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The Impact Of Utilizing Digital Technology DTKS And PPKS On The Accuracy Of Social Assistance Recipient Data In Probolinggo Regency

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Abstract

This study aims to analyze the effect of the use of digital technology DTKS and PPKS on the accuracy of social assistance recipient data in Probolinggo Regency. This study found differences between field data and data in the system, suboptimal data updates, and limited operator capabilities in operating the SIKS-NG application. These problems indicate that the application of digital technology in social assistance data collection still needs to be improved. The method used in this study is a quantitative approach with statistical analysis of numerical data to test the research hypothesis. The results show that the use of digital technology DTKS and the role of PPKS have a positive and significant influence on the accuracy of social assistance recipient data. This is evidenced by the calculated t value of the DTKS variable of 3.690 and the PPKS variable of 3.911 which is greater than the t table of 2.627 with a significance level of 0.000 <0.01. Furthermore, both variables simultaneously significantly influenced data accuracy, with a calculated F-value of 58.910, greater than the F-table of 4.83, and a coefficient of determination (R-square) of 0.548, or 54.8%. This research is expected to add to the study of the use of digital technology and social data management in public services through the implementation of DTKS and the involvement of PPKS.

Keywords: Digital Technology, DTKS, PPKS, Data Accuracy, Social Assistance.

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INTRODUCTION

Digital transformation in social assistance management is a strategic step for the government to improve the targeting accuracy of social protection programs. One of the main instruments used is the Integrated Social Welfare Data (DTKS), an electronic-based data collection system containing social, economic, and population information on poor and vulnerable communities in Indonesia. Following the issuance of Minister of Social Affairs Regulation Number 5 of 2019, the Integrated Database (BDT) was officially transformed into the DTKS, serving as a central database for recipients of various social assistance programs. The use of the DTKS is expected to support a more effective, transparent, and accountable aid distribution process. Meanwhile, social protection programs such as the Family Hope Program (PKH) continue to be a key government instrument in reducing poverty by providing conditional assistance to poor families registered in the DTKS (Fajri, 2022; Anggraeni & Nugroho, 2022).

The urgency of strengthening the DTKS (Social Welfare Data Collection) is increasingly apparent as the government strives to improve the quality of social welfare data through the integration of digital technology and social welfare information systems. The Next Generation Social Welfare Information System (SIKS-NG) application has become the primary tool for data collection, verification, validation, and updating of social assistance recipients. However, its implementation still faces various obstacles, such as data discrepancies between field conditions and system data, delays in data updates, and limited capacity of village operators to operate the application. These conditions indicate that the use of digital technology has not fully guaranteed the accuracy of social assistance recipient data, potentially leading to mistargeting in aid distribution and reducing the effectiveness of social protection programs (Dwiarto, 2023; Fajri, 2022).

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Table 1. PPKS Data (Social Welfare Service Recipients 2025)

Bulan *Month*	Gelandangan *Tramp*		Pengemis *Beggar*		Lanjut Usia Terlantar *Neglected Elderly*		Anak Terlantar *Homeless Child*	
	Laki-laki *Male*	Perempuan *Female*	Laki-laki *Male*	Perempuan *Female*	Laki-laki *Male*	Perempuan *Female*	Laki-laki *Male*	Perempuan *Female*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sukapura	–	–	9	–	125	151	24	15
Sumber	–	–	–	–	748	–	76	91
Kuripan	10	3	2	3	641	883	25	11
Bantaran	23	8	21	1	93	282	33	17
Leces	–	–	2	–	220	362	58	44
Tegalsiwalan	10	5	2	2	10	43	27	29
Banyuanyar	1	–	9	–	798	1.134	190	–
Tiris	–	–	4	1	830	895	–	–
Krucil	–	–	–	–	543	–	–	–
Gading	5	–	–	–	1.086	–	16	6
Pakuniran	–	–	8	–	41	105	1	1
Kotaanyar	6	1	2	–	27	233	35	35
Paiton	1	–	–	1	528	496	15	11
Besuk	5	4	7	5	2.167	2.473	67	61
Kraksaan	–	–	9	1	376	555	7	5
Krejengan	8	–	4	–	64	140	14	–
Pajarakan	–	–	1	–	53	127	3	9
Maron	10	3	9	10	25	39	47	56
Gending	4	1	4	1	99	154	6	6
Dringu	5	5	1	1	43	214	14	12
Wonomerto	–	–	4	–	209	256	48	–
Lumbang	4	–	1	2	26	106	4	4
Tongas	–	2	1	5	55	144	3	–
Sumberasih	1	–	–	2	207	–	41	33
Kabupaten Probolinggo	93	32	100	35	9.014	8.792	754	446

Source: Social Welfare Office of Probolinggo Regency

The issue of social assistance data accuracy becomes increasingly important when linked to the social welfare situation in Probolinggo Regency. Data from the Social Welfare Service Recipients (PPKS) shows that social problems are widespread across all sub-districts, with varying numbers and characteristics. The neglected elderly group is the category with the highest number, followed by neglected children, homeless people, and beggars. The high number of these vulnerable groups indicates a significant need for social welfare services and government assistance. In this context, the quality of DTKS data is crucial because it serves as the basis for determining recipients of various social assistance programs aimed at the poor and vulnerable (Sari & Rfs, 2023; Republic of Indonesia, 1945).

