Service" (SaaS) is considered to be part of the terminology of cloud computing like Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Desktop as a Service (DaaS), managed software as a service (MSaaS), mobile backend as a service (MBaaS), and information technology management as a service (ITMAaaS). SaaS apps are typically accessed by users using a thin client, e.g. via a web browser.

SaaS has become a common mode of delivery for many business applications, including office software, messaging software, payroll processing software, customer invoicing, management software, computer-aided design software, accounting, resource planning, management information system (MIS), human resource management, and many others.

### **2.2 Definition of Cloud Computing**

However, there is a high misunderstanding among practitioners concerning the term cloud computing. According to the Forrester research only 58% of the surveyed managers were able to explain the cloud concept correctly (Forrester, 2010).

Hence, lack of understanding of the specific practical details of the basic functions of SaaS viewed in the context of the company's overall goals and performance is imperative before purchasing or subscribing it. A general definition of cloud computing was offered by the National Institute of Standards and Technology (NIST) and the organization defined it according to several requirements it must fulfil. These requirements include resources or electronic applications must be provided in electronic form via internet, the



service is provided on-demand, the application is measurable which means that the use of single customers is measurable and can be controlled (Benlian, 2010).

Cloud computing offers four different iterations: private cloud, public cloud, community cloud and hybrid cloud (Mell and Grance, 2009). According to Mell and Grance (2009), cloud computing can be subdivided into three different service models: platform as a service (PaaS), infrastructure as a service (IaaS) and software as a service (SaaS).

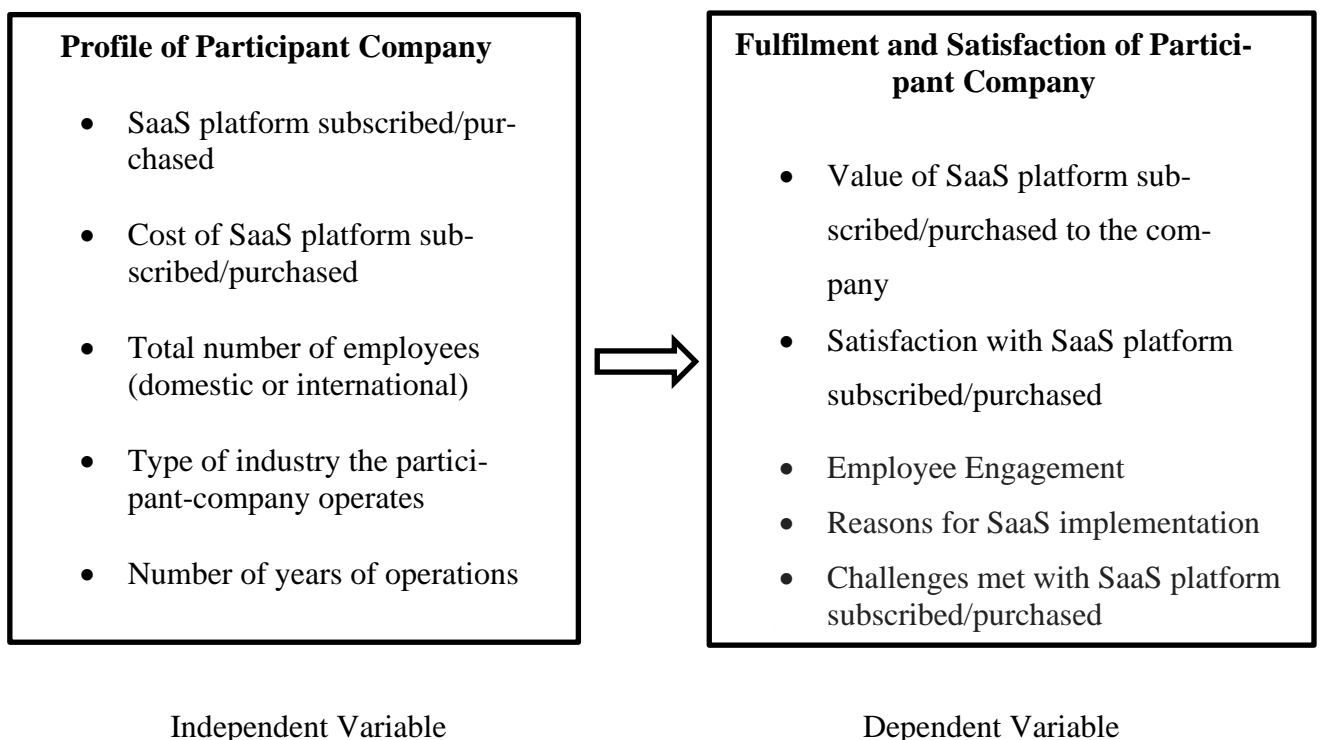
The three service models have interrelated components, however only SaaS is considered in the study. SaaS as specific form of cloud computing is defined as follows: “The capability provided to the consumer is to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through a thin client interface such as a web browser (e.g. web-based email). The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, apart from limited user-specific application configuration settings (Mell and Grance, 2009).

