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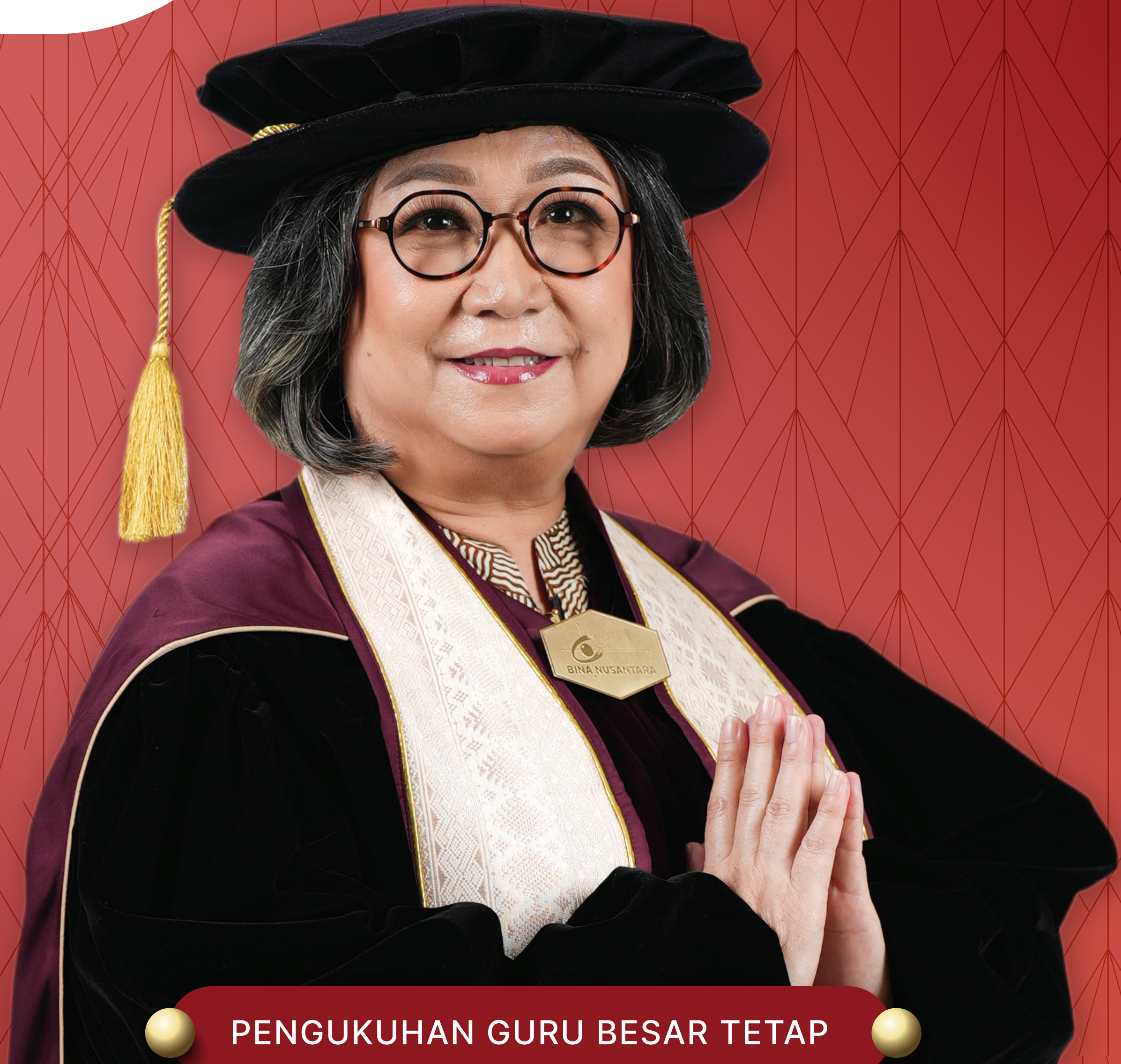

PENGUKUHAN GURU BESAR TETAP

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Orasi Ilmiah:

"Ketika Angka Kehilangan Makna: Merumuskan Ulang Hakikat Akuntansi di Era AI untuk Indonesia Emas 2045"

16 Juli 2025

ORASI ILMIAH

Pengukuhan Guru Besar Tetap Bidang Ilmu Akuntansi - Universitas Bina Nusantara

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Ketika Angka Kehilangan Makna: Merumuskan Ulang Hakikat Akuntansi di Era AI untuk Indonesia Emas 2045

Assalamualaikum warahmatullahi wabarakatuh,

Selamat pagi, salam sejahtera bagi kita semua.

Yang saya hormati:

- Plt. Kepala Lembaga Layanan Pendidikan Tinggi Wilayah III Bapak Tri Munanto, S.E., M.Ak., beserta segenap jajarannya
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- Rektor dan Ketua Senat Universitas Bina Nusantara Ibu Dr. Nelly, S.Kom., M.M.
- Para Guru Besar tamu yang hadir secara *onsite* maupun *online*
- Para Guru Besar Universitas Bina Nusantara dan Dewan Pelantik Guru Besar.
- Para Wakil Rektor, Dekan, Direktur, HOD, HOP Universitas Bina Nusantara.
- Seluruh teman sejawat dan mahasiswa yang saya banggakan
- Seluruh tamu undangan yang hadir secara *onsite* maupun *online*
- Seluruh teman-teman dan keluarga saya.

Perkenankan saya menyampaikan pidato pengukuhan saya sebagai Guru Besar Tetap Universitas Bina Nusantara di Bidang Ilmu Akuntansi.

Bapak/Ibu, hadirin yang saya hormati,

I. Mukadimah

Hari ini saya tidak hanya ingin menyampaikan sebuah orasi ilmiah, melainkan mengajak kita semua untuk merenungkan secara mendalam: ***"Ketika angka kehilangan makna, masihkah akuntansi menjadi penjaga kebenaran?"*** Apakah profesi akuntansi masih bermakna di tengah derasnya gelombang disrupsi teknologi dan pergeseran nilai-nilai sosial? Profesi akuntansi tidak lagi berada di persimpangan jalan ia tengah berada dalam pusaran transformasi yang begitu cepat dan menyeluruh. Transformasi ini tidak hanya bersifat teknologis, tetapi juga menyentuh aspek filosofis, etik, dan strategis.

Selama lebih dari satu abad, akuntansi dikenal sebagai penjaga keandalan laporan keuangan. Namun kini, revolusi digital, krisis iklim, dan perubahan harapan pemangku kepentingan telah mengguncang fondasi tersebut. Laporan *World Economic Forum (2023)* menunjukkan bahwa 75% nilai perusahaan global saat ini berasal dari aset tak berwujud termasuk data, merek, hubungan pelanggan, inovasi, dan reputasi ESG. Pertanyaannya: Apakah profesi akuntansi masih relevan hanya dengan mencatat angka-angka transaksi masa lalu? Jawabannya tegas: **TIDAK CUKUP**. Apalagi di era ketika angka dihasilkan oleh algoritma, laporan disusun oleh AI, dan keputusan dibuat oleh sistem otomatis, apakah angka-angka itu masih memiliki makna manusiawi, sosial, dan etis?

Orasi ilmiah ini akan membahas secara holistik mulai dari isu global, tantangan nasional, hingga transformasi profesi akuntansi, yang dilanjutkan dengan refleksi terhadap paradoks akuntansi, redefinisi hakikat profesi, krisis etika, dan pentingnya peran manusia dalam sistem berbasis AI. Di akhir, saya akan menawarkan strategi komprehensif untuk merumuskan *hakikat baru akuntansi* yang relevan bagi visi besar ***INDONESIA EMAS 2045***.

II. Latar Belakang

A. Isu Global: Disrupsi Teknologi dan Perubahan Paradigma Akuntansi

Dalam dua dekade terakhir, teknologi informasi telah mendisrupsi hampir seluruh sendi praktik akuntansi global.

Kecerdasan buatan (AI), *Big Data Analytics*, *Robotic Process Automation* (RPA), dan *Blockchain* bukan lagi sekadar konsep futuristik, melainkan telah menjadi bagian dari proses bisnis harian. Deloitte (2023) melaporkan bahwa 63% CFO dari perusahaan multinasional telah mengintegrasikan AI dalam fungsi keuangan dan akuntansi mereka, termasuk otomatisasi pencatatan transaksi, pengolahan faktur secara *real-time*, dan bahkan penyusunan laporan keuangan berbasis algoritma.

ACCA (2023) mencatat bahwa lebih dari 50% perusahaan anggota telah mengotomatiskan fungsi audit dan pelaporan keuangan, *continuous auditing* berbasis teknologi yang memungkinkan analisis transaksi secara menyeluruh tanpa perlu sampling. Sementara itu, laporan *World Economic Forum* (2024) memprediksi bahwa pada tahun 2027, lebih dari 70% pekerjaan di bidang keuangan dan akuntansi akan bersifat *Digital* atau *Hybrid*, menuntut pergeseran kompetensi dari kemampuan teknis ke arah penguasaan data dan Etika Algoritma. *World economic Forum* (2025) terjadi perubahan signifikan di pasar tenaga kerja dengan pertumbuhan secara cepat pada kebutuhan tidak saja kemampuan Teknologi tetapi dituntut kemampuan *skill* yang mumpuni. Pekerjaan yang menuntut Repetisi, Rutinitas dan Prediksi makin hilang.

Namun, di balik manfaatnya, penggunaan Teknologi ini memunculkan tantangan etis dan Keadilan Sistemik yang belum sepenuhnya Terantisipasi. Skandal bias algoritmik di sektor *Fintech* Australia tahun 2022, di mana sistem AI secara sistematis mengecualikan kelompok tertentu dari proses kredit karena data historis yang tidak netral, menjadi peringatan penting. Tanpa kehadiran kontrol manusia (*human-in-the-loop*), AI berisiko memperkuat ketimpangan dan kesalahan sistemik dalam pelaporan dan pengambilan keputusan keuangan.

B. Isu di Indonesia: Kesenjangan Kapasitas dan Ketidaksiapan Sistemik

Di tengah arus Transformasi Global, Indonesia menghadapi kesenjangan nyata dalam adopsi Teknologi Akuntansi baik dari sisi Infrastruktur, Kompetensi sumber daya manusia, maupun Integrasi Sistem.

Survei Ikatan Akuntan Indonesia (IAI) tahun 2023 menunjukkan bahwa hanya 12% Akuntan Profesional Indonesia yang memiliki kemampuan dalam data Analytics, pemahaman Sistem Informasi Akuntansi berbasis *Cloud*, atau penggunaan *Software* Prediktif. Kementerian Keuangan (2022) juga melaporkan bahwa lebih dari 70% proses pelaporan keuangan pada level BUMD masih dilakukan secara semi-manual.

