

**MODEL PENGEMBANGAN SISTEM MANAJEMEN MUTU  
BIDANG PEMBELAJARAN PEMROGRAMAN DI EDTECH STARTUP  
BERBASIS ISO 21001:2018**

**TESIS**

Diajukan untuk Memenuhi Salah Satu Syarat Memperoleh Gelar Magister Sains  
Pada Program Studi Manajemen Perkantoran  
Konsentrasi Manajemen Mutu



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2024**

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# **Model Pengembangan Sistem Manajemen Mutu Bidang Pembelajaran Pemrograman di *Edtech Startup* Berbasis ISO 21001:2018**

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M.Si Universitas Pendidikan Indonesia, 2024

Sebuah Tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Magister  
Sains (M.Si.) pada Sekolah Pascasarjana

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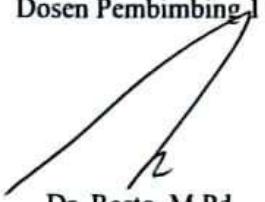
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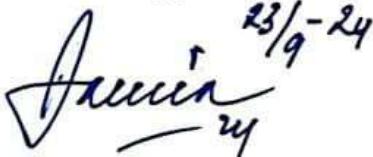
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Menyatakan bahwa proposal tesis yang saya ajukan dengan judul "**Model Pengembangan Sistem Manajemen Mutu Bidang Pembelajaran Pemrograman di EdTech Startup Berbasis ISO 21001:2018**" adalah karya asli saya sendiri. Saya telah menyusun proposal penelitian ini secara mandiri dan menggunakan sumber informasi yang sah. Saya juga menyatakan bahwa proposal tesis ini bebas dari unsur plagiat atau penggunaan informasi dari sumber lain tanpa mencantumkan sumbernya.

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## KATA PENGANTAR

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## ABSTRAK

Menurut riset World Bank dan McKinsey, dalam kurun waktu 2015-2030 Indonesia membutuhkan 600.000 talenta digital setiap tahunnya. Hal tersebut menginisiasi kemunculan banyak *EdTech Startup* di bidang pembelajaran pemrograman. Namun perjalanan *EdTech Startup* untuk mencetak talenta digital menemui banyak tantangan, mulai dari proses pembelajaran yang belum maksimal, belum adanya standardisasi dalam proses kerja yang dilakukan, hingga tingginya tingkat pergantian karyawan. Berdasarkan permasalahan ini, dalam penelitian dilakukan pengembangan set dokumen Sistem Manajemen Mutu (SMM) berbasis ISO 21001:2018 pada bidang pembelajaran pemrograman *EdTech Startup* yang bertujuan untuk menyusun standar penyelenggaraan pembelajaran di bidang pemrograman guna meningkatkan kualitas pendidikan. Metode penelitian ini menggunakan *Research and Development* (R&D) model Plomp (2013), yaitu Investigasi Awal, Desain, Realisasi/Konstruksi, serta satu tahapan tambahan yakni Penilaian Ahli, Praktisi, dan Pengguna. Penelitian ini dilakukan pada *EdTech Startup* yang bergerak di bidang pembelajaran pemrograman yang ada di Jabodetabek. Berdasarkan tahapan-tahapan penelitian tersebut, telah dihasilkan set dokumen SMM berbasis ISO 21001:2018 untuk Divisi Teaching and Learning Implementation (TLI) pada *EdTech Startup*, dimana divisi ini menangani bidang pengajaran dan pembelajaran di bidang pemrograman. Set dokumen ini meliputi Pedoman Mutu sebagai Dokumen Tingkat I, Standar Operasional Prosedur sebagai Dokumen Tingkat II, *Work Instructions* yang meliputi *playbook*, *checklist*, dan *handbook* sebagai Dokumen Tingkat III, serta *Form/Records* yang meliputi laporan dan formulir isian sebagai Dokumen Tingkat IV. Berdasarkan hasil penilaian oleh Ahli SMM ISO 21001 dan praktisi *EdTech Startup* bidang pembelajaran pemrograman, didapatkan rata-rata 4.63/5. Dan berdasarkan penilaian oleh pengguna yakni karyawan Divisi TLI *EdTech Startup* mendapatkan rata-rata 4.62/5. Sehingga dapat disimpulkan bahwa produk penelitian dinyatakan Sangat Layak untuk dilanjutkan ke tahap penelitian selanjutnya pada model R&D Plomp (2013), yakni tahapan Percobaan, Evaluasi, dan Revisi.

**Kata Kunci:** *EdTech Startup, ISO 21001:2018, Lembaga Pendidikan Nonformal, Pembelajaran Pemrograman, Sistem Manajemen Mutu*

*"Development of Quality Management System for Programming Learning at EdTech Startup Based on ISO 21001:2018." Filanti, 2105092, Universitas Pendidikan Indonesia, 2024*

## **ABSTRACT**

*According to World Bank and McKinsey research, Indonesia needs 600,000 digital talents every year between 2015 and 2030. As a result, numerous EdTech startups in programming learning have emerged. However, EdTech startups face numerous challenges in their quest to cultivate digital talent, including underutilization of the learning process, lack of standardization in their work processes, and a high employee turnover rate. Based on this problem, this research developed a set of ISO 21001:2018-based Quality Management System (QMS) documents in the EdTech Startup programming learning field. These documents aim to develop standards for organizing learning in the programming field, thereby improving the quality of education. This research method uses the Research and Development (R&D) model of Plomp (2013), namely Initial Investigation, Design, Realization/Construction, as well as one additional stage, namely Expert, Practitioner, and User Assessment. This research was conducted at an EdTech startup in Jabodetabek that specializes in programming learning. Based on these research stages led to the production of a set of ISO 21001:2018-based QMS documents for the Teaching and Learning Implementation (TLI) Division at EdTech Startup, which manages teaching and learning in the programming field. This document set includes Quality Guidelines as Level I documents, Standard Operating Procedures as Level II documents, Work Instructions (playbooks, checklists, and handbooks) as Level III documents, and Forms/Records (reports and forms) as Level IV documents. The assessment results from QMS ISO 21001:2018 expert and EdTech Startup practitioners in the field of programming learning yield an average score of 4.63/5. The TLI Division's employees, who conducted the assessment, scored an average of 4.62/5. Therefore, we can infer that Plomp's R&D model (2013) declares the research product highly feasible for advancement to the subsequent stage of experimentation, evaluation, and revision.*

**Keywords:** *EdTech Startup, ISO 21001:2018, Non-formal Education Institution, Programming Learning, Quality Management System*

## DAFTAR ISI

LEMBAR PENGESAHAN .....	i
SURAT PERNYATAAN TENTANG KEASLIAN TESIS DAN PERNYATAAN BEBAS PLAGIARISME .....	ii
KATA PENGANTAR .....	iii
HALAMAN UCAPAN TERIMA KASIH .....	iv
ABSTRAK .....	vi
<i>ABSTRACT</i> .....	vii
DAFTAR ISI.....	viii
DAFTAR TABEL.....	xi
DAFTAR GAMBAR .....	xiii
DAFTAR LAMPIRAN .....	xiv
 <b>BAB I PENDAHULUAN.....</b>	 <b>1</b>
1.1 Latar Belakang Penelitian.....	1
1.2 Rumusan Masalah Penelitian.....	16
1.3 Tujuan Penelitian .....	16
1.4 Spesifikasi Produk Penelitian .....	17
1.4.1 Dokumen Klausul 4 – 10 .....	17
1.4.2 Dokumen Pedoman Mutu ISO 21001:2018.....	21
1.4.3 Dokumen Manual Prosedur .....	21
1.4.4 Dokumen Instruksi Kerja.....	21
1.5 Batasan Penelitian.....	22
1.6 Manfaat Penelitian .....	22
1.6.1 Manfaat Teoritis.....	22
1.6.2 Manfaat Praktis .....	23
1.7 Sistematika Tesis.....	23
 <b>BAB II KAJIAN PUSTAKA .....</b>	 <b>26</b>
2.1 Teori dan Konsep Dasar .....	26
2.1.1 Sistem Manajemen Mutu .....	26
2.1.2 ISO 21001:2018 <i>Educational Organisations Management System</i> .....	32
2.1.3 Lembaga Pendidikan Nonformal .....	38
2.1.4 <i>Educational Technology Startup (EdTech Startup)</i> .....	41
2.1.5 Lembaga Pendidikan Nonformal Bidang Pembelajaran Pemrograman .	44
2.2 Penelitian Terdahulu .....	45
2.3 Kerangka Berpikir .....	48
 <b>BAB III METODE PENELITIAN .....</b>	 <b>53</b>
3.1 Desain Penelitian .....	53
3.1.1 <i>Preliminary Investigation</i> atau Investigasi Awal.....	54
3.1.2 <i>Design</i> atau Desain .....	55

3.1.3 <i>Realization/Construction</i> atau Realisasi/Konstruksi .....	55
3.1.4 <i>Test, Evaluation, and Revision</i> atau Percobaan, Evaluasi, dan Revisi ...	55
3.1.5 <i>Implementation</i> atau Implementasi .....	56
3.2 Tahapan Penelitian.....	57
3.2.1 <i>Preliminary Investigation</i> (Investigasi Awal).....	57
3.2.2 <i>Design</i> (Desain) .....	60
3.2.3 <i>Realization/Construction</i> (Realisasi/Konstruksi).....	61
3.2.4 Penilaian Produk oleh Ahli dan Pengguna.....	61
3.2.5 Batasan Tahapan Penelitian dan Pengembangan .....	64
3.3 Lokasi serta Waktu Penelitian .....	65
3.4 Subjek Penelitian .....	65
3.5 Instrumen Penelitian .....	65
3.5.1 Lembar Pedoman Studi Lapangan dan Observasi .....	66
3.5.2 Lembar Pedoman Wawancara Semi Terstruktur .....	66
3.5.3 Lembar Pedoman FGD di Tahap <i>Design</i> .....	67
3.5.4 Kuesioner untuk <i>Expert Review</i> (Penilaian oleh Ahli Sistem Manajemen Mutu ISO 21001:2018 dan Ahli <i>EdTech Startup</i> ) .....	67
3.5.5 Kuesioner Penilaian oleh Karyawan Divisi TLI.....	69
3.6 Teknik Analisis Data .....	70
3.6.1 Analisis Data Kualitatif.....	70
3.6.2 Teknik Analisis Data Kuantitatif .....	71
<b>BAB IV HASIL DAN PEMBAHASAN .....</b>	<b>72</b>
4.1 Hasil Penelitian.....	72
4.1.1 <i>Preliminary Investigation</i> (Investigasi Awal).....	72
4.1.2 <i>Design</i> (Desain) .....	80
4.1.3 <i>Realization/Construction</i> (Realisasi/Konstruksi).....	89
4.1.4 Penilaian Produk oleh Ahli, Praktisi, dan Pengguna .....	170
4.2 Pembahasan Hasil Penelitian.....	177
4.2.1 Analisis Permasalahan <i>EdTech Startup</i> dalam Proses Pembelajaran Pemrograman .....	177
4.2.2 Analisis Desain Set Dokumen Sistem Manajemen Mutu Berbasis ISO 21001:2018 .....	191
4.2.3 Analisis Proses Konstruksi Set Dokumen Sistem Manajemen Mutu Berbasis ISO 21001:2018 .....	196
4.2.4 Hasil Penilaian Produk oleh Ahli, Praktisi, dan Pengguna .....	208
<b>BAB V SIMPULAN, IMPLIKASI, DAN REKOMENDASI .....</b>	<b>226</b>
5.1 Simpulan .....	226
5.2 Implikasi .....	227
5.3 Rekomendasi.....	228
5.3.1 Pelaku <i>EdTech Startup</i> Bidang Pembelajaran Pemrograman .....	228
5.3.2 Peneliti Selanjutnya .....	229

DAFTAR PUSTAKA .....	230
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## DAFTAR TABEL

