

Energy Digitalisation Adoption in ASEAN Industries: The Role of Psychological Contract Fulfilment and Change Readiness

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ABSTRACT

Energy digitalisation is becoming central to sustainable industrial transformation in Southeast Asia, yet its uptake is not determined solely by technical readiness. This study examines the psychological attributes that shape practitioners' intention to engage with energy digitalisation. Drawing on Lewin's change model and psychological contract theory, the study conceptualises energy digitalisation intention as a configuration of knowledge, affective evaluation, preference, belief, recommendation and desirable action. Survey data were collected from 106 practitioners who attended an energy-related conference in 2023, with respondents drawn mainly from Malaysia and the wider ASEAN context. Descriptive analysis, zero-order correlation, partial correlation and Gaussian graphical modelling were conducted using Jamovi. The findings show high levels of positive attitude, preference, belief, recommendation and desirable action, while knowledge recorded the lowest mean score. Correlation analysis indicates that recommendation is strongly associated with desirable action and substantially attenuates the relationships between knowledge, feelings, preference, belief and the intention to seek further information. In the partial network, affective evaluation emerges as the most central attribute, suggesting that energy digitalisation intention is socially and psychologically reinforced rather than merely information driven. The study contributes by integrating change theory and psychological contract theory with a Gaussian graphical approach to explain human-centred energy digitalisation adoption. The findings highlight the importance of credible recommendations, affective readiness and transparent communication in advancing digital energy transitions.

JEL Codes:

Keywords: energy digitalisation; Gaussian graphical model; psychological contract theory; Lewin's change model; technology adoption; desirable action