Ironisnya, di saat yang sama, Indonesia memiliki visi besar untuk menjadi kekuatan ekonomi digital terbesar di Asia Tenggara pada tahun 2045. Visi ini akan sulit tercapai tanpa dukungan profesi akuntansi yang bertransformasi. Kurikulum pendidikan akuntansi di Indonesia masih sangat Prosedural dan Normatif, dengan hanya 8 dari 64 perguruan tinggi terkemuka, termasuk Universitas Bina Nusantara yang sudah menyisipkan mata kuliah terkait AI, *Blockchain*, atau *Big Data* untuk Akuntansi (Asosiasi Program Studi Akuntansi, 2023).

Meski demikian, ada institusi yang telah menunjukkan praktik baik yang patut dicontoh dari Bank Mandiri dalam laporan tahunan tahun 2023 menyebutkan keberhasilan digitalisasi fungsi Audit dan pelaporan berbasis AI, yang mampu menghemat lebih dari Rp200 miliar per tahun dan meningkatkan kecepatan deteksi anomali transaksi hingga 300% dibanding metode tradisional. Ini menunjukkan bahwa adopsi teknologi mampu meningkatkan efisiensi sekaligus ketepatan proses akuntansi.

C. Isu Profesi: Krisis Relevansi dan Redefinisi Peran Akuntan

Profesi akuntansi tengah memasuki era redefinisi identitas. Dahulu, akuntan dikenal sebagai penyusun laporan keuangan dan penjaga integritas pencatatan transaksi. Kini, peran tersebut mulai tergantikan oleh sistem otomatis, *software* ERP, dan algoritma AI. Akuntan kini dituntut menjadi Interpreter Data, Penasihat Strategis, dan Penjaga Tata Kelola Algoritmik.

Laporan IFAC (2023) menegaskan pentingnya profesi akuntan mengadopsi prinsip baru dalam etika profesi, yang mencakup transparansi algoritma, tanggung jawab terhadap sistem otomatis, dan pelatihan ulang secara berkala untuk menjaga relevansi. Tanpa transformasi dalam sistem pendidikan, organisasi profesi, dan regulasi yang responsif, akuntan akan kehilangan relevansi dalam lanskap ekonomi digital.

Dengan latar belakang tersebut, orasi ini mengajak kita semua untuk tidak hanya menyadari transformasi yang sedang berlangsung, tetapi juga menata ulang arah dan makna profesi akuntansi agar tetap relevan, bermakna, dan berdaya saing menuju Indonesia Emas 2045.

III. Paradoks Akuntansi di Era Disrupsi

Transformasi Digital dalam profesi akuntansi bukan sekadar adopsi teknologi baru. Ia mengungkap kontradiksi-kontradiksi mendalam paradoks yang mencerminkan ketegangan antara nilai-nilai klasik akuntansi dan realitas baru yang didorong oleh kecerdasan buatan, *Big Data*, dan otomatisasi.

Paradoks ini menunjukkan bahwa Disrupsi Digital tidak hanya mengubah cara kerja, melainkan juga menggugat Fondasi Epistemologi dan nilai-nilai dasar akuntansi sebagai ilmu dan praktik.

A. Objektivitas vs. Interpretasi

Selama ini, akuntansi dianggap sebagai penyaji Informasi keuangan yang Objektif dan Netral. Namun kenyataannya, laporan keuangan selalu memuat unsur interpretasi dan *judgment* manusia.

Kini, *judgment* manusia mulai dialihkan ke sistem AI dari memilih metode akuntansi hingga menentukan estimasi dan pengakuan pendapatan. Algoritma digunakan untuk menyusun draf laporan keuangan, mengevaluasi *impairment*, atau menghitung cadangan kerugian. Dalam konteks ini, muncul pertanyaan kritis: ***Jika laporan keuangan disusun oleh AI, siapa yang bertanggung jawab atas kebenarannya?.***

Contoh nyata: Pada tahun 2022, sebuah perusahaan *Fintech* di Australia mencatatkan pertumbuhan pendapatan berbasis prediksi perilaku pelanggan namun kemudian terbukti tidak didukung transaksi aktual. Sistem AI yang digunakan ternyata dilatih dengan data historis yang bias dan terlalu optimistis. Sumber: IFAC (2023), "The *Ethics of Algorithmic Accounting*".

B. Transparansi vs. Kompleksitas

Sistem ERP dan audit berbasis *Blockchain*

Salah satu janji utama teknologi adalah peningkatan transparansi. Sistem ERP dan Audit berbasis *Blockchain* memungkinkan pencatatan otomatis yang tak dapat diubah. Namun, teknologi canggih ini sering kali menjadi "kotak hitam" (*black box*).

Banyak pengambil keputusan dan auditor tidak dapat menjelaskan bagaimana Algoritma mengambil keputusan atau menyusun laporan. AI berbasis *Neural Network* bahkan tidak bisa menjelaskan secara pasti mengapa keputusan tertentu diambil. Ini menyebabkan akuntabilitas melemah, meskipun datanya terotomatisasi.

Sumber: ICAEW (2023) - 64% profesional keuangan mengaku kesulitan menjelaskan hasil analitik berbasis AI karena rendahnya transparansi model.

C. Kecepatan vs. Keandalan

Digitalisasi memungkinkan pelaporan keuangan secara *real-time* tetapi kecepatan sering mengorbankan ketelitian dan verifikasi. Banyak perusahaan *startup* melaporkan data keuangan ke investor berbasis *estimasi algoritmik* tanpa validasi manual. Ini memunculkan potensi kesalahan dan manipulasi.

Contoh mencolok adalah kasus IPO WeWork (2019), yang menggunakan metrik non-GAAP berbasis proyeksi Algoritmik sangat optimistis. Setelah dikritik karena tidak diverifikasi secara konservatif sesuai prinsip akuntansi, IPO tersebut akhirnya gagal.

Sumber: *Financial Times* (2020), "*The Fall of WeWork*".

D. Makna vs. Angka

Paradoks paling mendasar muncul ketika angka menjadi tujuan akhir, bukan alat untuk menyampaikan makna. Di tengah kelimpahan data, justru nilai-nilai seperti keberlanjutan, tanggung jawab sosial, dan keadilan sering tersingkir. Banyak perusahaan menyusun laporan ESG yang kaya angka, namun miskin makna. *Tools* otomatis menghasilkan indikator berbasis data sekunder tanpa verifikasi di lapangan menyebabkan "*greenwashing data driven*".

Sumber: *Transparency International* (2023), "*AI in ESG Reporting: Between Trust and Deception*".

Paradoks-paradoks ini mengingatkan kita bahwa transformasi akuntansi bukan hanya tentang adopsi teknologi, tetapi menyangkut perubahan paradigma. Dibutuhkan standar baru, pemahaman lintas disiplin, dan keseimbangan antara efisiensi digital dengan makna manusiawi yang menjadi ruh akuntansi.

IV. Hakikat Akuntansi Sedang Bertransformasi

Jika sebelumnya kita membahas paradoks yang muncul dari benturan antara nilai-nilai klasik akuntansi dan realitas digital, maka kini saatnya kita menelaah: Bagaimana sebenarnya hakikat profesi akuntansi tengah mengalami Transformasi?

Transformasi ini tidak hanya berupa penggantian alat kerja, tetapi menyentuh cara berpikir, paradigma profesi, dan nilai-nilai inti yang menopang fungsi akuntansi dalam masyarakat. Perubahan ini dibedakan dalam **enam dimensi** utama:

1. **Dari Pencatatan ke Prediksi**

Tradisionalnya, akuntansi berfokus pada pencatatan transaksi historis. Namun di era *Big Data* dan AI, fungsi ini mulai bergeser ke arah prediksi dan preskripsi dari mencatat masa lalu menjadi memproyeksikan masa depan. Contoh implementasi meliputi penggunaan AI untuk memprediksi kebangkrutan, risiko *fraud*, dan proyeksi arus kas.

Studi PwC (2023) menunjukkan bahwa prediksi arus kas berbasis AI mengurangi kesalahan hingga 38% dibanding metode manual.

Penelitian oleh Kokina & Davenport (2017) dalam "*The Emergence of Artificial Intelligence: How Automation is Changing Auditing*" menyoroti bahwa AI memungkinkan audit tidak lagi reaktif, tapi bersifat prediktif, membantu manajemen menghindari risiko lebih awal.

2. **Dari Verifikasi Manual ke Algorithmic Assurance**

Audit Tradisional bergantung pada teknik sampling dan pemeriksaan manual. Kini, dengan Teknologi seperti *Blockchain* dan *Machine Learning*, proses audit dapat dilakukan secara otomatis dan menyeluruh dalam waktu nyata. ICAEW (2022) melaporkan bahwa *continuous audit* meningkatkan efektivitas deteksi anomali hingga 60% dan mempercepat siklus pelaporan. Namun, otomatisasi ini memunculkan kebutuhan akan standar etika dan validasi model, karena kesalahan Sistemik Algoritma bisa luput dari deteksi manusia.

Menurut Alles (2015) memperingatkan bahwa tanpa pengawasan manusia, *algorithmic assurance* dapat menciptakan risiko baru yang tersembunyi.

3. **Dari Pelaporan ke Tata Kelola Data**

Peran Akuntansi berkembang dari sekadar penyusun laporan keuangan menjadi penjaga integritas ekosistem data. Akuntan kini bertanggung jawab atas kualitas data, menjadi *interpreter* bagi manajemen, dan menjembatani teknologi dengan kebijakan bisnis.

Dalam studi oleh Warren, Moffitt, & Byrnes (2015) menggambarkan akuntan sebagai *data steward* yang menjaga bukan hanya angka, tetapi makna dan nilai strategis data.

4. **Dari Akuntabilitas Finansial ke Akuntabilitas Keberlanjutan (*Sustainability Accountability*)**

Akuntansi modern harus mencakup pelaporan keberlanjutan termasuk jejak karbon, dampak sosial, dan tata kelola. Peran akuntan menjadi sentral dalam penerapan standar ESG dan penyusunan laporan terpadu yang menggabungkan kinerja finansial dan non-finansial.

World Economic Forum (2023) menyebutkan bahwa akuntan memainkan peran penting dalam penerapan standar ESG dan penghitungan *carbon footprint*. Menurut IFAC (2022), dan KPMG (2023) menjelaskan bahwa Akuntansi menjadi tulang punggung integrasi informasi ESG dalam pelaporan bisnis.

5. Dari Etika Tradisional ke AI Ethics dan Digital Trust

Di Era Digital, Akuntan tak hanya menjaga etika profesi konvensional, tetapi juga bertanggung jawab atas tata kelola algoritma, transparansi AI, dan privasi data. Tanpa intervensi etis, algoritma berisiko memperkuat ketimpangan. Akuntan harus memastikan bahwa sistem tidak hanya bekerja secara efisien, tetapi juga adil.