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Table 2. Poverty Line, Number, and Percentage of the Poor Population in Probolinggo Regency, 2015–2025

Tahun *Year*	Garis Kemiskinan (rupiah/kapita/bulan) *Poverty Line (rupiah/capita/month)*	Jumlah Penduduk Miskin (ribu jiwa) *Number of Poor People (thousand)*	Persentase Penduduk Miskin *Percentage of Poor People*
(1)	(2)	(3)	(4)
2022	475.713	203,23	17,12
2023	514.274	205,02	17,19
2024	537.724	197,11	16,45
2025	545.221	196,26	16,31

Source: BPS-Statistics Indonesia, March National Socioeconomic Survey 2015 2025

This problem is also closely related to the relatively high poverty rate in Probolinggo Regency. Data from the Central Statistics Agency (BPS) shows that although the percentage of the poor population decreased from 17.19% in 2023 to 16.31% in 2025, the number of poor people still reached 196,260. Meanwhile, the poverty line continues to rise annually, indicating increasing basic needs. This situation requires local governments to ensure that poverty alleviation programs, particularly the Family Hope Program (PKH), are distributed to groups truly entitled to receive assistance. Accurate targeting is highly dependent on the quality of the DTKS data and the ongoing verification and validation processes carried out by social welfare officers in the field (Waluyo & Khoirunurrofik, 2021; Fajri, 2022).

In addition to technological aspects, the quality of social assistance recipient data is also influenced by the role of Social Welfare Service Recipients (PPKS) and social welfare implementing actors in the data collection process. PPKS are individuals, families, or community groups experiencing obstacles in carrying out their social functions and thus requiring social services and protection. Therefore, the process of identifying, verifying, and updating PPKS data requires the active involvement of field officers who directly understand the social conditions of the community. Limited human resources, low technical skills of operators, and suboptimal coordination between village governments and the Social Services Agency are often factors that prevent data from being updated accurately and timely. As a result, inclusion and exclusion errors are still found in the

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distribution of social assistance to the community (Anggraeni & Nugroho, 2022; Waluyo & Khoirunurrofik, 2021).

Based on these conditions, this study aims to analyze the impact of the use of digital technology in the DTKS (Disaster Data Collection System) and the role of the Social Welfare Recipients (PPKS) on the accuracy of social assistance recipient data in Probolinggo Regency. This research is important because data accuracy is the main foundation for the success of social protection and poverty alleviation programs. The novelty of this research lies in the effort to integrate the analysis of the effectiveness of the DTKS digital system with the role of social actors in the data verification and updating process, thus not only focusing on the technological aspects but also highlighting the human factors that influence the quality of social assistance data. Therefore, this research is expected to provide academic and practical contributions to the development of more valid, accurate, and sustainable social welfare data governance to support the effectiveness of social assistance programs in Probolinggo Regency (Fajri, 2022; Anggraeni & Nugroho, 2022).

RESEARCH METHODS

This study employed a quantitative approach with an explanatory research approach. This approach was used to examine the relationship between the use of digital technology in the DTKS (Disaster Data Entity Data Entity) and the role of the Social Assistance Recipients (PPKS) on the accuracy of social assistance recipient data through statistical analysis. Explanatory research was chosen because it aimed to explain the interplay between variables and test hypotheses formulated based on theory and previous research findings (Sugiyono, 2022; Creswell & Creswell, 2023; Fajri, 2022).

The study population comprised all 513,344 people eligible to receive social assistance in Probolinggo Regency, based on data from the Ministry of Social Affairs and the Central Statistics Agency. The sample was determined using a purposive sampling technique, with the criteria being those registered or eligible to receive social assistance. Based on the Slovin formula, with a 10% margin of error, a sample of 100 respondents was obtained, deemed representative of the study population (Sugiyono, 2022; Sudaryono, 2022).