### **2.3 Success Factors Associated with SaaS**

Additionally, the results of various studies show that much of the value-creation of SaaS are realized on an organizational level, while the most success factors to “run” the service can be found in the system quality category. Success and value according to Webster and Watson (2002) taken from their critical literature review, should be gauged according to the framework of DeLone & McLean model (2003) of information system success. On this account, Delone & Mclean model should capture success factors which are critical as backbone of companies, as well as value-creational considerations on organizational level as net benefits construct. Success factor indicators suggested include performance, security, individualization, privacy, compliance, availability, flexibility, interoperability, implementation, legal aspect, opportunity cost, and social aspects arranged in descending order from highest to lowest preference.

The study further theorizes that all these success and value indicators must be translated into practical and serviceable indicators for user companies to assess their fulfilment and satisfaction particularly in improving their marketing strategies and sales.

For purposes of this study, respondent-company fulfilment and satisfaction include five broad domains: value of SaaS to the company, satisfaction with SaaS, employee engagement, reason for implementation, and challenges with SaaS. These fulfilment and satisfaction indicators are hypothesized to depend on the company's profile particularly: type of SaaS of marketing platform subscribed, industry to which the company operates, cost of SaaS subscription, number of employees who will benefit in all company's branches (domestic or abroad), and number of years of operation. The schematic diagram depicts the framework of the study shown in figure 1.



**Figure 1. Schematic Diagram**

## 2.4 Benefits and Challenge of SaaS

Singh and Padney (2014), noted certain technical challenges involved in the adoption of SaaS technology and some of the challenges are data security, customization and scalability and among others. SaaS-adoption differ across application types. Social influence, attitude toward SaaS-adoption, adoption uncertainty, and strategic value turned out to be the strongest and most consistent drivers across application types.

Furthermore, the authors found out that firm size does not matter in SaaS adoption, since large enterprises and small to medium-sized companies have similar adoption rates. According to Amburst et al (2009), "A Berkeley View of Cloud Computing" identified ten obstacles and opportunities for adoption and Growth of Cloud Computing. According to the market research company IDC prediction (2010) web cast IDCIT Cloud Services Survey: top benefits and Challenges are: security, availability performance still lead challenges, cost and lock –in worries rise, Dawei.sun et al (2011), studied on Surveying and Analyzing Security, Privacy and Trust Issues in Cloud Computing Environments. The main aim of researchers was to highlight the major security, privacy and trust issues in current existing cloud computing environments and help users recognize the tangible and intangible threats associated with their uses.

The two main aspects of security, privacy and trust issues, which include: (a) Surveying the most relevant privacy, security and trust issues that pose threats in current existing cloud computing environments, and (b) Analyzing the way that may be addressed to eliminate these potential security, privacy and trust threats, and providing a high secure, trustworthy, and dependable cloud computing environment. Along this line a study by Janssen Marijn and Joha Anton (2011), "Challenges For Adopting Cloud-based Software as a Service (SaaS) In The Public Sector" was conducted. The study found that SaaS could provide many benefits which are related to the outsourcing of the local control, installation and development of software which could result in potential cost-savings and better cost control. There are also many challenges that need to be addressed including ensuring the quality, privacy, security and business continuity which require the implementation of organizational changes and governance mechanisms for public sector organization are adopting SaaS.

Rong et al (2012), discussed the benefits and security challenges of cloud computing in the current cloud computing model, including both the conventional security challenges that can be applied to cloud computing and several new challenges that are inherently connected to the new cloud paradigm.

The current security issues of cloud computing emphasized three areas of particular interest such as SLAs, trusted data sharing, and accountability. According to Vozmediano

et al (2013), Cloud computing will play a major role in the future of Internet Services, enabling on-demand provisioning of applications, platforms, and computing infrastructures.

However, the cloud community must address several technology challenges to turn this vision into reality. Specific issues relate to deploying future infrastructure-as-a-service clouds and include efficiently managing such clouds to deliver scalable and elastic service platforms on demand, developing cloud aggregation architectures and technologies that let cloud providers collaborate and interoperate, and improving cloud infrastructures' security, reliability, and energy efficiency.