Binns et al. (2018): "*It's Reducing a Human Being to a Percentage - Perceptions of Justice in Algorithmic Decisions*", AI tanpa pengawasan manusia bisa mereduksi keadilan menjadi angka semata.

Contoh: IFAC (2023) dan Deloitte (2022) - AI digunakan dalam penilaian kredit atau deteksi fraud, tetapi jika *dataset*-nya bias, hasilnya dapat diskriminatif.

6. Dari Kepatuhan (*Compliance*) ke Penciptaan Nilai (*Value Creation*)

Dulu, fokus Akuntansi adalah pada kepatuhan (*compliance*), audit finansial, pelaporan kinerja keuangan. Kini, akuntansi menjadi *enabler of value creation*, yang mencakup aspek ekonomi, sosial, lingkungan, dan digital. Akuntansi kini menjadi mitra strategis dalam penciptaan nilai bisnis, melalui analitik prediktif, perencanaan strategis berbasis data, hingga mendukung inovasi model bisnis. Sutton, D., & Arnold, V. (2018) dalam *"Opportunities and Challenges of Big Data for Accounting and Auditing"* menyebutkan bahwa peran akuntansi telah berkembang menjadi *"Business Intelligence Partner"*.

Bagaimana dari Kepatuhan ke Penciptaan Nilai melalui pengukuran *Return on Value* (ROV). *Return on Value (ROV)* mengukur keberhasilan organisasi secara multidimensional:

- ***Economic Value*:** Profitabilitas dan pertumbuhan
- ***Social Value*:** Kesejahteraan dan inklusi sosial
- ***Environmental Value*:** Kontribusi terhadap keberlanjutan planet
- ***Digital Value*:** Kesiapan teknologi dan pengelolaan data
- ***Human Capital Value*:** Pengembangan SDM dan budaya inovasi

ROV melengkapi metrik finansial klasik (seperti ROI, ROA dan ROE), bukan menggantikannya dalam menghadapi ekonomi modern yang berbasis *intangible assets* dan keberlanjutan. Deloitte (2022) dan IFAC (2021) menegaskan bahwa ROV adalah metrik masa depan bagi keberlanjutan bisnis.

Struktur Hakikat Baru Akuntansi:

Dimensi Transformasi Hakikat Akuntansi	Dari	Menjadi	Referensi Kunci
A. Fungsi Informasi	Pencatatan	Prediksi & Preskripsi	PwC (2023), Kokina & Davenport (2017)
B. Assurance	Verifikasi Manual	*Algorithmic Assurance*	ICAEW (2022), Alles (2015)
C. Peran Data	Pelaporan	Tata Kelola Data (*Data Steward*)	Warren et al. (2015)
D. Keberlanjutan	Akuntabilitas Finansial	Akuntabilitas ESG	IFAC (2022), KPMG (2023)
E. Etika	Etika Tradisional	Etika AI & Digital Trust	IFAC (2023), Binns et al. (2018), Deloitte (2022)
F. Nilai Organisasi	Kepatuhan	Penciptaan Nilai (ROV)	Sutton & Arnold (2018), WEF (2023), IFAC (2021) & ACCA(2022)

V. Krisis Etika & Peran Akuntan: *Human in The Loop*

Di tengah kemajuan teknologi, otomatisasi, dan kecanggihan sistem berbasis AI, muncul pertanyaan mendasar: **masih adakah ruang bagi manusia dalam proses akuntansi modern?**

Ketika angka disusun oleh mesin dan keputusan diambil oleh algoritma, siapakah yang menjamin bahwa proses tersebut tetap berlandaskan nilai kebenaran, keadilan, dan akuntabilitas?

A. Siapa yang Bertanggung Jawab? – Akuntan sebagai penjaga makna

Jika laporan keuangan disusun oleh sistem AI, maka tugas manusia bukan lagi sekadar mencetak laporan melainkan memahami konteks, memverifikasi *fairness* data, dan menjamin integritas informasi.

Banyak Sistem Algoritmik dirancang oleh *Engineer* atau *Developer* yang tidak memahami prinsip akuntansi dan etika profesi. Ini menimbulkan celah serius: ketidaktepatan, bias, bahkan manipulasi data berbasis logika yang tidak transparan.

ICAEW (2022): 72% akuntan senior menyatakan kurang percaya diri dalam mengaudit sistem AI karena rendahnya transparansi dan kontrol etis algoritma.

PwC (2023): Tanpa tanda tangan manusia, laporan keuangan AI kehilangan legitimasi etis dan hukum.

B. Risiko Bias dan Ketidakadilan Algoritmik - Ketika Angka menjadi Ilusi Kebenaran

AI dan *Machine Learning* bukan sistem netral mereka belajar dari data historis yang sarat bias sosial, ekonomi, dan struktural. Jika data pelatihan menyimpan ketimpangan masa lalu, maka algoritma akan mereplikasi bahkan memperbesar ketidakadilan tersebut.

Contoh: UK Finance (2021) menemukan bahwa sistem *credit scoring* otomatis menolak lebih banyak pengajuan dari komunitas minoritas akibat data historis yang bias.

Dalam konteks Akuntansi:

- Usaha mikro dapat tersingkir karena rekam jejak keuangannya tidak lengkap
- Dimensi keberlanjutan sering terabaikan karena tidak tercermin dalam laporan tradisional
- Optimasi efisiensi jangka pendek bisa mengorbankan dampak sosial-lingkungan jangka panjang

Binns et al. (2018) menyebut fenomena ini sebagai "*Fairness Trap of Algorithm*" tampak objektif, namun menyembunyikan bias yang sistemik.

C. Krisis Etika: Ketika Angka Kehilangan Makna

Angka kehilangan makna ketika:

- Tidak ada pemaknaan sosial dan etis atas data
- Proses analisis menjadi murni kalkulatif, tanpa konteks kemanusiaan
- Hasil komputasi dijadikan dasar absolut, tanpa penilaian moral

Zuboff (2019) dalam "*The Age of Surveillance Capitalism"* memperingatkan: data tanpa pengawasan etika akan menjadi alat kontrol, eksklusi, bahkan ketidakadilan.

D. Urgensi *Human-in-the-Loop*

Human-in-the-Loop (HITL) adalah prinsip etis dalam sistem AI yang memastikan manusia tetap memegang kendali akhir baik sebagai *validator*, pengawas, maupun pengambil keputusan utama.

IFAC (2023), Deloitte (2022): HITL menjadi prinsip kunci dalam tata kelola akuntansi digital.

Oleh karena itu, akuntan harus:

- Bertindak sebagai *final controller* atas laporan berbasis AI
- Memverifikasi dan memahami model algoritma
- Memastikan kepatuhan terhadap standar akuntansi, hukum, dan prinsip etika

Contoh praktik:

- PwC dan EY mensyaratkan semua laporan berbasis AI ditinjau dan disahkan oleh akuntan bersertifikat

- OJK dan IAI mengembangkan standar pengungkapan model AI dalam pelaporan keuangan (OJK, 2023)

E. Tanggung Jawab Etika Baru: *Algorithmic Accountability*

Kini, tanggung jawab akuntan mencakup:

- *Fairness* algoritma
- Transparansi Data
- Privasi dan Keamanan Data
- Keadilan dalam keputusan berbasis AI

Deloitte (2022): Profesi akuntansi telah bergerak dari *Financial Stewardship* menuju *Algorithmic Stewardship*.

Di era ketika angka bisa diciptakan oleh mesin, tugas akuntan bukan lagi sekadar menghitung tetapi menjaga makna, menjamin keadilan, dan memastikan integritas.

Profesi akuntansi harus berevolusi menjadi **penjaga makna** (*guardian of meaning*) yang memastikan bahwa angka tetap merepresentasikan nilai, bukan sekadar ilusi kebenaran yang dihasilkan sistem.

VI. Strategi Menuju Indonesia Emas 2045

Untuk menjawab seluruh tantangan disrupsi, krisis etika, dan transformasi profesi yang telah diuraikan, dibutuhkan strategi lintas sektor yang komprehensif. Strategi ini bertujuan membentuk ekosistem profesi akuntansi yang adaptif secara digital, unggul secara etis, dan relevan secara Global untuk mendukung visi besar Indonesia Emas 2045.

Pendekatan ini mencakup Lima Pilar: Pendidikan Tinggi, Organisasi Profesi, Regulator dan Pemerintah, Industri, Serta Kolaborasi Global.

A. Peran Universitas dan Sektor Pendidikan

1.Reformasi Kurikulum Pendidikan Akuntansi

Saat ini, sebagian Besar Kurikulum Akuntansi masih berfokus pada pencatatan manual dan pelaporan tradisional, padahal dunia telah bergeser ke arah Digitalisasi dan Keberlanjutan (World Bank, 2021)

- Kurikulum harus bergeser ke model *digital-first, data-driven, dan sustainability-oriented*.
- Penambahan kursus seperti *AI for Accountants*, *Blockchain for Finance*, dan *ESG Reporting* menjadi prioritas.

Reformasi kurikulum ini telah dilaksanakan di Universitas Bina Nusantara meningkatkan penguatan *AI for Accountants*, *Blockchain for Finance*, dan *Data Visualization* (*Binus University Curriculum Update*, 2023).

2. Metode Pembelajaran Modern:

- Terapkan *Project-Based Learning*, *Collaborative Interdisciplinary Learning*, dan *Real-World Case Integration*
- Contoh: minor dan *free elective* lintas prodi di Binus University

3. *Teaching Factory* dan Laboratorium Digital:

Kemendikbud, (2020) mendorong *Merdeka Belajar Kampus Merdeka (MBKM)* dengan model *Teaching Factory* berbasis kolaborasi industri dan pendidikan untuk mewujudkan simulasi dunia nyata, termasuk penggunaan *software ERP*, analitik keuangan, audit berbasis AI, dan *Blockchain Bab*. Universitas Bina Nusantara berkontribusi melalui *Enrichment* program sejak 2011.

4. Peningkatan *Soft Skill* dan Etika Digital:

Kemampuan komunikasi, berpikir kritis, pengambilan keputusan berbasis data, dan penerapan etika di era digital menjadi kompetensi wajib. *Deloitte (2021)* menyebutkan bahwa etika digital dan kemampuan berpikir kritis adalah kunci dalam menghadapi tantangan teknologi dalam profesi akuntansi. Melalui *Binusian Value* of **"SPIRIT"** menjadi dasar pengembangan karakter akuntan masa depan.