Tabel 1.1 <i>EdTech Startup</i> Penyelenggara Pelatihan untuk Mencetak Talenta Digital .....	4
Tabel 1.2 <i>Students Completion Rate</i> di Sebuah <i>EdTech Startup</i> Dua Tahun Terakhir .....	7
Tabel 1.3 Rincian Dokumen Klausul 4 – 10 .....	17
Tabel 2.1 Lembaga Pendidikan yang Dapat Mengimplementasikan ISO 21001:2018 .....	33
Tabel 3.1 Kriteria <i>Expert Reviewer</i> .....	62
Tabel 3.2 Keterkaitan Antara Data, Instrumen, dan Sumber Data .....	66
Tabel 3.3 Kisi-Kisi Instrumen <i>Expert Review</i> untuk Ahli SMM 21001:2018 & Praktisi <i>EdTech Startup</i> .....	67
Tabel 3.4 Kisi-Kisi Kuesioner Penilaian oleh Karyawan Divisi TLI .....	69
Tabel 3.5 Interpretasi Skala <i>Likert</i> .....	71
Tabel 4.1 Daftar Dokumen pada Tahap Desain Awal .....	80
Tabel 4.2 Daftar Dokumen pada Tahap Desain Awal (Pasca FGD) .....	84
Tabel 4.3 <i>Document-level Metrics</i> .....	90
Tabel 4.4 Tabel Isu Internal di Bidang Pembelajaran Pemrograman <i>EdTech Startup</i> .....	98
Tabel 4.5 Tabel Isu Eksternal di Bidang Pembelajaran Pemrograman <i>EdTech Startup</i> .....	99
Tabel 4.6 Tabel Kebutuhan dan Harapan Pihak yang Berkepentingan di <i>EdTech Startup</i> .....	101
Tabel 4.7 Deskripsi Peta Aliran Proses .....	104
Tabel 4.8 Rencana Strategis Divisi TLI .....	110
Tabel 4.9 Daftar <i>Job Title</i> yang Ada di Divisi TLI <i>EdTech Startup</i> .....	116
Tabel 4.10 Data Pihak Berkepentingan Divisi TLI di <i>EdTech Startup</i> .....	117
Tabel 4.11 Sasaran Mutu Divisi TLI .....	122
Tabel 4.12 Perencanaan Perubahan Divisi TLI di <i>EdTech Startup</i> .....	125
Tabel 4.13 Kompetensi Karyawan Divisi TLI .....	129
Tabel 4.14 Matriks Kompetensi Karyawan Divisi TLI .....	132
Tabel 4.15 Hasil Penilaian Matriks Kompetensi Karyawan Divisi TLI .....	133
Tabel 4.16 Program Pelatihan Karyawan di Divisi TLI .....	136
Tabel 4.17 Daftar Infrastruktur Fisik di Divisi TLI .....	138

Tabel 4.18 Daftar Infrastruktur Nonfisik di Divisi TLI .....	140
Tabel 4.19 Form Satuan Acara Pembelajaran (SAP).....	145
Tabel 4.20 Klasifikasi Pengetahuan, Metode Pengumpulan, dan Metode Penyimpanan di Divisi TLI .....	146
Tabel 4.21 Saluran Komunikasi di Divisi TLI.....	149
Tabel 4.22 Persyaratan untuk Layanan Pendidikan di Divisi TLI.....	153
Tabel 4.23 Daftar Penyedia Eksternal di Divisi TLI.....	155
Tabel 4.23 Data Properti Pelanggan (Pemelajar) di Divisi TLI.....	157
Tabel 4.25 Form Proses Mengajar <i>Course Data Science</i> .....	160
Tabel 4.26 Form Catatan Perkembangan Pemelajar di <i>Bootcamp</i> .....	161
Tabel 4.27 Form Rencana Audit Internal Divisi TLI oleh Academy R&D ..	166
Tabel 4.28 Rincian Agenda Tinjauan Manajemen Divisi TLI.....	167
Tabel 4.29 Notulen Hasil Rapat Tinjauan Manajemen Divisi TLI .....	168
Tabel 4.30 Hasil Penilaian oleh Ahli dan Praktisi.....	171
Tabel 4.31 <i>Feedback</i> dari Pengguna Terhadap Produk Penelitian dan Pengembangan.....	173
Tabel 4.32 Hasil Penilaian oleh Pengguna.....	174
Tabel 4.33 <i>Feedback</i> dari Pengguna Terhadap Produk Penelitian dan Pengembangan.....	176

## DAFTAR GAMBAR

Gambar 1.1 Perjalanan Sebuah <i>EdTech Startup</i> .....	9
Gambar 2.1 Model Sistem Manajemen Mutu Berbasis Proses .....	27
Gambar 2.2 Model Interaksi Proses Sistem Manajemen Mutu Lembaga Pendidikan.....	30
Gambar 2.3 <i>Framework</i> Struktur Dokumen ISO 21001:2018 dalam Siklus PDCA.....	37
Gambar 2.4 Kerangka Pemikiran Penelitian dan Pengembangan.....	52
Gambar 3.1 Model <i>Educational Design Research</i> .....	54
Gambar 4.1 Dokumentasi Pelaksanaan Observasi oleh Penulis.....	74
Gambar 4.2 <i>Blueprint</i> Pengembangan SMM di <i>EdTech Startup</i> .....	80
Gambar 4.3 Templat Dokumen.....	89
Gambar 4.4 Bagan Peta Aliran Proses.....	104
Gambar 4.5 Bagan Panduan Penerapan PDCA di Divisi TLI.....	107
Gambar 4.6 Bagan Struktur Organisasi <i>EdTech Startup</i> .....	114
Gambar 4.7 Bagan Struktur Organisasi Divisi TLI di <i>EdTech Startup</i> .....	115
Gambar 4.8 Hierarki Dokumen di Divisi TLI.....	150
Gambar 4.9 Bagan Alir Pengendalian Dokumen di Divisi TLI.....	150
Gambar 4.10 <i>Live Chat</i> sebagai Formulir Keluhan dan Banding di Divisi TLI.....	165

## **DAFTAR LAMPIRAN**

- Lampiran 1 - Pedoman Divisi Teaching and Learning Implementation (TLI) di *EdTech Startup*
- Lampiran 2 - Peta Bisnis Proses Divisi TLI di *EdTech Startup*
- Lampiran 3 - 4.1.1.a SOP Penyusunan Rumusan Visi dan Misi
- Lampiran 4 - 4.1.1.b Rumusan Visi, Misi, Tujuan, dan Nilai
- Lampiran 5 - 4.1.2 Analisis SWOT
- Lampiran 6 - 4.1.3 Tabel Isu Internal dan Eksternal
- Lampiran 7 - 4.2.1 Tabel Kebutuhan dan Harapan Pihak Berkepentingan
- Lampiran 8 - 4.3.1 Ruang Lingkup Sistem Manajemen Mutu
- Lampiran 9 - 4.4.1 Peta Aliran Proses
- Lampiran 10 - 4.4.2 Bagan Implementasi *Plan-Do-Check-Act* (PDCA)
- Lampiran 11 - 5.1.1 Rencana Strategis Divisi TLI
- Lampiran 12 - 5.1.2 Komitmen Pimpinan Terhadap Pelanggan (Pemelajar)
- Lampiran 13 - 5.2.1 Kebijakan Mutu
- Lampiran 14 - 5.2.2 Form Kebijakan Organisasi Pendidikan
- Lampiran 15 - 5.2.3 Form Surat Keputusan Pelaksanaan EOMS
- Lampiran 16 - 5.2.4 Bukti Sosialisasi Kebijakan Sistem Manajemen Mutu
- Lampiran 17 - 5.3.1a Struktur Organisasi *EdTech Startup*
- Lampiran 18 - 5.3.1.b *Job Descriptions* - Head of Teaching & Learning Implementation (TLI)
- Lampiran 19 - 5.3.1.c *Job Descriptions* - Education Program/Program Manager
- Lampiran 20 - 5.3.1.d *Job Descriptions* - Facilitator Enablement & Performance (FEP) Manager
- Lampiran 21 - 5.3.1.e *Job Descriptions* - FEP Acquisition & Preparation
- Lampiran 22 - 5.3.1.f *Job Descriptions* - FEP Development & Performance
- Lampiran 23 - 5.3.1.g *Job Descriptions* - FEP Operations
- Lampiran 24 - 5.3.1.h *Job Descriptions* - Student Learning Support (SLS) Manager
- Lampiran 25 - 5.3.1.i *Job Descriptions* - SLS Counsellor
- Lampiran 26 - 5.3.1.j *Job Descriptions* - SLS Intelligence
- Lampiran 27 - 5.3.1.k *Job Descriptions* - SLS Affairs

- Lampiran 28 - 5.3.1.1 *Job Descriptions* - SLS Operations  
Lampiran 29 - 5.3.2 Data Pihak Berkepentingan  
Lampiran 30 - 6.1.1.a SOP Penyusunan Analisa Risiko dan Peluang  
Lampiran 31 - 6.1.1.b Analisa Risiko dan Peluang  
Lampiran 32 - 6.1.2 Form Manajemen Risiko dan Peluang  
Lampiran 33 - 6.2.1 Sasaran Mutu  
Lampiran 34 - 6.2.2 Sasaran Organisasi Pendidikan (Bidang Pembelajaran Pemrograman)  
Lampiran 35 - 6.3.1 Rumusan Perubahan Manajemen Divisi TLI  
Lampiran 36 - 6.3.2 Form Monitoring Pencapaian Sasaran Organisasi Pendidikan  
Lampiran 37 - 6.3.3 Form Manajemen Perubahan  
Lampiran 38 - 7.1.1 SOP Dokumen Kendali Sumber Daya Internal  
Lampiran 39 - 7.1.2 Dokumen Kendali Sumber Daya Internal  
Lampiran 40 - 7.1.3 Form Permintaan Karyawan Baru  
Lampiran 41 - 7.1.4 Form Aplikasi Calon Karyawan  
Lampiran 42 - 7.1.5 Form Panggilan Seleksi Calon Karyawan  
Lampiran 43 - 7.1.5 Form Materi Interview  
Lampiran 44 - 7.1.6 Form Kontrak Perjanjian Kerja PKWTT  
Lampiran 45 - 7.1.7 Form Kontrak Perjanjian Kerja PKWT  
Lampiran 46 - 7.1.8 Form Data Karyawan Baru  
Lampiran 47 - 7.1.9 Form Data Karyawan  
Lampiran 48 - 7.2.1 Standar Kompetensi  
Lampiran 49 - 7.2.2 Matriks Kompetensi Personalia  
Lampiran 50 - 7.2.3 Program Pelatihan  
Lampiran 51 - 7.2.4 Form Daftar Hadir Pelatihan  
Lampiran 52 - 7.2.5 Form Evaluasi Pelatihan  
Lampiran 53 - 7.3.1 Dokumen Pengendali Infrastruktur  
Lampiran 54 - 7.3.2 Jadwal Pemeliharaan Infrastruktur  
Lampiran 55 - 7.3.3 Mitigasi Risiko Infrastruktur  
Lampiran 56 - 7.3.4 Form Data Perangkat Monitoring dan Pengukuran  
Lampiran 57 - 7.4.1 Penjelasan Lingkungan Operasi

- Lampiran 58 - 7.4.2 SOP Penanganan Pelanggaran Berat (*Plagiarism, Sexual Harassment, dan Bullying*)
- Lampiran 59 - 7.5.1 Dokumen Pengukuran Kinerja Fasilitator
- Lampiran 60 - 7.5.2 Dokumen Kepuasan Pemelajar Terhadap Kinerja Fasilitator
- Lampiran 61 - 7.5.3 Dokumen Penilaian Kinerja Fasilitator oleh FEP
- Lampiran 62 - 7.5.4 Dokumen Kepuasan Pemelajar Terhadap Kinerja SLS
- Lampiran 63 - 7.5.5 Dokumen Kepuasan Pemelajar Terhadap Sistem Pembelajaran
- Lampiran 64 - 7.5.6 Dokumen Pengukuran Standar Bidang Pembelajaran dengan Education Alliance Finland (EAF)
- Lampiran 65 - 7.6.1 SOP Mampu Telusur Bidang Pembelajaran
- Lampiran 66 - 7.6.2 Formulir Mampu Telusur
- Lampiran 67 - 7.6.3 Form Satuan Acara Pembelajaran (SAP)
- Lampiran 68 - 7.6.4 Form Berita Acara Pembelajaran (BAP)
- Lampiran 69 - 7.7.1 SOP Pendistribusian Manajemen Pengetahuan
- Lampiran 70 - 7.8.1 Form Usulan Promosi
- Lampiran 71 - 7.8.2 Form Quality Management System Awareness
- Lampiran 72 - 7.8.3 Pendistribusian Quality Management System Awareness
- Lampiran 73 - 7.9.1 SOP Komunikasi Organisasi
- Lampiran 74 - 7.9.2 Form Komunikasi Divisi TLI
- Lampiran 75 - 7.9.3 SOP Komunikasi dengan Pemelajar
- Lampiran 76 - 7.10.1 SOP Pengendalian Dokumen
- Lampiran 77 - 8.1.1 SOP Perencanaan dan Pengendalian Operasi
- Lampiran 78 - 8.1.2 Form Proses Bisnis
- Lampiran 79 - 8.1.3 Form Rencana Divisi TLI
- Lampiran 80 - 8.1.4 Analisis Kebutuhan Pemelajar dengan Disabilitas
- Lampiran 81 - 8.2.1 SOP Persyaratan untuk Layanan Pendidikan
- Lampiran 82 - 8.2.2 Form Persyaratan Layanan Pendidikan
- Lampiran 83 - 8.3.1 SOP Desain dan Pengembangan Layanan Pendidikan
- Lampiran 84 - 8.3.2 Form Perencanaan Desain dan Pengembangan
- Lampiran 85 - 8.3.3 Form Input Desain dan Pengembangan
- Lampiran 86 - 8.3.4 Form Output Desain dan Pengembangan
- Lampiran 87 - 8.4.1 SOP Pengendalian yang Disediakan Secara Eksternal

