ABSTRACT

This research addresses the qualification gap and inefficient manual recruitment in Indonesia's IT industry by developing Runix, an intelligent recruitment system. The objective was to create and validate a prototype that uses a Large Language Model (LLM) to quantitatively and objectively assess candidates. Employing a Design Science Research (DSR) methodology, a functional prototype was built using a micro-frontend architecture. The system utilizes an LLM (Qwen 2.5) with few-shot learning and the CO-STAR framework to analyze CVs and generate a quantitative match score. The research was conducted in 2025 across three companies in Semarang, Sidoarjo, and Bandung, with a sample of 6 respondents evaluating the system. The conclusion is that Runix is an effective, objective, and measurable solution, proven to increase recruitment process efficiency by over 60% and achieving a good usability score (SUS 76.66). For future work, it is recommended to mitigate LLM hallucinations, perform domain-specific fine-tuning, and expand the system's capabilities.

Keywords—information systems, recruitment, Large Language Models, Design Science Research, process automation