B. Peran Organisasi Profesi (*Professional Body*)

1. Pembaruan Standar Akuntansi dan Etika

- IFAC dan IAI perlu menyusun *Digital Accounting Framework* dan PSAK untuk AI & *Blockchain*
- Mengembangkan pedoman transparansi algoritmik dan *Disclosure Ethics*.
- IFAC (2023); IAI (2023)

2. Penyediaan Sertifikasi Baru

- Misalnya:
    - *Certified* AI *Accountant*
    - *Blockchain Financial Auditor*
    - *Digital Ethics in Finance (DEF)*

    ACCA (2022): 84% akuntan muda siap mengikuti sertifikasi Teknologi

3. Program Pengembangan Profesional Berkelanjutan (CPD)

- Materi wajib pengembangan: RPA, *Cybersecurity, Sustainability, Algorithmic Auditin*g IFAC (2021)

4. Advokasi dan Edukasi Profesi

- Organisasi profesi harus aktif mengedukasi anggotanya untuk menjadi akuntan abad ke-21 yang etis dan visioner

C. Peran Pemerintah dan Regulator

1. Kebijakan dan Regulasi Transformasional

- Kementerian Keuangan, OJK, BPKP, dan Kemenristekdikti harus mengembangkan ekosistem regulasi yang mendorong Transformasi Digital dan Akuntansi keberlanjutan Perpres No. 95 Tahun 2018 tentang Sistem Pemerintahan Berbasis (SPBE), *Roadmap Digital Finance Ecosystem* OJK (2022) menekankan pentingnya Tata Kelola Teknologi, validasi AI, dan perlindungan data dalam laporan keuangan.

2. Pengembangan Kerangka Akuntansi Digital Nasional

- Wajib mencakup: pelaporan AI, validasi algoritma, pengelolaan data dan Audit Etis Diskusi Panel IAI & DSAK (2023)

3. Insentif dan Infrastruktur

- Perluasan *Super Tax Deduction* untuk Digitalisasi Akuntansi dan kolaborasi kampus–industri
- Kemenkeu (2021) Penyediaan insentif fiskal bagi industri yang melakukan digitalisasi akuntansi atau membangun kemitraan dengan perguruan tinggi.

4. Perlindungan Data dan Keamanan Siber

- Membuat standar keamanan data untuk Profesi Akuntansi dan pengendalian risiko penggunaan AI dan *blockchain* di Sektor Keuangan..
- Implementasi UU PDP No. 27 Tahun 2022 sebagai perlindungan Data Akuntansi.

5. Dukungan Inovasi & Inkubasi

- Pendanaan dan Regulasi bagi *startup* berbasis Teknologi Akuntansi (*Fintech*-Akuntansi) dan *Teaching Factory.*

D. Peran Industri dan Dunia Usaha

1. Kemitraan Kampus–Industri

- Industri mendukung Riset, Magang, *Teaching Factory,* dan Kurikulum *Hybrid.* PwC (2023)

2. Transfer Teknologi

- Memberikan simulasi langsung ERP, RPA, dan *Blockchain* pada mahasiswa dan dosen

3. Peningkatan Kapabilitas SDM Akuntansi

- Keterampilan utama:
  - *Data analytics*
  - *Predictive modeling*
  - *Cybersecurity & governance*
    WEF (2023): 75% perusahaan global butuh tenaga kerja berbasis data

4. Inkubasi *Startup*

- Contoh: Jurnal.id, Paper.id sebagai hasil kolaborasi kampus–industri dalam inovasi keuangan berbasis teknologi
  DailySocial Report (2023)

E. Peran Kolaborasi Global

1. Adopsi *Best Practices* Internasional

- Kerja sama dengan ACCA, IFAC, CPA Australia, ICAEW untuk Harmonisasi Standar dan *Benchmark Global*

2. Penguatan Kompetensi Global Akuntan Indonesia

- Fokus pada:
  - Etika lintas budaya
  - Teknologi & ESG
  - *Digital Accounting Standards*
    IFAC (2022), *Accountancy Education Transformation Repo*rt

VII. Ringkasan dan Penutup

Strategi menuju Indonesia Emas 2045 tidak bisa dijalankan secara parsial. Strategi ini membutuhkan orkestrasi bersama dari seluruh pemangku kepentingan Universitas, Profesi, Regulator, Industri, dan Komunitas Global dengan semangat Kolaboratif dan Transformasi berkelanjutan.

Jika dijalankan dengan konsisten, strategi ini akan memastikan bahwa profesi akuntansi Indonesia tidak hanya bertahan, tetapi juga memimpin dalam era Digital yang beretika dan bernilai. Di tengah dinamika tersebut, Universitas Bina Nusantara hadir sebagai *Pioneer* Transformasi Pendidikan

Akuntansi Digital di Indonesia. Melalui integrasi *AI for Accounting*, *Blockchain for Finance*, *ESG Reporting*, hingga Laboratorium Akuntansi berbasis Digital. Binus berkomitmen menyiapkan lulusan yang bukan hanya *tech-savvy* tapi juga *Ethically Grounded* dan mampu menjadi *navigator* perubahan. Sebagai institusi ia memegang teguh nilai *People, Innovation Excellence*, Binus tidak hanya mencetak lulusan-lulusan, tapi membentuk pemimpin masa depan, secara khusus akuntan yang Adaptif, Reflektif, dan Berintegritas. Dan saya merasa terhormat ikut menjadi bagian dari perjalanan ini, bersama seluruh civitas akademika Universitas Bina Nusantara yang luar biasa.

Sebagai Guru Besar Bidang Ilmu Akuntansi, saya tidak hanya memikul tanggung jawab akademik, tetapi juga tanggung jawab moral untuk menjadi **penjaga Nilai dan Etika, Pelopor Perubahan, dan Penghubung Ekosistem Ilmu dan Praktik.** Guru besar bukan simbol puncak akademik, melainkan katalis transformasi profesi, mampu sebagai *role model* serta fasilitator pembelajaran yang bermakna.

Namun izinkan saya menyampaikan bahwa hal ini tidak semata-mata saya sebagai akademisi, tapi juga saya sebagai manusia. Dalam lebih dari 3 dekade perjalanan saya di dunia pendidikan, saya telah menyaksikan transformasi profesi akuntansi, dari laporan keuangan yang manual hingga otomatisasi berbasis AI. Dari keterampilan untuk melakukan penghitungan, sampai menjadi keterampilan untuk menafsirkan. Saya pernah mendampingi mahasiswa, mereka bertanya "apakah saya akan digantikan mesin?", saya juga pernah diskusi dengan praktisi yang mulai ragu, "apakah profesi ini masih bermakna?". Dari semua itu saya belajar, ada 1 hal penting, bahwa teknologi itu boleh saja menggantikan fungsi, tapi tidak untuk menggantikan makna. Bahwa angka bisa dihasilkan oleh mesin, tapi tidak bisa menghasilkan makna. Dan di sinilah akuntan berdiri sebagai penjaga nilai, penjaga makna, dan penjaga masa depan.

VIII. Penutup

Bapak, Ibu, dan para hadirin yang saya hormati,

Profesi kita tidak boleh kehilangan arah. Kita harus memulihkan ruh akuntansi: sebagai penjaga kebenaran (*truth*), penjaga nilai (*value*), dan penuntun arah pengambilan keputusan yang adil dan berkelanjutan.

Kita adalah navigator keberlanjutan.
Kita adalah penghubung antara data, teknologi, dan etika.
Kita bukan hanya melihat angka, tetapi menafsirkan maknanya bagi umat manusia.

Transformasi ini bukan sekadar pilihan — ini keniscayaan. Jika profesi kita ingin tetap relevan di tahun 2045, maka kita harus:

- Menguasai AI, *Data Analytics*, *Blockchain*, dan ESG
- Memperkuat Etika Digital dan tanggung jawab sosial
- Menggeser paradigma dari *Return on Investment* (ROI) menuju *Return on Value* (ROV)

Dengan semangat kolaborasi, saya yakin: akuntansi Indonesia tidak hanya akan bertahan tetapi akan menjadi garda depan perubahan untuk *Indonesia Emas 2045.*

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Chief Executive Officer Yayasan Bina Nusantara Bapak Ir. Bernard Gunawan.

Chief Strategic Officer Yayasan Bina Nusantara Bapak Ir. Carmelus Susilo.

President of Binus Higher Education Bapak Stephen Wahyudi Santoso, BSE., MSIST., CBDMP, dan segenap jajarannya.

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Rektor dan Ketua Senat Universitas Bina Nusantara Ibu Dr. Nelly, S.Kom, M.M.

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Saya berterimakasih kepada suami saya, Bapak Budiyono yang selalu menemani saya saat kuliah dari S2 dan S3 dari di Indonesia sampai ke Australia. Perjuangan ini akhirnya membuahkan hasil. Terima kasih atas pengorbanannya, kesetiaannya, serta atas pemberian ijinnya. Untuk ketiga orang anak-anak saya, yang selalu memberikan dukungan dengan tanpa merepotkan sejak kecil saya tinggalkan selalu sukses dalam studi dan karirnya juga, terimakasih Rista, Aldian, Novi dan Aulia. Doa-doa kalian selalu menyertai keberhasilan Mama, keberhasilan keluarga kecil kita. Juga buat cucu-cucu lucu saya yang menghibur dari jauh dengan berita berita kenakalan dan kelucuannya, Xhabit, Aro, Shanum, dan Utsman

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Pagi Cerah di Kemanggisan

Ngopi Bijak di Alam Sutera

Bekasi Semangat, Senayan berwawasan

BINUS Bersatu, Akuntansi Mendunia!

Untuk pantun berikutnya:

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Di Bekasi Sarapan Lontong Kari

Kemanggisan dan Alam Sutera Ikut Serta Berdiri

Guru Besar Hadir, Bukan Hanya Cari Gengsi – Tapi Makna Sejati!

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World Economic Forum. (2022). *Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation.*

World Economic Forum (2025*), Future of Jobs Report 2025*

PROFESSIONAL EXPERIENCE

Bina Nusantara (BINUS) University, Jakarta, Indonesia

Dean of the School of Accounting, 1 May 2022-present
Head of Accounting Study Program 1 August 2018 – 30 April 2022
Assistant Professor (Guru Besar 850) in the area of Accounting Science, Accounting Department, Juli 2016-present
Project Leader - Project New Initiative -Scheme Advanced Research- Binus University

Perancangan dan Penerapan MFCA untuk Efisiensi Produksi Ramah Lingkungan dan Peningkatan Keberlanjutan Industri pada UMKM Batik di Pekalongan, January 2024 – November 2025

Implementasi ICT pada aplikasi android untuk pembelajaran entreprenuership (studi kasus di SMU/SMK yang terakriditasi A di Jakarta Barat), Riset Fundamental-BINUS, 2018-2019

Pemberdayaan KOPPAS Untuk Mensukseskan Revitalisasi Pasar Tradisional: Studi Pengentasan Kemiskinan dan Pemberdayaan Perempuan di Wilayah Pesisir, Program Hibah Bersaing (PHB)-DIKTI, 2016

Kajian Model Ekonomi Kreatif Berbasiskan Potensi Lokal: Studi Peningkatan Perekonomian Daerah Melalui Industri Kreatif di Malang, Program Hibah Fundamental-DIKTI, 2016

“RANGUNPASESI” (Rancang Bangun Pasar Seni Situbondo Integrasi) sebagai Pusat Pengembangan dan Pertumbuhan Ekonomi, Industri Pariwisata, Pendidikan dan Seni Budaya. Program PENPRINAS MP3EI – DIKTI, 2012-2013.

