

ABSTRACT

PT Kereta Api Indonesia (Persero), known as PT KAI (Persero) is the State-Owned Enterprises which provide, organize, and manage the rail freight services in Indonesia. The company provides services of freight and passenger transport by rail. For long-distance passenger transport services are divided into passenger transport executive class (K1), business class (K2) and the economy class(K3). High public interest towards the use of rail transport service clearly indicates that the train is still the favorite choice than any other. In a strategic plan to improve services and respond to high public interest PT KAI will unify train service business class and economy class train into a new class. So it takes a new draft of the related realization, including rail passenger seat. Existing passenger seats used today still adopt the draft in 1987 that implement integral design concepts that not relevant for use at this time. The concept of modularity is an approach that can be done to design the passenger train that promises the flexibility to change the design and mass production. The modular design concept through design structure matrix tools will integrate components according to function into a module. The application of this concept has been successfully implemented on a variety of products including public transport such as train passenger seat.

Keywords : *Modularity Concept, Modular Product, Design Stucture Matrix*