Gupta et al (2013), found out that five factors influencing the cloud usage by business community are ease of use and convenience, which is the most favorable factor followed by security and privacy and then come the cost reduction.

### **3 METHODOLOGY**

#### **3.1 Implementation of Methodology**

The study made use of descriptive-quantitative-correlational research design. The design made it possible to use a sample of participants taken from an unknown and possibly large population of SaaS users of likewise unknown places of origin. The design also enabled gathering data and then can be measured which can be subjected to deeper statistical control and analysis.

Moreover, the design allowed gathering data across a large number of cases which can be replicated, such as bootstrap resampling procedure. Thus, this enables making generalization of the results. To carry out this design, the study used an online survey method through the self-prepared survey questionnaire administered. The survey questionnaire was sent to target respondents over the worldwide web. The respondents received online surveys via email, and social media.

The instrument was first face validated by the thesis supervisor. The survey instrument was also validated via Cronbach alpha consistency coefficient. Using the same raw data, the dependent variables were found to have high rate of consistency except for one dependent variable, that is, reasons for implementation with consistency coefficient of (.583). The rest of the dependent variables posted high consistency coefficient namely: value of SaaS of the company (.928); satisfaction with SaaS (.956); employee engagement (.894); and challenges met (.974). Each of these dependent variables were scored and categorized into a 8-point Likert scale (e.g. from “strongly agree” to “strongly disagree”).

For ease of interpretation and analysis, the responses to the 8-point Likert scale survey questions were translated into 5-point Likert scale with a different category as: (e.g. “highly satisfied” to “highly dissatisfied”). On account, however, of only four companies responding to the online survey, the study made use of bootstrap resampling up to 500 samples of size 4 to ensure stability and the data. Despite the bootstrap resampling, the distribution of bootstrap values remained positively skewed with skewness value greater than one. This is attributed to the mere sample of four companies at the start. Thus, even

with bootstrap resampling the number is simply not enough. To answer the problem statements, study the used IBM SPSS to do bootstrap calculation of the means and confidence interval and their significance at .05 confidence level.

## **3.2 Study Progress**

### **Secondary Research**

Owed to the hindrance of obtaining data from undetermined companies with SaaS software related to SaaS applications, nature of cloud computing, success factors, benefits, and challenges of using SaaS platforms, the study made use of the reviews helped to formulate hypothesis on the relationship between the independent and dependent variables. The reviews were also helpful in identifying support to the empirical findings of the study.

### **Primary Research**

The data taken directly from the participants are primary sources of data. The primary data by their nature served as first-hand account of the conditions surrounding the research problem in question. These data were interpreted and analysed not based on beliefs but on standardized protocols. Unlike qualitative research, the design used by the study separates data collection from analysis as well as separate the researcher from the data.

## **3.3 Research Questions**

This study explores whether there was a significant effect of the profile variables of the participant-companies to their fulfilment and satisfaction in implementing SaaS platforms. Specifically, the study answers the following questions:

1. What is the profile of participant-companies considering:
  - 1.1 SaaS platform subscribed/purchased
  - 1.2 Cost of SaaS platform subscribed/purchased
  - 1.3 Total number of employees (domestic or international)
  - 1.4 Type of industry the participant-company operates
  - 1.5 Number of years of operations

2. How do the participant-companies rate their fulfilment and satisfaction in terms of:
  - 2.1 Value of SaaS platform subscribed/purchased to the company
  - 2.2 Satisfaction with SaaS platform subscribed/purchased
  - 2.3 Employee Engagement
  - 2.4 Reasons for SaaS implementation
  - 2.5 Challenges met with SaaS platform subscribed/purchased
3. Is there significant effect of the profile variables of participant-companies to their fulfilment and satisfaction with SaaS platform?

### **3.4 Research Time Frame**

The study went well as planned except for the unexpected very small number of four participant-companies who responded to the online survey in all the items in the online survey questionnaire. Despite some difficulties the study was completed in time. This thesis would not have been completed without the help of the thesis supervisor and the participants. The cooperation and guidance from the thesis supervisor, the respondents and the participant-companies were highly appreciated. The thesis started in July and was completed in December so being specific it took around six months for the final completion.



## 4 EMPIRICAL RESULTS AND ANALYSIS

This section interprets and analyses the research findings of the study according to the sequence of the problem statement cited in Section 3.3 under methodology. It started with the restatement of the problem followed by the interpretation and analysis preceding the statistically treated and tabulated data presented.

