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## Examination Of Variables Influencing The Utilization Of Aruba Central In Indonesia

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### Abstrak

SaaS merupakan salah satu jenis produk cloud computing yang menghosting perangkat lunak di cloud publik. Pengguna individu dapat mengakses perangkat lunak dan data yang tersimpan melalui klien cloud seperti browser web. Keunggulan lain dari SaaS adalah kapasitas penyimpanan yang besar. Hal ini memungkinkan pengguna untuk menyimpan data dalam jumlah besar tanpa perlu khawatir dengan kapasitas penyimpanan di perangkat mereka. Aruba Central merupakan salah satu aplikasi berbasis cloud yang dikembangkan oleh HPE Aruba Networking yang dapat mengelola Access Point dan Switch dalam satu dashboard. Berdasarkan informasi dari organisasi hingga September 2023, HPE Aruba Networking memiliki 420 klien di Indonesia, namun baru 25 klien (sekitar 5,9%) yang telah menggunakan Aruba Central dengan waktu penggunaan lebih dari 1 tahun. Oleh karena itu, penelitian ini dilakukan menggunakan Aruba Central pada pelanggan Indonesia dari Januari 2021 hingga September 2023. Penelitian ini perlu memahami elemen apa saja yang memengaruhi pemanfaatan aplikasi ini melalui Unified Theory of Acceptance and Use Technology-3 (UTAUT3)

Kata kunci: *Public Cloud, Cloud Computing, SAAS, Artificial Intelligent, UTAUT3*

## Abstract

SaaS is a type of cloud computing product that hosts software in a public cloud. Individual users can access the software and stored data through cloud clients such as web browsers. Another advantage of SaaS is the large storage capacity. This allows users to store large amounts of data without worrying about the storage capacity on their devices. Aruba Central is one of the cloud-based application develops by HPE Aruba Networking that can manage Access Point and Switch in single dashboard. In-line with information from the organization until September 2023, HPE Aruba Networking has 420 clients in Indonesia, however there are just 25 clients (around 5.9%) who already use Aruba Central with a time of over 1 year. This study was therefore conducted using Aruba Central on Indonesian customers from January 2021 to September 2023. This study needs to understand what elements influence the utilization of this application through the Unified Theory of Acceptance and Use Technology-3 (UTAUT3)

Keywords: *Public Cloud, Cloud Computing, SAAS, Artificial Intelligent, UTAUT3*

## PENDAHULUAN

Through benefit models like software-as-a-service (SAAS), infrastructure-as-a-service (IAAS), and platform-as-a-service (PAAS), the company slowly implements various cloud computing innovations. SAAS could be a kind of distributed computing thing that holds program in Open Cloud. Through cloud clients like web browsers, individual clients can program and save data. The use of SAAS in Indonesia is encountering quick turn of events. A large storage capacity is another advantage of SAAS. Users can store a lot of data in this way without worrying about their devices' storage capacity.

Aruba Central is a SAAS product from HPE Aruba Networking that serves as a dashboard management access point, switch, and router all in one. In the branch and Data Center, Aruba Central provides a control point for managing all aspects of Wired and Wireless LAN, WAN, and VPN. Aruba Focal has principal highlights, for example, investigation upheld by Fake Shrewd (computer-based intelligence), coordination and start to finish mechanization, as well as cutting edge security includes that are fabricated inborn into the arrangement.

According to information provided by the business up until September 2023, HPE Aruba Networking has 420 customers in Indonesia, but only 25 of those customers have used Aruba Central for more than a year. This indicates that Aruba Central has only been utilized by 5.9% of HPE Aruba Networking's Indonesian customers thus far. Using data from 420 HPE Aruba Networking customers in Indonesia, this number is still below the target of 15%, or approximately 63 customers, set by HPE Aruba Networking Regional Southeast Asia Taiwan Hong Kong (SEATH).