- Lampiran 88 - 8.4.2 SOP Seleksi Penyedia Eksternal  
Lampiran 89 - 8.4.3 SOP Evaluasi Penyedia Eksternal  
Lampiran 90 - 8.4.4 Daftar Properti Pemelajar  
Lampiran 91 - 8.4.5 Daftar Penyedia Eksternal  
Lampiran 92 - 8.4.6 Form Informasi Penyedia Eksternal  
Lampiran 93 - 8.4.7 Form *Accepted Level*  
Lampiran 94 - 8.4.8 Form Pra-Kualifikasi Penyedia Eksternal  
Lampiran 95 - 8.4.8 Form Daftar Penyedia Eksternal Terpilih  
Lampiran 96 - 8.4.9 Form Evaluasi Kinerja Penyedia Eksternal  
Lampiran 97 - 8.5.1 SOP Penyampaian Layanan Pendidikan  
Lampiran 98 - 8.5.2 Identifikasi dan Ketertelusuran  
Lampiran 99 - 8.5.3.a SOP Properti Milik Pihak yang Berkepentingan  
Lampiran 100 - 8.5.3.b Form Properti Milik Pihak Berkepentingan  
Lampiran 101 - 8.5.6.a SOP Penerimaan dan Kriteria Penerimaan Pemelajar  
Lampiran 102 - 8.5.6.b Form Informasi Pra-Penerimaan dan Kriteria Penerimaan  
Lampiran 103 - 8.5.7 Form Proses Mengajar  
Lampiran 104 - 8.5.9.a SOP Proses Dukungan Administrasi Pembelajaran  
Lampiran 105 - 8.5.9.b Form Proses Dukungan Administrasi Pembelajaran  
Lampiran 106 - 8.5.10.a SOP Penilaian Proses Pembelajaran  
Lampiran 107 - 8.5.10.b Form Catatan Perkembangan Pemelajar  
Lampiran 108 - 8.5.11 SOP Penanganan Masalah Pemelajar  
Lampiran 109 - 8.5.12 SOP Penanganan Masalah Fasilitator  
Lampiran 110 - 8.5.13 Form Kehadiran Fasilitator  
Lampiran 111 - 8.5.14 Form Kehadiran Pemelajar  
Lampiran 112 - 8.6.1 SOP Pelepasan Layanan (Kelulusan Pemelajar)  
Lampiran 113 - 8.6.2 Form Pengendalian Pelepasan Layanan Pendidikan  
Lampiran 114 - 8.6.3 SOP Penanganan Alumni  
Lampiran 115 - 8.7.1 SOP Pengendalian Atas Ketidak Sesuaian *Output* Pendidikan  
Lampiran 116 - 8.7.2 Form Tindak Lanjut Ketidak Sesuaian Pelepasan  
Lampiran 117 - 8.7.3 Form Pengendalian Ketidak Sesuaian *Output* Pendidikan  
Lampiran 118 - 8.7.4 Form Tindak Lanjut Pengendalian Ketidak Sesuaian *Output* Pendidikan

- Lampiran 119 - 9.1.1 Non-Conformance Report (NCR) Form - *Corrective Action*
- Lampiran 120 - 9.1.2 Form Survei Kepuasan (Form *Feedback Student*)
- Lampiran 121 - 9.1.3 Form Analisis Survei Kepuasan
- Lampiran 122 - 9.1.4 Form Keluhan dan Banding
- Lampiran 123 - 9.1.5 Form Tindak Lanjut Keluhan dan Banding
- Lampiran 124 - 9.1.6 Form Laporan Evaluasi
- Lampiran 125 - 9.1.7 Form Pemantauan Persepsi Pemelajar
- Lampiran 126 - 9.2.1 SOP Audit Internal
- Lampiran 127 - 9.2.2 Form Rencana Audit Internal
- Lampiran 128 - 9.2.3 Form Daftar Hadir
- Lampiran 129 - 9.2.4 Form Rekapitulasi Pertanyaan Audit Internal
- Lampiran 130 - 9.2.5 Form Rekapitulasi Temuan Audit Internal
- Lampiran 131 - 9.2.6 Form Rangkuman, Rencana, dan Verifikasi Perbaikan
- Lampiran 132 - 9.2.7 Laporan Audit Internal Divisi TLI oleh Academy R&D
- Lampiran 133 - 9.3.1 Form Rencana dan Undangan Tinjauan Manajemen
- Lampiran 134 - 9.3.2 Form Notulen Hasil Rapat Tinjauan Manajemen
- Lampiran 135 - 10.1.1 Form Permintaan Tindakan Perbaikan dan Pencegahan
- Lampiran 136 - 10.1.2 NCR & Corrective Action (Divisi TLI)
- Lampiran 137 - 10.1.3 *Research and Development* sebagai Tindakan Perbaikan
- Lampiran 138 - 10.2.1 Form *Logbook* Tindakan Perbaikan dan Pencegahan (PTPP)
- Lampiran 139 - Lembar Pedoman Studi Lapangan dan Observasi
- Lampiran 140 - Lembar Pedoman Studi Pustaka
- Lampiran 141 - Lembar Pedoman Wawancara Semi-Struktur
- Lampiran 142 - Lembar Pedoman FGD di Tahap *Design*
- Lampiran 143 - Rekaman dan Transkrip FGD Bersama Divisi TLI *EdTech Startup* di Tahap *Design*
- Lampiran 144 - Lembar *Self Review Checklist*
- Lampiran 145 - Hasil Penilaian oleh Ahli SMM ISO 21001:2018 dan Praktisi *EdTech Startup*
- Lampiran 146 - Hasil Penilaian oleh Pengguna
- Lampiran 147 - Surat Keterangan Melakukan Penelitian di Divisi TLI *EdTech Startup*

## DAFTAR PUSTAKA

- Abdulsalam, A. L. A. A. (2022). Availability of the requirements of the international standard ISO 21001:2018 in educational institutions a case study in the College of Administration and Economics, University of Mosul. *Tikrit Journal of Administration and Economics Sciences*, 18(57 part 1). <https://www.iasj.net/iasj/article/232905>
- AbuZarour, H., Hamarshi, S., Kalbouneh, L., & Rehan, S. (2021). Applying Management Systems for Educational Organizations-ISO 21001:2018 in Industrial Engineering department at An-Najah National University. *An-Najah National University*. <https://hdl.handle.net/20.500.11888/17109>
- Ada, M. B., & Foster, M. E. (2021). Enhancing postgraduate students' technical skills: Perceptions of modified team-based learning in a six-week multi-subject Bootcamp-style CS course. *Computer Science Education*, 0(0), 1–25. <https://doi.org/10.1080/08993408.2021.1959174>
- Adu-ManuSarpong, K., Kingsley Arthur, J., & Yaw Owusu Amoako, P. (2013). Causes of Failure of Students in Computer Programming Courses: The Teacher Learner Perspective. *International Journal of Computer Applications*, 77(12), 27–32. <https://doi.org/10.5120/13448-1311>
- Africano, N., Rodrigues, A. S., & Santos, G. (2019). The Main Benefits of the Implementation of the Quality Management System in Higher Education Institutions in Angola. *Quality Innovation Prosperity*, 23(3), 122. <https://doi.org/10.12776/qip.v23i3.1292>
- Agricola, B. T., Prins, F. J., & Sluijsmans, D. M. A. (2020). Impact of feedback request forms and verbal feedback on higher education students' feedback perception, self-efficacy, and motivation. *Assessment in Education: Principles, Policy & Practice*, 27(1), 6–25. <https://doi.org/10.1080/0969594X.2019.1688764>
- Aguirre, A. F., Villareal-Freire, A., Diaz, J., Gil, R., & Collazos, C. A. (2019). Extending the Concept of User Satisfaction from Customer Experience. Dalam A. Marcus & W. Wang (Ed.), *Design, User Experience, and Usability. Design Philosophy and Theory* (Vol. 11583, hlm. 397–407). Springer International Publishing. [https://doi.org/10.1007/978-3-030-23570-3\\_29](https://doi.org/10.1007/978-3-030-23570-3_29)
- Ahmad, I., Sharma, S., Singh, R., Gehlot, A., Gupta, L. R., Thakur, A. K., Priyadarshi, N., & Twala, B. (2024). Inclusive learning using industry 4.0 technologies: Addressing student diversity in modern education. *Cogent Education*, 11(1), 2330235. <https://doi.org/10.1080/2331186X.2024.2330235>
- Ahsan, Z., & Obaidullah, U. (2020). Predicting expertise among novice programmers with prior knowledge on programming tasks. *2020 Asia-*

- Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC), 1008–1016.*  
<https://ieeexplore.ieee.org/abstract/document/9306263>
- Aiman-Smith, L., Markham, S. K., Baumer, D. L., Kingon, A. I., & Zapata, M. (1999). Real world technology management education: Using the TEC algorithm. *PICMET '99: Portland International Conference on Management of Engineering and Technology. Proceedings Vol-1: Book of Summaries (IEEE Cat. No.99CH36310)*, 68. <https://doi.org/10.1109/PICMET.1999.807748>
- Ajiye, O. T. (2023). Measuring The Performance of Adult Literacy Facilitators. *Edumania-An International Multidisciplinary Journal*, 01(03), 66–79. <https://doi.org/10.59231/edumania/8996>
- Alshawi, A. (2023). *An Investigation Into the Rise of Boot Camp Against Educational Offering of Traditional Educational Institutions: Building a Personality and Preference – Driven Model for Digital Marketing and Coding Programs Offered in University, Community College, and Bootcamp Educational Institutions - ProQuest*. ProQuest. <https://www.proquest.com/openview/a3f87d91f60d3a6e8901b917048ee438/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Amtu, O., Fakhruddin, F., Haryono, H., & Muhsin, M. (2020). Revitalization the Internal Quality Assurance Through Leadership, Commitment, and Organization Culture. *Dinamika Pendidikan*, 15(2), 215–229. <https://doi.org/10.15294/dp.v15i2.26771>
- Anikeeva, O. V., Ivakhnenko, A. G., & Storublev, M. L. (2020). Analysis of industrial performance in terms of achieving quality goals. *IOP Conference Series: Materials Science and Engineering*, 971(3), 032078. <https://doi.org/10.1088/1757-899X/971/3/032078>
- Antonenko, P. D., Lee, B. R., & Kleinheksel, A. J. (2014). Trends in the crowdfunding of educational technology startups. *TechTrends*, 58(6), 36–41. <https://doi.org/10.1007/s11528-014-0801-2>
- Aripadono, H. W. (2022). Competitive advantage using a resource-based view startup education technology in Indonesia. *Proceeding of The International Seminar on Business, Economics, Social Science and Technology (ISBEST)*, 2. <https://doi.org/10.33830/isbest.v2i1.787>
- Asif, M., & Raouf, A. (2013). Setting the course for quality assurance in higher education. *Quality & Quantity*, 47(4), 2009–2024. <https://doi.org/10.1007/s11135-011-9639-2>
- Auccahuasi, W., Santiago, G. B., Núñez, E. O., & Sernaque, F. (2018). Interactive online tool as an instrument for learning mathematics through programming techniques, aimed at high school students. *Proceedings of the 6th International Conference on Information Technology: IoT and Smart City - ICIT 2018*, 70–76. <https://doi.org/10.1145/3301551.3301580>

- Aviles, F. P. (2017). Formulation of a quality policy and quality objectives at a Latin American university. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 4(1), 586–595. <https://doi.org/10.18844/prosoc.v4i1.2305>
- Azzali, S., & Mazza, T. (2018). The Internal Audit Effectiveness Evaluated with an Organizational, Process and Relationship Perspective. *International Journal of Business and Management*, 13(6), 238. <https://doi.org/10.5539/ijbm.v13n6p238>
- Babatunde, O. (2013). Importance of Effective Communication in Public Organisations. *Issues in Social Science*, 3(2), 78. <https://doi.org/10.5296/iss.v3i2.8596>
- Babic, T., & Musa, Z. (2021). Knowledge Transfer through Recognition and Implementation of the Transformational Team Member Role. *2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO)*, 765–770. <https://doi.org/10.23919/MIPRO52101.2021.9596753>
- Banabakova, V., Stoilova, M., & Dacheva, I. (2018). The management of changes in the system of school education. *Knowledge International Journal*, 28(3), 743–752. <https://doi.org/10.35120/kij2803743V>
- Bangura, S., & Lourens, M. E. (2024). Unveiling the Hidden Dynamics: Exploring causative factors and impact of employee turnover on organisational performance. *British Journal of Multidisciplinary and Advanced Studies*, 5(2), Article 2. <https://doi.org/10.37745/bjmas.2022.0439>
- Barkah, T. (2024). Authentic assessment in intensive training (bootcamp) of higher education students as well as feedback on the learning experience process. *Inovasi Kurikulum*, 21(1), Article 1.
- Barton, D. C. (2020). Impacts of the COVID-19 pandemic on field instruction and remote teaching alternatives: Results from a survey of instructors. *Ecology and Evolution*, 10(22), 12499–12507. <https://doi.org/10.1002/ece3.6628>
- Basnet, M. (2024). Cultural Diversity and Curriculum. *Panauti Journal*, 2, 1–9. <https://doi.org/10.3126/panauti.v2i1.66500>
- Basten, D., & Haamann, T. (2018). Approaches for Organizational Learning: A Literature Review. *Sage Open*, 8(3), 2158244018794224. <https://doi.org/10.1177/2158244018794224>
- Behnam, N., & Juanzon, J. B. P. (2017). ISO 9001 Standard and Organization's Performance: A Literature Review. *International Journal of Advanced Multidisciplinary Research*, 4(2), 6–13. <https://doi.org/10.22192/ijamr.2017.04.02.002>
- Bekmanova, G., Ongarbayev, Y., Somzhurek, B., & Mukatayev, N. (2021). Personalized training model for organizing blended and lifelong distance learning courses and its effectiveness in Higher Education. *Journal of*