Problem 1. What is the profile variables of the participant companies in terms of

- 1.1 SaaS purchased/Subscribed
- 1.2 Cost of SaaS
- 1.3 Number of Employees
- 1.4 Number of years of operation

The profile variables served as the independent variables that are used to determine which specific profile variable made a difference in the fulfilment and satisfaction of companies using SaaS. Table 1 shows that majority of the participants (75%) subscribed for SaaS Customer Success Platform while fewer than 25 percent subscribed for WordPress. Apparently, the majority of the participants are users of Salesforce Customer Success Platform (SCSP). It is a social and mobile cloud technology that help companies connect to their customers, partners, and partners in entirely new ways. The large percentage of SCSP subscription can be attributed to the considerable revenue and market shares it yields to the users. For instance, Craig Smith (2018) provided some considerable financial updates of SCSP to include the following: has 150,000 customers, of which 500 are companies listed in Fortune magazine, with a CRM market share of about 19.6%. Also, 34% of its revenue comes from cloud sales, 30% from service cloud sales, 21% comes from app cloud sales while 15% comes from marketing cloud sales. Currently, SCSP employs 30,000 employees with Salesforce revenue of about \$10.20 billion.

**Table1. Distribution Participants by SaaS Purchased/Subscribed**

SaaS Purchased/Subscribed	Frequency	Percent
Salesforce Customer Success	3	75.0

Wordpress	1	25.0
Total	4	100.0

In terms of how the customer companies viewed the cost of SaaS, Table 2 reveals that half of the participants (50%) viewed the cost as expensive while the other half viewed the cost of purchase/subscription as moderately expensive. The cost, however, depends on the kind of Salesforce platform purchased/subscribed. The typical cost or pricing of SCSP per user per month are: sales cloud (\$25), service cloud (\$25), and (see appendix A): sales cloud (\$25), it is the company's basic CRM system which includes the company's need marketing cloud or client management, client records, lead tracking, deals, dates and etc. Marketing cloud price is available on request that allows one-to-one marketing campaigns; service cloud (\$25) and commerce cloud is available on request. Apparently cost of SaaS varies depending on Salesforce platform and features or configurations requested.

**Table 2. Distribution Participants Purchased/Subscribed Cost of SaaS**

Cost of SaaS	Frequency	Percent
Expensive	2	50.0
Moderately Expensive	2	50.0
Total	4	100.0

The study had a prior assumption that companies that needed more manpower such as in the case of service companies, the greater the need for SaaS CRM software is. The study further assumed that the faster the growth of SaaS companies via growth in the number of customers, the more employees will be employed. Table 3 discloses that half of the participants (50%) had 100 or less of employees while 25% employ about 101 to 200 employees, and 25% employ 400 or more employees. Apparently, more companies employed 100 or less employees. The distribution of companies in Table 3 shows some degree of variance in terms of the number employees, which could be attributed to the variation of the number of SaaS configuration implemented.

**Table 3. Distribution Participants by Total Number of Employees**

Number of Employees	Frequency	Percent
100 – Below	2	50.0
101 – 200	1	25.0
401 – Above	1	25.0
Total	4	100.0

Before the introduction and wide acceptance of SaaS beginning in the year 2012, older companies may have some advantage of implementing SaaS than newer companies. In the first place, older companies, by then have established their market links via traditional sales and marketing management practices that were rather slow and tedious. On that account, these companies especially large ones and those geographically separated, were more likely willing and able to implement newer ways of connecting to their customers, partners, and employees in order to improve their business-related processes via software management. As the old cliché says, “experience does matter”. Table 4 shows that the majority of the companies (75%) were in operation for about 12 to 15 years and fewer as 25% were in operation for 28 years or more.

**Table 4. Distribution Participants by Number of Years in Operation**

Number of Years of Operation	Frequency	Percent
12 – 15 Years	3	75.0
28 Years - Above	1	25.0
Total	4	100.0

Problem 2. What is the level of satisfaction and fulfilment of companies considering:

- 2.1 Value of SaaS to the Company
- 2.2 Satisfaction with SaaS purchased/subscribed
- 2.3 Employee Engagement
- 2.4 Reasons for SaaS implementation
- 2.5 Challenges met with SaaS

For purposes of the study the responses to the original 8-point Likert scale from the online survey were translated into 5-point Likert scale with a new descriptive category. Table 5 demonstrates that the participant-companies were “satisfied” with the five domains of satisfaction and fulfilment with SaaS. By overall average the participants were satisfied with the value of SaaS to the company (5.789) in terms of customer retention, improved sales and profitability and improving company’s reputation via expansion of market. In the domain of satisfaction with SaaS, the participants were generally satisfied (5.877) considering company’s expectation and promoting it with partner companies’ usefulness to the company’s Salesforce and marketing strategy, and satisfaction with the historical growth of the company.

