# EVALUATION OF THE IMPLEMENTATION OF THE ADMINISTRATIVE INFORMATION SYSTEM OF INDONESIAN MIDWIVES ASSOCIATION IN EAST JAVA

#### Kasiati

kasiati.taufik@gmail.com Faculty of Social and Political Sciences, Universitas 17 Agustus 1945 Surabaya

#### Heru Santoso Wahito Nugroho

heruswn@gmail.com Poltekkes Kemenkes Surabaya

### ABSTRACT

One of the components of the IBI organizational system is an integrated organizational administration system, starting from the central level, provincial level, district / city level, to the lowest level, namely the sub-branch level. Until now, the administrative system has not been well organized, especially in the organizational administration system at the provincial level down to the subbranch level. One of the obstacles encountered was the inadequate implementation of the Administrative Information System for the Indonesian Midwives Association (SIA-IBI) at the district / city level. It is necessary to evaluate the smooth implementation of SIA-IBI in all districts / cities in East Java Province. The subjects of this descriptive research were all (38) administrators of SIA-IBI. There were 2 variables described in this study, namely: 1) the smooth implementation of SIA-IBI; 2) the obstacles in implementing SIA-IBI. Data on these two variables were collected through direct interviews with all SIA-IBI administrators. The data were analyzed using descriptive statistics, namely frequency and percentage. Based on the data analysis results, it is clear that: 1) all (100%) districts / cities in East Java Province had not been fluent in implementing SIA-IBI; 2) the obstacles faced by SIA-IBI administrators vary widely. The obstacles are grouped into 8 groups, namely: internet connection, double duty, completeness of data, fickle system, limited time, not yet proficient, lack of equipment, and low response to the system. Based on the results, it can be concluded that the implementation of SIA-IBI in all districts / cities in East Java Province has not been going well, and this is related to obstacles from technical and organizational aspects.

# Keywords: Administrative Information System, Indonesian Midwives Association, Smooth, Obstacles, Technical Aspects, Organizational Aspects

### A. PRELIMINARY

The Indonesian Midwives Association (IBI), as a professional forum for midwives in Indonesia was established on 24 June 1951 in Jakarta, and was

approved by the Minister of Justice of the Republic of Indonesia on 15 October 1954. IBI was active as a member of the Indonesian Women's Congress (KOWANI) from 1951 to now. Since 1956, IBI is also active as a member of the Confederation of Midwife (ICM). Since 1985, IBI has been registered as a non-governmental organization in the Ministry of Home Affairs of the Republic of Indonesia (PP IBI, 2018).

IBI has grown rapidly and now has 34 regional administrators at the provincial level, 509 branch administrators at the district / city level, and 3728 sub-branch administrators at the sub-district level, health service institutions, and educational institutions. Currently, the number of professional midwives in Indonesia is around 476,000 (PP IBI, 2018), while in East Java Province, the number of midwives registered as professional midwives is 32,010 (MTKI, 2020).

As a formal organization, IBI has an organizational system that is always improved according to the times and needs of the organization. One of the components of the IBI organizational system is an integrated organizational administration system, starting from the central level, provincial level, district / city level, to the lowest level, namely the sub-branch level. Until now, the administrative system has not been well organized, especially in the organizational administration system at the provincial level down to the subbranch level. One of the obstacles encountered was the inadequate implementation of the Administrative Information System for the Indonesian Midwives Association (SIA-IBI) at the district / city level that had to be reported to the provincial level officials.

Based on the explanation above, it is necessary to evaluate the smooth implementation of SIA-IBI in all districts / cities in East Java Province.

## **B. METHODS**

This research was conducted in East Java Province, with research sites, namely all secretariats of the Indonesian Midwives Association at the district / city level in East Java, a total of 38 secretariats. The research process, from data collection to report preparation, was carried out from January to July 2020. This research was conducted with a quantitative approach, the type of research chosen was a descriptive study.

The population of this study were all administrators of SIA-IBI at the district / city level in East Java Province, with a population size of 38 people. All members of the population were involved as research respondents, or in other words, the sample was selected by total sampling technique.

There were two variables described in this study, namely: 1) the smooth implementation of SIA-IBI; 2) the obstacles in implementing SIA-IBI. Data on these two variables were collected through direct interviews with all SIA-IBI administrators. After all the data had been collected, editing was carried out to ensure that the data collected was correct and complete, followed by the tabulating stage to facilitate the data analysis process. Data analysis was carried out descriptively in the form of frequency and percentage because all data were categorical types (Nugroho, 2014).