- Computing in Higher Education*, 33(3), 668–683. Scopus.  
<https://doi.org/10.1007/s12528-021-09282-2>
- Belmonte, M. V., Cotta, C., Fernández, A. J., Gómez, I., Pastrana, J. L., Pedreira, J. A., Rus, F., & Soler, E. (2002). Foundations of Programming: A Teaching Improvement. Dalam M. Ortega & J. Bravo (Ed.), *Computers and Education* (hlm. 81–91). Kluwer Academic Publishers.  
[https://doi.org/10.1007/0-306-47533-2\\_7](https://doi.org/10.1007/0-306-47533-2_7)
- Benz-Camino, M., Ramírez-Valdivia, M. T., Morales-Casetti, M., & Sirias, D. (2022). Lessons learned designing and implementing a quality assurance system in an industrial engineering school. *Quality Assurance in Education*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/QAE-06-2022-0119>
- Berssanette, J. H., & de Francisco, A. C. (2022). Cognitive Load Theory in the Context of Teaching and Learning Computer Programming: A Systematic Literature Review. *IEEE Transactions on Education*, 65(3), 440–449.  
<https://doi.org/10.1109/TE.2021.3127215>
- Bhardwaj, R., Yarrow, N., & Cali, M. (2020). *EdTech in Indonesia—Ready for Take-off?* (hlm. 84). World Bank. <http://hdl.handle.net/10986/33762>
- Bhattacharyya, E., & Shariff, A. B. M. S. @. (2014). Learning Style and its Impact in Higher Education and Human Capital Needs. *Procedia - Social and Behavioral Sciences*, 123, 485–494.  
<https://doi.org/10.1016/j.sbspro.2014.01.1448>
- Blizard, J. L. (2012). The importance of effective communication. *AORN Journal*, 95(3), 319–320. <https://doi.org/10.1016/j.aorn.2012.01.007>
- Bobrovskii, A. V., Bazhutina, M. M., Togliatti State University, Gorokhova, D. A., Togliatti State University, Chizhatkina, E. D., & Togliatti State University. (2024). The project-based learning model of training engineers: Exploring opportunities for building an individual learning trajectory from the students' and instructors' perspectives. *Perspectives of Science and Education*, 69(3), 179–191. <https://doi.org/10.32744/pse.2024.3.11>
- Boehm, B. (2014). Software Project Risk and Opportunity Management. Dalam G. Ruhe & C. Wohlin (Ed.), *Software Project Management in a Changing World* (hlm. 107–121). Springer Berlin Heidelberg.  
[https://doi.org/10.1007/978-3-642-55035-5\\_5](https://doi.org/10.1007/978-3-642-55035-5_5)
- Bogataj, V., & Žurga, G. (2018). Consistency of Quality Management in Slovenian Organizations. *Business Systems Research Journal*, 9(1), 78–92.  
<https://doi.org/10.2478/bsrj-2018-0007>
- Bolat, H. B., Yaşlı, F., & Temur, G. T. (2022). Risk Analysis for the Tech Startup Projects with Fuzzy Logic. Dalam C. Kahraman, S. Cebi, S. Cevik Onar, B. Oztaysi, A. C. Tolga, & I. U. Sari (Ed.), *Intelligent and Fuzzy Techniques for Emerging Conditions and Digital Transformation* (Vol. 308, hlm. 671–

- 679). Springer International Publishing. [https://doi.org/10.1007/978-3-030-85577-2\\_79](https://doi.org/10.1007/978-3-030-85577-2_79)
- Boon, C., Den Hartog, D. N., & Lepak, D. P. (2019). A Systematic Review of Human Resource Management Systems and Their Measurement. *Journal of Management*, 45(6), 2498–2537. <https://doi.org/10.1177/0149206318818718>
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., Bakken, S., Kaplan, C. P., Squiers, L., Fabrizio, C., & Fernandez, M. (2009). How We Design Feasibility Studies. *American journal of preventive medicine*, 36(5), 452–457. <https://doi.org/10.1016/j.amepre.2009.02.002>
- Bowser, G., & Reed, P. (1995). Education TECH Points for Assistive Technology Planning. *Journal of Special Education Technology*, 12(4), 325–338. <https://doi.org/10.1177/016264349501200404>
- Budiharso, T., & Tarman, B. (2020). Improving Quality Education through Better Working Conditions of Academic Institutes. *Journal of Ethnic and Cultural Studies*, 7(1), 99–115.
- Buskey, F., & Polizzi, J. A. (2012). A Tale of Two Educational Leadership Program Redesigns: How Policy Influences Process. *Journal of School Leadership*, 22(3), 462–492. <https://doi.org/10.1177/105268461202200303>
- Cantamessa, M., Gatteschi, V., Perboli, G., & Rosano, M. (2018). Startups' Roads to Failure. *Sustainability*, 10(7), Article 7. <https://doi.org/10.3390/su10072346>
- Carbonell, J., Sánchez-Esguevillas, A., & Carro, B. (2015). Assessing emerging issues. The external and internal approach. *Futures*, 73, 12–21. <https://doi.org/10.1016/j.futures.2015.07.015>
- Celik, B., & Olcer, O. H. (2018). What is the Contribution of ISO 9001 Quality Management System to Educational Institutions? *International Journal of Academic Research in Business and Social Sciences*, 8(6), Pages 445-462. <https://doi.org/10.6007/IJARBSS/v8-i6/4250>
- Chaabani, Y., Al-Thani, H., & Du, X. (2023). The role identities of discipline-specific facilitators in a multi-tiered professional development program in higher education. *Educational Research and Evaluation*, 28(7–8), 186–204. <https://doi.org/10.1080/13803611.2023.2281347>
- Chalermsook, K., & Anutariya, C. (2023). An Analytic Hierarchy Process-Based Framework for Evaluating and Matching Coding Bootcamp Graduates with Industry Opportunities. Dalam C. Anutariya, D. Liu, Kinshuk, A. Tlili, J. Yang, & M. Chang (Ed.), *Smart Learning for A Sustainable Society* (hlm. 279–282). Springer Nature. [https://doi.org/10.1007/978-981-99-5961-7\\_39](https://doi.org/10.1007/978-981-99-5961-7_39)
- Chen, R., Lee, Y.-D., & Wang, C.-H. (2020). Total quality management and sustainable competitive advantage: Serial mediation of transformational leadership and executive ability. *Total Quality Management & Business Excellence*, 31(1), 1–12. <https://doi.org/10.1080/1478233X.2019.1680700>

- Excellence*, 31(5–6), 451–468.  
<https://doi.org/10.1080/14783363.2018.1476132>
- Chen, S.-H. (2012). The establishment of a quality management system for the higher education industry. *Quality & Quantity*, 46(4), 1279–1296.  
<https://doi.org/10.1007/s11135-011-9441-1>
- Chiarini, A., Castellani, P., Rossato, C., & Cobelli, N. (2021). Quality management internal auditing in small and medium-sized companies: An exploratory study on factors for significantly improving quality performance. *Total Quality Management & Business Excellence*, 32(15–16), 1829–1849.  
<https://doi.org/10.1080/14783363.2020.1776101>
- Chiffi, D., Moroni, S., & Zanetti, L. (2022). Types of Technological Innovation in the Face of Uncertainty. *Philosophy & Technology*, 35(4), 94.  
<https://doi.org/10.1007/s13347-022-00587-3>
- Čižkienė, J. (2019). The Role Of Leadership in Adopting Quality Management System in Social Service Sector. *Journal of Intercultural Management*, 11(2), 179–199. <https://doi.org/10.2478/jiom-2019-0014>
- Cobbinah, J. E., & Agyemang, S. (2020). Quality Management and Academic Leadership. Dalam N. Baporikar & M. Sony (Ed.), *Advances in Higher Education and Professional Development* (hlm. 101–120). IGI Global.  
<https://doi.org/10.4018/978-1-7998-1017-9.ch006>
- Culduz, M. (2023). The Impact of Educational Leadership in Improving the Learning Experience: Dalam A. S. Munna, U. Nwagbara, & Y. Alhassan (Ed.), *Advances in Educational Marketing, Administration, and Leadership* (hlm. 168–189). IGI Global. <https://doi.org/10.4018/978-1-6684-8332-9.ch008>
- Dale, B. (2015). Quality Management Systems. Dalam C. L. Cooper (Ed.), *Wiley Encyclopedia of Management* (1 ed., hlm. 1–3). Wiley.  
<https://doi.org/10.1002/9781118785317.weom100038>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140.  
<https://doi.org/10.1080/10888691.2018.1537791>
- Das, K., Gryseels, M., Sudhir, P., & Tan, K. T. (2016). *Unlocking Indonesia's digital opportunity* (hlm. 28). McKinsey Indonesia Office.  
[https://www.mckinsey.com/~/media/McKinsey/Locations/Asia/Indonesia/Our%20Insights/Unlocking%20Indonesias%20digital%20opportunity/Unlocking\\_Indonesias\\_digital\\_opportunity.ashx](https://www.mckinsey.com/~/media/McKinsey/Locations/Asia/Indonesia/Our%20Insights/Unlocking%20Indonesias%20digital%20opportunity/Unlocking_Indonesias_digital_opportunity.ashx)
- Davidescu, A. A., Apostu, S.-A., Paul, A., & Casuneanu, I. (2020). Work Flexibility, Job Satisfaction, and Job Performance among Romanian Employees—Implications for Sustainable Human Resource Management. *Sustainability*, 12(15), Article 15. <https://doi.org/10.3390/su12156086>

- De Melo, R. M., Dos Santos, E. R., Lasserre Ferreira, M. H., & Silva Santos, L. P. D. (2020). Quality Management System in Educational Institutions: Integration of FMEA and PROMETHEE II. *Global Journal of Researches in Engineering*, 1–10. <https://doi.org/10.34257/GJREJVOL20IS2PG1>
- De Winne, S., Marescaux, E., Sels, L., Van Beveren, I., & Vanormelingen, S. (2019). The impact of employee turnover and turnover volatility on labor productivity: A flexible non-linear approach. *The International Journal of Human Resource Management*, 30(21), 3049–3079. <https://doi.org/10.1080/09585192.2018.1449129>
- Decuypere, M., Hartong, S., Brandau, N., Joecks, L., Loft-Akhoondi, A., Ortegón, C., Tierens, T., & Vanermen, L. (2024). Maneuvering constellations of valuation: A critical investigation of the edtech startup sector. *Critical Studies in Education*, 0(0), 1–20. <https://doi.org/10.1080/17508487.2024.2362196>
- Deslauriers, L., McCarty, L. S., Miller, K., Callaghan, K., & Kestin, G. (2019). Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom. *Proceedings of the National Academy of Sciences of the United States of America*, 116(39), 19251–19257. <https://doi.org/10.1073/pnas.1821936116>
- Díez, F., Villa, A., López, A. L., & Iraurgi, I. (2020). Impact of quality management systems in the performance of educational centers: Educational policies and management processes. *Heliyon*, 6(4), e03824. <https://doi.org/10.1016/j.heliyon.2020.e03824>
- Dirzyte, A., Perminas, A., Kaminskis, L., Žebrauskas, G., Sederevičiūtė – Pačiauskienė, Ž., Šliogerienė, J., Suchanova, J., Rimašiūtė – Knabikienė, R., Patapas, A., & Gajdosikiene, I. (2023). Factors contributing to dropping out of adults' programming e-learning. *Heliyon*, 9(12), e22113. <https://doi.org/10.1016/j.heliyon.2023.e22113>
- Djibu, R. (2021). *Evaluasi Pendidikan Nonformal*. Bayfa Cendekia Indonesia.
- Duarte, R., Ramos-Pires, A., & Gonçalves, H. (2014). Identifying at-risk students in higher education. *Total Quality Management & Business Excellence*, 25(7–8), 944–952. <https://doi.org/10.1080/14783363.2014.906110>
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Egido Gálvez, I., Fernández Cruz, F. J., & Fernández Díaz, M. J. (2016). Evaluation of the impact of quality management systems on school climate.

