

Self-Evaluation of *Jurnal Informatika Sunan Kalijaga* (JISKa): Perspectives of Reviewers and Authors

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Abstract— The success of JISKa is inseparable from the role of reviewers and authors. Unfortunately, JISKa had never been assessed or evaluated by reviewers and authors despite the fact that assessment from the reviewers and authors would be valuable feedback for JISKa's self-evaluation. Therefore, survey-based research has recently been conducted to assess JISKa's performance using the User Acceptance Test of OJS version 2.4.8.0. This study used a survey method to obtain an assessment and evaluation from reviewers and authors related to JISKa. The respondents in this study consist of 68 authors and 26 reviewers. The result of this study stated that 91.2% of the authors and 84.6% of reviewers are satisfied with JISKa. A percentage of 100% of writers and reviewers wants JISKa to raise its level of Sinta accreditation. This accreditation is awarded in 2018 and will end in 2023. JISKa is now on Sinta 4. The JISKa website appearance looks good and easy to use. The dashboard on the JISKa page is user-friendly for the author. However, the current version of JISKa OJS 2.4.8.0 needs to be upgraded to OJS version 3. There are some points for the future consideration of JISKa: JISKa needs to promote itself more, upgrade the OJS version, and provide the reviewers with certificates of appreciation for future consideration.

Keywords—Feedback; User Acceptance Test; Evaluation; Survey-based Research; Online Journal System

1 INTRODUCTION

JISKa is an Indonesian journal managed by the Informatics Engineering Study Program, Faculty of Science and Technology, UIN Sunan Kalijaga Yogyakarta that publishes and disseminates informatics research. JISKa was published for the first time in May 2016 and has consistently been published three times a year, namely January, May, and September. There are seven articles in each publication. JISKa is published through both electronic media (e-journal) and printed media. The online version of this journal is considered as an effective form of communication to disseminate research results. This is because e-journals can be published more quickly and regularly, and they can also be easily accessed through the website [1]. Apart from JISKa, the Informatics Engineering Study Program at UIN Sunan Kalijaga Yogyakarta also has an international journal, namely IJID (International Journal on Informatics for Development) [2].

Since July 9, 2018, JISKa has been a nationally accredited journal by Sinta 4. This accreditation is valid until July 9, 2023. Along the way, JISKa has begun to manage its acceptance of articles very well and publish each volume on time. JISKa has to be indexed by Moraref M3, Garuda, Dimension, and DOAJ (Directory of Open Access Journals). In the future, JISKa will try to improve its quality to achieve Sinta 2 or even Sinta 1.

The success indicators of a journal have been described in detail and objectively on the website of ARJUNA (*Akreditasi Jurnal Nasional*). JISKa's success is inseparable from the role of reviewers and also authors who are always faithful in using JISKa as a medium for the dissemination of research. Unfortunately, until now JISKa has never been assessed by its reviewers and authors. Opinion from reviewers and authors will be useful feedback for JISKa's professional evaluation. It is hoped that JISKa's success can be a mutual benefit for managers, editors, peer reviewers, and writers/authors. One element of the evaluation is the User Acceptance Test OJS version 2.4.8.0 that was used in JISKa.

This User Acceptance Test is carried out by potential system users and is based on the system features and functionality that will be used by the user [3]. In this case, the users are the authors and reviewers of JISKa. The purpose of the UAT is to determine the respondent's acceptance of the OJS system used by JISKa and the impact of the system on respondents as stated in the questionnaire.

2 METHOD

This research was conducted using a survey method. The followings are the stages of the research method:

2.1. Identification of problems

At this stage, problems and issues were identified. The data collected during this process would be evaluated, and the results of the evaluation would be used as the recommendation for future improvement. Problem identification was carried out through meetings and discussions among researchers and JISKa's managers.

2.2. Formulate the Survey Statement

Based on the problem and issues identified in the previous stage, a survey statement was created to find out how JISKa's writers and reviewers responded to these issues. Each statement is tested with a Likert scale. The Likert scale (Table 1) is a response scale used in the questionnaire to determine the preferences of respondents. Likert scale is also known as agree-disagree scale and is the scale most widely used in survey research [4].

Table 1. Likert Scale

Statement	Positive Score
Strongly Disagree	1
Disagree	2
Do not know	3
Agree	4
Strongly Agree	5

2.3. Running a Survey

The survey was conducted using online media (broadcast email) to all authors and reviewers registered in OJS (Online Journal System) of JISKa. There are 413 accounts of the authors and 109 accounts of the reviewers registered in JISKa's OJS.