Research data was collected through questionnaires, observations, structured interviews, and documentation. The questionnaire served as the primary instrument to measure respondents' perceptions regarding the use of the DTKS (Disaster Data Collection System), the role of the Social Assistance Program (PPKS), and the accuracy

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of social assistance data using a five-point Likert scale. Additionally, observations and interviews were conducted with DTKS operators and village officials to obtain more in-depth information regarding the data collection and updating process. Documentation was used to supplement research data from various official sources (Emzir, 2023; Rivaldi et al., 2023).

The research begins with problem identification, the development of a theoretical framework, and the formulation of hypotheses. Next, research instruments are developed, data are collected through questionnaires and interviews, and supporting documents are collected. The collected data is then processed and analyzed using SPSS software before interpreting the results and drawing conclusions (Creswell & Creswell, 2023; Sugiyono, 2022).

Data analysis was performed using multiple linear regression to examine the effect of the use of digital technology in the DTKS (Disaster Data Entity Data Collection) and the role of the Social Assistance Recipients (PPKS) on the accuracy of social assistance recipient data. Prior to hypothesis testing, validity was tested using Pearson Product Moment and reliability using Cronbach's Alpha. Next, classical assumption tests were conducted, including normality, multicollinearity, and heteroscedasticity. Hypothesis testing was conducted using t-tests, F-tests, and coefficients of determination (R^2) at a 10% significance level using SPSS version 25 (Sugiyono, 2022; Sudaryono, 2022; Creswell & Creswell, 2023).

RESEARCH RESULTS AND DISCUSSION

Data analysis

The number of statements submitted in the questionnaire consists of 4 statements for variable X1, 4 questions for X2, and 4 statements for variable Y. The X variable is the use of DTKS and PPKS digital technology, which is taken to find out whether there is an influence on the accuracy of data on recipients of social assistance in Probolinggo Regency, while for (Y) it is taken from the accuracy of data on recipients of social assistance in Probolinggo Regency.

Interview Result Data

The Impact of Utilizing DTKS Digital Technology on the Accuracy of Social Assistance Recipient Data

My interview with Mr. Nor Yaqut Rozan, the operator of the Integrated Social Welfare Data (DTKS), revealed that the process of data collection and determining social

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assistance recipients has undergone significant developments over time. These changes primarily relate to policies, verification procedures, and data collection systems, as well as the use of a decile-based system to determine eligibility for assistance recipients. Previously, the determination of social assistance recipients in villages relied heavily on proposals from village governments and the issuance of a Certificate of Poverty (SKTM) by the village head. In that previous period, regulations regarding the criteria for social assistance recipients were unclear, resulting in poor data accuracy. The operator explained that anyone who applied for an SKTM could potentially receive social assistance, whether they were truly poor or simply claiming to be poor. This situation opened up opportunities for data manipulation and inaccurate targeting of assistance.

The previous process for applying for assistance generally began with residents who felt they were underprivileged, then coming to the village office to submit a request. The village government then submitted the proposal through a village meeting or issued a Social Assistance Certificate (SKTM) as a requirement for submitting a social assistance application to the DTKS (Disaster Mitigation Agency). The attached documents included photos of the front and interior of the house, as well as administrative verification signed by the village head and acknowledged by the sub-district head.

However, the operator revealed that the main weakness of the DTKS system lies in the lack of rigorous field verification. In some cases, residents who are actually well-off still receive SKTM (Card Certificates) and social assistance due to weak verification processes. Therefore, this situation indicates that the accuracy of social assistance recipient data during that period is highly susceptible to inaccurate targeting. As policy developments progressed, the government began implementing a decile system as the primary basis for determining eligibility for social assistance recipients. Under this system, only people in deciles 1 to 5 are eligible to receive social assistance, while people in deciles 6 to 10 cannot be proposed as recipients because they are already considered well-off. The operator explained that the implementation of the decile system provides clarity in criteria and reduces the opportunity for data manipulation.

Furthermore, the data verification and validation process is now being implemented in stages, involving various parties, such as village governments, social workers, and the Social Services Agency. Field verification remains a crucial step to ensure that administrative data aligns with the actual conditions of the community. For example, if the verification reveals that a potential recipient has assets such as a vehicle or a house that are considered adequate, the application for assistance may be rejected even if a SKTM (Certificate of Eligibility) is present.

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The operator also explained that social data collection currently uses an application-based information system, such as the Social Welfare Information System, which is integrated with the national database. This system allows officers to view household data, economic conditions, and asset ownership, thereby increasing accuracy in determining eligibility for social assistance recipients. However, the operator believes that data accuracy still depends on public honesty and synergy between government agencies. Without honest reporting of economic conditions and good coordination between village governments, social workers, and local governments, data on social assistance recipients could still be inaccurate.

