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Comparative Study of Antivirus Adoption Rates on Smartphone-Based Operating Systems

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Abstract

Anti-Virus development is growing rapidly. Some are paid and some are free. With the increasing number of Anti-Virus applications, smartphone users are faced with several choices of Anti-Virus applications. Not all smartphone users know how to work and the advantages and disadvantages of each Anti-Virus. The purpose of this study is to determine the advantages and disadvantages of 360 Security and CM Security. The benefit of this research is that it makes it easier for smartphone users to choose the right Anti-Virus application on their respective smartphones. This research will use interview, observation, analysis and design methods. The results of this study are data that can be used by smartphone users as a reference and comparison of 360 Security and CM Security.

Keyword : Anti-virus, android, security

Introduction

Currently, Anti-Virus users determine which Anti-Virus product they use only based on info from other users, what was installed when buying a smartphone and some free Anti-Virus available on the internet. That is, Anti-Virus users choose Anti-Virus products not because of their knowledge of the AntiVirus product they choose, but because of these factors. Many sites on the internet compare various AntiVirus, but the site is not independent but is sponsored by one of the Anti-Viruses being compared, therefore the result of the comparison is unfair because it wins the Anti-Virus product that sponsors the site. Due to the large number of AntiVirus products on the market, this research is independent because this comparison is not sponsored by any of the Anti-Viruses studied.

Method

Sampling technique is a method or method used to determine the number and members of the sample. Each member is of course a representative of the population selected after being grouped based on similarity of characters. The sampling technique used must also be adapted to the objectives of the study. This study decided to choose two Anti-Virus products based on the results of a survey of 32 respondents randomly (using a random sampling methodology). Random sampling was conducted to broaden the scope of locations as well as various types of respondents as an argument. The population consists of a limited heterogeneous group of individuals. There are

many variations of the variables attached to each individual. This difference can be caused by internal and external factors of the individual such as the area of residence, level of education, culture or lifestyle in a particular area. The subjectivity of individuals who have repeated determinants in the population ultimately shapes the character of the population in general. Based on this character, it can be concluded that sampling from the population cannot be done just like that, but a technique is needed so that the samples drawn remain representative.

Things that need to be considered in sampling or sampling are all variables related to research. The special elements inherent in the personality of course need to be considered because individuals with special abilities in the sample will bring data bias and of course affect the distribution of existing data. The suitability of regional characteristics, levels, as well as special trends also need to be considered in selecting an appropriate sampling technique.
According to Kerlinger (2006: 188), simple random sampling is a method of drawing from a population or universe in a certain way so that every member of the population or universe has an equal chance of being selected or taken.

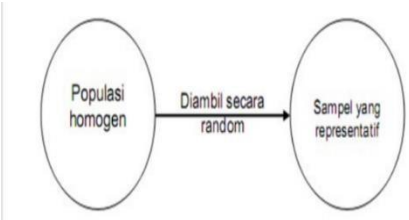
Prosedur *Simple Random Sampling*

Langkah 1	Menentukan jumlah elemen/unit sampling dalam populasi
Langkah 2	Menentukan besar sampel (n)
Langkah 3	Memilih n menggunakan pengambilan acak, tabel nomor acak atau program komputer

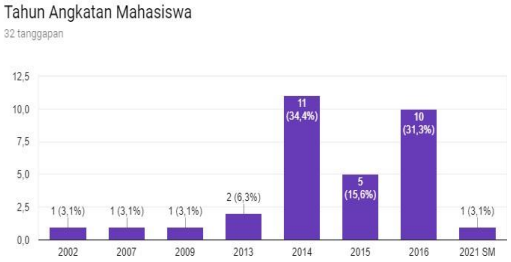
(Sumber Kumar,1999)