- International Journal of Educational Management*, 30(4).  
<https://doi.org/10.1108/IJEM-01-2015-0010>
- Ehsan, Z.-A. (2021). Defining a Startup—A Critical Analysis. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3823361>
- F. Seliem, M., M. Shazly, P. D. M., & A. Mostafa, A. P. (2019). Implementation of (Plan-Do-Check-Act) Process of Quality and Measuring its Effect on Nurses' Practice of Patient Safety Goals. *Egyptian Journal of Health Care*, 10(3), 218–233. <https://doi.org/10.21608/ejhc.2019.59045>
- Farida, I., & Setiawan, D. (2022). Business Strategies and Competitive Advantage: The Role of Performance and Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), Article 3. <https://doi.org/10.3390/joitmc8030163>
- Fathy, M., Hewedi, M. M., Ali, A., & Abdelhakim, A. (2021). Implementation of ISO 9001:2015 in a Student Hostel: The Interested Parties' Perspective. *International Journal of Heritage, Tourism and Hospitality*, 15(1), 38–50. <https://doi.org/10.21608/ijhth.2021.196587>
- Faura, M. C., Sanchez-Ruiz, D., Tello, P., Tullume, J., & Vilchez-Sandoval, J. (2019). Compliance Assessment of ISO 21001:2018 Clause 8.5 in the Systems Engineering Program of Universidad Autónoma del Perú. *2019 International Symposium on Engineering Accreditation and Education (ICACIT)*, 1–5. <https://doi.org/10.1109/ICACIT46824.2019.9130325>
- Fazekas, N., Kiss, N., & Barath, T. (2021, Januari 1). *Service Design and Learning Experience Development in Higher Education*. International RESER Conference: “Services and future of the workforce,” Germany.
- Fernández Cruz, F. J., Egido Gálvez, I., & Carballo Santaolalla, R. (2016). Impact of quality management systems on teaching-learning processes. *Quality Assurance in Education*, 24(3), 394–415. <https://doi.org/10.1108/QAE-09-2013-0037>
- Foster, S. T. (2017). *Managing quality: Integrating the supply chain* (Sixth Edition). Pearson.
- Garengo, P., Sardi, A., & Nudurupati, S. S. (2021). Human resource management (HRM) in the performance measurement and management (PMM) domain: A bibliometric review. *International Journal of Productivity and Performance Management*, 71(7), 3056–3077. <https://doi.org/10.1108/IJPPM-04-2020-0177>
- Gilbert, Dr. D. (2020). ISO Alongside, Instead, or Inside?The potential of ISO 21001:2018 to change and challenge higher education accreditation. *International Journal of Business and Applied Social Science*, 6(10), 45–52. <https://doi.org/10.33642/ijbass.v6n10p5>
- Ginting, D., Woods, R., Tantri, N. R., Rahayu, P. S., & Asfihana, R. (2022). Portraying the Performance of Indonesian's Massive Open Online Course

- Facilitators. *Sage Open*, 12(3), 21582440221116601. <https://doi.org/10.1177/21582440221116601>
- Girmanová, L., Šolc, M., Blaško, P., & Petrík, J. (2022). Quality Management System in Education: Application of Quality Management Models in Educational Organization—Case Study from the Slovak Republic. *Standards*, 2(4), Article 4. <https://doi.org/10.3390/standards2040031>
- Global EdTech. (2022). EdTech Products, Definitions and Trends. *Global EdTech*. <https://global-edtech.com/edtech-definitions-products-and-trends/>
- Goetsch, D. L., & Davis, S. (2014). *Quality management for organizational excellence: Introduction to total quality* (7. ed). Pearson Education Limited.
- Goulart, V. G., Liboni, L. B., & Cezarino, L. O. (2022). Balancing skills in the digital transformation era: The future of jobs and the role of higher education. *Industry and Higher Education*, 36(2), 118–127. <https://doi.org/10.1177/09504222211029796>
- Gremyr, I., Lenning, J., Elg, M., & Martin, J. (2021). Increasing the value of quality management systems. *International Journal of Quality and Service Sciences*, 13(3), 381–394. <https://doi.org/10.1108/IJQSS-10-2020-0170>
- Grudowski, P. (2008). Quality System Documentation of SMEs in Process Management Framework. *Economics and Organization of Enterprise*, 1(1), 77–82. <https://doi.org/10.2478/v10061-008-0010-1>
- Guerra Bretaña, R. M., Ramos Azcuy, F. J., & Roque González, R. (2020). Aplicación de la norma ISO 21001:2018 a la calidad de los programas de posgrado académico. *Educación Médica Superior*, 34(1). [http://scielo.sld.cu/scielo.php?script=sci\\_abstract&pid=S0864-21412020000100017&lng=es&nrm=iso&tlang=es](http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S0864-21412020000100017&lng=es&nrm=iso&tlang=es)
- Guevara, C., Lyons, K., & Wolfe, K. S. (2019). Change Management in Practice: Creating a Culture That Promotes Technology Adoption. Dalam K. S. Wolfe, K. Lyons, & C. Guevara (Ed.), *Developing Educational Technology at an Urban Community College* (hlm. 21–33). Springer International Publishing. [https://doi.org/10.1007/978-3-030-17038-7\\_3](https://doi.org/10.1007/978-3-030-17038-7_3)
- Guo, P. J. (2017). Older Adults Learning Computer Programming: Motivations, Frustrations, and Design Opportunities. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 7070–7083. <https://doi.org/10.1145/3025453.3025945>
- Gupta, A. (2021). Focus on Quality in Higher Education in India. *Indian Journal of Public Administration*, 67(1), 54–70. <https://doi.org/10.1177/00195561211007224>
- Gyurko, J., & Snow, M. (2020). Our “Directive”: Quality Teaching and Learning. *Change: The Magazine of Higher Learning*, 52(5), 6–16. <https://doi.org/10.1080/00091383.2020.1807873>
- Hakim, L., Rosadi, K. I., Widdah, M. E., Us, K. A., Shalahudin, & My, M. (2020). Did PDCA Cycle, Service Quality and Innovation Capability Influence

- Private Universities Performance? *Systematic Reviews in Pharmacy*, 11(10), 874–883. <https://doi.org/10.31838/srp.2020.10.131>
- Hasbullah, M. A., Seliwangi, N. B., Pradana, M. S., Khulel, B., & Hudi, M. (2020). Quality and Affordable Education through Quality Management Systems in Higher Education. *EDUTEC: Journal of Education And Technology*, 3(2), 151–160. <https://doi.org/10.29062/edu.v3i2.52>
- Hassan, M. M., Jambulingam, M., Alagas, E. N., Uzir, Md. U. H., & Halbusi, H. A. (2023). Necessities and Ways of Combating Dissatisfactions at Workplaces Against the Job-Hopping Generation Y Employees. *Global Business Review*, 24(6), 1276–1301. <https://doi.org/10.1177/0972150920926966>
- Hendricks, L. (2023). Coding Bootcamps—Perceptions and Outcomes. *All Graduate Theses and Dissertations, Spring 1920 to Summer 2023*. <https://doi.org/10.26076/3816-fa66>
- Herbert, I. P., Rothwell, A. T., Glover, J. L., & Lambert, S. A. (2020). Graduate employability, employment prospects and work-readiness in the changing field of professional work. *The International Journal of Management Education*, 18(2), 100378. <https://doi.org/10.1016/j.ijme.2020.100378>
- Hidayati, N., Pragita, T. E., & Sari, W. S. (2020). *Panduan Penerapan SNI ISO 21001:2018 Sistem Manajemen Organisasi Pendidikan*. Badan Standardisasi Nasional.
- Ho, K.-F., Ho, C.-H., & Chung, M.-H. (2019). Theoretical integration of user satisfaction and technology acceptance of the nursing process information system. *PLOS ONE*, 14(6), e0217622. <https://doi.org/10.1371/journal.pone.0217622>
- HolonIQ. (2023). *Global EdTech 1000*. <https://www.holoniq.com/global-edtech-1000>
- Hoppers, W. H. M. L. (2006). *Non-formal education and basic education reform: A conceptual review*. International Institute for Educational Planning, UNESCO.
- Howlett, M., & Mukherjee, I. (2017). Policy formulation: Where knowledge meets power in the policy process. Dalam M. Howlett & I. Mukherjee (Ed.), *Handbook of Policy Formulation*. Edward Elgar Publishing. <https://doi.org/10.4337/9781784719326.00006>
- Hoyle, D. (2007). *Quality: Management essentials* (1st ed). Butterworth-Heinemann.
- Hsieh, T.-C., Lee, M.-C., & Su, C.-Y. (2013). Designing and implementing a personalized remedial learning system for enhancing the programming learning. *Journal of Educational Technology & Society*, 16(4), 32–46.
- Huesca, G., Rodríguez-Rosales, A., Lara-Prieto, V., Ruiz-Cantisani, M. I., & Acevedo, J. (2024). Effectiveness of Challenge-Based Learning in Undergraduate Engineering Programs from Competencies and Gender

- Perspectives. *Education Sciences*, 14(3), Article 3.  
<https://doi.org/10.3390/educsci14030255>
- Hussein, N., Obeidat, B., Jaradat, M., Alshurideh, M., & Masa'deh, R. (2021). Agile-minded organizational excellence: Empirical investigation. *Academy of Strategic Management Journal*, 20, 1–25.
- Idris, F., Hassan, Z., Ya'acob, A., Gill, S. K., & Awal, N. A. M. (2012). The Role of Education in Shaping Youth's National Identity. *Procedia - Social and Behavioral Sciences*, 59, 443–450.  
<https://doi.org/10.1016/j.sbspro.2012.09.299>
- Ikram, M., Zhang, Q., & Sroufe, R. (2021). Future of quality management system (ISO 9001) certification: Novel grey forecasting approach. *Total Quality Management & Business Excellence*, 32(15–16), 1666–1693.  
<https://doi.org/10.1080/14783363.2020.1768062>
- Indarti, L., Mundiri, A., & Ferandita, N. (2021). Good governance university; strategic management application based on ISO 21001: 2018. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 5(3), Article 3.  
<https://doi.org/10.33650/al-tanzim.v5i3.3070>
- Indra, M. H., Sutarto, S., Kharizmi, M., Nurmiati, A. S., & Susanto, A. (2023). Optimizing the Potential of Technology-Based Learning Increases Student Engagement. *al-fikrah: Jurnal Manajemen Pendidikan*, 11(2), 233.  
<https://doi.org/10.31958/jaf.v11i2.10554>
- Ingþórsson, Á. H., Alfirević, N., Pavičić, J., & Vican, D. (2019). An Epilogue: The Policy Tide for Educational Management and Leadership Development in Small European Countries. Dalam Á. H. Ingþórsson, N. Alfirević, J. Pavičić, & D. Vican (Ed.), *Educational Leadership in Policy* (hlm. 265–268). Springer International Publishing. [https://doi.org/10.1007/978-3-319-99677-6\\_16](https://doi.org/10.1007/978-3-319-99677-6_16)
- ISO. (2020, Desember 15). ISO 9000:2015. ISO.  
<https://www.iso.org/standard/45481.html>
- ISO 21001. (2018). *Educational organizations—Management systems for educational organizations—Requirements with guidance for use*.
- Iweuno, B. N., Tochi, N. S., Egwim, O. E., Omorotionmwan, A., Makinde, P., Iweuno, B. N., Tochi, N. S., Egwim, O. E., Omorotionmwan, A., & Makinde, P. (2024). Impact of racial representation in curriculum content on student identity and performance. *World Journal of Advanced Research and Reviews*, 23(1), Article 1.  
<https://doi.org/10.30574/wjarr.2024.23.1.2280>
- Jalal, S., Norman, H., Zaini, H., Hamdan, F., & Zakaria, N. Y. K. (2024). Transformation of Challenge-based Learning Spaces in Higher Education. *International Journal of Academic Research in Business and Social Sciences*, 14(5), 654–661.