Overall, operators concluded that the use of the DTKS and decile-based system has improved the accuracy of social assistance targeting compared to the previous system. However, efforts to improve data accuracy still require consistent field verification, clear regulations, and a shared commitment from all parties involved in the data collection and distribution of social assistance.

The Impact of PPKS on the Accuracy of Social Assistance Recipient Data

An interview with the Village Head was conducted to obtain information on the conditions of Persons Requiring Social Welfare Services (PPKS), how to apply for social assistance, and obstacles in implementing the Integrated Social Welfare Data (DTKS)-based social assistance program. The informant in this interview was the Village Head, Mr. Daratim.

Based on the interview results, it was discovered that several residents in the village fall into the category of PPKS. This group includes people with physical disabilities, the blind, those with mild or severe strokes, those with chronic diseases such as elephantiasis (filariasis), and elderly people with declining health. The Village Head explained that approximately three residents have suffered severe strokes and are unable to walk, requiring assistive devices such as wheelchairs. Furthermore, there are also residents who have suffered mild strokes and are still able to carry out limited activities. This situation indicates that some PPKS have significant physical limitations and require special attention from the village and local governments.

Regarding the implementation of the social assistance program, the Village Head stated that the assistance received so far has been in the form of basic food supplies and assistance from the Village Fund for residents classified as having difficult socioeconomic conditions. However, assistance in the form of assistive devices, such as wheelchairs for people with disabilities, had not yet been realized at the time of the interview. The village

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government has submitted a request for this assistance through the Family Hope Program (PKH) facilitator, but the process must follow procedures established by the Social Services Agency.

According to informants, the village government plays a role in identifying and reporting residents who fall into the PPKS category to PKH facilitators. PKH facilitators then verify and coordinate with the Social Services Agency regarding eligibility for assistance. Determining social assistance recipients currently relies heavily on the decile system in the DTKS (Disaster Data Collection). The Village Head revealed that this decile system often presents challenges due to discrepancies between the community's actual conditions and the data recorded in the system. In some cases, it was found that economically well-off residents received assistance, while those classified as poor did not receive assistance because their decile score was deemed to not meet the criteria. If the decile score falls within the six-point range or above, the assistance application process becomes more complex and requires a data objection process or data update. This situation indicates that the accuracy of data in the DTKS significantly influences the accuracy of targeting social assistance recipients.

In conclusion, the interview results revealed that the accuracy and up-to-dateness of data in the DTKS (Disaster Mitigation Data) significantly determines the accuracy of social assistance targeting. Therefore, improved coordination between village governments, PKH facilitators, and the Social Services Agency is needed, as well as more accurate data updates that are responsive to community conditions on the ground.

Hypothesis Testing

Judging from the various answers to the questionnaire results that have been conducted, it is composed of five answers, the first is strongly agree, agree, undecided, disagree, and the last is strongly disagree. Therefore, the researcher gave a score of 5 for respondents who responded strongly agree, a score of 4 for respondents who responded agree, a score of 3 for respondents who responded undecided, a score of 2 for respondents who responded disagree, and a score of 1 for respondents who responded strongly disagree.

This research uses the Semors'd quantitative method with the help of SPSS 25. The following are the results of the questionnaire that the author obtained from respondents of the Semors'd statistical method research:

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Results of the DTKS Digital Utilization Questionnaire, PPKS, and Data Accuracy
DTKS Digital Technology Utilization Questionnaire Results (X1)

The results of the questionnaire on the use of digital technology in the DTKS (Disaster Data Entity Data) prove that the use of digital technology in the DTKS has an influence on the accuracy of data on recipients of social assistance in Probolinggo Regency. The questionnaire, which had 100 respondents and consisted of 4 questions, has resulted in the use of digital technology in the DTKS having an effect on the accuracy of data on recipients of social assistance in Probolinggo Regency.

The categories were determined by dividing the percentage range of the assessment results into several levels. In this study, the lowest percentage started at 20% and the highest percentage was 100%. The 20% value was derived from the lowest score on the Likert scale, which was 1 out of a maximum total score of 5. Meanwhile, the 100% value was derived from the highest score, which was 5 out of 5. The difference between the minimum and maximum values was 80%. Furthermore, this 80% range was divided into five assessment categories: very low, low, medium, high, and very high. This division indicates that each category has an interval width of 16%. Based on this calculation, the category range was compiled to facilitate interpretation of the research results as follows:

Table 1. Category Interpretation

Percentage	Category
20% – 36%	Very Low
37% – 52%	Low
53% – 68%	Currently
69% – 84%	Tall
85% – 100%	Very high