Wollongong University, NSW, Australia

Teaching Associate for an Undergraduate Degree in Accounting and Finance Department, June 2003-June 2009.

Education Staff (Part Time Teacher)- Diploma of Business, Wollongong University College (WUC), Sydney, Australia, January 2005 – December 2006.

EDUCATION.

Doctor of Philosophy, Accounting 2010. Wollongong University, NSW, Australia.
Dissertation: Beneath the Glass ceiling – Women in the Indonesian accounting Profession. Advisors: Dr Ciorstan Smark.

Master of Commerce (Honours), Accounting, 2002, Wollongong University, NSW, Australia.
Theses: The Moral Reasoning of Public Accountants in the Development of a Code of Ethics: The Case of Indonesia.
Advisor: Prof. Michael Gaffikin.

Master of Commerce, Accounting, 1999, Wollongong University, NSW, Australia.

Bachelor of Accounting, 1992, Universitas Muhammadiyah Malang- Indonesia.
Skripsi: Sistem Pengendalian Piutang Dagang Dalam Peningkatan Effisiensi Penggunaan Modal Kerja Pada Perusahaan Rokok Kretek Djagung Padi di Malang
Advisor: Dra. Sri Wibawani & Drs. Dhaniel Syam.M.M

Diploma Of Library (Dipl. Librarian), Faculty of Politics and Social Science, Airlangga University, Surabaya-Indonesia.

PROFESSIONAL CERTIFICATION

Certified Management Accountant (CMA) From ICMA, Australia.

Certified Sustainability Reporting Specialist (CSRA) from NCSR Indonesia.

Certified Sustainability Reporting Assurance (CSRA) from NCSR Indonesia. Certified Business Valuer (CBV) from the Academy of Finance and Management Australia (AFMA).

Certified Data Analyst (Cert.DA) from ACCA and IAI.

SELECTED AWARDS

HKI No. EC00201602031, Buku berjudul “Obligasi Pemerintah Daerah (Municipal Bond) Sebagai Model Revitalisasi Pasar Tradisional Melalui Koperasi Pasar Di Kabupaten Situbondo” HKI No. EC00201602031, 1 Desember 2017, UMC.

Best Paper Award on Socialisation Management Journal, Management OJS, and Scientific Article Writing Methods - Journal of Accounting Multiparadigm. Brawijaya University, Malang. East Java- Indonesia, 2013.

The Winner of the Grant of Scientific Study Centre Program. The Private University Grant Program – Directorate of Higher Education Indonesia (PHP- PTS, DIKTI), 2011.

The International Doctoral Fellowship Award of AAUW (American Association of University Women) - Educational Foundation, 2006.

RESEARCH AND TEACHING INTEREST

- MANAGEMENT ACCOUNTING
- SUSTAINABILITY ACCOUNTING
- ETHICS AND CORPORATE GOVERNANCE

- CORPORATE REPORTING
- FINANCIAL DATA ANALYSIS
- DiGITAL TRANSFORMATION IN ACCOUNTING
- STRATEGIC COST MANAGEMENT

SELECTED SCHOLARLY PUBLICATIONS

Journal Publications (Scopus Indexes)

2025	Palm Oil Industry Dynamics: Assessing P/B Ratios of Indonesian Palm Oil Companies through Palm Tree Profile, Average FFB Yield, and Palm Oil Extraction Rate	Journal of Applied Data Sciences 6(1), pp. 236–246
2025	The Influence of CEO overconfidence, female director, and CEO duality on the financial performance of industrial sector companies: a strategic outlook	Corporate and Business Strategy Review, 6(1), pp. 64–74
2024	Model of UTAUT 2 for the adoption of Blockchain technology in improving quality of financial reporting	Journal of Theoretical and Applied Information Technology , 102(24), pp. 9184–9195
2024	Exploring Carbon Disclosure Research for Future Research Agenda: A Bibliometric Analysis	International Journal of Energy Economics and Policy , 14(3), pp. 684–693
2024	The influence of CSR and CEO narcissism on financial performance with earning management as mediation	Heritage and Sustainable Development , 6(2), pp. 483–500
2024	A bibliometric analysis on the research trends of global climate change and future directions	Cogent Business and Management , 11(1), 2325112
2023	Innovation Diffusion Model in Auditors' Acceptance of metaverse Technology.	Journal of Theoretical and Applied Information Technology Volume 101, Issue 14, Pages 5481 - 5490
2023	Instructions Green Innovation and Creating Shared Value on Achievement of Environmental Development Pillar in Indonesian Energy Sector	International Journal of Sustainable Development and Planning, 18(7), pp. 2213–2221
2023	Systematic Literature Review on Implementation of Whistleblowing System in Preventing Financial Accounting Fraud.	Journal of Theoretical and Applied Information Technology, 101(9), pp. 3305–3315
2023	Effect of Technology, Organization Environment, and Individual Factors Towards Adoption Intention of Cloud-Based Accounting Software in MSMES	Journal of Theoretical and Applied Information Technology, 101(1), pp. 172–181

Proceedings Publication (Scopus Indexes)

2024	Exploring Blockchain Adoption: Insights from Indonesia’s Accountancy Firms on Auditor Intentions	ACM International Conference Proceeding Series Pages 47 - 5331 December 2024 15th International Conference on E-business, Management and Economics, ICEME 2024Beijing19 July 2024through 21 July 2024
2024	Metaverse World Fusion of Digital Humanities in Virtual Reality Exploration	ACM International Conference Proceeding Series Pages 55 - 613 December 2024 10th International Conference on e-Society, e-Learning and e-Technologies, ICSLT 2024Rome21 June 2024through 23 June 2024
2024	Impact of Gamification Elements for Student Acceptance on Gamification-enhanced Learning	ACM International Conference Proceeding Series Pages 82 - 8914 June 2024 10th International Conference on Frontiers of Educational Technologies, ICFET 2024 Malacca 14 June 2024 through 16 June 2024
2024	Model of Heuristic Herding and Prospect on Investor Decision in Online Trading	2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation, IATMSI 20242024 2nd IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation, IATMSI 2024Gwalior14 March 2024through 16 March 2024
2023	Model of Innovation Diffusion for Fraud Detection Using Robotic Process Automation	ACM International Conference Proceeding Series Pages 245 - 25122 September 2023 9th International Conference on Industrial and Business Engineering, ICIBE 2023, Beijing22 September 2023through 24 September 2023

When Numbers Lose Their Meaning: Redefining the Nature of Accounting in the AI Era for a Golden Indonesia 2045

Peace be upon you, and Allah's mercy and blessings,

Good morning, prosperity to all of us.

Whom I respect:

- Acting Head of the Higher Education Services Institute Region III, Mr. Tri Munanto, SE, M.Ak., and all his staff
- *Chief Executive Officer* of the Bina Nusantara Foundation, Mr. Ir. Bernard Gunawan
- *Chief Strategic Officer* of the Bina Nusantara Foundation, Mr. Ir. Carmelus Susilo
- *President of Binus Higher Education* Mr. Stephen Wahyudi Santoso, BSE, M.SIST., CBDMP, and all his staff
- Chairman of the Board of Professors of Bina Nusantara University, Prof. Dr. Ir. Harjanto Prabowo, MM
- Rector and Chair of the Senate of Bina Nusantara University, Mrs. Dr. Nelly, S.Kom., M.M
- Guest Professors who attended both *onsite* and *online*
- Bina Nusantara University Professors and Professor Inauguration Council.
- Vice Chancellors, Deans, Directors, HODs, HOPs of Bina Nusantara University.
- All my colleagues and students that I am proud of
- All invited guests who attended *onsite* and *online*
- All my friends and family.

Allow me to deliver my inaugural speech as a Permanent Professor at Bina Nusantara University in the field of Accounting.

Ladies, gentlemen, and distinguished guests

I. Preamble

Today, I don't just want to deliver a scientific speech but invite us all to reflect deeply: ***"When numbers lose their meaning, can accounting still be the guardian of truth?"*** Is accounting still meaningful in the face of rapid technological disruption and shifting social values? The accounting profession is no longer at a crossroads; it is in the midst of a fast and comprehensive transformation. This transformation is not only technological but also touches on philosophical, ethical, and strategic aspects.

For more than a century, accounting has been known as the guardian of the reliability of financial reports. But now, the digital revolution, the climate crisis, and changing stakeholder expectations have shaken that foundation. A *2023 World Economic Forum report* indicates that 75% of global corporate value today comes from intangible assets, including data, brands, customer relationships, innovation, and ESG reputation. The question is: Is the accounting profession still relevant simply by recording past transaction figures? The answer is emphatic: **NOT ENOUGH**. Especially in an era where algorithms generate numbers, reports are compiled by AI, and decisions are made by automated systems, do those numbers still have human, social, and ethical meaning?

This scientific oration will holistically discuss global issues and national challenges, including the transformation of the accounting profession. It will then continue with reflections on the paradoxes of accounting, the redefinition of the profession's nature, the ethical crisis, and the importance of humans in AI-based systems. Finally, I will offer a comprehensive strategy for formulating *a new accounting nature* that is relevant to the grand vision ***of GOLDEN INDONESIA 2045***.

II. Background

A. Global Issues: Technological Disruption and Accounting Paradigm Changes

Information technology has disrupted almost every aspect of global accounting practice in the last two decades.

Artificial intelligence (AI), *Big Data Analytics*, *Robotic Process Automation* (RPA), and *Blockchain* are no longer futuristic concepts; they have become part of daily business processes. Deloitte (2023) reports that 63% of CFOs of multinational companies have integrated AI into their finance and accounting functions, including transaction recording automation, *real-time invoice processing*, and even algorithm-based financial reporting.

ACCA (2023) noted that more than 50% of member firms have automated their audit and financial reporting functions, with technology-based *continuous auditing* that enables comprehensive transaction analysis without sampling. Meanwhile, the *World Economic Forum* (2024) report predicts that by 2027, more than 70% of jobs in finance and accounting will be *digital* or *hybrid*, demanding a shift in competency from technical skills to data mastery and algorithm ethics. *The World Economic Forum* (2025) noted significant changes in the labour market with rapid growth in the need for technological and skilled skills. *Jobs* that require repetition, routine, and prediction are increasingly disappearing.