2.4. Validity test

The results of the survey in stage 3 were then tested for validity. According to Nisfiannoor [5], the use of a questionnaire (survey) as a means of collecting research data needs to meet certain criteria so as to provide reliable information. The criteria in question are good validity and reliability. Therefore, it is necessary to test the validity and reliability test. Statements that do not pass the validity test are then discarded, and a statement that has passed the validity test is left. Validity is a measure that shows the levels of validity or validity of an instrument. An instrument that is valid is considered to have high validity. Conversely, instruments that are less valid means having low validity [6]. The validity test is carried out to determine the level of accuracy and accuracy of the measuring instrument in performing its measuring function. In conducting the validity test, a measurement item should have a correlation (r) > r table which is known based on the number of respondents. Correlation (r) is calculated by the following Formula (1):

$$r_y = \frac{N\sum y - \sum y}{\sqrt{(N\sum y^2) - (\sum y)^2}} \quad (1)$$

Where:

r_y = coefficient correlation

N = Number of respondents

y = Score each item in criteria

If the calculated r value > r table, it means that the items mentioned above are valid.



2.5. Reliability Test

Statements that pass the validity test are then carried out by the reliability test. The reliability test was conducted to determine the accuracy of each indicator used in the research instrument. The results of the reliability test determine whether or not the research instrument can be trusted based on the level of stability and accuracy of the measuring instrument, or in other words the measurement results obtained are the correct measure of what is being measured [7].

The indicator can be declared reliable if the Cronbach Alpha value is between 0.7 – 0.9 [8]. In other references, the value interpretation can be as follows.

Table 2. Interpretation of r [9]

The amount of r	Interpretation
0.80 - 1.00	Very strong/ very reliable
0.60 - 0.80	Strong
0.40 - 0.60	Strong enough
0.20 - 0.40	Low
0.00 - 0.20	Very low

In other references, according to Nunnally (in Streiner, 2003 [10]), instrument is said to be reliable if the Cronbach's Alfa reliability coefficient is more than 0.70 ($r_i > 0.70$), and Streiner (2003) [10] states that the reliability coefficient of Alfa Cronbach should not be more than 0.90 ($r_i < 0.9$). If the Cronbach's alpha reliability coefficient is less than 0.70 ($r_i < 0.70$). Tavakol & Dennick (2011) [11] suggest revising or eliminating items that have low correlation. Cronbach Alpha (r_i) is calculated by the following Formula (2):

$$r_i = \left(\frac{n}{n-1} \right) \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right) \quad (2)$$

Where:

r_i = Cronbach Alpha value

n = Number statement

$\sum \sigma_i^2$ = sum of variance of each item score
 σ_t^2 = variance total

2.6. Final Results and Discussion

The final result is a questionnaire statement that has passed the validity and reliability tests along with the percentage of respondents who agree and strongly agree with the statements in the questionnaire.

3 RESULT AND DISCUSSION

3.1 Problem Identification Results

Based on the discussions during the meetings and some considerations, here are some points to be assessed in this survey research:

- Journal naming
- Sinta national journal accreditation
- Internationalization
- Reviewer's performance

- Editor's performance
- Quality of articles
- Publication costs
- Layout editor's performance
- Delivery of hardcopy journal
- Writing templates
- Website appearance (UAT)
- Citations
- Promotion
- User satisfaction
- Willingness to become a reviewer
- Reviewer's rewards and incentives
- Number of articles per edition
- Number of reviewers
- Honor of reviewers

3.2 Result of Statement Formulation

From the above issues, two lists of survey statements that will be asked of the authors (Table 3) and reviewers (Table 4) are formulated as follows.

Table 3. Survey Statement to JISKa's Authors

Issue	Code	Statement
Name of Journal	P1	The name JISKa (Jurnal Informatika Sunan Kalijaga) is right and good to become the name of this journal.
Name of Journal	P2	The name JISKa Jurnal Informatika Sunan Kalijaga) needs to be changed to be more specific.
Accreditation	P3	Currently, JISKa is accredited nationally by Sinta 4. National accreditation for JISKa needs to be upgraded to a higher accreditation.
Accreditation	P4	JISKa needs to register for international accreditation.
Reviewers Performance	P5	The results of article reviews by JISKa reviewers help you to produce higher quality articles.
Reviewers Performance	P6	JISKa reviewers are reviewers who are experts in their fields.
Editors Performance	P7	The performance of the JISKa editor has been very good in responding to your articles.
Article Quality	P8	The quality of the articles in JISKa is already very good, it just needs to be maintained.
Article Quality	P9	The quality of articles in JISKa is still not good, so it needs to be improved.
Publication Costs	P10	JISKa needs to charge the authors a fee to improve the quality of JISKa services.
Publication Costs	P11	JISKa needs to maintain itself to be able to provide free services to writers.
Layout Editor	P12	The performance of the JISKa layout editor is good in the layout editing and copyediting process of each article.
Hardcopy JISKa	P13	The JISKa team needs to send the hardcopy of JISKa to the author.



