

## **The development of a multi-dimensional reporting system for monitoring operations and the decision of the administrators. study case of Halal Science Center Chulalongkorn University, Pattani Office**

**Pitak Ardmare<sup>1</sup>, Anyamanee Nakarakaw<sup>1</sup>, Nurulhuda doolah<sup>1</sup>, Arseeyah Lateh<sup>1</sup>,  
Fakutdeen Tapohtoh<sup>1</sup>, Zunuri Sedeh<sup>1</sup>, Habilla Chapakiya<sup>1</sup>, Ameen Mahmud<sup>1</sup>, Nifarid  
Radenamad<sup>1</sup>, Winai Dahlan<sup>2</sup>**

<sup>1</sup>Halal Science Center, Chulalongkorn University, Pattani office, Thailand

<sup>2</sup>Halal Science Center, Chulalongkorn University, Bangkok, Thailand

### **Abstract**

The Halal Science Center Chulalongkorn University at Pattani Office was established in 2009 with the primary mission of developing areas according to the Indonesia-MalaysiaThailand Growth Triangle (IMT-GT) through the project to increase personnel potential from the border provinces in the southern region until now. In addition, must report the performance of the various activities Performance in finance, supplies, content, people, public relations, Etc. Through weekly reports. The Executive Committee of The Halal Science Center Chulalongkorn University's monthly report and the report found that have the problem of the past operations cannot see the overall picture of the whole operation. Therefore, this research was conducted to develop a system for monitoring and reporting the performance in a multi-dimensional format and testing the users' satisfaction. So, results of the study showed that the multi-dimensional performance tracking and reporting system had been developed with Microsoft Excel that can reduce the operating time reduce about 70.00%, while Users of the monitoring and reporting system have an outstanding level of satisfaction from 15 total users.

**Keywords:** *Dashboard; Monitor, Office dashboard, Excel dashboard*



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### **INTRODUCTION**

Nowadays, the economy is motivated by digital information becoming the biggest asset of an organization. Business operations and work processes are relied on information to create added value. Then for absolute competitive advantage, companies in all industries develop strategies for information management. Knowledge management was used to different priorities and harvest and leverage information to make business decisions [3]. Information and knowledge This is therefore extremely important for management's decision-making. Suppose accessed information Manage and select information efficiently. Therefore, the system for supporting information management to be accurate and complete will support the management and decision-making with the most correct and effective.

Corresponding author  
Pitak Ardmare  
pitak.hsc@gmail.com  
DOI: <https://doi.org/10.31098/ihsatec.v14i1.502>

Research Synergy Foundation

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The Halal Science Center Chulalongkorn University (HSC) has expanded the responsibility in the southern border part of Thailand since 2009 by establishing a Pattani office that works on "Project to increase personnel from in southern border Thailand. The projects that have been commissioned from the center must report the performance of various activities, financial performance, supplies, content, people, and public relations, Etc., through weekly reports. Monthly report and report of the Executive Committee of the Halal Science Center Chulalongkorn University Period to acknowledge the problems and needs of the management of the Halal Science Center.

Reporting problems

- a) There is much information from different parties to be collected and scattered among different parties. It cannot be used
- b) There is no linkage of information from different parties. That is a puzzle in different parts, which are not projected overall picture of the operation.
- c) Unable to keep track of the operations of various departments, the current operational status, must wait for reporting to be informed of the current state of operations.
- d) Lack of multi-dimensional reporting and inability to analyze data for organizational decision-making.
- e) There was a delay in reporting, doing the job out of date, incapability to analyze data, and forecast operations trends.

Executive needs

- a) Overview of the current state of the organization.
- b) Past operating trends and future decisions of the activities.
- c) Visualize the performance in each section. Linked to a big picture to follow up on problems and resolve them promptly.

Objective

- a) To develop the performance monitoring and reporting system in a multi-dimensional format to monitor operations and support management decisions.
- b) To test the satisfaction of users of the system to track and report the performance in a multi-dimensional format