# C. RESULTS a. The Smooth Implementation of SIA-IBI

The results of data collection on the smooth implementation of SIA-IBI are presented in Table 1. Based on this presentation, it is clear that all (100%) districts / cities in East Java Province had not been fluent in implementing SIA-IBI.

Table 1. Smooth Implementation of SIA-IBI in All Branches in East	Java
Province	

	Districts/Cities	Smooth Implementation of SIA-IBI in The Last 5				
No.		Years				
		2015	2016	2017	2018	2019
1.	Pacitan	NS	NS	NS	NS	NS
2.	Ponorogo	NS	NS	NS	NS	NS
3.	Trenggalek	NS	NS	NS	NS	NS
4.	Tulungagung	NS	NS	NS	NS	NS
5.	Blitar	NS	NS	NS	NS	NS
6.	Kediri	NS	NS	NS	NS	NS
7.	Malang	NS	NS	NS	NS	NS
8.	Lumajang	NS	NS	NS	NS	NS
9.	Jember	NS	NS	NS	NS	NS
10.	Banyuwangi	NS	NS	NS	NS	NS
11.	Bondowoso	NS	NS	NS	NS	NS
12.	Situbondo	NS	NS	NS	NS	NS
13.	Probolinggo	NS	NS	NS	NS	NS
14.	Pasuruan	NS	NS	NS	NS	NS
15.	Sidoarjo	NS	NS	NS	NS	NS
16.	Mojokerto	NS	NS	NS	NS	NS
17.	Jombang	NS	NS	NS	NS	NS
18.	Nganjuk	NS	NS	NS	NS	NS
19.	Madiun	NS	NS	NS	NS	NS
20.	Magetan	NS	NS	NS	NS	NS
21.	Ngawi	NS	NS	NS	NS	NS
22.	Bojonegoro	NS	NS	NS	NS	NS
23.	Tuban	NS	NS	NS	NS	NS
24.	Lamongan	NS	NS	NS	NS	NS
25.	Gresik	NS	NS	NS	NS	NS
26.	Bangkalan	NS	NS	NS	NS	NS
27.	Sampang	NS	NS	NS	NS	NS
28.	Pamekasan	NS	NS	NS	NS	NS
29.	Sumenep	NS	NS	NS	NS	NS
30.	Kediri City	NS	NS	NS	NS	NS
31.	Blitar City	NS	NS	NS	NS	NS
32.	Malang City	NS	NS	NS	NS	NS
33.	Probolinggo City	NS	NS	NS	NS	NS

No.	Districts/Cities	Smooth Implementation of SIA-IBI in The Last 5 Years					
		2015	2016	2017	2018	2019	
34.	Pasuruan City	NS	NS	NS	NS	NS	
35.	Mojokerto City	NS	NS	NS	NS	NS	
36.	Madiun City	NS	NS	NS	NS	NS	
37.	Surabaya City	NS	NS	NS	NS	NS	
38.	Batu City	NS	NS	NS	NS	NS	

Note: NS = Not Smooth

### b. The Obstacles in Implementing SIA-IBI

The results of interviews with SIA-IBI administrators in all districts / cities in East Java Province regarding the obstacles in implementing SIA-IBI that they have experienced during their assignment to date are shown in Table 2.

No.	The Obstacles	Serial Number of Respondents	Percentage
1.	Internet connection	1, 3, 9, 24, 25, 28	15.78%
2.	Double duty	2, 5, 10, 15, 26, 29, 31, 32, 33, 34, 35,	31.57%
		36	
3.	Completeness of data	3, 4, 6, 7, 11, 14, 18, 20, 21, 23, 27, 28	31.57%
4.	Fickle system	11, 30	5.26%
5.	Limited time	2, 5, 10, 11, 13, 15, 17, 27, 33, 37	26.31%
6.	Not yet proficient	22, 30, 31, 38	10.52%
7.	Lack of equipment	9, 20, 21, 24, 38	13.15%
8.	Low response to the system	3, 8, 9, 17, 18, 19, 24, 34, 36	23.68%

Table 2. The Obstacles in Implementing SIA-IBI

Based on table 2, it can be seen that the obstacles faced by SIA-IBI administrators vary widely. To make it easier to understand, the obstacles are grouped into 8 groups, with various distributions.

## **D. DISCUSSION**

The results of this study indicate that there are still problems in implementing SIA-IBI in all districts / cities in East Java Province, Indonesia. Even from the data obtained, it is known that there are no districts / cities that have been smooth in implementing SIA-IBI. In other words, we have found "the low level of implementation of SIA-IBI at the district / city level in East Java Province by administrators." This low implementation indicates the low acceptance of SIA-IBI by administrators, as the concept of the Technology Acceptance Model, commonly known as TAM (Davis, et al., 1989; Venkatesh & Davis, 2000; Venkatesh & Bala, 2008) states that acceptance of an information system is marked with the behavior of the use of the system by users.