JISKa's Template	P14	I am comfortable with the current JISKa writing template.
Web Appearance	P15	The JISKa website looks good and easy to use.
Web Appearance	P16	The dashboard on the JISKa page is user-friendly when I log in as an author.
Citations	P17	I have cited JISKa's articles in my research/writing articles.
Promotion	P18	JISKa needs to promote itself to reach a wider audience
Satisfaction	P19	Overall, I am satisfied with JISKa's process of publishing scientific articles.
Willingness to Become a Reviewer	P20	I am willing to become a JISKa reviewer if needed.

From the list of statements (Table 3) above, it can be seen that the statements regarding the OJS 2.4.8.0 User Acceptance Test used by JISKa are found in P15 and P16.

Table 4. Survey Statement to JISKa's Reviewers

Issue	Code	Statement
Name of Journal	R1	The name JISKa (Jurnal Informatika Sunan Kalijaga) is right and good to become the name of this journal.
Name of Journal	R2	The name JISKa Jurnal Informatika Sunan Kalijaga) needs to be changed to be more specific.
Accreditation	R3	Currently, JISKa is accredited nationally by Sinta 4. National accreditation for JISKa needs to be upgraded to a higher accreditation.
Accreditation	R4	JISKa needs to register for international accreditation.
Editors Performance	R5	The JISKa editor's performance has been good in selecting the right articles for reviewers
Reward	R6	Giving honorarium to JISKa reviewers will improve the performance and quality of the review results.
Incentive	R7	JISKa needs to provide the reviewers with a certificate of appreciation.
Softcopy JISKa	R8	The JISKa team needs to send a softcopy of each edition of the JISKa Journal to reviewers.
Hardcopy JISKa	R9	The JISKa team needs to send a hard copy of each edition of the JISKa Journal to the reviewer.
Promotion	R10	I promote JISKa journal to my friends / students.
Promotion	R11	The JISKa team needs to further promote the JISKa journal to the public.
Web Appearance	R12	The JISKa website looks good and easy to use.

Web Appearance	R13	Currently the JISKa website uses OJS version 2, JISKa needs to be upgraded to use OJS version 3.
Article Quality	R14	The quality of the articles in JISKa is already very good and needs to be maintained.
Article Quality	R15	The quality of articles in JISKa is still not good, so it needs to be improved.
Number of Articles	R16	Currently, JISKa publishes seven articles in one edition. JISKa needs to increase the number of articles published in each edition.
Citations	R17	I once cited JISKa articles in my research/writing articles.
Number of reviewers	R18	The current number of JISKa reviewers is sufficient to handle all articles included in JISKa.
Satisfaction	R19	As a reviewer, I am satisfied/ pleased with the overall performance of the JISKa Team.
Willingness to Become a Reviewer	R20	I am willing to become a JISKa Reviewer if needed.

From the list of statements (Table 4) above, it can be seen that the statements regarding the OJS 2.4.8.0 User Acceptance Test used by JISKa are found in R12 and R13.

3.3 Survey Results

There were 68 authors and 26 reviewers who participated in filling out the survey in this study with a total of 94 respondents. The following table shows the survey results to authors (Code is P in Table 5) and reviewers (Code is R in Table 5).