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**RESEARCH METHODOLOGY**

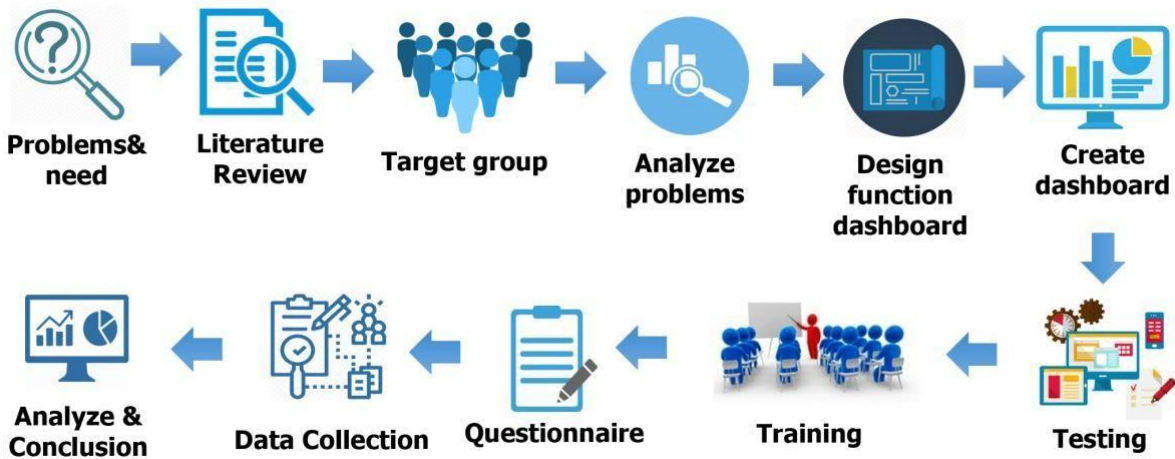


Figure 1 The Methodology Framework of The Study

**FINDINGS AND DISCUSSION**

This research can be summarized as follows

Development of monitoring and reporting system on the performance in a multidimensional format.

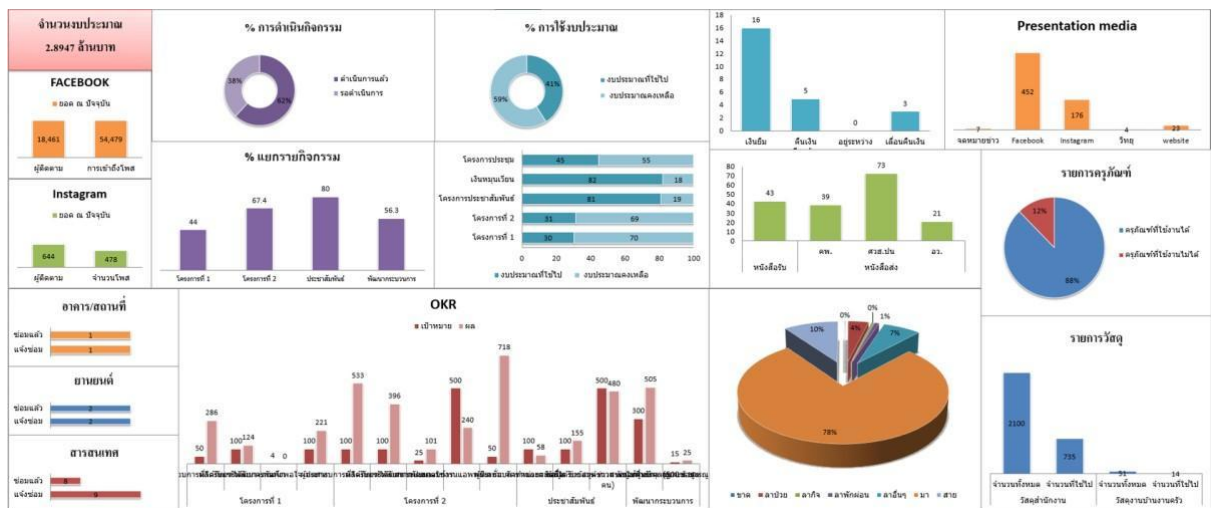


Figure 2 Monitoring and reporting dashboard presented in multidimensional format.

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Reducing time to follow up and report on the performance of The Halal Science Center Chulalongkorn University (Pattani office).

