



## INTISARI

Evolusi teknologi digital yang pesat mendorong transformasi yang cukup signifikan pada proses pengadaan, khususnya di industri hulu minyak dan gas. Digitalisasi pengadaan melalui *e-procurement* menjadi instrumen strategis untuk meningkatkan efisiensi, akuntabilitas, serta transparansi proses bisnis. Namun demikian, tingkat keberhasilan implementasi sistem digital *procurement* sangat dipengaruhi oleh faktor teknologi, dukungan organisasi, dan kesiapan pengguna. Penelitian ini bertujuan mengevaluasi keberhasilan implementasi sistem *e-procurement* SMART by GEP melalui pengembangan kerangka *Technology Acceptance Model* (TAM) yang diperluas dengan penambahan variabel *Facilitating Conditions* dan *System Quality*.

Studi ini menerapkan metode kuantitatif yang mana pengumpulan data dilakukan dengan menggunakan kuesioner kepada 49 partisipan yang mencakup *analyst* pengadaan, *analyst* fungsi pengguna, serta penyedia barang/jasa di Perusahaan. Data yang terkumpul kemudian diolah menggunakan teknik *Partial Least Squares Structural Equation Modeling* (PLS-SEM) untuk menguji keterkaitan sebab-akibat antarvariabel serta mengevaluasi tingkat keabsahan dan keandalan model penelitian.

Hasil penelitian menunjukkan bahwa model integrasi TAM dengan variabel *Facilitating Conditions* dan *System Quality* mampu menjelaskan 46,2% variasi pada konstruk *Intention to Use* ( $R^2 = 0,462$ ;  $Q^2 = 0,259$ ). *Facilitating Conditions* menjadi faktor dominan ( $\beta = 0,463$ ;  $p < 0,001$ ), diikuti *Perceived Ease of Use* ( $\beta = 0,309$ ;  $p = 0,006$ ) dan *Perceived Usefulness* ( $\beta = 0,241$ ;  $p = 0,034$ ), sedangkan *System Quality* dan *Result Demonstrability* tidak signifikan. Secara demografis, hanya jenis kelamin yang berpengaruh terhadap intensi penggunaan. Hasil penelitian ini menunjukkan adopsi *e-procurement* bersifat *compliance-driven*, sehingga keberhasilan jangka panjang memerlukan peningkatan kualitas sistem, penyederhanaan antarmuka, dan program sosialisasi berkelanjutan, sekaligus memperluas penerapan TAM dalam konteks industri hulu migas.

**Kata kunci:** *e-procurement*, *Technology Acceptance Model* (TAM), industri hulu migas, *digital procurement*, *facilitating condition*, *system quality*, PLS-SEM.



## ABSTRACT

*The rapid evolution of digital technology has driven significant transformations in procurement processes, particularly in the upstream oil and gas industry. Digitalization of procurement through e-procurement has become a strategic tool for improving efficiency, accountability, and transparency in business processes. However, the success of implementing a digital procurement system is heavily influenced by technological factors, organizational support, and user readiness. This study aims to evaluate the successful implementation of the SMART by GEP e-procurement system through the development of an expanded Technology Acceptance Model (TAM) framework with the addition of Facilitating Conditions and System Quality variables.*

*This study employed a quantitative method, collecting data using questionnaires from 49 participants, including procurement analysts, user function analysts, and goods/services providers within the company. The collected data were then processed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the causal relationships between variables and evaluate the validity and reliability of the research model.*

*The results showed that the TAM integration model with the Facilitating Conditions and System Quality variables was able to explain 46.2% of the variation in the Intention to Use construct ( $R^2 = 0.462$ ;  $Q^2 = 0.259$ ). Facilitating Conditions was the dominant factor ( $\beta = 0.463$ ;  $p < 0.001$ ), followed by Perceived Ease of Use ( $\beta = 0.309$ ;  $p = 0.006$ ) and Perceived Usefulness ( $\beta = 0.241$ ;  $p = 0.034$ ), while System Quality and Result Demonstrability were not significant. Demographically, only gender had an effect on the intention to use. The results of this study indicate that e-procurement adoption is compliance-driven, so long-term success requires improving system quality, simplifying interfaces, and ongoing socialization programs, while expanding the application of TAM in the context of the upstream oil and gas industry.*

**Keywords:** *e-procurement, Technology Acceptance Model, upstream oil and gas industry, digital procurement, facilitating condition, system quality, PLS-SEM.*