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Analysis Sentiment On Social Media Instagram Towards Metaverse Games Saindbox Aplha 2 With Support Vector Machine Algorithm

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Abstract

Metaverse is part from development technology in the metaverse SandBox Alpha 2 Game world taking place worldwide , games in the virtual world like real very possible thing done . metaverse now Already in progress for can be implemented most affected technology to opinion from particular society enthusiasts game metaverse saydbox alpha 2. where game can create her world alone and various game For look for missions and coins can make money to sell in metaverse sandbox alpha. since emergence exists game that has been appeared on facebook that has been replaced be meta, create attention world public increasingly highlight technology this , someone welcome game the with good and some have worries to development technology the. So study This will dig analysis sentiment public Indonesia against development and use metaverse technology uses method Algorithm Support Vector Machine. analysis sentiment that will done on social media Facebook. Programming language used is Language Jupyter Notebook Python. Study This get results opinion public Indonesia to metaverse technology that shows behave neutral ,negative and positive .

Keywords : Metaverse, Sandbox Apple 2, Sentimen,Support Vector Machine.

1. Introduction

The term Metaverse first appeared in 1992 in a fictional novel scientific Neal Stephenson's " Snow Crash. " In this novel , Stephenson defines the metaverse as scalable virtual environment big and pictured as Internet version
embodied . _ Same as How We browse websites using mouse device , user can explore virtual worlds within the Metaverse with use augmented reality (AR), virtual reality (VR) and the Internet [1].

The metaverse is persistent , alive , and synchronous dimensions time . Metaverse time and interactions No paused For user after turn off the device it uses For connected to the metaverse. Interaction between user happen in real time, and experience consistent For all user in a certain metaverse space . In dimensions space , the metaverse is composed from virtual space . Metaverse users (or population) is represented in digital avatars . Business can make metaverse version of shop physique they (or only virtual space only exists in the metaverse). space like That can widespread Alone For accommodate more lots of digital avatars and if required . Metaverse concept means We Can in a manner together is in one or more parallel worlds (or natural universe). Self Our clones , that is , digital avatars, can live in the metaverse, and we can switch with smooth and out between the virtual world and the real world . because _ that is, "metaverse" is meta (transcendence) + verse (nature universe). This Possible sort of natural universe That go beyond reality, virtual reality, and two realms virtual and real [2].

Entered general _ user moment join with Alpha Test 2 is area . users in this area designed as multi player by Sandbox With their avatars , they can explore the portals, NFTs, voxelites (games) offered in the lobby . you can increase opportunity win Alpha Pass ticket with gather diamond blue in it . Alfa In the lobby , Atari, Deadmau5, Blondish (portal available), Adidas, The Smurfs, The Brands famous such as Walking Dead, Snoop Dogg (available portal use), Care Bears and Sueco and Individuals own the space alone . The brand that owns the portal can ensure that That directed direct to the relevant area without leave lobby . This Besides In addition , the three portals in the Alpha Lobby are Oracle, Heroes, Scientist Faction, and there is also the Portal Hub, which contains more of 20 game experiences . seer , Heroes, Scientist Faction, and Snoop Dogg's portal, Blondish is also a part from The PortalHub. also included in . User access this portal from the two areas, meet more Lots again [3].

From several explanation and results study previously above , in journal This writer mean do analysis sentiment public abroad against _ recent emergence of the metaverse this , research done use data source from sentiments that appear on Instagram social media with the

keyword " Sandbox or Sandbox " with limitation problem only related emerging sentiment _ from public abroad . Objective from study This For see the response of the Indonesian people on related Instagram social media appearance technology metaverse games users . Get sentiment data test results with SVM algorithm . Get comparison test results performance algorithm SVM [4].

2. Research Methods

2.1. Metaverse

Metaverse and non-fungible (NFT) are a number of term technology hottest in 2021 , according to Google Search trend . Our review aims For describes the metaverse and deep NFTs context application potential they in treatment disturbance health soul . deep progress technology has change life humans at a constant speed increase . Metaverse, also known as internet three dimensions (3D), is convergence virtual reality (VR) and reality physique in digital space . That Can potentially change the internet as we know , with NFTnas block building main in an expansive virtual Barun ecosystem . Immersive 3D virtual world This proud real world features with ability addition For changed environment around according to individual
needs and requirements [5].
On a global scale, an estimated every ten years, technology platforms have undergone a paradigm shift. Computer communication in the 1990s, in order of paradigms in the following decades; website, mobile communication and the “metaverse. In the Metaverse concept, digital users/avatars interact with each other socially and economically through 3D virtual and multi-user online environments. Now the real space is connected to the virtual space through metastore transformations [6].
Relationship with it, people the first to coin the term metaverse is Neal Stephenson. he mentioned the term in his novel in 1992 entitled "Snow Crash". the term has no acceptable definition universally. For example, the metaverse is internet rendered in 3D. Therefore, the metaverse is a world mutual endless virtual community connected, for example, people can work, meet, play with using a virtual reality headset, augmented reality glasses, app smartphone or other device [7].