Table 5. Result of Author and Reviewer Survey

Code	Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
P1	4	2	0	36	26
P2	6	41	8	10	3
P3	0	0	0	23	45
P4	0	5	3	26	34
P5	0	0	1	44	23
P6	0	1	11	37	19
P7	1	0	6	44	17
P8	0	7	9	43	9
P9	0	19	12	29	8
P10	8	30	14	14	2
P11	0	1	5	30	32
P12	0	2	3	50	13
P13	5	10	7	32	14
P14	0	2	2	50	14
P15	0	3	3	50	12
P16	0	2	2	52	12
P17	1	6	21	33	7
P18	0	0	1	33	34
P19	1	0	5	38	24
P20	0	2	9	31	26



Code	Very Disagree	Disagree	Don't Know	Agree	Very Agree
R1	1	0	1	12	12
R2	6	13	4	3	0
R3	0	0	0	5	21
R4	1	2	1	9	13
R5	0	0	3	12	11
R6	1	1	5	9	10
R7	0	0	1	10	15
R8	0	6	3	7	10
R9	2	12	6	3	3
R10	0	0	3	12	11
R11	0	0	0	11	15
R12	0	3	4	15	4
R13	0	1	4	8	13
R14	0	2	7	11	6
R15	0	5	4	12	5
R16	1	5	6	11	3
R17	3	6	5	7	5
R18	0	1	13	9	3
R19	0	1	3	13	9
R20	0	0	3	11	12

3.4. Result of Validity Test

After the survey results are obtained from the author and reviewer, then the validity test is carried out using Formula (1). Because the number of the author's respondents is 68, the r table used in this stage is 0.2387. A statement is said to be valid if r count is greater than r table. The following (Table 6) are the results of the calculation of the survey results with Formula (1):

Table 6. Result of Validity Test from Author Survey

Code	R count	Result
P1	0.332423051	Valid
P2	0.114162876	Not Valid
P3	0.336986374	Valid
P4	0.365911016	Valid
P5	0.53135985	Valid
P6	0.672449642	Valid
P7	0.571148135	Valid
P8	0.381972559	Valid
P9	-0.019857864	Not Valid
P10	0.052701852	Not Valid
P11	0.289388782	Valid
P12	0.60568724	Valid
P13	0.489879183	Valid
P14	0.538981483	Valid
P15	0.467493213	Valid
P16	0.536984323	Valid
P17	0.407511752	Valid
P18	0.407852614	Valid
P19	0.608723611	Valid
P20	0.379130084	Valid

Next, test the validity of the reviewer statement survey. Because the number of reviewer respondents is 26

respondents, the r table used is r table = 0.3882. A statement is said to be valid if r count is greater than r table. The following (Table 7) are the results of the calculation of the survey results with Formula (1):

Table 8. Result of Validity Test from Reviewer Survey

Code	R count	Result
R1	0.062598917	Not Valid
R2	-0.183195983	Not Valid
R3	0.456453489	Valid
R4	0.399048893	Valid
R5	0.560168785	Valid
R6	0.661168	Valid
R7	0.822882505	Valid
R8	0.731479328	Valid
R9	0.342184072	Valid
R10	0.872055588	Valid
R11	0.726743194	Valid
R12	0.542927211	Valid
R13	0.547049946	Valid
R14	0.716776759	Valid
R15	-0.045446257	Not Valid
R16	0.095367751	Valid
R17	0.570894514	Valid
R18	0.597047267	Valid
R19	0.613165125	Valid
R20	0.703132421	Valid

3.5. Result of Reliability Test

After the validity test is carried out, invalid statements are removed/deleted from the lists. After that, the list containing valid statements is then calculated by Formula (2). This is the result (Table 8) of reliability test from two lists:

Table 8. Reliability Test Result

List of Statement	Cronbach Alpha	Reliability Test Result
Author	0.78371	Reliable
Reviewer	0.84378	Reliable

3.6. Final Result and Discussion

After knowing which statements pass the validity and reliability test, the next step is to draw conclusions from the valid and reliable statements.

First, we calculate the score for each statement by counting the number of respondents in each answer multiplied by the Likert scale weight in Table 1, then dividing by the total number of respondents.

$$\text{score} = \frac{1(nSD)+2(nD)+3(nDK)+4(nA)+5(nSA)}{nTotal} \quad (3)$$

Where:

nSD = number of Strongly Disagree



nD = number of Disagree
nDK = number of Don't Know
nA = number of Agree
nSA = number of Strongly Agree
nTotal = total number of respondent

After the score for each statement is calculated, then it is converted into a percentage using the Formula (4) below:

$$\text{percentage} = \frac{\text{score}}{5} \times 100\% \quad (4)$$

The results of these calculations are in Table 9 and Table 10 below:

Table 9. Result of Author Survey

Code	Statement	Percentage
P1	The name JISKa (Jurnal Informatika Sunan Kalijaga) is right and good to become the name of this journal.	82.94%
P3	Currently, JISKa is accredited nationally by Sinta 4. National accreditation for JISKa needs to be upgraded to a higher accreditation.	93.24%
P4	JISKa needs to register for international accreditation.	86.18%
P5	The results of article reviews by JISKa reviewers help you to produce higher quality articles.	86.47%
P6	JISKa reviewers are reviewers who are experts in their fields.	81.76%
P7	The performance of the JISKa editor has been very good in responding to your articles.	82.35%
P8	The quality of the articles in JISKa is already very good, it just needs to be maintained.	75.88%
P11	JISKa needs to maintain itself to be able to provide free services to writers.	87.35%
P12	The performance of the JISKa layout editor is good in the layout editing and copyediting process of each article.	81.76%
P13	The JISKa team needs to send the hardcopy of JISKa to the author.	71.76%
P14	I am comfortable with the current JISKa writing template.	82.35%
P15	The JISKa website looks good and easy to use.	80.88%
P16	The dashboard on the JISKa page is user-friendly when I log in as an author.	81.76%
P17	I have cited JISKa articles in my research / writing articles.	71.47%
P18	JISKa needs to promote itself to reach a wider audience.	89.71%
P19	Overall, I am satisfied with JISKa's process of publishing scientific articles.	84.71%

P20	I am willing to become a JISKa Reviewer if needed.	83.82%
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Table 10. Result of Reviewer Survey

Code	Statement	Percentage
R3	Currently, JISKa is accredited nationally by Sinta 4. National accreditation for JISKa needs to be upgraded to a higher accreditation.	96.15%
R4	JISKa needs to register for international accreditation	83.85%
R5	The JISKa editor's performance has been good in selecting the right articles for reviewers	86.15%
R6	Giving honorarium to JISKa reviewers will improve the performance and quality of the review results.	80.00%
R7	JISKa needs to provide its reviewers with certificates of appreciation.	90.77%
R8	The JISKa team needs to send a softcopy of each edition of the JISKa Journal to reviewers.	76.15%
R9	The JISKa team needs to send a hard copy of each edition of the JISKa Journal to the reviewer.	54.62%
R10	I promote JISKa journal to my friends / students.	86.15%
R11	The JISKa team needs to further promote the JISKa journal to the public.	91.54%
R12	The JISKa website looks good and easy to use.	75.38%
R13	Currently the JISKa website uses OJS version 2, JISKa needs to be upgraded to use OJS version 3.	85.38%
R14	The quality of the articles in JISKa is already very good and needs to be maintained.	76.15%
R16	Currently, JISKa publishes seven articles in one edition. JISKa needs to increase the number of articles published in each edition.	67.69%
R17	I once cited JISKa articles in my research / writing articles.	63.85%
R18	The current number of JISKa reviewers is sufficient to handle all articles included in JISKa.	70.77%
R19	As a reviewer, I am satisfied / pleased with the overall performance of the JISKa Team.	83.08%
R20	I am willing to become a JISKa reviewer if needed.	86.92%

4 CONCLUSION



The conclusions of the JISKa journal self-evaluation from survey-based research with the authors and JISKa's reviewers are as follow:

- Authors and reviewers are satisfied with JISKa's performance and the process of publishing scientific articles.
- Authors agree that JISKa is the appropriate name for this journal.
- Authors agree that the article reviews by JISKa's reviewers help them produce higher quality scientific articles.
- Authors agree that JISKa's reviewers are experts in their fields.
- Authors agree that the performance of JISKa's editors is excellent. Reviewers agree that JISKa's editors have done a good job in selecting the articles for review.
- The quality of JISKa's articles is already very good, but it needs to be maintained.
- Authors want JISKa to provide free scientific article publication to its authors.
- Authors agree that the performance of the JISKa's layout editor has been good in the layout editing and copyediting processes of each article.
- Authors are comfortable with the current JISKa's template.
- Authors and reviewers agree that JISKa's website looks good and easy to use.
- Authors state that the dashboard on the JISKa page is user friendly.
- Reviewers agree that honorarium can improve the performance of reviewers.
- JISKa's reviewers have approved JISKa to their colleagues or students.

Below are some suggestions and recommendations by the authors and JISKa's reviewers for the journal's improvement.

- JISKa needs to raise the level of its Sinta national accreditation.
- JISKa needs to register itself for international accreditation.
- JISKa needs to send hardcopies of JISKa journals to authors.
- JISKa team needs to promote the journal to a wider audience.
- OJS JISKa needs to be upgraded to the latest version.
- JISKa needs to increase the number of articles and authors in each edition of JISKa.
- Reviewers want JISKa to provide them with a certificate of appreciation as a reviewer.

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