

ABSTRAK

JAINAL B TOGATOROP, NIM. 8196113007. Pengembangan Model Kepemimpinan Digital Berbasis Lean Six-Sigma Untuk Meningkatkan Kinerja Program Studi, *Disertasi*. Program Pascasarjana Universitas Negeri Medan. April 2026.

Penelitian ini bertujuan: (1) mengidentifikasi kondisi faktual kepemimpinan digital dan praktik manajemen mutu pada program studi; (2) mengembangkan Model Kepemimpinan Digital berbasis Lean Six Sigma (DLSS-Leadership Model); (3) memvalidasi kelayakan model; serta (4) menguji efektivitasnya dalam meningkatkan kinerja program studi.

Hasil studi pendahuluan menunjukkan bahwa pemanfaatan teknologi digital dalam pengelolaan akademik telah mulai diterapkan, namun belum sepenuhnya terintegrasi dengan pengambilan keputusan berbasis data dan sistem manajemen mutu yang sistematis. Pendekatan Lean Six Sigma sebagai metode peningkatan efisiensi proses dan pengendalian kualitas juga belum banyak diimplementasikan dalam praktik kepemimpinan akademik program studi. Kondisi ini mengindikasikan perlunya model kepemimpinan yang mampu mengintegrasikan kompetensi digital dengan pendekatan manajemen mutu berbasis data.

Penelitian ini menggunakan metode Research and Development (R&D) dengan tahapan studi pendahuluan, analisis kebutuhan, pengembangan model konseptual, validasi ahli, Focus Group Discussion (FGD), revisi model, dan uji efektivitas. Subjek penelitian terdiri atas 24 responden dari tiga program studi di Universitas Quality yang meliputi ketua program studi, dosen, tenaga kependidikan, dan mahasiswa. Data dikumpulkan melalui observasi, angket, wawancara, dan FGD, serta dianalisis secara deskriptif kuantitatif dan kualitatif.

Hasil penelitian menunjukkan bahwa kepemimpinan digital berada pada kategori baik, dengan skor tertinggi pada Adaptabilitas Teknologi (19,33) dan terendah pada Pengambilan Keputusan Berbasis Data (17,78). Penerapan Lean Six Sigma memperoleh skor 30,62, menunjukkan berkembangnya budaya efisiensi dan mutu. Model DLSS yang dikembangkan mencakup enam dimensi kepemimpinan digital—visionary, data-driven, collaborative, innovative, continuous improvement, dan agility & digital mindset yang terintegrasi dengan tahapan DMAIC (Define, Measure, Analyze, Improve, Control). Validasi ahli memperoleh nilai 4,52 (sangat baik), dan uji efektivitas menunjukkan tingkat efektivitas 70% (kategori baik).

Novelty penelitian ini terletak pada integrasi kepemimpinan digital dengan pendekatan Lean Six Sigma sebagai kerangka kepemimpinan akademik berbasis data untuk meningkatkan efisiensi, kualitas, dan kinerja program studi di era transformasi digital..

Kata kunci: Kepemimpinan Digital, Lean Six Sigma, Kinerja Program Studi, Manajemen Mutu, Pendidikan Tinggi.

ABSTRACT

JAINAL B. TOGATOROP, Student ID: 8196113007. Development of a Digital Leadership Model Based on Lean Six Sigma to Improve Study Program Performance. *Dissertation*. Postgraduate Program, Universitas Negeri Medan, April 2026.

This study aims to: (1) identify the factual conditions of digital leadership and quality management practices within study programs; (2) develop a Lean Six Sigma based Digital Leadership Model (DLSS-Leadership Model); (3) validate the feasibility of the model; and (4) test its effectiveness in improving study program performance.

The preliminary study revealed that the utilization of digital technology in academic management has begun to be implemented; however, it has not been fully integrated with data-driven decision-making and systematic quality management practices. The Lean Six Sigma approach, which focuses on process efficiency and quality control, has also not been widely applied in academic leadership practices at the study program level. These conditions indicate the need for a leadership model capable of integrating digital leadership competencies with a data-based quality management approach. This research employed a Research and Development (R&D) method consisting of several stages: preliminary study, needs analysis, conceptual model development, expert validation, Focus Group Discussion (FGD), model revision, and effectiveness testing. The research subjects consisted of 24 respondents from three study programs at Universitas Quality, including heads of study programs, lecturers, administrative staff, and students. Data were collected through observations, questionnaires, interviews, and FGDs, and analyzed using descriptive quantitative and qualitative techniques.

The results indicate that digital leadership in study programs is in the good category, with the highest score in Technology Adaptability (19.33) and the lowest in Data-Driven Decision Making (17.78). The implementation of Lean Six Sigma obtained a total score of 30.62, indicating that a culture of efficiency and quality management has begun to develop. The DLSS model developed in this study consists of six dimensions of digital leadership visionary leadership, data-driven leadership, collaborative leadership, innovative leadership, continuous improvement leadership, and agility & digital mindset integrated with the DMAIC stages (Define, Measure, Analyze, Improve, Control) of Lean Six Sigma. Expert validation produced an average score of 4.52 (very good), and the effectiveness test showed 70% effectiveness (good category).

The novelty of this research lies in the integration of digital leadership with the Lean Six Sigma approach as a data-driven academic leadership framework to enhance efficiency, quality, and the performance of study programs in the era of digital transformation in higher education.

Keywords: Digital Leadership, Lean Six Sigma, Study Program Performance, Quality Management, Higher Education.