The License of Aruba Central is a subscription that must be renewed annually, making the low number of Aruba Central customers in Indonesia possible. The customer's Aruba Central Dashboard will cease to function if the customer does not renew. Customers who continue to use an on-premises controller, access point, and switch are not affected by this. Where customers who use on-premises services do not renew, operations can continue to operate. In addition, the IT teams of each customer who has not utilized Aruba Central still feel at ease using the controller, access point, and switch on premise due to the current operational features they believe are sufficient, which is why the low number of Aruba Central installations in Indonesia is possible. While elements, for example, examination upheld by Counterfeit Clever (simulated intelligence), Coordination, start to finish Mechanization, and Concentrated Dashboard The executives which just possessed by Aruba Focal will make it simpler for the IT group to complete everyday functional exercises. In terms of usage, one of the customers I spoke with believes that Aruba Central, a new system, will assist him in managing switch devices, access points, and routers on a daily basis. Then, based on an interview with one of the other customers, it is known that the innovation he just got from Aruba Central helps him learn new things.

This study was conducted using Aruba Central on Indonesian customers between January 2021 and September 2023. This study needs to understand what elements influence the utilization of this application through the UTAUT-3 (UTAUT3) (Muhammad Shoaib Farooq et al., 2017). The creator is keen on utilizing UTAUT-3 since it has a free factor Individual Imaginativeness since Individual Ingenuity has a sub-variable, in particular asset help (Gaitan, J. A., Peral, B. P. & Jeronimo, M. A. R., 2015). Customers must provide this sub variable when arranging and observing with Aruba Central.

There are currently 255 IT team members responsible for opening Aruba Central for operational activities and ensuring that access point devices, switches, and routers are properly managed for the 25 customers who are already using it. We were provided with information about customer characteristics from 25 customers and 255 IT team members in Table 1.

Table 1 Customer Characteristics

Industry Sector	The total IT Team that opens the Aruba Central for daily use
<i>Hospitality</i>	10
<i>Hospitality</i>	10
<i>Hospitality</i>	12
<i>Hospitality</i>	10
<i>Healthcare</i>	10
<i>Healthcare</i>	12
<i>Telco</i>	49
<i>E-commerce</i>	15
<i>Manufacture</i>	14
<i>Manufacture</i>	12
<i>Retail</i>	10
<i>Manufacture</i>	8
<i>Manufacture</i>	8
<i>Oil &amp; Gas</i>	12
<i>Oil &amp; Gas</i>	9
<i>Oil &amp; Gas</i>	8
<i>State-Owned Enterprise</i>	12
<i>Financial and Services Industry</i>	8
<i>Financial and Services Industry</i>	8
<i>Financial and Services Industry</i>	12
<i>Financial and Services Industry</i>	7
<i>Financial and Services Industry</i>	7
<i>Financial and Services Industry</i>	8
<i>Financial and Services Industry</i>	8
<i>Education</i>	8

RESEARCH METHODS

This examination depends on the utilization of Aruba Central to organizations that as of now use it in Indonesia. An application called Aruba Central is used to monitor and configure Access Points and Switches. Has Aruba Central been effective and efficient after a year of use? As a result, the purpose of this study is to determine whether Aruba Central's

implementation has an impact on user performance as well as whether users' acceptance and use of technology are impacted.

Figure 3 below talks about influence between the variables that have been described, which can be associated as follows:

1. H1: Performance expectancy has a positive influence on behavioural intention.
2. H2: Effort expectancy has a positive influence on behavioural intention.
3. H3: Social influence has a positive influence on behavioural intention.
4. H4: Facilitating conditions have a positive influence on behavioural intention.
5. H5: Hedonic Motivation has a positive influence on behavioural intention.
6. H6: Price value has a positive influence on behavioural intention.
7. H7: Habit has a positive influence on behavioural intention.
8. H8: Personal Innovativeness has a positive influence on behavioural intention.
9. H9: Behavioural intention has a positive influence on use behaviour.
10. H10: Facilitating conditions have a positive influence on use behaviour.
11. H11: Habit has a positive influence on use behaviour.
12. H12: Personal Innovativeness has a positive influence on use behaviour.