However, despite its benefits, this technology raises ethical and systemic fairness challenges that have not been fully anticipated. The algorithmic bias scandal in the Australian *fintech sector* in 2022, where an AI system systematically excluded certain groups from the credit process due to non-neutral historical data, is a significant warning. Without human oversight (*human-in-the-loop*), AI risks amplifying inequalities and systemic errors in financial reporting and decision-making.

B. Issues in Indonesia: Capacity Gaps and Systemic Unpreparedness

Amidst the current global transformation, Indonesia faces a real gap in adopting accounting technology regarding infrastructure, human resource competence, and system integration.

A 2023 survey by the Indonesian Institute of Accountants (IAI) showed that only 12% of Indonesian Professional Accountants possess skills in data analytics, understanding cloud-based accounting information systems, or using predictive *software*. The Ministry of Finance (2022) also reported that over 70% of regional-owned enterprises (BUMD) financial reporting processes are still semi-manual.

Ironically, at the same time, Indonesia has a grand vision to become the largest digital economy in Southeast Asia by 2045. This vision will be difficult to achieve without the support of a transforming accounting profession. The accounting education curriculum in Indonesia remains highly procedural and normative, with only 8 of 64 leading universities, including Bina Nusantara University, offering courses related to AI, *Blockchain*, or *Big Data* in accounting (Association of Accounting Study Programs, 2023).

However, some institutions have demonstrated exemplary good practices, such as Bank Mandiri's 2023 annual report. It cited the successful digitalization of its AI-based audit and reporting functions, which resulted in over IDR 200 billion annual savings and increased transaction anomaly detection speeds by up to 300% compared to traditional methods. This demonstrates that technology adoption can improve accounting processes' efficiency and accuracy.

C. Professional Issues: Crisis of Relevance and Redefinition of the Accountant's Role

The accounting profession is entering an era of identity redefinition. Accountants were once known as preparers of financial statements and guardians of the integrity of transaction records. Now, these roles are being replaced by automated systems, ERP *software*, and AI algorithms. Accountants are now called upon to become Data Interpreters, Strategic Advisors, and Guardians of Algorithmic Governance.

The IFAC (2023) report emphasizes the importance of the accounting profession adopting new principles of professional ethics, including algorithmic transparency, accountability for automated systems, and regular retraining to maintain relevance. Without transformation in education systems, professional organizations, and responsive regulation, accountants will lose relevance in the digital economy.

Against this backdrop, this speech invites us all to recognize the ongoing transformation and reimagine the accounting profession's direction and meaning to ensure its continued relevance, meaningfulness, and competitiveness towards Golden Indonesia 2045.

III. Accounting Paradoxes in the Era of Disruption

Digital transformation in the accounting profession is more than just adopting new technology. It reveals profound contradictions and paradoxes that reflect the tension between classic accounting values and new realities driven by artificial intelligence, *Big Data*, and automation.

This paradox shows that Digital Disruption not only changes the way of working, but also challenges the Epistemological Foundations and fundamental values of accounting as a science and practice.

A. Objectivity vs. Interpretation

Accounting has long been considered a provider of objective and neutral financial information. However, financial reports always contain elements of human interpretation and *judgment*.

Today, human *judgment* is being shifted to AI systems, from selecting accounting methods to determining revenue estimates and recognition. Algorithms are used to draft financial statements, evaluate *impairments*, or calculate loss reserves. In this context, a critical question arises: ***If financial statements are prepared by AI, who is responsible for their accuracy?***

Real-life example: In 2022, an Australian *fintech company reported revenue growth based on customer behaviour predictions, which was later proven inconsistent with actual transactions. The AI system was trained on biased and overly optimistic historical data. Source: IFAC (2023), "The Ethics of Algorithmic Accounting* ."

B. Transparency vs. Complexity

Blockchain-based ERP and audit system

One of the central promises of technology is increased transparency. *Blockchain-based ERP and audit systems* enable automated, immutable record-keeping. However, this advanced technology often acts as a "black box. "

Many decision-makers and auditors cannot explain how algorithms make decisions or compile reports. *Neural Network-based AI* can't even definitively explain why certain decisions are made. This weakens accountability, even when the data is automated.

Source: ICAEW (2023) - 64% of finance professionals have difficulty explaining AI-based analytics results due to low model transparency.

C. Speed vs. Reliability

Digitization enables *real-time financial reporting,* but speed often comes at the expense of accuracy and verifiability. Many startups *report* financial data to investors based on *algorithmic estimates* without manual validation. This creates the potential for errors and manipulation.

A striking example is the case of WeWork's IPO (2019), which used highly optimistic algorithmic projection-based non-GAAP metrics. The IPO ultimately failed after being criticized for not being conservatively verified according to accounting principles.

Source: *Financial Times* (2020), " *The Fall of WeWork* ".

D. Meaning vs. Number

The most fundamental paradox arises when numbers become an end in themselves, rather than a means to convey meaning. Amidst the abundance of data, values like sustainability, social responsibility, and justice often get sidelined. Many companies produce ESG reports that are rich in numbers but poor in meaning. Automated *tools* generate indicators based on secondary data without on-the-ground verification, leading to "*data-driven greenwashing* ."

Source: *Transparency International* (2023), "*AI in ESG Reporting: Between Trust and Deception*".

These paradoxes remind us that accounting transformation is not simply about adopting technology, but rather about a paradigm shift. It requires new standards, cross-disciplinary understanding, and a balance between digital efficiency and the human meaning that is the soul of accounting.

IV. Transformation of The Accounting Nature

Suppose we previously discussed the paradox that arises from the clash between classical accounting values and digital reality. In that case, it is time for us to examine how the true nature of the accounting profession is transforming.

This transformation is not only a matter of replacing work tools but also touches on ways of thinking, professional paradigms, and core values that support the function of accounting in society. These changes are distinguished in **six** main dimensions:

7. **From Recording to Prediction**

Traditionally, accounting focused on recording historical transactions. However, in the era of *Big Data* and AI, this function shifts from recording the past to projecting the future, focusing on prediction and prescription. Examples of implementations include using AI to predict bankruptcy, *fraud risk*, and cash flow projections.

A PwC study (2023) showed that AI-based cash flow predictions reduced errors by up to 38% compared to manual methods.

Research by Kokina & Davenport (2017) in "*The Emergence of Artificial Intelligence: How Automation is Changing Auditing"* highlights that AI enables audits to no longer be reactive, but predictive, helping management avoid risks early.

8. From Manual Verification to Algorithmic Assurance

Traditional audits rely on sampling techniques and manual inspections. The audit process can be automated and comprehensive in real time with technologies such as Blockchain and Machine Learning. ICAEW (2022) reports that *continuous auditing is a key factor in the audit process. Audits* increase the effectiveness of anomaly detection by up to 60% and speed up the reporting cycle. However, this automation requires ethical standards and model validation, as systemic algorithmic errors can escape human detection.

According to Alles (2015), algorithmic assurance could create new hidden risks without human supervision.

9. From Reporting to Data Governance

The role of accounting has evolved from simply preparing financial statements to safeguarding the integrity of the data ecosystem. Accountants are now responsible for data quality, *interpreting* for management, and bridging technology with business policies.

In a study by Warren, Moffitt, & Byrnes (2015), accountants are *data stewards* who maintain not just numbers but also the meaning and strategic value of data.

10. From Financial Accountability to *Sustainability* Accountability

Modern accounting must encompass sustainability reporting, including carbon footprint, social impact, and governance. Accountants are central in implementing ESG standards and developing integrated reports that combine financial and non-financial performance.

The World Economic Forum (2023) states that accountants play a crucial role in implementing ESG standards and calculating *carbon footprints*. According to IFAC (2022) and KPMG (2023), accounting is the backbone of integrating ESG information into business reporting.

11. From Traditional Ethics to AI Ethics and Digital Trust

In the digital era, accountants uphold conventional professional ethics and are responsible for algorithm governance, AI transparency, and data privacy. Without ethical intervention, algorithms risk reinforcing inequality. Accountants must ensure that systems operate not only efficiently but also fairly.

Binns et al. (2018): "It'*s Reducing a Human Being to a Percentage - Perceptions of Justice in Algorithmic Decisions* ", AI can reduce justice to mere numbers without human supervision.

Example: IFAC (2023) and Deloitte (2022) - AI is used in credit scoring or fraud detection, but if *the dataset* is biased, the results can be discriminatory.

12. From *Compliance* to *Value* Creation

In the past, accounting focused on compliance, financial audits, and financial performance reporting. Now, accounting has become *an enabler of value creation*, encompassing economic, social, environmental, and digital aspects. Accounting has become a strategic partner in value creation through predictive analytics, data-driven strategic planning, and supporting business model innovation. Sutton, D., & Arnold, V. (2018) in *"Opportunities and Challenges of Big Data for Accounting and Auditing"* state that the role of accounting has evolved into *a "Business Intelligence Partner"*.

How to move from Compliance to Value Creation through measuring *Return on Value* (ROV). *Return on Value (ROV)* measures organizational success multidimensionally:

- ***Economic Value*:** Profitability and growth
- ***Social Value*:** Welfare and Social Inclusion
- ***Environmental Value*:** Contribution to the sustainability of the planet
- ***Digital Value*:** Technology readiness and data management
- ***Human Capital Value*:** Human resource development and innovation culture

ROV complements classic financial metrics (such as ROI, ROA, and ROE) but does not replace them when facing the modern economy based on *intangible assets* and sustainability. Deloitte (2022) and IFAC (2021) affirm that ROV is the future metric for business sustainability.

The New Nature of Accounting Structure:

Dimensions of Transformation of the Nature of Accounting	From	Become	Key References
A. Information Function	Recording	Prediction & Prescription	PwC (2023), Kokina & Davenport (2017)
B. Assurance	Manual Verification	*Algorithmic Assurance*	ICAEW (2022), Alles (2015)
C. Role of Data	Reporting	*Data* Stewardship	Warren et al. (2015)
D. Sustainability	Financial Accountability	ESG Accountability	IFAC (2022), KPMG (2023)
E. Ethics	Traditional Ethics	AI Ethics & Digital Trust	IFAC (2023), Binns et al. (2018), Deloitte (2022)
F. Organisational Values	Compliance	Value Creation (ROV)	Sutton & Arnold (2018), WEF (2023), IFAC (2021) & ACCA(2022)

V. Ethical Crisis & The Role of Accountants: *Human in the Loop*

Amidst advances in technology, automation, and the sophistication of AI-based systems, a fundamental question arises: **is there still room for humans in modern accounting processes?**

When machines and decisions compile numbers are made by algorithms, who guarantees that the process remains based on the values of truth, justice, and accountability?

B. Who is Responsible? – Accountants as Guardians of Meaning

Suppose an AI system prepares financial reports. In that case, the human task is no longer to print the report but also to understand the context, verify *the fairness* of the data, and ensure the integrity of the information.