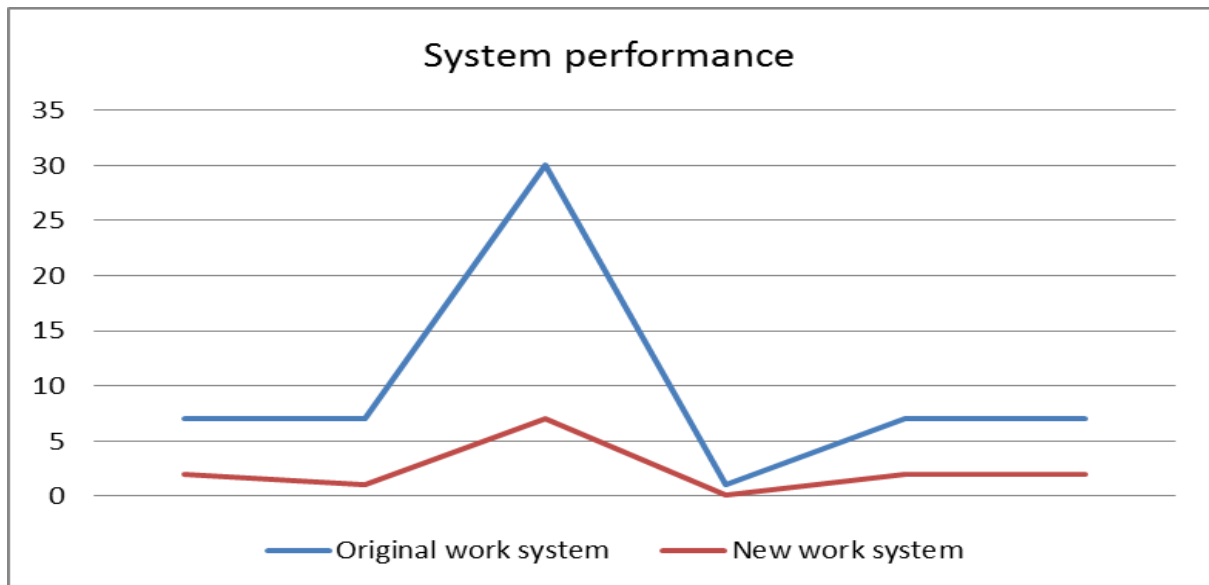


Figure 3 Line graph showed system performance

Reduction of time monitoring and reporting of performance comparing pre-adjustment and post-adjustment operations the follow-up and reporting of results were improved by ten days after improvement to 3 days, which reduced the tracking and reporting time by 70.00%.

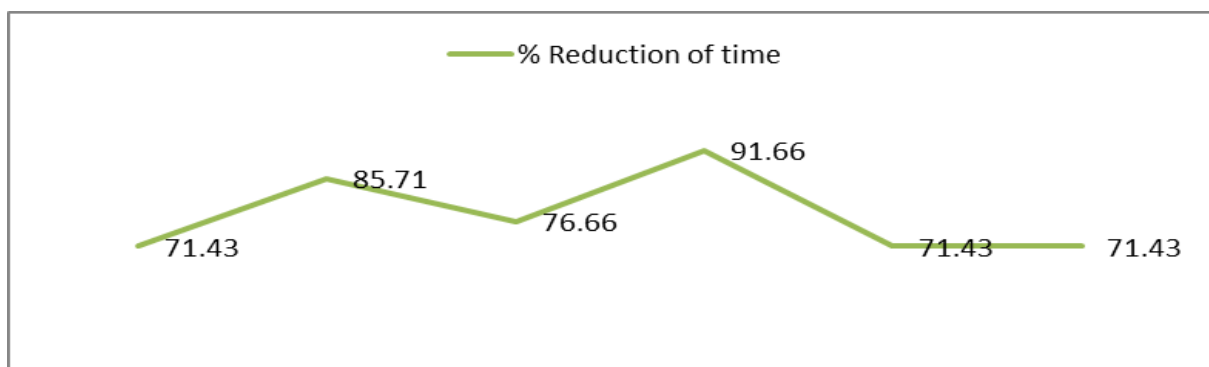


Figure 4 Line graph showed reduction of time (percent)

Satisfaction with using multi-dimensional tracking and reporting system.