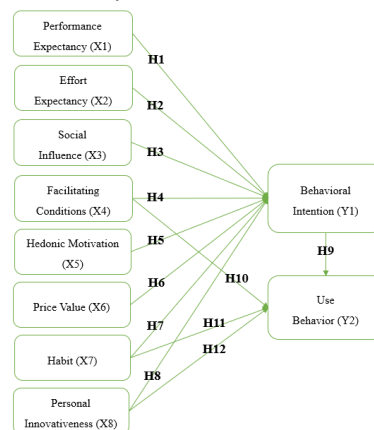


Figure 1 UTAUT-3 for this research

The UTAUT-3 variables that will be used in this research according to the image above are as follows:

1. Independent Variable (X):
  - a. Performance Expectancy
  - b. Effort Expectancy
  - c. Social Influence
  - d. Facilitating Conditions
  - e. Hedonic Motivation
  - f. Price Value
  - g. Habit

h. Personal Innovativeness

2. Dependent Variable (Y):

a. Behavioural Intention

b. Use Behaviour

A survey-based quantitative inquiry is the type of inquiry that will be carried out. The overview could be a data assortment procedure by spreading inquiries to respondents inside the trust of giving analysis or answer responses from the rundown of inquiries asked.

This questionnaire will use a Likert scale, where the scale used from scale 1 to scale 5, along with information from each scale:

1. Scale 1: Strongly Disagree

2. Scale 2: Disagree

3. Scale 3: Neutral

4. Scale 4: Agree

5. Scale 5: Strongly agree

This study's sample consists of 25 Indonesian businesses that have been using HPE Aruba Networking Central for more than a year between January 2021 and September 2023. The all-out IT group from these 25 organizations whose day-to-day exercises are opening HPE Aruba Systems administration Fundamental for There are 255 functional individuals. In this investigation, this number will serve as a reference population. This examination livelihoods probability techniques, explicitly fundamental sporadic looking at for testing. The Slovin equation, as follows, is the one used:

$$n = \frac{N}{1 + N \cdot e^2}$$

Information:

n = Number of Samples

N = Number of Population

e = Error Tolerance Limit

1 = constant

With a confidence level of 95%, the error tolerance limit is 5%. So based on the Slovin formula above, the number of samples in this study can be calculated as follows,

$$n = 255: (1+255 \cdot 0.05 \cdot 0.05)$$

$$n = 255: (1+255 \cdot 0.0025)$$

$$n = 255: (1+0.6375)$$

$$n = 156$$

Therefore, for this study to accurately represent the population, 156 respondents were required. After that, a Google Form-created questionnaire with a link will be sent to these

respondents via WhatsApp. For the findings of the investigation to be considered substantial and precise, the survey data that is used needs to be of a high enough level of reliability and consistency. Therefore, investigations that are deemed substantial are those in which there are analogies between the data gathered and the actual events that take place during the investigation. Investigations that are deemed solid are those in which there are analogies in the data at various times. Legitimacy and unwavering quality testing can be completed utilizing apparatuses, specifically the SmartPLS 4 application. First, the questionnaire that has been created will be tested to determine whether it is valid and reliable enough to be used in this study. The questionnaire data collected for this quantitative study will be processed and analysed using the Structural Equation Model (SEM) to measure the influence of variables based on partial least squares (PLS).

## RESULTS AND DISCUSSION

### Results

The analysis results from distributing the questionnaire will be presented in this section. The poll was disseminated utilizing a connection made utilizing Google Structure and conveyed by means of WhatsApp to clients who have involved Aruba Central for over 1 year. This poll information assortment was completed for 45 days. Based on their position within the company, respondents were divided into two categories, management level and non-management level, as shown in Figure 4.



Figure 2 chart containing positions in the company

Figure 5 underneath informed us about respondent attributes in light of length of utilization use were isolated into three, to be explicit under 1 year, 1-2 years and over 2 years.



Figure 3 chart containing experiences using Aruba Central in the company

Figure 6 underneath informed us about respondent attributes in view of length of utilization use were segregated into three, to be explicit under 1 year, 1-2 years and over 2 years.

