

University Key Performance Indicator Management Model (e-KPIus)

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Abstract— Coordinating numerous projects conducted by various parties within the university is a daunting task as it involves many individuals and groups. To make it easier for Strategic Planning Unit (UPS) of UiTM Cawangan Kelantan to monitor all projects being worked on, an application named the Key Performance Indicator Management Model (e-KPIus) was developed. The "e-KPIus" is a systematic approach to data collection, and supervision of the project progress by the top management and serves as an information sharing platform. e-KPIus gives significant and valuable contributions to UPS as it ensures the quality control and improvement in the context of UPS data management. Although the idea of the application developed is undoubtedly convincing, the effectiveness of the application is yet to proof. Thus, a study was undertaken aiming at assessing the effectiveness of e-KPIus. A total of 40 respondents consist of project executors, and performance indicators (PI) keepers at UiTM Cawangan Kelantan participated in this study. Findings revealed that e-KPIus has received a favorable response from users. This project suggested that the e-KPIus can be used to enhance the quality of data management process in UPS and has a great potential to be extended to other departments to ensure better quality of performance management.

Keywords—performance, indicator, management

I. INTRODUCTION AND LITERATURES

Based on the past record, few issues has gain attention of the top management, which requires UPS to find effective solution to the issue. First, UPS has face the difficulties of collecting and recording data from each unit or PI holder. Coordinating numerous projects conducted by various parties within the university is a daunting task as it involves many individuals and groups. Second, a need for top management to gain accessto PI targets and to get updated information on the progress and other relevant information required for planning and decision making purposes. Third, a need for UPS to enhance the monitoring process in spite current PI

achievements. Based on the JKEN report, top management also wishes to improve UiTM Cawangan Kelantan's KPI achievement for future year.

Systematic approach to data collection, supervision of the project progress by the top management and information sharing platform are the important element in quality control [1-3]. To make it easier for Strategic Planning Unit (UPS) to monitor all projects being worked on, the objective of this project is to develop an application named the Key Performance Indicator Management Model, UiTM Kelantan (e-KPIus). The _e-KPIus is a systematic approach to data collection, and supervision of the project progress by the top management and serves as an information sharing platform. The project also aims to examine the effectiveness of the KPI management model among users.

II. METHODOLOGY

Figure 1 shows the flow chart of the study methodology carried out to achieve the main objectives of the study as follows; 1) Developing University Key Performance Indicator (KPI) management model for Strategic Planning Unit (UPS), UiTM Kelantan; 2) To study the effectiveness of e-KPIus among users.

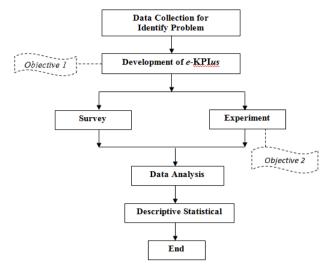


Figure 1: The flow chart of the study methodology

III. ANALYSIS AND RESULT

The study successfully developed *e*-KPI*us* management model based on Systems Development Life Cycle (SDLC) that contains four main phases as in Figure 2. Table 1 explain the details in each phase of *e*-KPI*us* management model.

TABLE 1 e-KPIus MANAGEMENT MODEL

Phase	Details
Planning	 identifying the planning information to form groups representing groups of activities. This phase consists of two main processes: The collection of PI-based planning information is outlined by the CSPI, Shah Alam, the mandate of the Vice Chancellor of UiTM, and the mandate of the UiTM Kelantan Branch. Distribution of PI to responsible owners. The owner is appointed as the Project Manager. The project manager is responsible for planning and ensuring that planning is in place.
Designing	Forming a team to implement the PI that is assigned to the Project Manager. This phase involves the following processes: Each designated project manager is responsible for preparing his or her own blueprint to achieve the PI target. The Blueprint is used as a guide by executives (faculty, divisions, units) to plan activities / programs. Executives provide planning as outlined by the project manager. The project manager is responsible for selecting or refining activities / programs / participation based on PI goals. Based on the planning provided by all the faculties, divisions, and units involved, the project manager builds the project team to make the plan successful.
Implementation	Gathering information on the implementation of planned activities. To facilitate data collection, UPS recommends owners and executives use the information sharing method. Here's the process for this phase: The project manager lists all approved activities according to the project team that has been formed. The project team / Executor must report the activities that have been carried out or

- participating in by the project manager.
- The project manager needs to report the achievements every two months to the UPS Coordinator.
- The UPS coordinator will report the latest achievements every two months to the UePMO system, CSPI.

Evaluation

Evaluating the achievements and monitor all of the PIs assigned to the Project Manager in particular and the Kelantan Branch UiTM in general. Action requires;1) UPS coordinators need access to achievements issued by CSPI through the UePMO system every two months. 2) The UPS coordinator needs to provide intervention reports for PI who have not met the target and are reported to the CSPI. 3) The project manager must cooperate to provide feedback on the pending PI to the UPS Coordinator. 4) The UPS Coordinator should provide current achievement report information to all those involved in strategic planning as a guide to planning implementation.



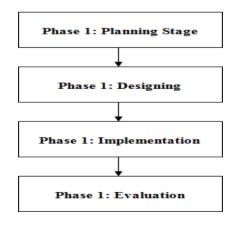


Figure 2: e-KPIus management model

Although the idea of the application developed is undoubtedly convincing, the effectiveness of the application is yet to proof. Thus, a study was undertaken aiming at assessing the effectiveness of e-KPIus among project executors, and performance indicators (PI) keepers at UiTMCK. Findings as in Table 2 revealed that e-KPIus has received a favorable response from users.

TABLE 2 RESULT OF EFFECTIVENESS SURVEY

Effectiveness of e-KPIus	Neutral	Agree	Strongly Agree
Data management processes using <i>e</i> -KPI <i>us</i> is more systematic	-	100%	-
The time taken for data collection via <i>e</i> -KPI <i>us</i> is shorter	-	100%	-
e-KPIus is a good platform for information sharing	-	67%	33%
e-KPIus makes the projects' monitoring process easier	-	67%	33%
e-KPIus is a user-friendly interface	33%	67%	-

IV CONCLUSION

e-KPIus ensures the quality control and improvement in the context of UPS data management. This project suggested that the e-KPIus can be used to enhance the quality of data management process in UPS and has a great potential to be extended to other departments to ensure better quality of performance management.

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REFERENCES

- [1] Amitava Mitra, Fundamentals of Quality Control and Improvement, 4th ed., John Wiley & Sons, 2016.
- [2] Dale H. Besterfield, *Quality Improvement*, 9th ed., Prentice Hall, 2014
- [3] McMurtrey, M., A Case Study of the Application of the Systems Development Life Cycle (SDLC) in 21st Century Health Care: Something Old, Something New?. *Journal of the Southern Association for Information Systems*, 1(1), 2013.