In the domain of employee engagement, the participants were satisfied with SaaS (5.870) particularly in allowing employees to meet their work goals, improving employees’ relationship with co-workers, improving relationships of supervisors, adaptable to the company’s culture, and helping the company to gain employees’ productivity.

Moreover, the participants were satisfied with the implementation of SaaS (5.888) in terms of increasing the company’s collaboration with partner companies aimed at expanding sales and market, improved customer services, and increasing the range of choice of customers on their specific demands for goods and services.

Furthermore, the participants were satisfied despite the challenges met (5.871) particularly in making their customers’ lives easier and enabling the company to provide greater opportunities for the company’s growth.

**Table 5. Mean Fulfilment and Satisfaction with SaaS**

Satisfaction/Fulfilment with SaaS	Mean	SD	Interpretation
Value of SaaS to the Company	5.789	.522	Satisfied
Satisfaction with SaaS purchased/subscribed	5.877	.520	Satisfied
Employee Engagement	5.870	.522	Satisfied
Reasons for SaaS implementation	5.888	.532	Satisfied
Challenges met with SaaS	5.871	.520	Satisfied
Overall Mean	5.859	.0397	Satisfied

Problem 3. Is there significant difference in the participants' fulfilment and satisfaction with SaaS considering their profile such as:

- 3.1 SaaS purchased/subscribed
- 3.2 Type of industry participant-companies operates
- 3.2 Cost of SaaS purchased/subscription
- 3.3 Number of employees
- 3.4 Number of years of operations

Owed to the fact that only four companies responded to the online survey questions, the study conducted bootstrap resampling technique for about 500 samples. The reason is to expand the sample size from the data of the four companies to ensure the validity and accuracy of interpretation and conclusion. Table 6 reveals only the type of SaaS platform purchased/subscribed significantly made a difference in the companies' fulfilment and satisfaction with SaaS.

The other profile variable such as cost of SaaS, number of employees, and number of years of operations were excluded as these did not make a significant difference or effect for that matter on user companies' fulfilment and satisfaction. Table 6 shows that the choice of SaaS marketing form significantly made a difference in the companies' fulfilment and satisfaction if the 0.05 confidence level had to be lightened up to .06 level. Those with Salesforce customer success platform (SCSP) significantly had higher fulfilment and satisfaction compared to WordPress subscribers. This is apparent by ( $F = 15.513$ ,  $p = .059$ ). Moreover, choice of SaaS marketing platform also had a significant effect on the perceived value of SaaS, satisfaction level, employee engagement, and challenges met in using SaaS as evident by ( $F = 36.542$ ,  $p = .026$ ;  $F = 31.00$ ,  $p = .031$ ; and  $F = 18.692$ ,  $p = .05$ ).

The above findings are confirmed by some studies found in related literature. Kuo et al (2009); Lee et al (2000); and Yee et al (2010) suggested that SaaS service quality is apparent in the Salesforce customer success as one of its platform (SCSP). Hence, it is an

antecedent of customer satisfaction. This implies that SaaS company provides quality services customer satisfaction in the Salesforce platform. This consequently is enhanced and enabled their sales, services, marketing collaboration, and analytics and business intelligence. However, there is still lack of consensus among researchers and managers concerning the most adequate way to measure SaaS service quality. Despite the importance of using SaaS to help firms gain benefits and the popularity of SaaS, understanding about SaaS satisfaction is still in its infancy (Chou and Chiang, 2013) and the relative newness of SaaS means that there have been few empirically validated models of SaaS satisfaction from the client's perspective, with little overlap among models (Yang et al., 2015).

Other studies also seemed to complement with to the findings of other studies. In a systematic review of literature, Hye-Jung Lee, Jung-Woo Lee, and Cheul-Hyun Cho (2012) demonstrates that the application of SaaS in actual operations of industries are widely proliferated. However, the studies on SaaS generally lacks in its number and types of platforms. For example, studies so far are more focused in the field of engineering and technology. Since SaaS is moving towards the service orientation, studies on SaaS should develop in the fields of business, individual and society. In addition, the existing studies uses different concepts of relations between SaaS and ASP (Application Service Provider), as well as, different definitions of SaaS. Lastly, the review analyzed the problems of utilization of SaaS and found that, the quality, performance and security are presented as the core of the problems.