2.2. Sentiments

Sentiment according to the Big Indonesian Dictionary (KBBI) is opinion or views based on exaggerated feelings _ _ to something (contradict with consideration mind) meanwhile analysis is investigation to something events (writing , deeds , and so on) for know the actual situation (causes , circumstances , and so on) .
analysis sentiment is activity investigation or study to something opinions that emerge from some people or public to something p . Sentiment analysis can say _ as a mining opinion which is part from studies computational of Natural Language Processing (NLP) which has objective get mark from sentiment from text that can sourced from documents , social media, product reviews, magazines , news and others. Can form opinion nor emotion to something entity . the value Can form negative , neutral and positive word groups [4].

2.3. SVM (Support Vector Machine) Algorithm

Algorithm SVM learning is still a Supervised Learning model relate with Algorithm Learning which performs data analysis for analysis regression and classification , in In practice, SVM is widely used For problem related classification . Plot the input data object or Input as point in room dimension , where dimension represent various feature object on the Algorithm this , then try For in a manner iterative find function that represents a hyperplane that can be Act as separator between the space occupied by the class different target outputs . The SVM algorithm model is representation from the Input data object in room graphic with clear gap _ between group representing point _ different category . _ Distribution This caused by the hyperplane, i.e. the line (in matter 2D space) or field (in matter 3D field). Hyperplanes are curve dividing division _ room like That with clear signify part which space is occupied by the category where. Privileges of SVM that is SVM has kernels that can implement separation dimensionless non-linear input high , some of the kernels contained in SVM are Radial Basis Function (Rbf), polynomial and linear. On research this is used only radial and linear [4].

2.4. Comments Instagram Against The Sandbox Alpha 2 Metaverse Games

As for the pictures under This as comment to game saindbox alpha 2 which was commented on by the marries metaverse:

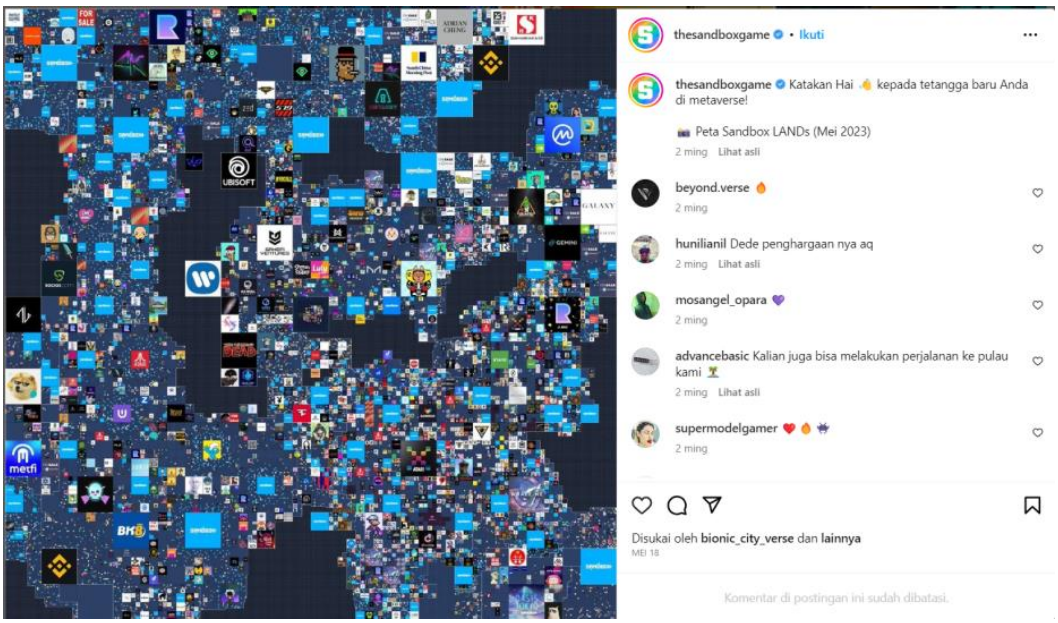

Fig. 1: Instagram comments

3. Results And Discussion

SVM algorithm should have processed data as analysis calculation look for accuracy Positive, Negative , Neutral which is where the data is in the form of testing data and training data, as follows This is the sentiment analysis data that will be carried out in the calculation process search Instagram sentiment analysis of the sandbox alpha 2 game. The following data is below this :

Table 1: Data set of sentiment analysis sanbox on instagram

No	Sentiment	Label
0	Lands Sandbox Map (May 2023)	Neutral
1	Dede award his I	Positive
2	can too do journey to island ...	Positive
3	I 'm there	Neutral
4	What a word normal	Positive
5	Fail	Negative
6	Take cash _ Again	Positive
7	All is on XP	Positive
8	Hey neighbor ! Let us know where you w ...	Neutral
9	Hello neighbors	Neutral
10	Sandbox _ nft work ?	Positive
11	I have do sale land so far ...	Negative
12	when box sand do sweepstakes ... you m...	Negative
13	Because This lottery	Neutral
14	i have one and i always lost raffle j...	Positive
15	No you think the metaverse doesn't useful ?	Negative
16	is box sand will up to $20!?? In th ...	Neutral
17	I bet 40% of map This is LAND...	Negative
18	Metaverse doesn't happen So This Possible will ...	Negative
19	Sandbox _ has damaged	Negative