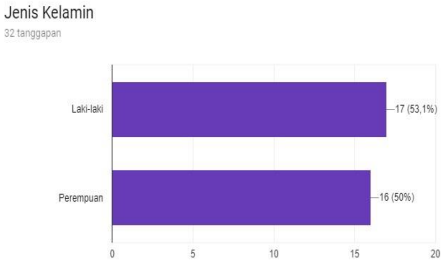
Figure 1. Simple Random Sampling

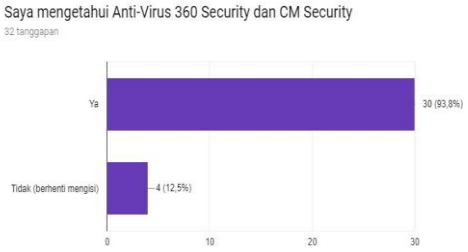
According to Sugiyono (2001:57) it is stated as simple (simple) because the sampling of population members is carried out randomly without regard to the existing strata in the population. Margono (2004:126) states that simple random sampling is a technique to obtain samples that are directly carried out on the sampling unit. This method is carried out if the members of the population are considered homogeneous. This technique can be used when the number of sampling units in a population is not too large. For example, the population consists of 500 undergraduate students (sampling unit). To obtain a sample of 150 people from the population, this technique was used, either by way of a comparative antivirus study on a smartphone-based operating system is one way to compare one product with another. This research was conducted to find out how the general public responds to the 2 products that we compare. Looking at the test results, the respondents mostly use CM Security. CM Security is an all-in-one cleaning application that lets you keep your Android device in perfect condition, thanks to the different optimization options built into it that will clean up temporary storage, clear temporary storage, or clean up usage traces on your smartphone. lottery, ordinal, and random number tables. This technique can be described below.

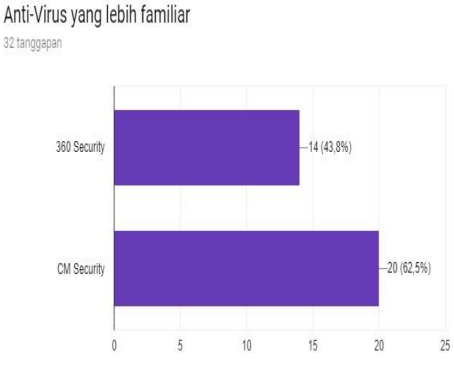


Results and Discussion



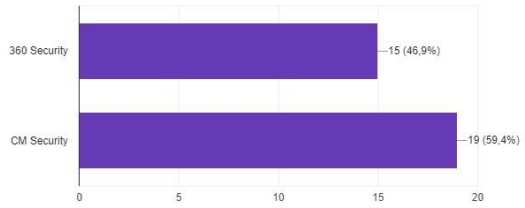






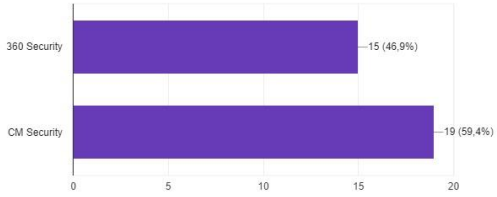
Saya mengingat salah satu iklan Anti-Virus di Internet

32 tanggapan



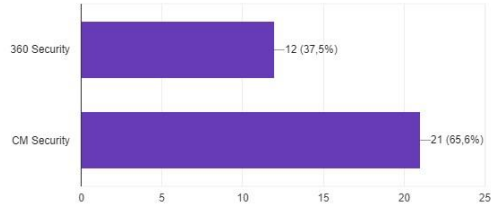
Anti-Virus yang menjadi alternatif pilihan saat memilih Anti-Virus

32 tanggapan



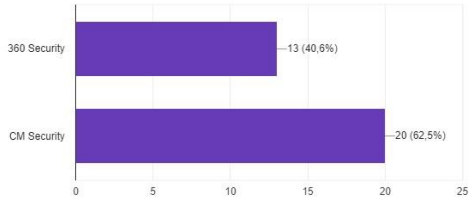
Anti-Virus yang lebih berkualitas

32 tanggapan



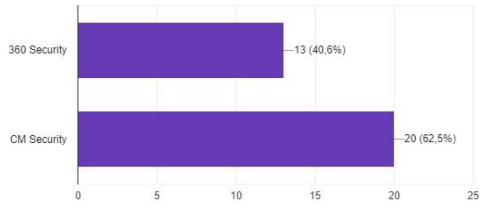
Anti-Virus yang lebih mudah dipakai

32 tanggapan



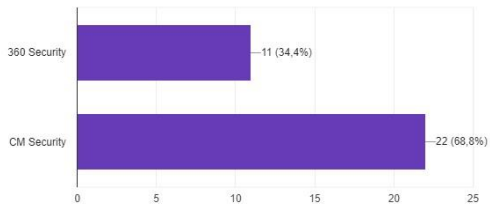
Anti-Virus yang lebih cocok untuk berbagai kalangan/smartphone