Other factors that contributed to customer success in the customer salesforce platform could be attributed to the quality in the execution of the platform, quality in the implementation and relationships, and implementation and delivery of SaaS (Asaka and Mendes et al., 2017). This article aims to identify factors influencing the customer satisfaction of SaaS and proposes a set of indicators that can be used to measure it. Furthermore, size of firm, cost of SaaS, number of employees, and number of years of operation did not make significant difference in SaaS adoption via customer Salesforce platform. This of the fact that large enterprises and small to medium-sized companies have similar adoption rates. It is sufficient to say, usage of SaaS is owed to the fact that SaaS offers better services in terms of encrypted cloud-based enterprise resource planning (ERP), or-

der management, customer relationship management (CRM), and e-commerce application services. The software operates entirely on the cloud and does not provide offline access to its software, and the software is inoperable without a subscription.

**Table 6. SaaS Purchased/Subscribed and Companies Fulfilment and Satisfaction**

Profile Variable and Fulfilment and Satisfaction with SaaS	F	Sig.	Interpretation
Perceived Value of SaaS*Platform of SaaS Purchased/Subscribe	15.513	.059	Significant at .06 confidence level
Satisfaction w/ SaaS*Platform of SaaS purchased/Subscribed	36.542	.026	Significant
Employee Engagement* Platform of SaaS purchased/subscribed	31.00	.031	Significant
Challenges Met* Platform of SaaS Purchased/subscribed	18.692	.05	Significant

## **5 CONCLUSION**

Cloud computing will play a major role in the future of software-as-a-service. Similar to the findings of this study, the role of cloud computing should focus more on on-demand provision of applications, programs, and computing infrastructures. Still, the cloud community must address several technology challenges to turn this prospect into reality. On the other hand, specific issues have to be taken into account, particularly the future of software-as-a-service on how to manage such software efficiently in delivering measurable and flexible service platforms on demand, developing cloud combination technologies that let software-as-a-service providers collaborate, interpret, and improve cloud infrastructure's security, dependability, and energy efficiency.

Moreover, five factors influencing the cloud usage by the business community such as ease of utilization, convenience, security and the cost of software-as-a-services should be the basis for enhancing customer fulfilment and satisfaction considering the value of the software to the company, satisfaction, employee engagement, implementation and benefits and challenges met in the use of the software.



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## **APPENDIX**

### **SURVEY QUESTIONNAIRE ON COMPANY USERS OF SaaS CUSTOMER SUCCESS MANAGEMENT FOR SALES AND MARKETING PLATFORM**

Dear SaaS user companies,

This is a survey questionnaire aims at determining the fulfilment and satisfaction of companies with SaaS Customer Success Management (CSM) for their sales and marketing platform. Please rate each item of each survey category with the best of your ability and sincerity. All items of the survey are measured in Likert (ordinal) scale as opposed to interval scale such that you will not have any problem of retrieving and/or calculating for absolute figures to respond on each item. The results of the study will be used as CSM industry benchmark for you to assess where your company position by order or rank in terms of fulfilment and satisfaction with the use of CSM through key performance indicators (KPIs) and how this vary with the companies' profile. Rest assured, that your responses on this survey will be kept with utmost confidentiality and anonymity, the results of which is retrievable at your end.

Thank you for your sincere cooperation,

Sincerely yours,  
Dalton B. Paurom  
Student Researcher

## **SURVEY QUESTIONNAIRE**

### **PART A. COMPANY PROFILE**

1. CSM purchased/subscribed.

☐ Salesforce Customer Success Platform

☐ Close More Deals

☐ Hubspot

☐ Marketo

☐ Wordpress

[ ] Others. Please specify\_\_\_\_\_

2. Nature of Industry. Please check appropriate box.

[ ] Extraction and Agriculture (primary) [ ] Manufacturing (secondary) [ ] Service (Tertiary)

3. Purchase/subscription cost of CSM. Please check appropriate scale.

[ ] Very expensive [ ] Expensive [ ] Moderately expensive [ ] Inexpensive

4. Number of Employees (includes employees in all domestic branches). Please specify how many\_\_\_\_\_

5. Number of years in operation since the company's founding. Please specify\_\_\_\_\_

#### PART B. FULFILMENT AND SATISFACTION WITH CSM

The items in this section describe how your company is satisfied with the implementation of CSM in terms of the key performance indicators via the following subcategories: value to the organization; satisfaction; employee engagement; reasons for CSM implementation; and challenges met. Please rate each item by checking box according to appropriate circle below in 8 – point continuous scale as follows:



Value to the Company	1	2	3	4	5	6	7	8
CSM increases our company's customer retention								
CSM increases our company's profitability through improved								

sales and marketing improvement								
CSM improves our company's reputation arising from the expansion of our market								
<b>Satisfaction with CSM Used</b>	1	2	3	4	5	6	7	8
CSM match up with the company's expectation and likelihood of promoting it with partner companies								
CSM match up with our company's expectation in terms of its usefulness in our company's Salesforce and marketing strategy								
CSM assures an overall rate of satisfaction of our company in terms of its contribution to historical of growth of the company								
<b>Employee Engagement</b>	1	2	3	4	5	6	7	8
CSM implementation allows our employees to meet their work goals								

CSM implementation improves our employees' relationship with co-workers								
CSM implementation improves the relationships of our supervisors								
CSM implementation is adaptable to our company's culture								
Uniqueness and innovativeness of CSM help our company to gain employees' productivity								
<b>Reason for CSM Implementation</b>	1	2	3	4	5	6	7	8
CSM help increase our company's collaboration with partner companies aimed at expanding sales and market								
CSM helps our company improve its customer services								
CSM helps increase the range of choice our customers on their specific demands for goods and services								
<b>Challenges with CSM</b>								

CSM makes our customers' life easier								
Our CSM enables our company to maximize its internal strengths								
Our CSM helps provides greater opportunities for our company's growth								
Our CSM enables the company to share it effectively and efficiently with partner companies								
Overall Mean								



## Cost of SaaS per User per Month

### Salesforce Typical Pricing (per user, per month):

	Sales Cloud	Service Cloud	Sales & Service Cloud
<b>Salesforce Essentials</b>	<b>\$25</b>	<b>\$25</b>	—
Standout features	-Account, Contact, Lead, and Opportunity Management -Email Integration (Gmail, Outlook) -Mobile App	-Cross-company collaboration -Customizable Reports -Mobile App	<i>No combo deal available in the Salesforce Essentials tier</i>
<b>Lightning Professional</b>	<b>\$75</b>	<b>\$75</b>	<b>\$100</b>
Standout features	-Lead Registration -Rules-Based Lead Scoring -Sales Forecasting	-Developer Sandbox -Orders Management -Asset Management	-Developer Sandbox -Asset Management -Team Collaboration Tools
<b>Lightning Enterprise</b>	<b>\$150</b>	<b>\$150</b>	<b>\$175</b>
Standout features	-Workflow Automation -Approval Automation	-Field Service Tools -Process Automation -AI Tools	-Unlimited Roles and Permissions -Workflow and Approval Automation -Offline Access
<b>Lightning Unlimited</b>	<b>\$300</b>	<b>\$300</b>	<b>\$325</b>
Standout features	-24/7 Support and Configuration Services	-Unlimited Online Training -24/7 Support	-Unlimited Online Training -24/7 Support

SPSS Bootstrap sampling output

F	Sig.
VOCTC * SaaSpurchased	15.513 .059
SWSU * SaaSpurchased	36.542 .026
EMENG * SaaSpurchased	31.000 .031
Challenges * SaaSpurchased	18.692 .050

Measures of Association

	Eta	Eta Squared
VOCTC * SaaSpurchased	.941	.886
SWSU * SaaSpurchased	.974	.948
EMENG * SaaSpurchased	.969	.939
Challenges * SaaSpurchased	.950	.903

ANOVA Table<sup>a</sup>

		Sum of Squares	df	Mean Square	F	Sig.
VOCTC * SaaSpurchased	Between Groups (Combined)	11.980	1	11.980	15.513	.059
	Within Groups	1.544	2	.772		
	Total	13.524	3			
SWSU * SaaSpurchased	Between Groups (Combined)	9.487	1	9.487	36.542	.026
	Within Groups	.519	2	.260		
	Total	10.007	3			
EMENG * SaaSpurchased	Between Groups (Combined)	12.813	1	12.813	31.000	.031
	Within Groups	.827	2	.413		
	Total	13.640	3			
Challenges * SaaSpurchased	Between Groups (Combined)	15.188	1	15.188	18.692	.050
	Within Groups	1.625	2	.813		
	Total	16.813	3			

a. No variance within groups - statistics for REASONS \* SaaSpurchased cannot be computed for split: \$bootstrap split = 0

**Measures of Association**

	Eta	Eta Squared
VOCTC * SaaSpurchased	.941	.886
SWSU * SaaSpurchased	.974	.948
EMENG * SaaSpurchased	.969	.939
Challenges * SaaSpurchased	.950	.903