4. Testing

As for the results from display program analysis process sentiment on social media Instagram against metaverse games saindbox aplha 2 with support vector machine algorithm can be seen in the image below this :

```
In [24]: # You can use the below syntax to see the vocabulary that it has learned from the corpus
         print(tfidf_vect_9010.vocabulary_)
```

```
{'peta': 69, 'sandbox': 74, 'lands': 46, 'mei': 50, '2023': 1, 'dede': 23, 'penghargaan': 66, 'nya': 60, 'aq': 10, 'kalian': 3
7, 'juga': 35, 'bisa': 20, 'melakukan': 51, 'perjalanan': 68, 'ke': 41, 'pulau': 70, 'kami': 38, 'aku': 7, 'ada': 4, 'di': 24,
'sana': 73, 'kata': 40, 'yang': 94, 'luar': 47, 'biasa': 19, 'gagal': 27, 'mengambil': 55, 'uang': 91, 'tunai': 90, 'lagi': 45,
'semua': 80, 'xp': 93, 'heya': 31, 'tetangga': 87, 'beri': 17, 'tahu': 82, 'mana': 48, 'anda': 8, 'berada': 14, 'halo': 29, 'pa
ra': 62, 'kotak': 44, 'pasir': 63, 'nft': 59, 'berfungsi': 15, 'saya': 76, 'telah': 85, 'penjualan': 67, 'tanah': 84, 'sejauh':
78, 'ini': 32, 'melihat': 52, 'hanya': 30, 'orang': 61, 'memiliki': 53, 'ditarik': 26, 'ketika': 43, 'undian': 92, 'banyak': 1
3, 'kemenangan': 42, 'ganda': 28, 'atau': 11, 'sudah': 81, 'karena': 39, 'punya': 71, 'satu': 75, 'dan': 21, 'selalu': 79, 'kal
ah': 36, 'jadi': 33, 'jawabannya': 34, 'adalah': 5, 'pengadopsi': 65, 'awal': 12, 'pemenangnya': 64, 'tidakkah': 89, 'menurutm
u': 56, 'metaverse': 57, 'tidak': 88, 'berguna': 16, 'apakah': 9, 'akan': 6, 'mencapai': 54, '20': 0, 'tahun': 83, '2024': 2,
'bertaruh': 18, '40': 3, 'dari': 22, 'dicuri': 25, 'terjadi': 86, 'mungkin': 58, 'segera': 77, 'mati': 49, 'rusak': 72}
```

```
Out[25]: SVC(kernel='linear')
```

```
In [43]: # Proses Pengujian

         from sklearn.metrics import accuracy_score

         predictions_SVM_9010 = model.predict(test_X_tfidf_9010)
         test_prediction_9010 = pd.DataFrame()
         test_prediction_9010['Sentiment'] = test_X
         test_prediction_9010['Label'] = predictions_SVM_9010
         SVM_accuracy_9010 = accuracy_score(predictions_SVM_9010, test_Y)*100
         SVM_accuracy_9010 = round(SVM_accuracy_9010,1)
```

```
In [44]: test_prediction_9010
```

Out[44]:

	Sentiment	Label
18	Metaverse tidak terjadi jadi ini mungkin akan ...	Negatif
1	Dede penghargaan nya aq	Positif

```
In [28]: test_prediction_9010.to_csv(r"test_prediction_9010.csv")
```

```
In [45]: SVM_accuracy_9010
```

```
Out[45]: 100.0
```

```
In [30]: # Accuracy, Precision, Recall, f1-score

         from sklearn.metrics import classification_report

         print ("\nHere is the classification report:")
         print (classification_report(test_Y, predictions_SVM_9010))
```

```
Here is the classification report:
              precision    recall  f1-score   support

     Negatif       1.00      1.00      1.00         1
     Positif       1.00      1.00      1.00         1

    accuracy                           1.00         2
   macro avg       1.00      1.00      1.00         2
weighted avg       1.00      1.00      1.00         2
```

Fig. 2: Accuracy results analysis SVM algorithm

For the average precision is (1.00*1 + 1.00*2 + 1.00*2)/8 = 0.62% . The results of the accuracy that has been done study amounted to 0.62%. Results to be got is positive and negative .

5. Conclusions

Accuracy results in research This with mark accuracy of 0.62% of the results obtained with classification positive and negative . Then the digital literacy level is whole has increase Own internet facilities and infrastructure , number of people using device technology and digital game applications sainbox alpha 2. For get information about useful metaverse virtual environment generation millennial . Application Mostly innovative metaverse digital generation has accepted by millions of people.

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