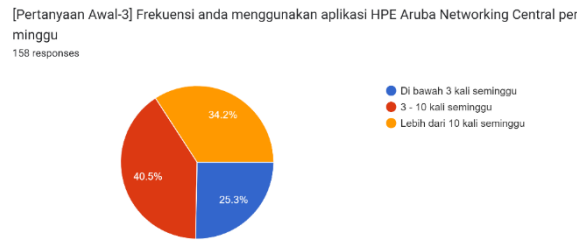


Figure 4 chart containing the frequency of using Aruba Central in the company per week

The SmartPLS 4 application was used to process the questionnaire results that were obtained. Testing of the external model (legitimacy test and unwavering quality test) was fruitful without a solitary variable fizzling.

Figure 7 below informed us about the convergent validity test process was carried out by distributing questionnaires to 158 respondents to see whether the indicators used were valid. The first step is to test the outer loading factor value of each variable. Variables will be considered valid if the loading factor value for each variable is more than 0.5.

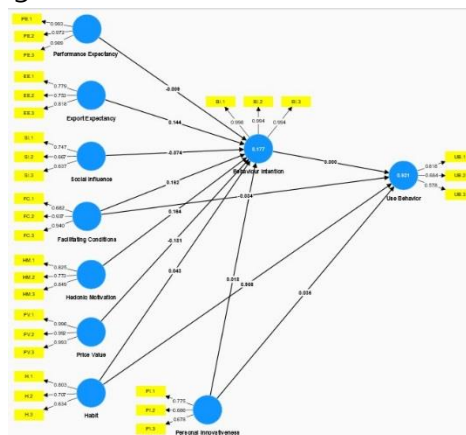


Figure 5 convergent validity result

Table 2 below talks about the discriminant validity test is carried out to prove that an indicator has an AVE value of more than 0.4

Table 2 AVE result

	Average variance extracted (AVE)
Behavioural Intention	0.991
Effort Expectancy	0.615
Facilitating Conditions	0.574
Habit	0.615
Hedonic Motivation	0.666
Performance Expectancy	0.97

Personal Innovativeness	0.555
Price Value	0.987
Social Influence	0.572
Use Behaviour	0.602

Table 3 below talks about the reliability testing was carried out using the Smart PLS application by looking at the Cronbach's Alpha value. A construct is declared to be of good value if it has a value above 0.6 and a Composite Reliability value above 0.7. In investigate, unwavering quality is the degree to which the estimations of a test stay steady after being carried out over and over on subjects and beneath the same conditions. Investigate is considered solid in case it gives steady comes about for the same estimations. It cannot be depended on if rehashed estimations allow diverse comes about. The taking after is the comes about of the legitimacy test on the SmartPLS application.

Table 3 cronbach's alpha & composite reliability result

	Cronbach's alpha	Composite reliability
Behavioural Intention	0.995	0.997
Effort Expectancy	0.686	0.827
Facilitating Conditions	0.627	0.801
Habit	0.687	0.827
Hedonic Motivation	0.752	0.857
Performance Expectancy	0.984	0.99
Personal Innovativeness	0.653	0.789
Price Value	0.993	0.996
Social Influence	0.626	0.8
Use Behaviour	0.67	0.819

Table 4 below talks about the form of inner model testing that I chose was testing the hypothesis explained in chapter 3 regarding methods. To carry out hypothesis testing I used Bootstrapping from SmartPLS 4. In this research, I carried out bootstrapping with a resampling size of 1000, after running the process I obtained t-statistic values for the independent and dependent variables. and here are the results:

Table 4 inner model result

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
Performance Expectancy -> Behavioural Intention (H1)	-0.025	-0.038	0.095	0.259	0.796
Effort Expectancy -> Behavioural Intention (H2)	0.136	0.139	0.105	1.288	0.198
Social Influence -> Behavioural Intention (H3)	-0.019	0.02	0.088	0.21	0.834
Facilitating Conditions -> Behavioural Intention (H4)	0.064	0.064	0.085	0.757	0.449
Hedonic Motivation -> Behavioural Intention (H5)	0.235	0.237	0.109	2.143	0.032
Price Value -> Behavioural Intention (H6)	-0.15	-0.153	0.084	1.782	0.075
Habit -> Behavioural Intention (H7)	-0.083	-0.096	0.086	0.973	0.331
Personal Innovativeness -> Behavioural Intention (H8)	0.135	0.137	0.088	1.535	0.125
Behavioural Intention -> Use Behaviour (H9)	0.105	0.1	0.053	1.961	0.05
Facilitating Conditions -> Use Behaviour (H10)	0.189	0.198	0.088	2.155	0.031
Habit -> Use Behaviour (H11)	0.354	0.342	0.115	3.078	0.002
Personal Innovativeness -> Use Behaviour (H12)	0.282	0.297	0.096	2.945	0.003