**ANOVA Table**

			Sum of Squares	df	Mean Square	F	Sig.
VOCTC * Industry	Between Groups (Combined)		2.667	2	1.333	.123	.896
	Within Groups		10.858	1	10.858		
	Total		13.524	3			
SWSU * Industry	Between Groups (Combined)		5.507	2	2.753	.612	.671
	Within Groups		4.500	1	4.500		
	Total		10.007	3			
EMENG * Industry	Between Groups (Combined)		7.860	2	3.930	.680	.651
	Within Groups		5.780	1	5.780		
	Total		13.640	3			
REASONS * Industry	Between Groups (Combined)		.027	2	.014	.250	.816
	Within Groups		.054	1	.054		
	Total		.082	3			
Challenges * Industry	Between Groups (Combined)		10.687	2	5.344	.872	.604
	Within Groups		6.125	1	6.125		
	Total		16.813	3			

**Measures of Association**

	Eta	Eta Squared
VOCTC * Industry	.444	.197
SWSU * Industry	.742	.550
EMENG * Industry	.759	.576
REASONS * Industry	.577	.333
Challenges * Industry	.797	.636

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
VOCTC * costofSaas	Between Groups (Combined)		8.970	1	8.970	3.939	.186
	Within Groups		4.554	2	2.277		
	Total		13.524	3			
SWSU * costofSaas	Between Groups (Combined)		2.772	1	2.772	.766	.474
	Within Groups		7.234	2	3.617		
	Total		10.007	3			
EMENG * costofSaas	Between Groups (Combined)		3.240	1	3.240	.623	.513
	Within Groups		10.400	2	5.200		
	Total		13.640	3			
REASONS * costofSaas	Between Groups (Combined)		.027	1	.027	1.000	.423
	Within Groups		.054	2	.027		
	Total		.082	3			
Challenges * costofSaas	Between Groups (Combined)		2.250	1	2.250	.309	.634
	Within Groups		14.563	2	7.281		
	Total		16.813	3			

#### Measures of Association

	Eta	Eta Squared
VOCTC * costofSaas	.814	.663
SWSU * costofSaas	.526	.277
EMENG * costofSaas	.487	.238
REASONS * costofSaas	.577	.333
Challenges * costofSaas	.366	.134

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
VOCTC * Employees	Between Groups (Combined)		9.024	2	4.512	1.003	.577
	Within Groups		4.500	1	4.500		
	Total		13.524	3			
SWSU * Employees	Between Groups (Combined)		3.272	2	1.636	.243	.820
	Within Groups		6.734	1	6.734		
	Total		10.007	3			
EMENG * Employees	Between Groups (Combined)		3.960	2	1.980	.205	.842
	Within Groups		9.680	1	9.680		
	Total		13.640	3			
REASONS * Employees	Between Groups (Combined)		.027	2	.014	.250	.816
	Within Groups		.054	1	.054		
	Total		.082	3			
Challenges * Employees	Between Groups (Combined)		3.031	2	1.516	.110	.905
	Within Groups		13.781	1	13.781		
	Total		16.813	3			

#### Measures of Association

	Eta	Eta Squared
VOCTC * Employees	.817	.667

SWSU * Employees	.572	.327
EMENG * Employees	.539	.290
REASONS * Employees	.577	.333
Challenges * Employees	.425	.180

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
VOCTC * yearsofoperation	Between Groups (Combined)		.000	1	.000	.000	.999
	Within Groups		13.524	2	6.762		
	Total		13.524	3			
SWSU * yearsofoperation	Between Groups (Combined)		1.340	1	1.340	.309	.634
	Within Groups		8.667	2	4.333		
	Total		10.007	3			
EMENG * yearsofoperation	Between Groups (Combined)		2.253	1	2.253	.396	.594
	Within Groups		11.387	2	5.693		
	Total		13.640	3			
REASONS * yearsofoperation	Between Groups (Combined)		.009	1	.009	.250	.667
	Within Groups		.073	2	.036		
	Total		.082	3			
Challenges * yearsofoperation	Between Groups (Combined)		4.688	1	4.688	.773	.472
	Within Groups		12.125	2	6.063		
	Total		16.813	3			

#### Measures of Association

	Eta	Eta Squared
VOCTC * yearsofoperation	.001	.000
SWSU * yearsofoperation	.366	.134
EMENG * yearsofoperation	.406	.165
REASONS * yearsofoperation	.333	.111
Challenges * yearsofoperation	.528	.279