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URL of this article: <http://heanoti.com/index.php/hn/article/view/hn1111>

Understanding The Resistance to Health Information Systems

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ABSTRACT

User resistance is users' opposition to system implementation. Resistance often occurs as a result of a mismatch between management goals and employee preferences. There are two types of resistance to health information system namely active resistance and passive resistance. The manifestation of active resistance are being critical, blaming/accusing, blocking, fault finding, sabotaging, undermining, ridiculing, intimidating/threatening, starting rumors, appealing to fear, manipulating arguing, using facts selectively, distorting facts and raising objections. The manifestation of passive resistance are agreeing verbally but not following through, failing to implement change, procrastinating/dragging feet, feigning ignorance, withholding information, suggestions, help or support, and standing by and allowing the change to fail.

Keywords: Health information systems, User Resistance, Active resistance, Passive resistance

INTRODUCTION

In this global era, information and communication technology (ICT) has been widely used to support the implementation of health information systems (Nugroho, et al., 2016). In relation to the above, health care institutions such as hospitals, health offices, community health centers, health clinics and so forth have implemented health information systems with ICT support in service management. Typically, health information systems are implemented within organizations, with healthcare professionals as users such as doctors, nurses, midwives, nutritionists, sanitarians and so on. Generally health information systems are classified as mandatory information systems, which have different characteristics from voluntary information systems. In the mandatory information system, users are required to run an unconditional information system. Health professionals must implement this system, has no choice whether to use the system, or not (Gewald & Gewald, 2017).

In addition to providing health services, health professionals must also perform the additional task of becoming end-users of the health information system at the institution where they work. Often, these health professionals complain that the addition of this work is burdensome. The reality on the ground shows that there are still many health professionals who are not yet familiar with information technology. For those belonging to this group, it may be necessary to step up efforts so that they can run the health information system properly. Additional efforts to be performed by the user in order to operate such information technology are known as increased effort (Salih, et al., 2013; Nugroho, et al., 2017).

Increased efforts may relate to factors such as low education, lack of training experience on ICT and changes in job content (Salih, et al., 2013). Associated with the "change of job content", the implementation of ICT-based health information systems will bring significant changes to the work. If before the time of change they only perform the task of providing health services and then documenting it manually (paper-based), now they have to document it into computer-based information systems, so they are required to proficiently operate information and communication technology devices.

The above problems can have an impact on the resistance of health professionals as users to the implementation of health information systems. If not properly anticipated, then resistance may threaten the

sustainability of the implementation of health information systems. Some scholars have argued that user resistance can lead to failure to initiate a change (Lawrence, 1954; Maurer, 1996; Strelbel, 1994; Waddell & Sohal, 1998).

RESISTANCE TO HEALTH INFORMATION SYSTEMS

In his study, Klaus (2005) defines user resistance as users’ opposition to system implementation. Resistance often occurs as a result of a mismatch between management goals and employee preferences. Until now, there are still many assumptions that resistance is the opposite of acceptance. But in reality, many employees have clearly implemented an information system within the organization in which they work, but passively there has been resistance within him/her. Under these conditions, resistance may be manifested in covert actions such as procrastination, "forgetting" certain tasks, or slow performance in task execution (Marakas & Hornik, 1996).

Resistance to change can occur in two forms, namely active resistance and passive resistance. Active resistance is characterized by behaviors that openly indicate resistance to change, ranging from less aggressive rejection to highly aggressive rejection. Passive resistance is not accompanied by overt refusal. In this case, an employee is willing to implement the changes implemented within the organization, but he does not carry out the changes in earnest. Hultman (2003) has presented examples of behavioral manifestations classified as both active and passive resistance, as shown in Figure 1.

RESISTANCE TO CHANGE	ACTIVE RESISTANCE		
	Being critical	Blaming/accusing	Blocking
	Fault-Finding	Sabotaging	Undermining
	Ridiculing	Intimidating/threatening	Starting rumors
	Appealing to fear	Manipulating	Arguing
	Using facts selectively	Distorting facts	Raising objections
	PASSIVE RESISTANCE		
	Agreeing verbally but not following through.		
	Failing to implement change.		
	Procrastinating/dragging feet.		
Feigning ignorance			
Withholding information, suggestions, help or support.			
Standing by and allowing the change to fail.			

Figure 1. The manifestation of active and passive resistance (Hultman, 2003)

The following is an explanation accompanied by examples of each of the manifestations of active resistance associated with the implementation of health information systems.

Being critical

A health worker who refuses the implementation of a health information system can throw a variety of criticisms of the system. The criticism is presented as a mere reason for the system to be reviewed or aborted, or used as an excuse simply because he or she does not have the will or ability to run the information system. Some common examples of criticism are: the system is not built properly, the system procedure is too complicated, the system does not match the needs, and so on.

Blaming/accusing

A user may refuse the implementation of the information system by blaming or accusing the initiator or manager of the information system. He actively calls for allegations of allegations with a view to cover up his

inability or unwillingness to run the information system. Examples of possible alleged allegations include: health information information systems built only to get aid projects, systems in a hurry are implemented where resources are not well prepared, and so on.

Blocking

An end user's resistance to the implementation of a health information system may be demonstrated by actions aimed at blocking the implementation of a health information system, such as engaging with other users to perform other activities, disrupting the smoothness of the internet so that the system can not operate, as well as other behaviors Blocking.

Fault-Finding

One of the active efforts made by users who are resistant to the implementation of information systems is to conduct the act of "Fault-Finding" is an attempt to find fault-related information systems that have been implemented in the organization. They find fault with various elements such as software is considered incompatible,

Sabotaging

A user who is resistant to the implementation of a health information system may be sabotaging. The evil purpose of this sabotage act is to block the smooth running of the information system being implemented. Sabotage can be done in various ways such as hiding data that should be ready to be inserted into the database system or retaining the material to be used to support the implementation of the system

Undermining

A user who is resistant to the application of a health information system may commit undermining the system's existence. For example, disrupt a well-functioning computer program, or damage hardware slowly and clandestinely.