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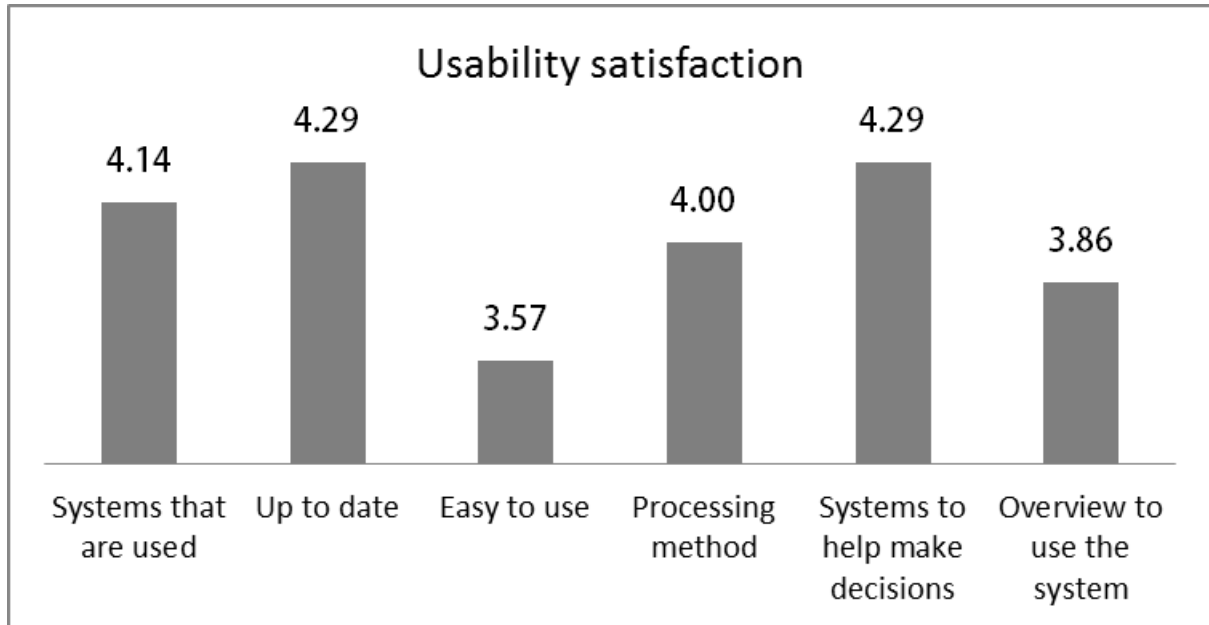


Figure 5 Bar chart showed usability satisfaction

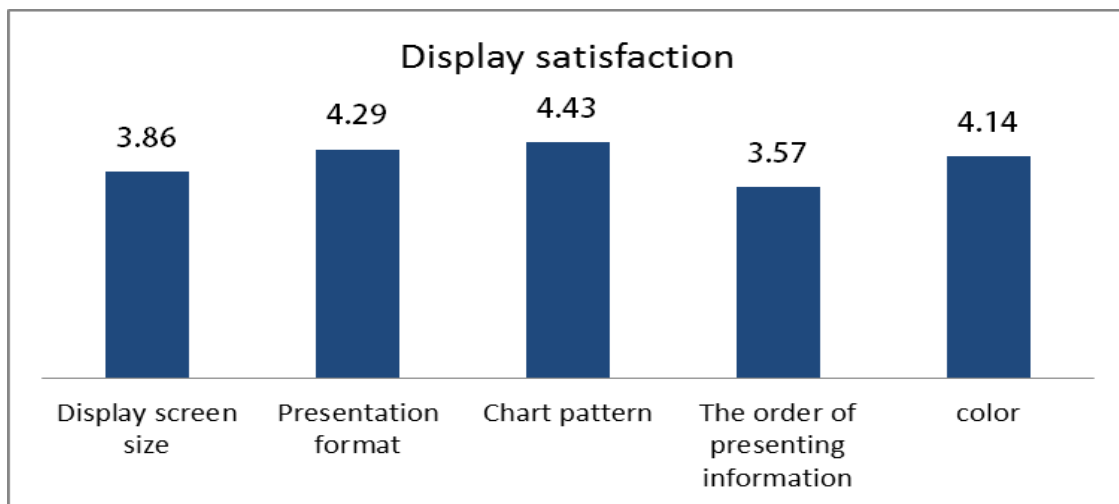


Figure 6 Bar chart display 5 category of satisfaction

The satisfaction level of the use of multi-dimensional monitoring and reporting systems to monitor management operations and decisions is shown in the figure. From the population of 15

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people of the Halal Science Center Chulalongkorn University Pattani Office, it was found that the satisfaction level of the system users was outstanding. It accounted for 80.80%.

### **DISCUSSION**

The development of a monitoring and reporting system is necessary for improving the performance of the Halal Science Center Chulalongkorn University Pattani Office to manage the project. A multi-dimensional reporting system provided the dashboard to see the overall picture of the operation and follow up to solve the operational problems on time. Figure 2 shows the reduction of the operating time to 7 days, with 70.00 percent of the monitoring and reporting time prior to system development. However, the satisfaction level of the monitoring and reporting system was outstandingly presented in 80.80 percent of the total population of 15 people by this research reducing the operating time. In addition, it provided an overview of current project execution and agency status and helped management decision-making drive further work.

### **ACKNOWLEDGEMENTS**

We appreciate the support provided by The Halal Science Center Chulalongkorn University, Pattani office.

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