Seeing that the t-statistic value for the coefficient path of the twelve hypotheses, 8 hypotheses did not meet the bootstrapping test cut-off, only the hypothesis regarding the influence of hedonic motivation on behavioural intention, facilitating conditions on use behaviour, habit on use behaviour and personal innovativeness on use behaviour exceeded the bootstrapping test cut-off value.

Hypothesis testing is carried out by looking at the t-statistic value and path coefficient. The t-statistic value shows the significance of the latent variable, while the path coefficient shows the nature of the relationship between the latent variables (positive or negative).

## Discussion

The author of this study conducted a preliminary study on a few customers who have been using Aruba Central for more than a year. Clients' viewpoints were accumulated through interviews as a component of the exploration strategy. Regarding usage, one customer I spoke with believed that the new system, Aruba Central, would assist him in daily management of routers, access points, and switch devices. Then, from a gathering with another client, it was found that the progression he had as of late gotten from Aruba Central helped him with making himself in regard to new data.

In this research, from the 12 hypotheses created using UTAUT-3, the author obtained 4 acceptable hypotheses. This study examines the acceptance of Aruba Central in Indonesia using UTAUT-3. From the results of the questionnaire that was distributed, there were 32 respondents at management level (20.3%) and 126 people at non-management level (79.7%) with variations in data for length of use of the Aruba Central application and frequency of application use per week. As decision makers, they are very concerned with the prices offered. This is based on the suspicion that the low number of Aruba Central customers in Indonesia is possible because the Aruba Central license is a subscription which needs to be renewed every year which is mandatory. If the customer does not renew, the operation of the Aruba Central dashboard that the customer has will stop.

## CONCLUSIONS

This study examines the acceptance of Aruba Central in Indonesia using UTAUT-3. The author concludes that: 1) The variables performance expectancy, effort expectancy, social influence, facilitating conditions, price value, habit, personal innovativeness do not have a positive effect on customer behavioural intention to use HPE Aruba Networking Central significantly. From survey respondents using HPE Aruba Networking Central for 1-2 years with a total of 81 people (51.3%) out of a total of 158 respondents, it shows that most of these respondents think that their interest in using the HPE Aruba Networking Central application is not influenced by the factors above. 2) The price value variable in this study did not have a positive effect on behavioural intention. From the results of the questionnaire that was distributed, there were 32 respondents with management level positions (20.3%) and 126 people with non-management level positions (79.7%). As decision makers, they

really pay attention to the price offered when making a purchase. Price is one of the main factors that determines whether customers will buy an HPE Aruba Networking Central license or whether they still decide to use an on-premises solution using a wireless controller. This is based on the suspicion that the low number of HPE Aruba Networking Central customers in Indonesia is possible because the HPE Aruba Networking Central license is a subscription which needs to be renewed every year which is mandatory. If the customer does not renew, the operation of the HPE Aruba Networking Central dashboard that the customer has will stop if the access points and switches managed at HPE Aruba Central experience a shutdown or loss of connection. 3) The hedonic motivation variable is the only hypothesis that has a positive effect on customer behavioural intention to use HPE Aruba Networking Central. Meanwhile, behavioural intention is the only hypothesis that has a negative influence on customer use behaviour when using HPE Aruba Networking Central. 4) The variables facilitating conditions, habit, and personal innovativeness have a significant positive effect on customer use behaviour in using HPE Aruba Networking Central. 5) The personal innovativeness variable which only exists in the UTAUT-3 method (not in the UTAUT and UTAUT-2 research models) has a positive impact on use behaviour in using HPE Aruba Networking Central. This proves that this research is appropriate to use UTAUT-3 because the personal innovativeness variable has a positive impact.

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