- Jamali, A., Bhutto, A., Khaskhely, M., & Sethar, W. (2022). Impact of leadership styles on faculty performance: Moderating role of organizational culture in higher education. *Management Science Letters*, 12(1), 1–20.
- Janols, R., & Göransson, B. (2013). *Secondary Users Interpretations on Key Concerns for Achieving an Effective and Efficient Region-wide Electronic Patient Record Usage*. The 21st European Conference on Information Systems (ECIS 2013). <https://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-196509>
- Javaid, M., Haleem, A., Pratap Singh, R., & Suman, R. (2021). Significance of Quality 4.0 towards comprehensive enhancement in manufacturing sector. *Sensors International*, 2, 100109. <https://doi.org/10.1016/j.sintl.2021.100109>
- Jie, Z., & Kim, H.-J. (2013). User feedback oriented quality of experience management framework. *China Communications*, 10(1), 72–80. <https://doi.org/10.1109/CC.2013.6457531>
- Jones, E. C. (2014). *Quality management for organizations using Lean Six Sigma techniques*. CRC Press.
- Kamal, S., Ibrahim, R., Ghani, I., & Ziauddin. (2015). Incorporating Users Satisfaction to Resolve Sparsity in Recommendation Systems. Dalam H. Fujita & A. Selamat (Ed.), *Intelligent Software Methodologies, Tools and Techniques* (Vol. 513, hlm. 134–146). Springer International Publishing. [https://doi.org/10.1007/978-3-319-17530-0\\_10](https://doi.org/10.1007/978-3-319-17530-0_10)
- Khalifa, M. (2009). Modelling Ease of Learning of User Interfaces. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences de l'Administration*, 12(3), 250–267. <https://doi.org/10.1111/j.1936-4490.1995.tb00088.x>
- Kim, J., & Jung, H.-S. (2022). The Effect of Employee Competency and Organizational Culture on Employees' Perceived Stress for Better Workplace. *International Journal of Environmental Research and Public Health*, 19(8), Article 8. <https://doi.org/10.3390/ijerph19084428>
- Kim, N. H., So, H.-J., & Joo, Y. J. (2021). Flipped learning design fidelity, self-regulated learning, satisfaction, and continuance intention in a university flipped learning course. *Australasian Journal of Educational Technology*, 37(4), Article 4. <https://doi.org/10.14742/ajet.6046>
- Kim, O.-J. (2019). A Study on the Measures for Managing the Quality of Curriculum of Early Childhood Education Department in College with the Application of CIPP Model Based on PDCA. *Journal of the Korea Convergence Society*, 10(1), 215–226. <https://doi.org/10.15207/JKCS.2019.10.1.215>
- Kim, S. J., Lee, J., Song, J. H., & Lee, Y. (2021). The reciprocal relationship between academic resilience and emotional engagement of students and the effects of participating in the Educational Welfare Priority Support Project

- in Korea: Autoregressive cross-lagged modeling. *International Journal of Educational Research*, 109, 101802. <https://doi.org/10.1016/j.ijer.2021.101802>
- King, W., Chung, T., & Haney, M. (2008). Knowledge Management and Organizational Learning. *Omega*, 36(2), 167–172. <https://doi.org/10.1016/j.omega.2006.07.004>
- Kirov, A. V. (2020). Methodology of determining benchmarks and indicators characterizing the functioning of the enterprise quality management system. *IOP Conference Series: Materials Science and Engineering*, 919(4), 042004. <https://doi.org/10.1088/1757-899X/919/4/042004>
- Klochkov, Y., Klochkova, E., Alasas, B. M., Kuzmina, T., & Konakhina, N. (2017). Development of external customer classification based on the analysis of interested parties. *2017 International Conference on Infocom Technologies and Unmanned Systems (Trends and Future Directions) (ICTUS)*, 729–732. <https://doi.org/10.1109/ICTUS.2017.8286103>
- Knyvienė, I. (2020). Quality management implementation technique in education: the case of Lithuania. *Humanities Studies*, 83(6), 95–108. <https://doi.org/10.26661/hst-2020-6-83-07>
- Kohl, H. (2020). *Standards for Management Systems: A Comprehensive Guide to Content, Implementation Tools, and Certification Schemes*. Springer Nature.
- Kovalenko, S. M., Romelashvili, O. S., Zborovska, T. V., & Blagun, O. D. (2020). General aspects of introduction of management systems in educational organizations in pursuance of ISO 21001:2018. *Management, Economy and Quality Assurance in Pharmacy*, 4(64), Article 4(64). <https://doi.org/10.24959/uekj.20.33>
- Kozioł-Nadolna, K. (2020). The Role of a Leader in Stimulating Innovation in an Organization. *Administrative Sciences*, 10(3), Article 3. <https://doi.org/10.3390/admsci10030059>
- Kusumawati, E. (2023). *Leadership in Total Quality Management for Service Quality*. 2576–2582. <https://www.scitepress.org/Link.aspx?doi=10.5220/0009948625762582>
- Lai, K.-H. L. (2017). Implementing the Quality Startup Management System model in Hong Kong: A case study. *International Journal of Quality Innovation*, 3(1), 4. <https://doi.org/10.1186/s40887-017-0013-x>
- Lang, G., & Sharp, J. H. (2022). Coding Bootcamp Satisfaction: A Research Model and Survey Instrument. *Information Systems Education Journal*, 20(2), 49–60.
- Larina, L. N. (2015). Practical Application of Total Quality Management System to Education of International Students. *Procedia - Social and Behavioral Sciences*, 215, 9–13. <https://doi.org/10.1016/j.sbspro.2015.11.566>

- Li, Y., Li, X., & Li, J. (2014). Exploring the underlying mechanism of PDCA cycle to improve teaching quality: A motivation theory perspective. *Proceedings of PICMET '14 Conference: Portland International Center for Management of Engineering and Technology; Infrastructure and Service Integration*, 2693–2698. <https://ieeexplore.ieee.org/abstract/document/6921297>
- Lodge, J. M., Kennedy, G., Lockyer, L., Arguel, A., & Pachman, M. (2018). Understanding Difficulties and Resulting Confusion in Learning: An Integrative Review. *Frontiers in Education*, 3. <https://doi.org/10.3389/feduc.2018.00049>
- Lund, A. (2001). Measuring Usability with the USE Questionnaire. *Usability and User Experience Newsletter of the STC Usability SIG*, 8.
- Lye, S. Y., & Koh, J. H. L. (2014). Review on teaching and learning of computational thinking through programming: What is next for K-12? *Computers in Human Behavior*, 41, 51–61. <https://doi.org/10.1016/j.chb.2014.09.012>
- Ma, Y., Zhang, Q., & Yin, H. (2020). Environmental management and labor productivity: The moderating role of quality management. *Journal of Environmental Management*, 255, 109795. <https://doi.org/10.1016/j.jenvman.2019.109795>
- Ma'arif, M. A. (2016). Manajemen Mutu Pendidikan. *At- Ta'lim : Jurnal Pendidikan*, 2(2), Article 2.
- Mandiri Capital. (2022, Mei 30). *Investor Ungkap Alasan Startup Marak PHK meski Ekonomi Mulai Pulih*. Mandiri Capital Indonesia. <https://mandiri-capital.co.id/en/investor-ungkap-alasan-startup-marak-phk-meski-ekonomi-mulai-pulih/>
- Martínez-Caro, E., Cegarra-Navarro, J. G., & Cepeda-Carrión, G. (2015). An application of the performance-evaluation model for e-learning quality in higher education. *Total Quality Management & Business Excellence*, 26(5–6), 632–647. <https://doi.org/10.1080/14783363.2013.867607>
- Martínez-Zarzuelo, A., Rodríguez-Mantilla, J. M., & Fernández-Díaz, M. J. (2022). Improvements in climate and satisfaction after implementing a quality management system in education. *Evaluation and Program Planning*, 94, 102119. <https://doi.org/10.1016/j.evalprogplan.2022.102119>
- Mashuri, S., Sarib, M., Alhabisy, F., Syam, H., & Ruslin, R. (2022). *Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies*.
- Mazzetti, G., & Schaufeli, W. B. (2022). The impact of engaging leadership on employee engagement and team effectiveness: A longitudinal, multi-level study on the mediating role of personal- and team resources. *PLoS ONE*, 17(6). <https://doi.org/10.1371/journal.pone.0269433>

- McLaren, S. V. (2015). Policy Formulation and Enactment. Dalam K. Stables & S. Keirl (Ed.), *Environment, Ethics and Cultures* (hlm. 133–152). SensePublishers. [https://doi.org/10.1007/978-94-6209-938-8\\_9](https://doi.org/10.1007/978-94-6209-938-8_9)
- Md Ali, S., & Mohamad Ali, A. Z. (2019). Perceived Ease of Use Towards Acceptance on Focused Educational Video Sharing Site. *Asia-Pacific Journal of Information Technology & Multimedia*, 08(01), 1–15. <https://doi.org/10.17576/apjitm-2019-0801-01>
- Melo-Becerra, L. A., Hahn-De-Castro, L. W., Ariza, D. S., & Carmona, C. O. (2020). Efficiency of local public education in a decentralized context. *International Journal of Educational Development*, 76, 102194. <https://doi.org/10.1016/j.ijedudev.2020.102194>
- Mensah, J. (2020). Improving Quality Management in Higher Education Institutions in Developing Countries through Strategic Planning. *Asian Journal of Contemporary Education*, 4(1), 9–25. <https://doi.org/10.18488/journal.137.2020.41.9.25>
- Mercure, J.-F., Sharpe, S., Vinuales, J. E., Ives, M., Grubb, M., Lam, A., Drummond, P., Pollitt, H., Knobloch, F., & Nijssse, F. J. M. M. (2021). Risk-opportunity analysis for transformative policy design and appraisal. *Global Environmental Change*, 70, 102359. <https://doi.org/10.1016/j.gloenvcha.2021.102359>
- Mercurio, D. I., & Hernandez, A. A. (2020). Understanding User Acceptance of Information System for Sweet Potato Variety and Disease Classification: An Empirical Examination with an Extended Technology Acceptance Model. *2020 16th IEEE International Colloquium on Signal Processing & Its Applications (CSPA)*, 272–277. <https://doi.org/10.1109/CSPA48992.2020.9068527>
- Miltner, K. M. (2022). Everything Old Is New Again: A Comparison of Midcentury American EDP Schools and Contemporary Coding Bootcamps. *Information & Culture*, 57(3), 255–282. <https://doi.org/10.7560/IC57302>
- Moldovan, L. (2012). Integration of Strategic Management and Quality Assurance in the Romanian Higher Education. *Procedia - Social and Behavioral Sciences*, 58, 1458–1465. <https://doi.org/10.1016/j.sbspro.2012.09.1132>
- Molinillo, S., Japutra, A., & Ekinci, Y. (2022). Building brand credibility: The role of involvement, identification, reputation and attachment. *Journal of Retailing and Consumer Services*, 64, 102819. <https://doi.org/10.1016/j.jretconser.2021.102819>
- Moshirpour, M., Paul, R., & Hemmanti, H. (2019, November 7). Designing a programming bootcamp for non-software engineers. *Proceedings of the Canadian Engineering Education Association (CEEA)*. Canadian Engineering Education Association (CEEA), Toronto. <https://doi.org/10.24908/pceea.vi0.13824>

- Mouzakitis, S., & Askounis, D. (2010). A Knowledge-Based Framework for Measuring Organizational Readiness for the Adoption of B2B Integration Systems. *Information Systems Management*, 27(3), 253–266. <https://doi.org/10.1080/10580530.2010.493842>
- Nailufar, N., Ekosiswoyo, R., & Mulyono, S. E. (2019). The Implementation Analysis of Total Quality Management in Clothing Sewing Training. *Journal of Nonformal Education*, 5(1), Article 1. <https://doi.org/10.15294/jne.v5i1.18334>
- Nair, K. (2019). Overcoming today's digital talent gap in organizations worldwide. *Development and Learning in Organizations: An International Journal*, 33(6), 16–18. <https://doi.org/10.1108/DLO-02-2019-0044>
- Nayak, S. K. (2020). Essentials of Organizational Leadership for Quality Enhancement in Educational Institutions. *Shanlax International Journal of Arts, Science and Humanities*, 8(1), 89–92. <https://doi.org/10.34293/sijash.v8i1.2407>
- Nehme, R. (2017). Performance evaluation of auditors: A constructive or a destructive tool of audit output. *Managerial Auditing Journal*, 32(2), 215–231. <https://doi.org/10.1108/MAJ-09-2016-1446>
- Nendi, I., Abdurokhim, & Askarno. (2024). Strategies to Improve Employee Motivation and Performance Through the Employee Engagement Program. *Jurnal Ilmiah Akuntansi Kesatuan*, 12(4), 505–512. <https://doi.org/10.37641/jiakes.v12i4.2760>
- Nevenglosky, E. A., Cale, C., & Aguilar, S. P. (2019). Barriers to Effective Curriculum Implementation. *Research in Higher Education Journal*, 36. <https://eric.ed.gov/?id=EJ1203958>
- Neyestani, B. (2016). Effectiveness of Quality Management System (QMS) on Construction Projects. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2960422>
- Nguyen, V., Nguyen, N., Schumacher, B., & Tran, T. (2020). Practical Application of Plan–Do–Check–Act Cycle for Quality Improvement of Sustainable Packaging: A Case Study. *Applied Sciences*, 10(18), Article 18. <https://doi.org/10.3390/app10186332>
- Nieswandt, M., Geschwill, R., & Zimmermann, V. (2019). EdTech verändert die Kompetenzmodelle. Dalam M. Nieswandt, R. Geschwill, & V. Zimmermann, *EdTech in Unternehmen* (hlm. 131–137). Springer Fachmedien Wiesbaden. [https://doi.org/10.1007/978-3-658-26844-2\\_9](https://doi.org/10.1007/978-3-658-26844-2_9)
- Nikula, U., Gotel, O., & Kasurinen, J. (2011). A Motivation Guided Holistic Rehabilitation of the First Programming Course. *ACM Transactions on Computing Education*, 11(4), 1–38. <https://doi.org/10.1145/2048931.2048935>

