ABSTRACT

DESIGNING INFORMATION TECHNOLOGY BLUEPRINT TO REALIZE SMART SCHOOL USING A COMBINATION OF ENTERPRISE ARCHITECTURE PLANNING AND WARD AND PEPPARD (CASE STUDY OF SMK NEGERI 1 AMPELGADING)

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SMK Negeri 1 Ampelgading in the implementation of carrying out educational functions has the responsibility of fulfilling eight national education standards which include graduate competency standards, content standards, process standards, educational assessment standards, standards for educators and education personnel, standards for educational facilities and infrastructure, education management standards, and financing standards. Based on this, to be able to meet the achievement of eight national education standards, one of which is to adopt information technology. The adoption of information technology in the education sector for learning is a model of the Hybrid Learning System (HyLS) that can improve the competence ability of students to compete globally. Information technology improves the quality of learning in the function of educational services by using educational technology media, the media is a school system concept that applies information technology in teaching and learning and administrative activities where the system is integrated with each other to school residents in accordance with their respective roles such as students, teachers, and school employee staff called smart schools. Currently, SMK Negeri 1 Ampelgading does not have an integrated information system, existing resources are not optimal to provide value benefits according to the needs of information technology services as an educational function. Therefore, SMK Negeri 1 Ampelgading requires the design of an Information Technology (IT) blueprint as a foundation and guideline in planning, structuring, implementing, and utilizing and developing SI / IT to realize smart schools. The purpose of this study is to produce an IT blueprint design in the form of data architecture, application architecture, and technology architecture to realize a smart school that is in line with the vision, mission, and goals at SMK Negeri 1 Ampelgading. The method used in this study was by using a combination of Enterprise Architecture Planning (EAP) and Ward and Peppard methods. The EAP method provides a clear definition in the current stage of condition analysis on business modeling and SI/IT. However, the analysis of the current condition of the EAP has not yet had an internal and external analysis of the organization, so the EAP method can be combined using the Ward and Peppard method in the current business analysis and SI / IT. The combination of these two methods can provide clarity and convenience regarding the design of an blueprint IT to realize smart schools at SMK Negeri 1 Ampelgading. The results of this study are in the form of an blueprint IT document to realize smart schools at SMK Negeri 1 Ampelgading within four years.

Keywords: Blueprint TI, Smart School, EAP, Ward Peppard