Table 2. DTKS Questionnaire Results (X1)

item	Tanggapan Responden										Total Skor	Persentase	Kategori
	STS (1)		TS (2)		RR (3)		S (4)		SS (5)				
	F	%	F	%	F	%	F	%	F	%			
1	4	4	5	10	15	45	41	164	35	175	398	79,6%	Tinggi
2	0	0	10	20	17	51	18	72	55	275	418	83,6%	Tinggi
3	0	0	7	14	20	60	25	100	48	240	414	82,8%	Tinggi
4	0	0	7	14	14	42	61	244	18	90	390	78,0%	Tinggi

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Based on the results of the DTKS questionnaire, all statement items received a high category. Item 1 received a total score of 398 with a percentage of 79.6% (high), item 2 a total of 418 with a percentage of 83.6% (high), and item 3 a total of 414 with a percentage of 82.8% (high). Meanwhile, item 4 received a total score of 390 with a percentage of 78.0% and included in the high category.

Overall, it can be concluded that the indicators used in this study are said to be able to describe the actual conditions quite well.

PPKS Questionnaire Results (X2)

Table 3. PPKS Questionnaire Results (X2)

item	Tanggapan Responden										Total Skor	Persentase	Kategori
	STS (1)		TS (2)		RR (3)		S (4)		SS (5)				
	F	%	F	%	F	%	F	%	F	%			
1	1	1	8	16	27	81	49	196	15	75	369	73,8%	Tinggi
2	3	3	3	6	22	66	38	152	34	170	397	79,4%	Tinggi
3	3	3	5	10	25	75	20	80	47	235	403	80,6%	Tinggi
4	0	0	4	8	4	12	31	124	61	305	449	89,8%	Sangat Tinggi

Based on the PPKS questionnaire results, item 1 had a total score of 369, representing 73.8%, and falls into the high category. Item 2 scored a total score of 397, representing 79.4% (high), while item 3 scored a total score of 403, representing 80.6% (high). Item 4 scored the highest, at 449, representing 89.8%, and categorized as very high.

Overall, the PPKS questionnaire results showed that respondents responded positively to all statement items, with high and very high categories indicating that the measured indicators had been met properly.

Data Accuracy Questionnaire Results (Y)

Table 4. Results of the Data Accuracy Questionnaire (Y)

item	Tanggapan Responden										Total Skor	Persentase	Kategori
	STS (1)		TS (2)		RR (3)		S (4)		SS (5)				
	F	%	F	%	F	%	F	%	F	%			
1	0	0	7	14	20	60	31	124	42	210	408	81,6%	Tinggi
2	3	3	8	16	10	30	53	212	26	130	391	78,2%	Tinggi
3	11	11	6	12	18	54	31	124	34	170	371	74,2%	Tinggi
4	0	0	9	18	27	81	35	140	29	145	384	76,8%	Tinggi

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Based on the results of the Data Accuracy questionnaire, all statement items received a high rating. Item 1 received a total score ofA total of 408 with a percentage of 81.6% is included in the high category. Item 2 obtained a total score of 391 with a percentage of 78.2% (high), while item 3 obtained a total score of 371 with a percentage of 74.2% (high) and finally, item 4 obtained a total score of 384 with a percentage of 76.8% (high).

Overall, the results of the data accuracy questionnaire showed that respondents gave positive responses to all measured indicators, so it can be concluded that the level of variable achievement is in the high category.

Data Calculation Analysis
Validity Test

Table 5. Validity Test of DTKS Digital Technology (X1)

Item	Corrected ItemTotal Correlation	R Table	Information
X1.1	0.700	0.256	VALID
X1.2	0.773	0.256	VALID
X1.3	0.665	0.256	VALID
X1.4	0.513	0.256	VALID

Source: Primary data processed in 2026

Therefore, the results of the questionnaire have stated that the use of DTKS digital technology has a valid effect on the accuracy of data on social assistance recipients in Probolinggo Regency by applying a validity test.*Pearson product moment*and utilize the help of SPSS 25.

Table 6. PPKS Validity Test (X2)

Item	Corrected ItemTotal Correlation	R Table	Information
X2.1	0.457	0.256	VALID
X2.2	0.825	0.256	VALID
X2.3	0.783	0.256	VALID
X2.4	0.691	0.256	VALID

Source: Primary data processed in 2026

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So, the results of the questionnaire have stated that PPKS has a valid influence on the accuracy of data on social assistance recipients in Probolinggo Regency using the Semors'd method and using SPSS 25.