Ridiculing

User resistance to the implementation of health information systems is also manifested by throwing taunts. Ridicule can be directed to developers or system managers or can be to fellow users. An example is a ridicule that it is impossible for the system to work properly because many system users are not adept at using the computer.

Intimidating/threatening

A more violent form of resistance behavior is to intimidate. An example is to intimidate or threaten fellow users not to run a health information system. Active users still operate information systems, threatened to be shunned, unhelpful, excluded from groups, and so on.

Starting rumors

There is also resistance that is manifested by behavior that is not a knight is to spread the word clandestinely about the ugliness of the implementation of health information systems, both in terms of hardware, software, and brainware. For example rumors spread that the health information system was enacted only to disburse project funds from the government.

Appealing to fear

This behavior is manifested by frightening fellow users. There are many ways to make other users afraid to run a health information system, such as saying that if they are not proficient in operating a computer it will often occur error, this will cause damage to computers and programs used, and users should be responsible for the damage.

Manipulating

This behavioral resistance can also be manifested by manipulative actions, such as manipulating information that can discourage other users from implementing health information systems.

Arguing

Rejection of information systems can also be done by debating the developers, managers, or fellow users of the system. In principle this debate is used to weaken the existence of health information systems. Various reasons are used as arguments to show the ugliness of the information system that has been applied. Arguments can also be used to prevent the introduction of new information systems.

Using facts selectively

In this case, a user who is resistant to the information system will pick out the facts that benefit himself/herself. If there is a fact that could harm the existence of the information system, then he will use it or spread it to weaken the system that has been enforced, and vice versa if there is a fact that strengthens the position of the information system, then he does not use it.

Distorting facts

A user who is resistant to information systems can perform various reckless actions, one of which is 'twisting' facts. The lucky facts for the sustainability of information system implementation can be distorted so that it can harm the system. For example, the fact is that the majority of users are ready to run the system this year, but while representing users he reports to the manager that new users are ready to run the system in the coming year. Indeed there are still users who are not ready to carry out now, but the numbers are few.

Raising objections

Active resistance to the implementation of information systems can also be realized by raising objections to run the system for various reasons. He invites fellow users to jointly appeal to implement the system, for example by reason of not yet technically ready, the more important organizational project can not be completed, and various other reasons.

The above explanations are examples of actions performed actively by the user (active resistance), which aims to thwart the implementation of information systems that have been imposed by the organization. On the other hand there are also resistances that are manifested in a more subtle, passive resistance. Users who realize passive resistance are not easily known by others. The following is an explanation of each of the six main characteristics of passive resistance to the implementation of information systems.

Agreeing verbally but not following through.

In this first type of manifestation, the end-user has verbally agreed or supported the implementation of the information system, but in reality he did not run the information system seriously. In other words, the consent expressed only in speech alone, while not in action. So in this case, there is no commitment from within the user to run the system that has been imposed by the organization.

Failing to implement change.

In this case, the end-user does not succeed to participate in implementing the information system as well as possible, such as frequent errors in charging data. This can happen because of low spirit and low enjoyment in implementing system information system.

Procrastinating/dragging feet

In this case, the user often or even always procrastinate his duty to operate the information system with various reasons rational strived. One of them may reasonably still busy completing the main task of caring for patients, some argue that the deadline for submission of reports is still long, there is also a reason that still have many difficulties to complete the task in the near future, even some are looking for a reason Not related to the tasks in his work.

Feigning ignorance

In this case, the user pretends not to know anything about the health information system that has been enforced. If the manager warns him/her, he ignores it and does not feel obliged to implement the system as well as possible. He/she did not feel that running a health information system was his primary duty. In this case, there is no self-awareness of the information system implemented in the organization, or in other words, has no "sense of belonging to information systems", whereas the implementation of information systems require the active role of him/her as a user.

Withholding information, suggestions, help or support.

In this case, the user holds or does not convey the things that are useful for the sustainability of the implementation of health information systems. For example, he has important or valuable information for the development of a health information system, but he/she does not submit it to authorities such as a manager or system developer. He/she is passive in the sense that he does not want to make suggestions useful to managers or developers, but he has positive ideas that can be delivered. He/she also does not want to provide assistance or support for the sustainability and progress of the implementation of information systems, even though he has the ability to do so.

Standing by and allowing the change to fail.

When the health information system is in a bad condition, the user actually feels more like it. He/she prefers waiting and prepares to welcome the failure of the implementation of the information system within his organization. In other words, he/she does want the information system fails to be implemented. The failure of this information system implementation will make him/her free of this mandatory additional task. In other words, there is no more loyalty to the program created by the organization, which should require full support from him/her.

CONCLUSION

Based on a description of the manifestations of active resistance and passive resistance to health information systems, it can be concluded that user resistance is a serious problem that must be solved by the manager or developer of the health information system. So it is true if experts say that user resistance is the main cause of failure of information system implementation, including health information system. The last type of passive resistance is the omission of the system.

One of the important things to solve the problem of resistance to the implementation of health information system is to improve and maintain organizational support for health professionals as users. This support can be realized in the form of: 1) supervisor support such as support from direct supervisor and system manager, 2) working conditions such as mentoring service, technical assistance, communication between user with direct superior, communication between user and system manager, and provision, adequate facilities, and 3) rewards, both financially and non financially such as self-esteem, sense of achievement, sense of development (heru ijphs)

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