- Noriah, M. A. (2007). Gaining competitive advantage in personal dosimetry services through ISO 9001 certification. *Radiation Protection Dosimetry*, 125(1–4), 101–104. <https://doi.org/10.1093/rpd/ncl381>
- Norouzi, M., Kiany, G. R., ShayesteFar, P., & Allami, H. (2021). The 2 × 2 standards and standpoints measure of EFL teachers' achievement goals: Model revision and relations with affective and behavioral outcomes. *Studies in Educational Evaluation*, 70, 101011. <https://doi.org/10.1016/j.stueduc.2021.101011>
- Nurwardani, S., Zayyan, A., Astuti, E. F., & Putra, P. O. H. (2024). Exploring the Factors in the Discontinuation of a Talent Pool Information System: A Case Study of an EduTech Startup in Indonesia. *Information*, 15(7), Article 7. <https://doi.org/10.3390/info15070412>
- Okanović, M. Ž., Jevtić, M. V., & Stefanović, T. D. (2021). Organizational Changes in Development Process of Technology Startups. Dalam N. Mitrovic, G. Mladenovic, & A. Mitrovic (Ed.), *Experimental and Computational Investigations in Engineering* (Vol. 153, hlm. 203–219). Springer International Publishing. [https://doi.org/10.1007/978-3-030-58362-0\\_13](https://doi.org/10.1007/978-3-030-58362-0_13)
- Okviana, L., & Nurhaeni, I. D. A. (2020). *Management of the Educational Change in the Covid 19 Pandemic Era*. 184–188. <https://doi.org/10.2991/assehr.k.201219.027>
- O'Mahony, K., & Garavan, T. N. (2012). Implementing a quality management framework in a higher education organisation: A case study. *Quality Assurance in Education*, 20(2), 184–200. <https://doi.org/10.1108/09684881211219767>
- Østerås, N., Gulbrandsen, P., Garratt, A., Benth, J. Š., Dahl, F. A., Natvig, B., & Brage, S. (2008). A randomised comparison of a four- and a five-point scale version of the Norwegian Function Assessment Scale. *Health and Quality of Life Outcomes*, 6, 14. <https://doi.org/10.1186/1477-7525-6-14>
- Paipay, K. M. R., & Bustamante, M. Á. T. Y. (2019). La Norma ISO 21001:2018 – Apéndice normativo y su impacto en estudiantes de educación superior de Lima. *INNOVA Research Journal*, 4(3.2), Article 3.2. <https://doi.org/10.33890/innova.v4.n3.2.2019.1190>
- Patel, P., & Deshpande, V. (2017). Application Of Plan-Do-Check-Act Cycle For Quality And Productivity Improvement-A Review. *International Journal for Research in Applied Science & Engineering Technology*, 5, 197–201.
- Patel, S. (2011). Discovery Of Knowledge Management In Organisation. *Indian Journal of Applied Research*, 1(12), 134–136. <https://doi.org/10.15373/2249555X/SEP2012/47>
- Pfeifer, M. R. (2022). Human Resources in Start-Ups: Expert Interviews with Managers on the Transition of Start-Ups from Academic to Private. *Merits*, 2(2), 81–100. <https://doi.org/10.3390/merits2020008>

- Pinto, C., Carvalho, M., & Martins, S. (2021). A Gestão da Informação como facilitadora do empoderamento psicológico e da melhoria do desempenho profissional. *Páginas a&b Arquivos & Bibliotecas*, 15, 105–120. <https://doi.org/10.21747/21836671/pag15a6>
- Plomp, T. (2013). Educational Design Research: An Introduction. Dalam *Educational Design Research* (hlm. 10–51). Netherlands Institute for Curriculum Development (SLO).
- Plomp, T., Anderson, R. E., Law, N., & Quale, A. (2009). *Cross-National Information and Communication Technology Policies and Practices in Education: (Revised Second Edition)* (2 ed.). IAP.
- Pozo, M., Chiky, R., Meziane, F., & Métais, E. (2017). Enhancing New User Cold-Start Based on Decision Trees Active Learning by Using Past Warm-Users Predictions. Dalam N. T. Nguyen, G. A. Papadopoulos, P. Jędrzejowicz, B. Trawiński, & G. Vossen (Ed.), *Computational Collective Intelligence* (Vol. 10448, hlm. 137–147). Springer International Publishing. [https://doi.org/10.1007/978-3-319-67074-4\\_14](https://doi.org/10.1007/978-3-319-67074-4_14)
- Prasojo, L. D. (2016). *Manajemen Mutu Pendidikan* (1 ed.). UNY Press. <http://staffnew.uny.ac.id/upload/132254846/penelitian/BUKU%20MANA%20JEMEN%20MUTU%20PENDIDIKAN-%20LANTIP%20DIAT%20P.pdf>
- Purwanto, A., Asbari, M., & Santoso, P. B. (2020). Effect of Integrated Management System of ISO 9001:2015 and ISO 22000:2018 Implementation To Packaging Industries Quality Performance at Banten Indonesia. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(1), Article 1. <https://doi.org/10.31955/mea.v4i1.213>
- Qadriani, F. E., & Windasari, N. A. (2023). Battle of Bootcamp: Analyzing Factor Affecting Customer Satisfaction and Continuance Intention in Coding Bootcamp Industry Indonesia. *International Journal of Current Science Research and Review*, 06(01). <https://doi.org/10.47191/ijcsrr/V6-i1-06>
- Qutni, D., Kristiawan, M., & Fitriani, Y. (2021). Human Resource Management in Improving The Quality of Education. *Edunesia : Jurnal Ilmiah Pendidikan*, 2(2), 354–366. <https://doi.org/10.51276/edu.v2i2.132>
- Rachman, P. (2020). Implementasi Plan-Do-Check-Act (PDCA) berbasis Key Performance Indicators (KPI): studi kasus di SMP-SMA integral Ar-Rohmah Dau Malang. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 4(2), Article 2. <https://doi.org/10.33650/al-tanzim.v4i2.981>
- Rahayu, A., Wibowo, L. A., & Sulastri. (2021). *Skill Mismatch and Industry Involvement in Improving the Job Readiness of Vocational School Graduates*. 771–774. <https://doi.org/10.2991/aebmr.k.210831.145>
- Rahmadani, V. G., Schaufeli, W. B., Stouten, J., Zhang, Z., & Zulkarnain, Z. (2020). Engaging Leadership and Its Implication for Work Engagement and Job Outcomes at the Individual and Team Level: A Multi-Level

- Longitudinal Study. *International Journal of Environmental Research and Public Health*, 17(3). <https://doi.org/10.3390/ijerph17030776>
- Rahmadii, R., & Iskandar, A. (2020). Analisis Kesiapan Sertifikasi ISO 21001:2018 dengan Metode Gap Analysis (Studi Kasus pada Akademi Telkom Jakarta). *Journal of Informatics and Communication Technology (JICT)*, 2(1), Article 1. [https://doi.org/10.52661/j\\_ict.v2i1.49](https://doi.org/10.52661/j_ict.v2i1.49)
- Rahmat, A. (2018). *Manajemen Pemberdayaan pada Pendidikan Nonformal* (1 ed.). Ideas Publishing.
- Rahmat, T. (2019). The Influence of Perceived Ease of Use and Usefulness of The Academic Registration System on the Attitude of Using online Study Plan Card (KRS). *Jurnal Manajemen Teori dan Terapan / Journal of Theory and Applied Management*, 12(3), 260. <https://doi.org/10.20473/jmtt.v12i3.15434>
- Raj, R., Kumar, V., Sharma, N. K., Singh, S., Mahlawat, S., & Verma, P. (2023). The study of remote working outcome and its influence on firm performance. *Social Sciences & Humanities Open*, 8(1), 100528. <https://doi.org/10.1016/j.ssaho.2023.100528>
- Ravaghi, H., Beyranvand, T., Mannion, R., Alijanzadeh, M., Aryankhesal, A., & Belorgeot, V. D. (2021). Effectiveness of training and educational programs for hospital managers: A systematic review. *Health Services Management Research*, 34(2), 113–126. <https://doi.org/10.1177/0951484820971460>
- Rawshdeh, M., Keathley, H., Obeidat, S., Athamenh, R., Tanash, M., & Bani Hani, D. (2022). Factor Analysis of Quality Management Systems Implementation in Healthcare: An Online Survey. *Healthcare*, 10(10), Article 10. <https://doi.org/10.3390/healthcare10101828>
- Richardson, S., & Radloff, A. (2014). Allies in learning: Critical insights into the importance of staff–student interactions in university education. *Teaching in Higher Education*, 19(6), 603–615. <https://doi.org/10.1080/13562517.2014.901960>
- Rivai, M. A., Suroso, J. S., & Pangemanan, F. (2020). Review of The Risk Analysis Using MEHARI Model: The Guideline To Analyze Risk For Startup Educational Platform. *2020 International Conference on Information Management and Technology (ICIMTech)*, 577–582. <https://doi.org/10.1109/ICIMTech50083.2020.9211204>
- Rochmad, R. (2012). Desain Model Pengembangan Perangkat Pembelajaran Matematika. *Kreano, Jurnal Matematika Kreatif-Inovatif*, 3(1), Article 1. <https://doi.org/10.15294/kreano.v3i1.2613>
- Roehrs, C., Wang, L., & Kendrick, D. (2013). Preparing Faculty to Use the Quality Matters Model for Course Improvement. *MERLOT Journal of Online Learning and Teaching*, Vol. 9(No. 1). <https://typeset.io/papers/preparing-faculty-to-use-the-quality-matters-model-for-1w1c68aoed>

- Rogala, P., & Wawak, S. (2021). Quality of the ISO 9000 series of standards-perceptions of quality management experts. *International Journal of Quality and Service Sciences*, 13(4), 509–525. <https://doi.org/10.1108/IJQSS-04-2020-0065>
- Roh, K. H., & Martin, D. G. (2018). *A Study on the Effect of Quality Management Activities on Productivity*. 13(2), 81.
- Rohayati, Y., & Delvika, R. H. (2020). *Preparation for the Implementation of ISO 21001: 2018 using Assistance Program: Case study of Telkom Vocational High School*. 12 th International Seminar on Industrial Engineering and Management, Batu, Malang. <https://www.semanticscholar.org/paper/Preparation-for-the-Implementation-of-ISO-21001%3A-of-Rohayati-Delvika/37db48414f8f10e0518e4adc0de2a77391591e71>
- Rosiana, L., Hubis, M., & Cahyadi, E. R. (2020). Factors affecting user behavior of technology application of management information system. *Indonesian Journal of Business and Entrepreneurship*. <https://doi.org/10.17358/ijbe.6.3.239>
- Ross, C. E., & Van Willigen, M. (1997). Education and the Subjective Quality of Life. *Journal of Health and Social Behavior*, 38(3), 275–297. <https://doi.org/10.2307/2955371>
- Ruales Guzmán, B. V., Brun, A., & Castellanos Domínguez, O. F. (2019). Quality management as a determinant factor of productivity: A systematic literature review. *International Journal of Productivity and Performance Management*, 68(4), 675–698. <https://doi.org/10.1108/IJPPM-07-2018-0251>
- Sales, X. (2019). A proposed methodology for evaluating the quality of performance management systems. *Pacific Accounting Review*, 31(3), 376–393. <https://doi.org/10.1108/PAR-03-2018-0019>
- Sallis, E. (2014). *Total Quality Management in Education* (3rd ed). Taylor and Francis.
- Sangpikul, A. (2017). Implementing academic service learning and the PDCA cycle in a marketing course: Contributions to three beneficiaries. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 21, 83–87. <https://doi.org/10.1016/j.jhlste.2017.08.007>
- Sawant, M. A., Rokke, C., & Yadav, O. P. (2018). A practical quality management system implementation framework for small-sized companies. *International Journal of Intelligent Enterprise*, 5(1/2), 173. <https://doi.org/10.1504/IJIE.2018.10012156>
- Shahin, A., & Dabestani, R. (2011). A feasibility study of the implementation of total quality management based on soft factor. *Journal of Industrial Engineering and Management*, 4(2), Article 2. <https://doi.org/10.3926/jiem..v4n2.p258-280>

- Siddiqui, S. T. (2017). ISO Standards: Impact of Quality Management Systems on Organizational Development. *International Journal of Managerial Studies and Research*, 5(4), 17–21.
- Sikandar, M. A., & Rahman, P. F. (2021). Edtech start-ups in the education ecosystem in the post-covid-19 era in India. *Toward Excellence*, 13, 914–921.
- Silaeva, V. V., & Semenov, V. P. (2018). Internal Education Quality Assurance through Standardization of Educational Organization Management System. *2018 IEEE International Conference “Quality Management, Transport and Information Security, Information Technologies” (IT&QM&IS)*, 70–73. <https://doi.org/10.1109/ITMQIS.2018.8525083>
- Silva, C. S., Magano, J., Matos, A., & Nogueira, T. (2021). Sustainable Quality Management Systems in the Current Paradigm: The Role of Leadership. *Sustainability*, 13(4), Article 4. <https://doi.org/10.3390/su13042056>
- Singgih, M. L., Akbar, R. A., & Abdillah, O. (2022, Maret 21). Kano Lean Six Sigma (KLSS) for Improving Service Quality at Education Technology (EdTech) Startups. *Productivity and Quality in Smart Manufacturing Systems*. <https://www.smartmoses.com/kano-lean-six-sigma-klss-for-improving-service-quality-at-education-technology-edtech-startups/>
- Sitorus, T. M. (2021). Penyelarasan ISO 21001:2018 Dengan Peraturan Standar Nasional Pendidikan Tinggi Nomor 3 Tahun 2020. *JAS-PT (Jurnal Analisis Sistem Pendidikan Tinggi Indonesia)*, 5(2), Article 2. <https://doi.org/10.36339/jaspt.v5i2.524>
- Sitzmann, T., Ely, K., Bell, B. S., & Bauer, K. N. (2010). The effects of technical difficulties on learning and attrition during online training. *Journal of Experimental Psychology: Applied*, 16(3), 281–292. <https://doi.org/10.1037/a0019968>
- Smaliychuk, G. (2020). Formation of international employee competencies in the conditions of the global labor market transformation. *Social and labour relations: theory and practice*, 10(2), 1–9. [https://doi.org/10.21511/slntp.10\(2\).2020.01](https://doi.org/10.21511/slntp.10(2).2020.01)
- Somasundaram, M., Junaid, K. A. M., & Mangadu, S. (2020). Artificial Intelligence (AI) Enabled Intelligent Quality Management System (IQMS) For Personalized Learning Path. *Procedia Computer Science*, 172, 438–442. <https://doi.org/10.1016/j.procs.2020.05.096>
- Song, D., Hong, H., & Oh, E. Y. (2021). Applying computational analysis of novice learners' computer programming patterns to reveal self-regulated learning, computational thinking, and learning performance. *Computers in Human Behavior*, 120, 106746. <https://doi.org/10.1016/j.chb.2021.106746>
- Standing, J. R., & Buss, S. R. (2020). Measurement and monitoring. *Quarterly Journal of Engineering Geology and Hydrogeology*, 53(3), 349–351. <https://doi.org/10.1144/qjegh2020-119>