In connection with the problems above, an identification has been made of the causes of the non-smooth implementation of SIA-IBI, which was obtained through interviews (table 2). Based on the results of the interview, and referring to the theoretical concepts that have existed previously, namely TAM, Organization Citizenship Behavior (OCB), Organizational Support (OS), it is concluded that there are 3 factors that can be suspected to be the cause of not smooth implementation of SIA-IBI at the level of districts / cities in East Java Province, as shown in table 3.

No.	Interview Results	Possible Causes	Theory as a Reference
1.	- Not yet proficient	Difficulty using the	Technology Acceptance
	- Fickle system	system (Perceived Ease	Model (TAM)
		of Use)	
2.	- Completeness of data	Lack of perceived	Technology Acceptance
	- Low response to the	usefulness of the system	Model (TAM)
	system	(Perceived Usefulness)	
3.	- Internet connection	Inadequate	Perceived Organizational
	- Lack of equipment	organizational support	Support (POS)
4.	- Double duty	Is an additional task	Organizational Citizenship
	- Limited time	outside of the main task	Behavior (OCB) Theory

Table 3.	The	Possible	Causes	of Not A	Accepting	SIA-IBI

Referring to TAM, it can be explained that 2 factors are causing the low acceptance of SIA-IBI, namely:

- 1. The level of difficulty felt by users when running SIA-IBI, which is relevant to **perceived ease of use**, which is indicated by empirical data: not yet proficient and the fickle system.
- 2. The low benefit of SIA-IBI felt by users, which is relevant to **perceived usefulness**, which is indicated by empirical data: insufficient data completeness, low member response to the system.

Meanwhile, 2 more factors are not in the TAM, namely:

- 1. Inadequate organizational support in implementing SIA-IBI, including: inadequate internet connection and inadequate equipment. This condition, can be referred to the **Perceived Organizational Support** Theory.
- 2. The implementation of SIA-IBI is an additional task outside the main task, such as the status as a double duty, the limited time to run the system. This condition can be referred to as **Organizational Citizenship Behavior**, which is voluntary behavior that exceeds its main duties, for the sake of organizational progress.

The following is an explanation of the problems in implementing SIA-IBI in East Java Province, with reference to TAM, POS, and OCB as theoretical references so that the root of the problem can be identified more clearly. Theoretically, this problem can be referred to in TAM as the most widely used theoretical model to explain the acceptance of information technology implementation. In TAM, it is explained that the acceptance of information technology (Actual System Use / AU) (Davis, et al., 1989; Venkatesh & Davis, 2000;

Venkatesh & Bala, 2008). Referring to this reference, it can be said that the low implementation of SIA-IBI by administrators is identical to the low actual system use. Thus, the "low usage" of SIA-IBI indicates the "low acceptance" of administrators to this system.

Actual system use is influenced by the user's intention to use information technology (behavioral intention to use / BI). User intention is influenced by perceived ease of use (PEOU), namely the level of ease felt by users in carrying out information technology; and perceived usefulness (PU), namely the level of usefulness of information technology that is felt by users (Davis, et al., 1989).

Thus, the low use of SIA-IBI is identical to the low actual system use. Furthermore, it can be interpreted that the low actual system use (AU) indicates the low acceptance of SIA-IBI by administrators at the district / city level in East Java Province. So referring to TAM, the low acceptance of the system is influenced by the administrator's intention to run the system (behavioral intention to use). Furthermore, the intention to run SIA-IBI can be influenced by two factors, namely the level of ease felt by administrators in running the system (perceived ease of use) and the level of perceived usefulness of the system (perceived usefulness).

Regarding the low organizational support in IBI, it has been explained above that it can be referred to as **Perceived Organizational Support (POS)**. Several studies on the acceptance of information technology show that perceived organizational support has a positive effect on perceived ease of use (Chuo, et al., 2011; Lee, et al., 2010; Shih & Huang, 2009; Nugroho, et al., 2016), perceived usefulness (Lee, et al., 2010; Lopez & Manson, 1997; McFarland & Hamilton, 2006; Shih & Huang, 2009; Nugroho, et al., 2016), behavioral intention (Macharia & Nyakwende, 2010; Mitchel, et al., 2012; Snicker, 2013; Nugroho, et al., 2016), and actual system use (McFarland & Hamilton, 2006; Nugroho, et al., 2016). In relation to the implementation of SIA-IBI in East Java, the organizational support in question comes from the Indonesian Midwives Association in the level of East Java Province and districts / cities, including: 1) Support from supervisors; 2) A supportive work environment such as: effective communication within the organization, operational assistance, problem solving assistance, and availability of facilities; 3) Rewards for system operators.