Many algorithmic systems are designed by *engineers* or *developers* who lack a solid understanding of accounting principles and professional ethics. This creates serious flaws: inaccuracy, bias, and even opaque, logic-based data manipulation.

ICAEW (2022): 72% of senior accountants expressed a lack of confidence in auditing AI systems due to algorithms' low transparency and ethical control.

PwC (2023): AI financial reports lose ethical and legal legitimacy without a human signature.

B. Risk of Algorithmic Bias and Injustice - When Numbers Become an Illusion of Truth

AI and *machine learning* are not neutral systems; they learn from historical data, which is rife with social, economic, and structural biases. If the training data contains past inequalities, the algorithm will replicate and even magnify those inequities.

Example: UK Finance (2021) found that automated *credit scoring systems* rejected more applications from minority communities due to biased historical data.

In the context of Accounting:

- Micro businesses can be eliminated because their financial track records are incomplete.
- The sustainability dimension is often overlooked because it is not reflected in traditional reports.
- Short-term efficiency optimisation can come at the expense of long-term socio-environmental impacts.

Binns et al. (2018) call this phenomenon the " *Fairness Trap of Algorithm* " which appears objective, but hides systemic bias.

C. Ethical Crisis: When Numbers Lose Meaning

Numbers lose their meaning when:

- There is no social and ethical meaning to the data
- The analysis process becomes purely calculative, without any human context.
- Computational results are taken as an absolute basis, without moral judgment.

Zuboff (2019) in " *The Age of Surveillance Capitalism"* warns that data without ethical oversight will become a tool of control, exclusion, and even injustice.

Human-in-the-Loop

Human-in-the-Loop (HITL) is an ethical principle in AI systems that ensures humans remain in final control as *validators*, supervisors, and primary decision-makers.

IFAC (2023), Deloitte (2022): HITL becomes a key principle in digital accounting governance.

Therefore, accountants must:

- Act as the *final controller* on AI-based reports
- Verifying and understanding algorithm models
- Ensuring compliance with accounting standards, laws and ethical principles

Practical example:

- PwC and EY require all AI-based reports to be reviewed and certified by a certified accountant.
- OJK and IAI develop standards for disclosing AI models in financial reporting (OJK, 2023)

E. New Ethical Responsibilities: *Algorithmic Accountability*

Today, an accountant's responsibilities include:

- *Fairness of* the algorithm
- Data Transparency
- Data Privacy and Security
- Fairness in AI-based decisions

Deloitte (2022): The accounting profession has moved from *Financial Stewardship* to *Algorithmic Stewardship*.

In an era where machines can generate numbers, the accountant's job is to calculate and maintain meaning, guarantee fairness, and ensure integrity.

The accounting profession must evolve into a guardian *of* **meaning** that ensures that numbers continue to represent value, not just an illusion of truth generated by the system.

VI. Strategy Towards To Golden Indonesia 2045

A comprehensive cross-sectoral strategy is needed to address all the challenges of disruption, ethical crises, and professional transformation outlined above. This strategy aims to establish an accounting professional ecosystem that is digitally adaptive, ethically superior, and globally relevant, supporting the grand vision of Golden Indonesia 2045.

This approach encompasses five pillars: Higher education, professional organisations, regulators, government, industry, and global collaboration.

A. Transforming Accounting Education through Universities and Academia

1. Accounting Education Curriculum Reform

Currently, most Accounting Curricula still focus on manual recording and traditional reporting, even though the world has shifted towards digitalization and Sustainability (World Bank, 2021)

- The curriculum must shift to a *digital-first, data-driven, and sustainability-oriented model*.
- Adding courses such as *AI for Accountants*, *Blockchain for Finance*, and *ESG Reporting* is a priority.

This curriculum reform has been implemented at Bina Nusantara University to strengthen *AI for Accountants*, *Blockchain for Finance*, and *Data Visualization* (*Binus University Curriculum Update*, 2023).

2. Modern Learning Methods:

- Apply *Project-Based Learning*, *Collaborative Interdisciplinary Learning*, and *Real-World Case Integration*
- Example: minor and *free elective* across study programs at Binus University

3. *Teaching Factory* and Digital Laboratory:

Ministry of Education and Culture (2020) promoted *the Independent Learning Campus (MBKM)* with a *Teaching Factory model* based on industry and education collaboration to realise real-world simulations, including *ERP software*, financial analytics, AI-based audits, and *Blockchain Chapter*. Bina Nusantara University has contributed through *the Enrichment* program since 2011.

4. Improvement of *Soft Skills* and Digital Ethics:

Communication skills, critical thinking, data-driven decision-making, and the application of ethics in the digital age are essential competencies. *Deloitte (2021)* states that digital ethics and critical thinking skills are key to facing technological challenges in the accounting profession. The *Binusian Value* of **"SPIRIT"** is the basis for developing the character of future accountants.

B. Involvement of Professional Organisations (*Professional Bodies*)

1. Accounting and Ethics Standards Update

- IFAC and IAI need to develop *a Digital Accounting Framework* and PSAK for AI & *Blockchain*
- Developing algorithmic transparency guidelines and *Disclosure Ethics*.
- IFAC (2023); IAI (2023)

2. Provision of New Certification

- For example:
    - *Certified* AI *Accountant*
    - *Blockchain Financial Auditor*
    - *Digital Ethics in Finance (DEF)*

    ACCA (2022): 84% of young accountants ready to take Technology certification

3. Continuing Professional Development (CPD) Program

- Mandatory development materials: RPA, *Cybersecurity, Sustainability, Algorithmic Auditing,* IFAC
(2021)

4. Advocacy and Professional Education

- Professional organizations must actively educate their members to become ethical and visionary 21st-century accountants.

C. Support and Oversight by Government and Regulators

1. Transformational Policies and Regulations

- The Ministry of Finance, OJK, BPKP, and Kemenristekdikti must develop a regulatory ecosystem that encourages Digital Transformation and Sustainable Accounting. Presidential Decree No. 95 of 2018 concerning the Data-Based Governance System (SPBE), *Roadmap Digital Finance Ecosystem* OJK (2022) emphasizes the importance of Technology Governance, AI validation, and data protection in financial reports.

2. Development of a National Digital Accounting Framework

- Mandatory to include: AI reporting, algorithm validation, data management and Ethical Audit. IAI & DSAK Panel Discussion (2023)

3. Incentives and Infrastructure

- Expansion of *Super Tax Deduction* for Accounting Digitalisation and campus-industry collaboration
- Ministry of Finance (2021). Provision of fiscal incentives for industries that digitise accounting or build partnerships with universities.

4. Data Protection and Cyber Security

- Creating data security standards for the Accounting Profession and controlling the risks of using AI and *blockchain* in the Financial Sector..
- Implementation of PDP Law No. 27 of 2022 as protection of Accounting Data.

5. Innovation & Incubation Support

- Funding and Regulation for Accounting Technology-based *startups* (*Fintech* - Accounting) and *Teaching Factories.*

D. Engagement from Industry and the Business Community

1. Campus–Industry Partnership

- Industry supports research, internships, *teaching factories, and hybrid* Curricula. PwC (2023)

2. Technology Transfer

- Providing live simulations of ERP, RPA, and *Blockchain* to students and lecturers

3. Improving Accounting HR Capabilities

- Key skills:
    - *Data analytics*
    - *Predictive modeling*
    - *Cybersecurity & governance*
      WEF (2023): 75% of global companies need a data-driven workforce

***Startup* Incubation**

- Example: Journal.id, Paper.id as a result of campus-industry collaboration in technology-based financial innovation
  DailySocial Report (2023)

E. Synergy through Global Collaboration

1. Adoption of International *Best Practices*

- Collaboration with ACCA, IFAC, CPA Australia, and ICAEW for Harmonisation of Standards and *Global Benchmarks*

2. Strengthening the Global Competence of Indonesian Accountants

- Focus on:
    - Cross-cultural ethics
    - Technology & ESG
    - *Digital Accounting Standards*
      IFAC (2022), *Accountancy Education Transformation Repo*rt

VII. Summary and Conclusion

The strategy toward a Golden Indonesia 2045 cannot be implemented in isolation. It requires collaborative efforts from all stakeholders universities, professions, regulators, industry, and the global community with a spirit of collaboration and sustainable transformation.

If implemented consistently, this strategy will ensure that the Indonesian accounting profession survives and leads in an ethical and valuable digital era. Amid this dynamic, Bina Nusantara University is *a pioneer of digital accounting education transformation in Indonesia, which has been achieved through integrating AI for accounting, blockchain for finance, ESG reporting, and a digital-based accounting l*aboratory. Bina Nusantara is committed to preparing graduates who are not only *tech-savvy* but also *Ethically Grounded* and capable of *navigating* change. As an institution that upholds the values of *People, Innovation, Excellence*, Bina Nusantara not only produces graduates, but also shapes future leaders, specifically accountants who are Adaptive, Reflective, and Integrity. And I am honoured to be part of this journey, along with the extraordinary academic community of Bina Nusantara University.

As a Professor of Accounting, I bear both academic and moral responsibility to be **a guardian of values and ethics, a pioneer of change, and a bridge between the ecosystem of science and practice.** Professors are not symbols of academic excellence but catalysts for professional transformation, capable of serving as *role models* and facilitators of meaningful learning.

But let me say that this isn't just about me as an academic, but also as a human being. In my more than three decades in education, I've witnessed the transformation of the accounting profession, from manual financial reporting to AI-based automation. From the skill of calculating to the skill of interpreting. I've assisted students who asked, "Will a machine replace me?" I've also discussed with practitioners, wondering, "Is this profession still meaningful?" From all this, I've learned that technology may replace function, but it shouldn't replace meaning. Machines can generate numbers, but they can't produce meaning. And this is where accountants stand as guardians of values, guardians of meaning, and guardians of the future.

VIII. Conclusion

Ladies, gentlemen, and distinguished guests

Our profession must not lose its way. We must restore the soul of accounting as a guardian of truth, values, and a guide to fair and sustainable decision-making.

We are sustainability navigators.
We are the bridge between data, technology, and ethics.
We don't just look at numbers, but interpret their meaning for humanity.

This transformation is not simply a choice—it's an inevitability. If our profession wants to remain relevant in 2045, we must:

- Mastering AI, *Data Analytics*, *Blockchain*, and ESG
- Strengthening Digital Ethics and Social Responsibility
- Shifting the paradigm from *Return on Investment* (ROI) to *Return on Value* (ROV)

With the spirit of collaboration, I am confident that Indonesian accounting will survive and be at the forefront of change for *Golden Indonesia 2045*.

AKNOWLEDGEMENT

Ladies, gentlemen, and distinguished guests, before I conclude this scientific oration, allow me to express my gratitude to Allah SWT; the Almighty God, for all His blessings and grace that He has given to us all, especially for my appointment as a Permanent Professor at Bina Nusantara University in the field of Accounting.