Table 7. Data Accuracy (Y)

Item	Corrected ItemTotal Correlation	R Table	Information
Y.1	0.686	0.256	VALID
Y.2	0.774	0.256	VALID
Y.3	0.795	0.256	VALID
Y.4	0.432	0.256	VALID

Source: Primary data processed in 2026

All items in the statement of the Social Assistance Recipient Data Accuracy variable have been determined to be valid because the calculated r-value is greater than the table r-value, so the instrument is suitable for use in the next analysis stage. Therefore, the researcherobtained valid results that produced the Effect of Utilization of DTKS and PPKS Digital Technology on the Accuracy of Social Assistance Recipient Data in Probolinggo Regency which was tested for validity with the help of SPSS 25.

Based on the results of testing the validity of this research instrument using correlation*Pearson Product Moment*With the help of SPSS version 25, all statement items in the variables Utilization of Digital Technology for DTKS, PPKS, and Accuracy of Social Assistance Recipient Data were declared valid. Therefore, this research instrument is suitable for use in the next stage of data analysis, namely reliability testing and hypothesis testing.

Reliability Test

Table 8. Reliability Test of DTKS and PPKS Digital Technology (X1 and X2)

Item	Cronbach's Alpha If Item Deleted	Alpha Value Cronbach's	Information
X1	0.781	0.600	RELIABLE
X2	0.639	0.600	RELIABLE

Source: Primary data processed in 2026

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Thus, the Cronbach's Alpha results for each variable were >0.600, proving that each variable was worthy of testing. This reliability, therefore, impacted the accuracy of social assistance recipient data in Probolinggo Regency.

Based on the item on the Accuracy of Data on Aid Recipients, the Cronbach's Alpha results for each variable are > 0.400, proving that each variable is worthy of being tested in producing an influence on the accuracy of data on social assistance recipients in Probolinggo Regency.

Table 9. Data Accuracy Reliability Test (Y)

Item	Cronbach's Alpha If Item Deleted	Alpha Value Cronbach's	Information
Y	0.877	0.400	RELIABLE

Source: Primary data processed in 2026

Therefore, the Cronbach's Alpha result for the data accuracy variable is >0.400, indicating that the data accuracy variable is worthy of testing. Therefore, this reliability test demonstrates the influence of the use of digital technology for the DTKS and PPKS on the accuracy of social assistance recipient data in Probolinggo Regency.

Classical Assumption Test

Normality Test

Table 10. Results of the Kolmogorov Sminov Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parametersa,b	Mean	.0000000
	Standard Deviation	1.91357500
Most Extreme Differences	Absolute	.066
	Positive	.066
	Negative	-.064
Test Statistics		.066
Asymp. Sig. (2-tailed)		.200c,d

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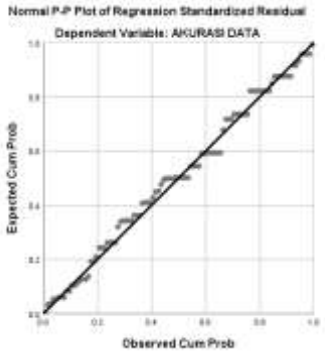
a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: Primary data processed in 2026

From the results of the normality test above, it shows that the significance value of 0.200 > 0.01, stated as greater than 0.01, it can be concluded that the data is normally distributed.

Multicollinearity Test

Table 11. Multicollinearity Test Results



Source: Primary data processed in 2026

The results of the multicollinearity test have been found, namely that all variables have a tolerance value > 0.10 or a VIF value < 10, so it can be concluded that there are no symptoms of multicollinearity or it can be interpreted as passing the multicollinearity test.

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Heteroscedasticity Test

Table 12. Results of Heteroscedasticity Test

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,404	.685		,510	.001
	X1	.246	.049	.681	,981	.000
	X2	-.306	.064	-.657	4,803	.000

a. Dependent Variable: ABS
Source: Primary data processed in 2026

The results of the heteroscedasticity test have been found to prove that all variables have a significance value below 0.01, thus it can be determined that the variables experience symptoms of heteroscedasticity or pass the heteroscedasticity test.

Multiple Linear Regression Analysis Test

Table 13. Results of Multiple Linear Regression Analysis Test

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,916	1,233		2,364	.020
	X1	.328	.089	.384	3,690	.000
	X2	.448	.115	.407	3,911	.000

a. Dependent Variable: Y
Source: Primary data processed in 2026

Based on the results of the table, it can be seen that the constant value (value a) is 2.916 and for variable X1 (value B) it is 0.328 while variable X2 (value B) is 0.448 so that the multiple linear regression equation can be obtained as follows:

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$$Y = a + B1.X1 + B2.X2 + e$$
$$= 2.916 + 0.328 + 0.448 + e$$

The interpretation of the regression model equation above is as follows:

a) The data accuracy constant value (Y) is 2.916, stating that if the Digital Technology variables DTKS (X1) and PPKS (X2) are equal to zero (0), then the data accuracy is 2.916.
b) The X1 coefficient is 0.328, which means that for every 1% increase in the X1 variable (DTKS Digital Technology), the data accuracy increases by 0.328 (32.8%) or vice versa, for every 1% decrease in the X1 variable (DTKS Digital Technology), the data accuracy decreases by 0.328 (32.8%).
c) The X2 coefficient is 0.448, which means that for every 1% increase in X2 (PPKS), Data Curation will increase by 0.448 (44.8%) or conversely, for every 1% decrease in the X2 (PPKS) variable, Data Accuracy will decrease by 0.448 (44.8%).

