

PROPOSED DESIGN OF INDONESIAN HSR SERVICE QUALITY KPI

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Abstract

High-Speed Railway (HSR) transportation development in certain country embodies a significant technology to support modern society's value of time and dynamic activities. Despite of complicated operations and huge investment spent, various studies stated that HSR industry faces barrier challenges to increasing ridership due to lack of punctuality, reliability, pricing scheme, and inconvenience in passenger journey. It majorly affects the reasons on why passengers may and may not choose the transport option since it influences passenger satisfaction levels. Acknowledging this global issue, an anticipation to the upcoming Indonesian HSR operation is made through this paper to survey Indonesian HSR passenger expectation which result was being the basis of performance management design. The quantitative data from across-age 200 respondents was generated through statistical analysis to determine the prioritization and it has shown tangibility and reliability attributes as the first and second most important. Afterwards, the process continued with qualitative and quantitative analysis from Indonesian railway expert interviews and previous publications of worldwide HSR which were utilized to conduct external benchmarking, validate the findings, and discover contextual performance indicators for both attributes using a Knowledge-based Performance Management System. The paper resulted in 6 performance variables on tangibility and 7 performance variables on reliability attributes which were linked and weighted for further implementation. Differ from other countries, our findings indicate that the physical facilities' importance is uniquely considered by Indonesian as it impacted tourist motivation. These new insights could focus Indonesian HSR operators to invent on-target solutions to improve passenger satisfaction which also impacting the increase of economic benefit.

Keywords: High-Speed Railway, Knowledge-based Performance Management System, Product Quality, SERVQUAL & Tangibility and Reliability.