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Chief Executive Officer of Bina Nusantara Foundation, Mr. Ir. Bernard Gunawan.

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President of Binus Higher Education, Mr. Stephen Wahyudi Santoso, BSE., MSIST, CBDMP, and all his staff.

Chairman of the Board of Professors of Bina Nusantara University, Prof. Dr. Ir. Harjanto Prabowo, MM Thank you, Prof. Har, for all your guidance, support, prayers, and inspiration.

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Prof. Dr. Engkos Achmad Kuncoro, SE, MM, Secretary of the Senate and Vice Rector for Academic Development of Bina Nusantara University, processed my academic position proposal until it was successful.

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I would like to express my gratitude to the Bina Nusantara Foundation and the leaders at Bina Nusantara University who have provided me with ample space and opportunities to learn, work, and innovate.

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To my parents, my beloved late mother, Ibu Nursiah, an extraordinary figure who continuously encouraged me to move forward until I finally reached this point. I'm sorry, Mom, that only now can everything be realized and Linda can fulfil this promise, also to my only sister, Ibu Ratnawati, who always gave me support and prayers, always there when I needed to discuss and accommodate all my stories and complaints. Thank you, my beloved granddaughter, may this be a sweet gift from our shared struggle, and may it provide an example for our family.

Finally, before I end, I would like to express my deepest gratitude to the Minions and Hulks of the School of Accounting. Your services have been extraordinary in accompanying me through thick and thin to advance *the School of Accounting* and prepare this Professorial Inauguration to be lively and memorable.

Thank you to all the ladies, gentlemen, and distinguished guests who attended this event. Allow me to sing a rhyme, I will convey **2 rhymes:**

*Pagi Cerah di Kemanggisan
Ngopi Bijak di Alam Sutera
Bekasi Semangat, Senayan berwawasan
BINUS Bersatu, Akuntansi Mendunia!

*Ke Senayan Naik MRTi
Di Bekasi Sarapan Lontong Kari
Kemanggisan dan Alam Sutera Ikut Serta Berdiri
Guru Besar Hadir, Bukan Hanya Cari Gengsi – Tapi Makna Sejati!

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Deloitte. (2021). *Navigating the Future of Finance* .

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Deloitte. (2022). *Measuring Return on Value for Digital Transformation.*

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IFAC. (2021, 2022, 2023). *Accountancy Education Transformation Reports* .

IFAC. (2023). *Ethics in a Digital Age.*

IFAC. (2022). *The Accountancy Profession – A Sustainability Journey.*

IFAC. (2021). *The Future of Value Creation: Accountants as Value Navigators.*

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KPMG. (2023). *Sustainability Reporting Survey.*

KPMG. (2023). *Beyond Financials: Capturing ESG Value.*

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Warren, J.D., Moffitt, K.C., & Byrnes, P. (2015). *How Big Data Will Change Accounting.* Accounting Horizons, 29(2), 397–407

World Bank. (2021). *The Changing Nature of Work* .

World Economic Forum (WEF). (2023). *Future of Jobs Report 2023* .

World Economic Forum. (2022). *Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation.*

World Economic Forum (2025 *), Future of Jobs Report 2025*

PROFESSIONAL EXPERIENCE

Bina Nusantara (BINUS) University, Jakarta, Indonesia

Dean of the School of Accounting, 1 May 2022-present
Head of Accounting Study Program 1 August 2018 – 30 April 2022
Assistant Professor (Professor 850) in the area of Accounting Science, Accounting Department, July 2016-present
Project Leader - Project New Initiative - Advanced Research Scheme - Binus University

Design and Implementation of MFCA for Environmentally Friendly Production Efficiency and Improved Industrial Sustainability in Batik MSMEs in Pekalongan, January 2024 – November 2025

Implementation of ICT in Android applications for entrepreneurship learning (case study in A-accredited Senior High Schools/Vocational High Schools in West Jakarta), Fundamental Research-BINUS, 2018-2019

Empowering KOPPAS to Succeed in Traditional Market Revitalisation: A Study on Poverty Alleviation and Women's Empowerment in Coastal Areas, Competitive Grant Program (PHB) - DIKTI, 2016

Study of Creative Economy Model Based on Local Potential: Study of Regional Economic Improvement Through Creative Industries in Malang, Fundamental Grant Program-DIKTI, 2016

"RANGUNPASESI" (Integrated Design and Construction of Situbondo Art Market) as a Centre for Economic Development and Growth, Tourism Industry, Education and Arts and Culture. PENPRINAS MP3EI – DIKTI Program, 2012-2013.

Wollongong University, NSW, Australia

Teaching Associate for an Undergraduate Degree in Accounting and Finance Department, June 2003-June 2009.

Education Staff (Part Time Teacher)- Diploma of Business, Wollongong University College (WUC), Sydney, Australia, January 2005 – December 2006.

EDUCATION.

Doctor of Philosophy, Accounting 2010. Wollongong University, NSW, Australia.
Dissertation: Beneath the Glass Ceiling – Women in the Indonesian Accounting Profession. Advisors: Dr Ciorstan Smark.

Master of Commerce (Honours), Accounting, 2002, Wollongong University, NSW, Australia.
Theses: The Moral Reasoning of Public Accountants in Developing a Code of Ethics: The Case of Indonesia.
Advisor: Prof. Michael Gaffikin.

Master of Commerce, Accounting, 1999, Wollongong University, NSW, Australia.

Bachelor of Accounting, 1992, Muhammadiyah University of Malang- Indonesia.
Thesis: Accounts Receivable Control System in Increasing the Efficiency of Working Capital Use at the Djagung Padi Kretek Cigarette Company in Malang
Advisor: Dra. Sri Wibawani & Drs. Dhaniel Syam, MM

Diploma of Library (Dipl. Librarian), Faculty of Politics and Social Science, Airlangga University, Surabaya, Indonesia.

PROFESSIONAL CERTIFICATION

Certified Management Accountant (CMA) From ICMA, Australia.

Certified Sustainability Reporting Specialist (CSRA) from NCSR Indonesia.

Certified Sustainability Reporting Assurance (CSRA) from NCSR Indonesia. Certified Business Valuer (CBV) from the Academy of Finance and Management Australia (AFMA).

Certified Data Analyst (Cert.DA) from ACCA and IAI.

Selected Awards

HKI No. EC00201602031, Book entitled "Regional Government Bonds (Municipal Bonds) as a Model for Revitalising Traditional Markets Through Market Cooperatives in Situbondo Regency" IPR No. EC00201602031, 1 December 2017, UMC.

Best Paper Award on Socialization Management Journal, Management OJS, and Scientific Article Writing Methods - Journal of Accounting Multiparadigm. Brawijaya University, Malang. East Java- Indonesia, 2013.

The Winner of the Grant of Scientific Study Center Program. The Private University Grant Program – Directorate of Higher Education Indonesia (PHP-PTS, DIKTI), 2011.

The International Doctoral Fellowship Award of AAUW (American Association of University Women) - Educational Foundation, 2006.

RESEARCH AND TEACHING INTEREST

- MANAGEMENT ACCOUNTING
- SUSTAINABILITY ACCOUNTING
- ETHICS AND CORPORATE GOVERNANCE
- CORPORATE REPORTING
- FINANCIAL DATA ANALYSIS

- DIGITAL TRANSFORMATION IN ACCOUNTING
- STRATEGIC COST MANAGEMENT

SELECTED SCHOLARLY PUBLICATIONS

Journal Publications (Scopus Indexes)

2025	Palm Oil Industry Dynamics: Assessing P/B Ratios of Indonesian Palm Oil Companies through Palm Tree Profile, Average FFB Yield, and Palm Oil Extraction Rate	Journal of Applied Data Sciences 6(1), pp. 236–246
2025	The Influence of CEO overconfidence, female directors, and CEO duality on the financial performance of industrial sector companies: a strategic outlook	Corporate and Business Strategy Review, 6(1), pp. 64–74
2024	Model of UTAUT 2 for the adoption of Blockchain technology in improving the quality of financial reporting	Journal of Theoretical and Applied Information Technology , 102(24), pp. 9184–9195
2024	Exploring Carbon Disclosure Research for Future Research Agenda: A Bibliometric Analysis	International Journal of Energy Economics and Policy , 14(3), pp. 684–693
2024	The influence of CSR and CEO narcissism on financial performance with earnings management as mediation	Heritage and Sustainable Development , 6(2), pp. 483–500
2024	A bibliometric analysis on the research trends of global climate change and future directions	Cogent Business and Management , 11(1), 2325112
2023	Innovation Diffusion Model in Auditors' Acceptance of Metaverse Technology.	Journal of Theoretical and Applied Information Technology Volume 101, Issue 14, Pages 5481 - 5490
2023	Instructions Green Innovation and Creating Shared Value on Achievement of Environmental Development Pillar in Indonesian Energy Sector	International Journal of Sustainable Development and Planning, 18(7), pp. 2213–2221
2023	Systematic Literature Review on Implementation of Whistleblowing System in Preventing Financial Accounting Fraud.	Journal of Theoretical and Applied Information Technology, 101(9), pp. 3305–3315
2023	Effect of Technology, Organization Environment, and Individual Factors Towards Adoption Intention of Cloud-Based Accounting Software in MSMES	Journal of Theoretical and Applied Information Technology, 101(1), pp. 172–181

Proceedings Publication (Scopus Indexes)

2024	Exploring Blockchain Adoption: Insights from Indonesia's Accountancy Firms on Auditor Intentions	ACM International Conference Proceedings Series Pages 47 - 5331 December 2024 15th International Conference on E-business, Management and Economics, ICEME 2024Beijing19 July 2024through 21 July 2024
2024	Metaverse World Fusion of Digital Humanities in Virtual Reality Exploration	ACM International Conference Proceedings Series Pages 55 - 613 December 2024 10th International Conference on e-Society, e-Learning and e-Technologies, ICSLT 2024Rome21 June 2024through 23 June 2024
2024	Impact of Gamification Elements for Student Acceptance on Gamification-enhanced Learning	ACM International Conference Proceedings Series Pages 82 - 8914 June 2024 10th International Conference on Frontiers of Educational Technologies, ICFET 2024 Malacca 14 June 2024 through 16 June 2024
2024	Model of Heuristic Herding and Prospect on Investor Decision in Online Trading	2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation, IATMSI 20242024 2nd IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation, IATMSI 2024Gwalior14 March 2024through 16 March 2024
2023	Model of Innovation Diffusion for Fraud Detection Using Robotic Process Automation	ACM International Conference Proceedings Series Pages 245 - 25122 September 2023 9th International Conference on Industrial and Business Engineering, ICIBE 2023, Beijing22 September 2023through 24 September 2023