- Suryadi, I. (2016). *Implementation of Leadership Style to Improve The Quality of Education*. 189–192. <https://doi.org/10.2991/icemal-16.2016.38>
- Susanty, A. I., Yuningsih, Y., & Anggadwita, G. (2018). Knowledge management practices and innovation performance: A study at Indonesian Government apparatus research and training center. *Journal of Science and Technology Policy Management*, 10(2), 301–318. <https://doi.org/10.1108/JSTPM-03-2018-0030>
- Syahrullah, Y., Imran, R., Adhiana, T., & Krisnawati, M. (2022, Maret 21). *Improvement of Education Quality Using Quality Control Circle Methods Based on Fulfillment of ISO 21001:2018 Requirements*. Second Asia Pacific International Conference on Industrial Engineering and Operations Management, Surakarta Indonesia.
- Syahrullah, Y., Yanti, A., Adhiana, T. P., & Imran, R. A. (2022). GAP Analysis of Higher Education Quality Assurance System Implementation Against Educational Organization Management Standards ISO 21001:2018. *Operations Excellence: Journal of Applied Industrial Engineering*, 14(1), Article 1. <https://doi.org/10.22441/oe.2022.v14.i1.044>
- Syreyschikova, N. V., Pimenov, D. Yu., Mikolajczyk, T., & Moldovan, L. (2020). Development of a Risk Management Technique in Strategic Planning of Universities. Case study of a Polytechnical Institute. *Procedia Manufacturing*, 46, 256–262. <https://doi.org/10.1016/j.promfg.2020.03.038>
- Syukron, B. (2022). Penerapan Klausul ISO 21001:2018 Sebagai Upaya Penguatan Manajemen Budaya Mutu Pendidikan Tinggi Keagamaan Islam. *Tarbawiyah : Jurnal Ilmiah Pendidikan*, 6(2), Article 2. <https://doi.org/10.32332/tarbawiyah.v6i2.5550>
- Syukron, B., Sari, F., Ramadhani, S. A., UmpuSinga, H. A., Bhaidowi, M. M., & Rofik, M. A. (2022). ISO 21001:2018: Upaya Mewujudkan Budaya Mutu pada IAIN Metro. *Elementary : Jurnal Ilmiah Pendidikan Dasar*, 8(2), Article 2. <https://doi.org/10.32332/elementary.v8i2.5165>
- Tech in Asia Indonesia. (2022, Desember 13). [Update] Data para Pelaku Layanan Edtech di Indonesia. Tech in Asia Indonesia. <https://id.techinasia.com/data-pelaku-edtech-indonesia>
- Tello, A. E. C., & Acevedo-Rojas, E. S. (2020). Planificación estratégica y calidad del servicio educativo en los estudiantes de la Facultad de Psicología de la Universidad Federico Villarreal. *IGOBERNANZA*, 3(12), Article 12. <https://doi.org/10.47865/igob.vol3.2020.83>
- Thayer, K., & Ko, A. J. (2017). Barriers Faced by Coding Bootcamp Students. *Proceedings of the 2017 ACM Conference on International Computing Education Research*, 245–253. <https://doi.org/10.1145/3105726.3106176>
- Thoif, Dr. M., S. H. , M. H. (2021). *Tinjauan yuridis pendidikan nonformal dalam sistem pendidikan nasional*. Scopindo Media Pustaka.

- Timchenko, V. V., Trapitsin, S. Y., & Apevalova, Z. V. (2020). Educational Technology Market Analysis. *2020 International Conference Quality Management, Transport and Information Security, Information Technologies (IT&QM&IS)*, 612–617. <https://doi.org/10.1109/ITQMIS51053.2020.9322982>
- Tjakraatmadja, J. H., & Handayani, D. W. (2019). Mapping six characteristics of new learning organization in Indonesian education technology startups. *Proceedings of the International Conference on Intellectual Capital, Knowledge Management and Organisational Learning*, 340–347.
- Tohet, M., & Eko, D. (2020). Peningkatan mutu perguruan tinggi pesantren melalui ISO 21001: 2018. *MANAGERE: Indonesian Journal of Educational Management*, 2(2), Article 2. <https://doi.org/10.52627/ijeam.v2i2.37>
- Trisnawati, J. D., & Rosiawan, M. (2022). *Incorporation of ISO 21001 and National Accreditation Board for Higher Education Criteria in Indonesia*. 1023–1031. [https://doi.org/10.2991/978-94-6463-008-4\\_127](https://doi.org/10.2991/978-94-6463-008-4_127)
- Tukiran, M., & Sari, N. P. (2021). *Membangun Sistem Manajemen Organisasi Pendidikan: Berdasarkan ISO 21001: 2018*. PT Kanisius.
- Tushar, H., & Sooraksa, N. (2023). Global employability skills in the 21st century workplace: A semi-systematic literature review. *Heliyon*, 9(11), e21023. <https://doi.org/10.1016/j.heliyon.2023.e21023>
- Ugwulashi, C. S., & Mba, C. O. (2021). Measurement of School Effectiveness Using Iso 21001:2018—Management Systems for Educational Organizations (EOMS). *International Journal of Educational Management*, 19(1), Article 1. <https://metatags.io/>
- Venkat, R., & Banerjee, J. (2021). Educational Technology at Pivotal Crossroads. Dalam A. McMurray, N. Muenjohn, & C. Weerakoon (Ed.), *The Palgrave Handbook of Workplace Innovation* (hlm. 617–639). Springer International Publishing. [https://doi.org/10.1007/978-3-030-59916-4\\_33](https://doi.org/10.1007/978-3-030-59916-4_33)
- Vilchez-Sandoval, J., Vasquez-Paragulla, J., Andrade-Arenas, L., & Cortez-Maldonado, W. (2020). Appraisal of the provision of educational products and services according to the ISO-21001 standard in the faculty of sciences and engineering from the Sciences and Humanities University. *2020 IEEE World Conference on Engineering Education (EDUNINE)*, 1–4. <https://doi.org/10.1109/EDUNINE48860.2020.9149520>
- Vlachopoulos, D., & Makri, A. (2019). Online communication and interaction in distance higher education: A framework study of good practice. *International Review of Education*, 65(4), 605–632. <https://doi.org/10.1007/s11159-019-09792-3>
- Vykydal, D., Folta, M., & Nenadál, J. (2020). A Study of Quality Assessment in Higher Education within the Context of Sustainable Development: A Case Study from Czech Republic. *Sustainability*, 12(11), Article 11. <https://doi.org/10.3390/su12114769>

- Watt, H. M. G., & Richardson, P. W. (2020). Motivation of higher education faculty: (How) it matters! *International Journal of Educational Research*, 100, 101533. <https://doi.org/10.1016/j.ijer.2020.101533>
- Wibisono, E. (2018). The new management system ISO 21001:2018: What and why educational organizations should adopt it. *Proceeding of 11th International Seminar on Industrial Engineering and Management*, 66–73.
- Wibowo, T., & Veronica, J. (2022). IT Curriculum for Boot Camp: An Iterative Development In Applying OBE In Computer Science Education for Non-Formal Institution. *Journal of Education Technology*, 6(4), 598–606. <https://doi.org/10.23887/jet.v6i4.51343>
- Wicaksono, A., & Maharani, A. (2020). The Effect of Perceived Usefulness and Perceived Ease of Use on the Technology Acceptance Model to Use Online Travel Agency. *Journal of Business Management Review*, 1(5), 313–328. <https://doi.org/10.47153/jbmr15.502020>
- Widianingsih, I., Priyadharma, S. W., Iskandar, G. H., Abdillah, A., Miftah, A. Z., & Adikancana, Q. M. (2023). *Paving the Way for Inclusive Digitalization in Indonesia: Policy and Governance Perspectives*. 107–118. [https://doi.org/10.2991/978-94-6463-290-3\\_10](https://doi.org/10.2991/978-94-6463-290-3_10)
- Wilson, G. A. (2018). Could a coding bootcamp experience prepare you for industry? *IT Professional*, 20(2), 83–87. <https://doi.org/10.1109/mitp.2018.021921655>
- Wolniak, R. (2019). The Level of Maturity of Quality Management Systems in Poland—Results of Empirical Research. *Sustainability*, 11(15), Article 15. <https://doi.org/10.3390/su11154239>
- Wulandari, C. R. (2019). *Kementerian Komunikasi dan Informatika* [Pemerintah]. Kominfo. [https://m.kominfo.go.id/content/detail/16892/indonesia-butuh-9-juta-digital-talent/0/sorotan\\_media](https://m.kominfo.go.id/content/detail/16892/indonesia-butuh-9-juta-digital-talent/0/sorotan_media)
- Wulandari, D. A. P., & Aristana, M. D. W. (2021). Analysis Evaluation Management Information System Audit Internal Quality. *Journal of Electrical, Electronics and Informatics*, 5(1), 5. <https://doi.org/10.24843/JEEI.2021.v05.i01.p02>
- Yang, Y., & Xu, Y. (2022). Research on the PDCA Quality Management Model of the Undergraduate Innovation and Entrepreneurship Training Programs. *Proceedings of the 13th International Conference on Education Technology and Computers*, 370–374. <https://doi.org/10.1145/3498765.3498823>
- Yukhtanova, Yu. A., Koltsova, T. A., Skipin, D. L., & Myshyakov, R. Yu. (2020). Quality Management System in Medical Organizations as a Tool to Increase Human Satisfaction with Services. *Proceedings of the Russian Conference on Digital Economy and Knowledge Management (RuDEcK 2020)*. Russian Conference on Digital Economy and Knowledge Management (RuDEcK 2020), Voronezh, Russia. <https://doi.org/10.2991/aebmr.k.200730.058>

- Yusra, Y. (2022). *Ruangguru Lakukan Efisiensi Bisnis, Fokus Perdalam Model “Hybrid Learning.”* DailySocial.Id. <https://dailysocial.id/post/ruangguru-layoff-2022>
- Zahrah, F., & Dwiputra, R. (2023). Digital Citizens: Efforts to Accelerate Digital Transformation. *Jurnal Studi Kebijakan Publik*, 2, 1–11. <https://doi.org/10.21787/jskp.2.2023.1-11>
- Zamiri, M., & Esmaeili, A. (2024). Methods and Technologies for Supporting Knowledge Sharing within Learning Communities: A Systematic Literature Review. *Administrative Sciences*, 14(1), Article 1. <https://doi.org/10.3390/admsci14010017>
- Zellweger Moser, F. (2007). Strategic Management of Educational Technology—The Importance of Leadership and Management. *Tertiary Education and Management*, 13(2), 141–152. <https://doi.org/10.1080/13583880701238407>
- Zhang, L., Kalyuga, S., Lee, C., & Lei, C. (2016). Effectiveness of Collaborative Learning of Computer Programming Under Different Learning Group Formations According to Students’ Prior Knowledge: A Cognitive Load Perspective. *Journal of Interactive Learning Research*, 27(2), 171–192.
- Zorlu, K., & Korkmaz, F. (2021). Organizational Communication as an Effective Communication Strategy in Organizations and the Role of the Leader. Dalam H. Dincer & S. Yüksel (Ed.), *Management Strategies to Survive in a Competitive Environment* (hlm. 305–320). Springer International Publishing. [https://doi.org/10.1007/978-3-030-72288-3\\_21](https://doi.org/10.1007/978-3-030-72288-3_21)
- Zulkifli, Ambiyar, Syahril, Irfan, D., Mulyono, H., Saputra, A., & Weriza, J. (2024). The Effect of Flipped Classroom and Project-Based Learning on Engagement and Learning Outcome in Higher Education. *International Journal of Religion*, 5(10), Article 10. <https://doi.org/10.61707/s9d0cx34>