From the discussion above, it can be concluded that the DTKS and PPKS digital technologies influence the accuracy of social assistance recipient data. This is because they serve as the primary field data source for determining data accuracy, while the DTKS technology serves as a supporting tool for data collection.

T-test

Table 14. T-Test Results

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,916	1,233		2,364	.020
	DTKS	.328	.089	.384	3,690	.000
	PPKS	.448	.115	.407	3,911	.000

a. Dependent Variable: DATA ACCURACY
Source: Primary data processed in 2026

a) (Ha1) is accepted, the results of the study obtained with a sig value of 0.000 which is stated to be smaller than the critical value of 0.01 and the calculated t value of

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3.690 is greater than the t table value of 2.627 which means significant. So with this, the researcher concludes that (Ha1) is accepted which means there is an influence between the variable X1 on Y.

b) Ha2) is accepted, the results of the research obtained with a sig value of 0.000 is smaller than the critical value of 0.01 and the calculated t value of 3.911 is stated to be greater than the t table value of 2.627 which can be concluded that there is an influence between variables X2 on Y.

Overall, it can be concluded that variable X2 (PPKS) has a more dominant influence than variable X1 (utilization of DTKS digital technology). This is because PPKS is the primary source of data provision, which directly influences the quality and accuracy of the resulting information. Meanwhile, DTKS digital technology only functions as a supporting tool in the data processing process, so its influence is not as significant as PPKS's role in determining the accuracy of social assistance recipient data.

F test

Table 15. F Test Results

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	440,325	2	220,162	58,910	.000b
	Residual	362,515	97	3,737		
	Total	802.840	99			
a. Dependent Variable: DATA ACCURACY						
b. Predictors: (Constant), PPKS, DTKS Source: Primary data processed in 2026						

(Ha3) is accepted, the results of the research obtained in the sig value of 0.000 are stated to be smaller than the critical value of 0.01 and the calculated F of 58,910 is greater than the F table value of 4.83, meaning that a conclusion can be drawn regarding the influence between variables X1 and X2 on Y.

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Determinant Coefficient (R2)

Table 16. Results of the Determinant Coefficient (R2) Test

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.741a	.548	.539	1.93320
a. Predictors: (Constant), X2, X1 Source: Primary data processed in 2026				

Based on the data from the results of the table above, the R square coefficient value is 0.548 or 54.8%, which concludes that the DTKS Digital Technology (X1) and PPKS (X2) variables have a contribution to the Data Accuracy (Y) variable of 0.548 (54.8%), and the rest is influenced by other factors that were not carried out by the researcher.

DISCUSSION OF RESEARCH RESULTS

The Impact of Utilizing DTKS Digital Technology on Data Accuracy

The analysis of this study revealed that the use of digital technology in the DTKS (Disaster Data Entity List) has a positive and significant impact on the accuracy of social assistance recipient data. It can be concluded that the more optimal the use of the DTKS digital system in the data collection, verification, and updating processes, the higher the level of accuracy and conformity of social assistance recipient data. The results of this study align with previous research conducted by Raden Dwiarto (2023), which explained that innovation in targeted social security distribution requires support from DTKS management policies and the use of digital applications such as "Cek Bansos." The study stated that the success of the digital system is significantly influenced by budget support, human resource competency, and a structured verification and validation process. This is also supported by Aprih Santoso et al. (2023), who highlighted the importance of optimizing the DTKS verification and validation process. These conditions strengthen the results of this study that the use of digital technology is a crucial factor in minimizing data errors and increasing the accuracy of the social assistance recipient database.

The use of digital technology in the DTKS (Disaster Data Collection) is very helpful in making the management of social assistance recipient data more efficient and

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transparent. With a digital system, the process of entering, updating, and verifying data can be done more quickly and interconnected, thereby reducing errors that usually occur when done manually. This is in accordance with the theory according to Purwanto & Prabowo (2022), namely the process of using information systems and digital technology by the government to collect, update, verify, and manage community data more accurately, quickly, transparently, and accountably in order to support public services and targeted social policies. Therefore, the use of digital technology in the DTKS not only improves data accuracy but also helps ensure that the distribution of social assistance is more targeted and tailored to community conditions.