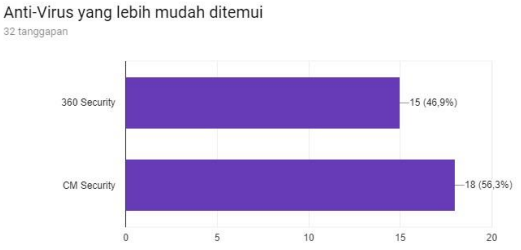
32 tanggapan

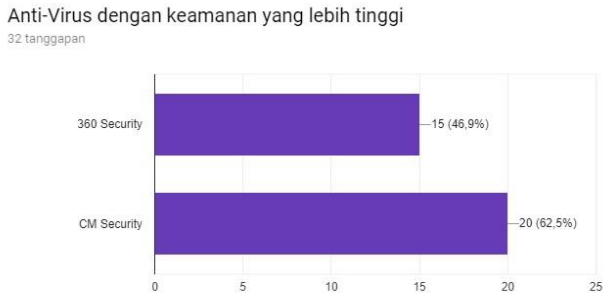


Anti-Virus yang memiliki lebih banyak kegunaan

32 tanggapan







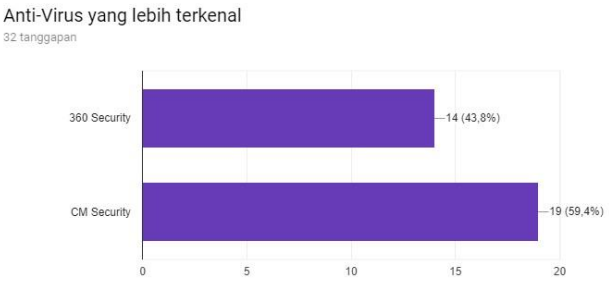


Table 1. Brand Awareness

No.	Question/Statement	Percentage	
		360 Securiry	CM Security
1	When asked to name Anti-Virus, what is the first brand that comes to my mind	43,8 %	59,4 %
2	More familiar Anti-Virus	43,8 %	62,5 %
3	I remember one of the Anti-Viruses on the Internet	46,9 %	59,4 %
4	Anti-Virus is an alternative choice when choosing Anti-Virus	46,9 %	59,4 %

Table 2. Perceived Quality Results

No.	Question/Statement	Percentage	
		360 Securiry	CM Security
1	Quality Anti-Virus	37,5 %	65,5 %
2	Easy-to-use Anti-Virus	40,6 %	62,5 %
3	Anti-Virus suitable for various circles/smartphones	40,6 %	62,5 %
4	Anti-Virus that has many uses	34,4 %	68,8 %

Table 3. Brand Association Percentage Results

No.	Question/Statement	Percentage	
		360 Securiry	CM Security
1	Anti-Virus with high security	46,9 %	62,5 %
2	More popular Anti-Virus	43,8 %	59,4 %
3	Anti-Virus produced by a company with high credibility (Trusted)	40,6 %	62,5 %
4	Easy-to-find Anti-Virus	46,9 %	56,3 %

The results obtained above have shown that the respondent's antivirus awareness has a good awareness and is quite liked by many respondents. Respondents still see that CM security is better than anti virus 360 security. From the perspective of quality perception, the antivirus has met good security quality, although it is still not significant. Respondents still see that CM security is better than anti virus 360 security in terms of quality. On the presentation side of brand associations, users still see Respondents still seeing that CM security is better than anti virus 360 security. This is due to convenience, some functions of the antivirus can function according to their purpose but there are still certain functions that have not been used by users according to their designation so that they are still not useful enough. While the level of satisfaction, the majority of users have expressed satisfaction with the antivirus-based so that it can continue to be used properly and is expected to continue to be used in the future. Users still choose CM security anti-virus.

Conclusion

The results of this study can conclude that the most widely used antivirus system is CM Security. The public uses CM Security a lot because it is seen from several reasons that benefit users such as easy to use. The results of this study can be used as a comparison tool or as a reference material for the public before choosing a product. This research can provide suggestions for what to do: When we want to choose a product, we should look back at what antivirus products we can see in terms of speed to perform scans, the security offered, and the size we need, such as choosing the antivirus

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