Although what was identified in this study was only related to facility support, but POS explained that organizational support was broader as mentioned above.

Meanwhile, the implementation of SIA-IBI, which is still an additional duty for administrators, is relevant to **organizational citizenship behavior (OCB)**. This is in accordance with the definition of OCB, namely the behavior of organizational members to support organizational progress even though they have to exceed their main duties.

The causative factors above can then be used as a basis for the development of TAM, which can be used to explain the acceptance of SIA-IBI in East Java Province. Of course, this must go through further research. Thus, it is hoped that a new model will be found that can explain the acceptance of SIA-IBI in East Java, with TAM as the backbone, which is developed using POS and OCB as organizational factors.

#### **E. CONCLUSION**

Based on the results of research and discussion, it can be concluded that the implementation of SIA-IBI in all districts / cities in East Java Province has not been going well, and this is related to obstacles from technical and organizational aspects.

## REFERENCES

- Chuo, Y. H., Tsai, C. H., Lan, Y. L., Tsai, C. S., 2011. The Effect of Organizational Support, Self Efficacy, and Computer Anxiety on The Usage Intention of E-learning. *African Journal of Business Management*, vol. 5, no. 14, pp. 5518-5523.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, XXXV, 982–1003.
- Lee, D. H., Lee, S. M., Olson, D. L., 2010. The Effect of Organizational Support on ERP Implementation. *Industrial Management & Data Systems*, vol. 110, no. 2, pp. 269-283.
- Lopez, D. A., Manson, D. P., 1997. A Study of Individual Computer Self-Efficacy and Perceived Usefulness of The Empowered Desktop Information System. *Journal of Interdisciplinary Studies*, vol. 10, no. 1, pp. 83-92.
- Macharia, J., Nyakwende, E., 2010. Vice-Chancellors Influence on Academic Staff Intentions to Use Learning Management Systems (LMS) For Teaching and Learning. *The Journal of Language, Technology & Entrepreneurship in Africa*, vol. 2, no.1, pp. 220-230.
- Mcfarland, D. J., Hamilton, D., 2006. Adding Contextual Specificity to The Technology Acceptance Model. *Computers in Human Behavior*, vol. 22, no. 1, pp. 427–447.
- Mitchel, J.I., Gagne, M., Beaudry, A., Dyer, L., 2012. The Role of Perceived Organizational Support, Distributive Justice and Motivationin Reactions to New Information Technology. *Computer in Human Behavior*, vol. 28, no. 1, pp. 729-738.
- MTKI. (2020). Report of the Indonesian Health Workforce Assembly (Laporan Majelis Tenaga Kesehatan Indonesia). Jakarta: Majelis Tenaga Kesehatan Indonesia.
- PP IBI. (2018). Implementation Guidelines for the IBI Organization (Petunjuk Pelaksanaan Organisasi IBI). Jakarta: Pengurus Pusat Ikatan Bidan Indonesia.
- Nugroho, H. S. W. (2014). Descriptive Data Analysis for Categorical Data (Analisis Data Secara Deskriptif untuk Data Kategorik). Ponorogo: FORIKES.
- Nugroho, H. S. W., Supriyanto, S., Notobroto, H. B. (2016). The Role of Perceived Organizational Support, Personal Characteristic and Perceived Enjoyment in Acceptance Model of Maternal and Child Health Information System" (Peran Perceived Organizational Support, Personal Characteristic,

dan Perceived Enjoyment Dalam Model Penerimaan Sistem Informasi Kesehatan Ibu dan Anak). Surabaya: FKM-UNAIR.

- Shih, Y. Y, Huang, S. S., 2009. The Actual Usage of ERP Systems: An Extended Technology Acceptance Perspective. *Journal of Research and Practice in Information Technology*, vol. 41, no. 3, pp. 263-276.
- Snicker, E., 2013. Employee Self-Service Technology Acceptance: A Case Study at TAP Portugal. *Dissertation*. Faculdade de Engenharia da Universidade do Porto.
- Venkatesh, V. & Bala, H. (2008). Technology Acceptance Model 3 and A Research Agenda

on Interventions. Decision Sciences, 273-315.

Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of The Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science, XLVI* (2), 186–204.