The Impact of PPKS on Data Accuracy

The results of this research analysis revealed that the PPKS has a positive and significant effect on the accuracy of social assistance recipient data. It can be concluded that the better the identification, data collection, and assistance processes for PPKS, the higher the level of accuracy of the resulting social assistance recipient data. This result is consistent with research by Nessy Fauziah Sari and Harapan Tua Rfs (2023), and Alvita Kumara Wasistiyana (2024), as both directly discussed that social services for PPKS are running quite well through the implementation of appropriate duties and responsibilities, thus contributing to improving community welfare. This is in accordance with this research, where the quality of PPKS assistance and data collection plays a role in producing more accurate data on the accuracy of social assistance recipient data.

The role of the Social Welfare Assistance (PPKS) in social assistance data collection is crucial because it directly impacts the quality of the resulting data. PPKS are not only the recipients of data collection but also assist in identifying and confirming socioeconomic conditions in the field. With assistance from officers, the collected data becomes more accurate. According to Dwiyanto (2022), PPKS are individuals, families, or groups experiencing social welfare problems and therefore requiring government social service intervention. They face obstacles in carrying out their social, economic, and psychological functions, requiring data collection, social protection, rehabilitation, and empowerment. Therefore, the honesty and openness of PPKS in providing information also determine whether assistance is on target. Therefore, the better the data collection process and assistance provided to PPKS, the more accurate the resulting data on social assistance recipients will be.

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The influence of the simultaneous use of DTKS and PPKS digital technology on data accuracy

The DTKS requires support from various parties, such as the central and regional governments, and improvements in the quality of human resources in the data verification and validation process. These results indicate that the independent variables, namely the use of digital technology for the DTKS (X1) and the PPKS (X2), simultaneously have a significant effect on the dependent variable, namely the accuracy of social assistance recipient data (Y). Thus, these two independent variables simultaneously contribute to explaining developments in the accuracy of social assistance recipient data.

According to the results of the simultaneous test (F test) presented in table 4.12, the calculated F value was 58.910 with a significance level of 0.000. This significance value is smaller than the significance level used by the researcher, which is 0.10 (0.000 <0.10), so the alternative hypothesis (Ha3) stating that there is a simultaneous influence between the variables of the use of digital technology DTKS and PPKS on the accuracy of social assistance recipient data is accepted, while the null hypothesis (Ho3) is rejected. This supports the results of this study that the use of technology (DTKS) and PPKS together contribute to increasing data accuracy.

Thus, the results of this study are supported by research by Aprih Santoso, Emaya Kurniawati, and Ali Umar Dhani (2023), which states that the verification and validation process for DTKS data still needs to be optimized, particularly in terms of community data collection and data updates in the field. This study indicates that implementing factors in the field, such as data collection officers and community administrative conditions, significantly influence the quality of the resulting data. This is consistent with the results of this study, where the PPKS variable has a significant influence on determining data accuracy, thus reinforcing the importance of human factors in addition to technology.

CONCLUSION

This study shows that the use of digital technology for the Integrated Social Welfare Data (DTKS) and the role of Social Welfare Service Providers (PPKS) have a positive and significant impact on the accuracy of social assistance recipient data in Probolinggo Regency. Partial test results demonstrate that both DTKS and PPKS variables each have a significant impact on data accuracy, while simultaneous test results indicate that both variables together contribute strongly to improving the accuracy of social assistance recipient data. These findings confirm that the integration of digital technology through DTKS, supported by identification, verification, and assistance

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processes by PPKS, can improve the quality of social welfare data, thus ensuring more targeted aid distribution. Practically, the results of this study provide implications for local governments to continue strengthening digital social data collection systems, increasing the capacity of social operators and facilitators, and expanding coordination between village governments, the Social Services Agency, and other stakeholders to maintain the quality and sustainability of data updates.

However, this study has several limitations. The variables studied only covered the use of digital technology for the DTKS (Disaster Mitigation Data Collection) and PPKS (Disaster Mitigation and Social Security System), while other factors potentially influence the accuracy of social assistance recipient data, such as human resource competency, inter-agency coordination, community participation, and government policy support. Furthermore, the study was conducted in Probolinggo Regency with a limited sample size, requiring caution in generalizing the results to other regions. Therefore, future research is recommended to expand the scope of the study area, increase the number of respondents, and include other relevant variables to gain a more comprehensive understanding of the factors influencing the accuracy of social assistance data. Future research could also employ a mixed quantitative and qualitative approach to further explore the dynamics of digital-based social data system implementation in the field.

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