

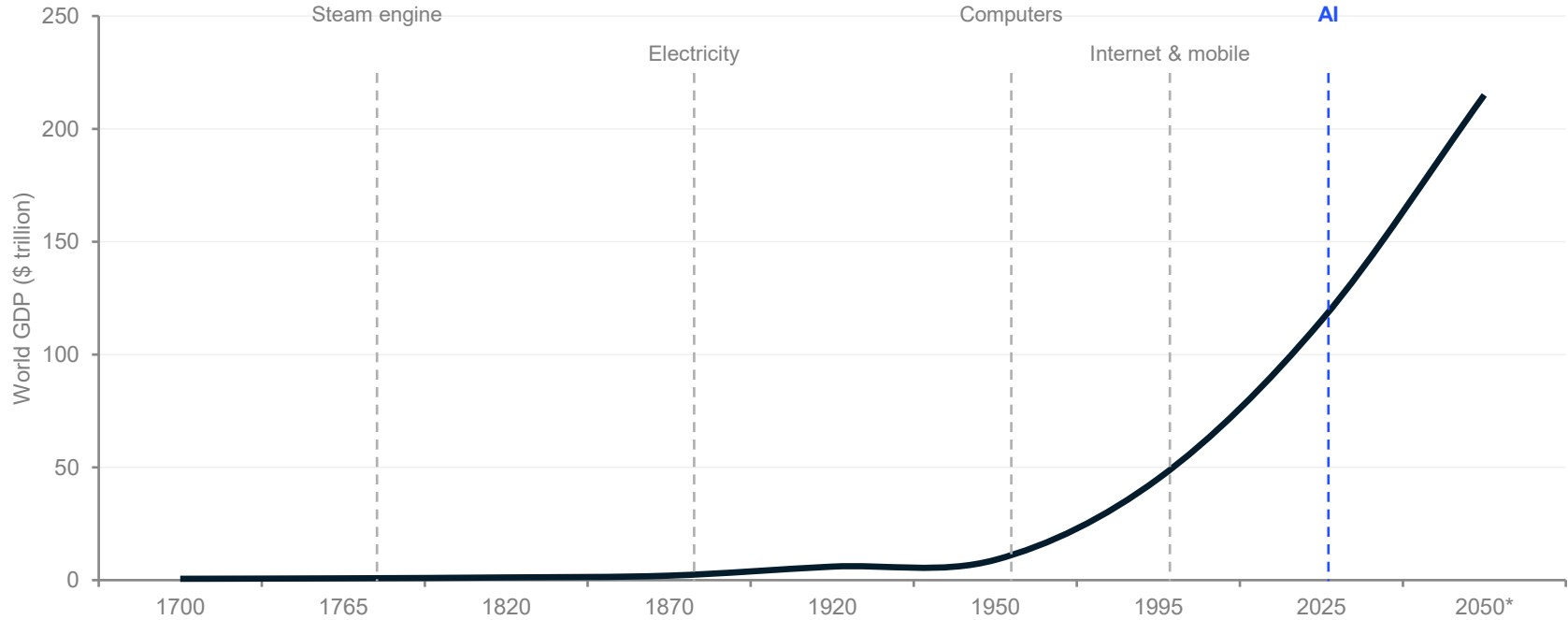
ALL INDIA CHARTERED ACCOUNTANTS SOCIETY (AICAS)

Implementing AI at the Ground Level

Workflows and tools professional firms can adopt

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World GDP and the major inventions, 1700–2050



World GDP in constant international \$, approximate (Maddison Project / OWID estimates). *2050 is a projection from multiple economic studies, not historical fact.

Every wave multiplied world GDP — and each hit faster

Technology wave	Period	World GDP	Adoption	Productivity driver
Pre-industrial economy	1700	~\$0.6 tn	—	Agriculture dominated
Steam engine	1765–1820	~\$0.8 → \$1.2 tn	~80 yrs	Mechanised physical labour
Electricity	1870–1920	~\$2 → \$6 tn	~50 yrs	Cheap, flexible power
Computers	1950–1995	~\$9 → \$45 tn	~40 yrs	Digital automation
Internet & mobile	1995–2025	~\$45 → \$115 tn	~25 yrs	Global connectivity
Artificial intelligence	2025–2050*	potentially \$180–250+ tn*	~10–20 yrs?	Automation of knowledge work

*AI projections are estimates from multiple economic studies, not historical facts. World GDP in constant international \$ (Maddison Project / OWID; estimates approximate).

One engine, one shaft: the factory before electricity



THE SETUP

One massive steam engine powered the entire building. Every machine was physically connected to it through rotating shafts, belts and pulleys.

- 1 Layout by shaft, not by process** — Factories were built around the drive shaft — not the production flow.
- 2 One point of failure** — If the central engine stopped, the entire factory stopped.
- 3 Friction everywhere** — Energy drained away in belts and pulleys before it did any work.
- 4 A hostile floor** — Noisy, hot and hazardous for the people working in it.
- 5 Frozen in place** — Adding or rearranging a machine was a construction project.

A FACTORY IN 1880: ONE POWER. EVERY MACHINE.

The entire building is really one machine.

1 STEAM ENGINE

One massive steam engine is the heart of the factory.

2 ROTATING SHAFT

Power from the engine turns one long shaft that runs the entire length of the building.

3 LEATHER BELTS

Leather belts drop down from the shaft to drive every machine.

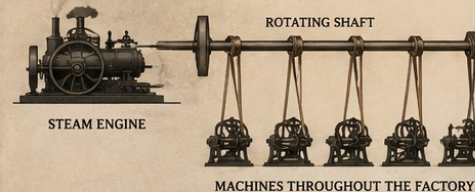
4 EVERY MACHINE

Every machine is powered from the same source. When the engine runs, everything runs.

IN THE 1880s

This system turned factories into highly efficient, synchronized machines—driven by steam, connected by belts.

THE WHOLE BUILDING WORKS TOGETHER



ONE SOURCE OF POWER. ONE SYSTEM. ONE MACHINE.

The first mistake — and the real breakthrough

THE RETROFIT (1890s)

Owners simply swapped the steam engine for one big electric motor — and kept the belts, shafts and layout.

Productivity barely moved.

Economists call it the productivity paradox of early electrification: the technology existed; the processes hadn't changed.

THE BREAKTHROUGH

One motor per machine.

- Machines placed by production flow — shorter lines, less movement
- Power travels far — bigger, multi-building, multi-storey plants
- Independent workstations — the moving assembly line becomes practical

Ford, 1913 — one Model T chassis: **12.5 hours → 1.5 hours.** *Mass production was born.*

Why it took decades — and what it means for AI

Electricity paid off only after firms...

- Rebuilt factories around the new power
- Retrained workers on new machines
- Developed new management methods
- Standardised parts
- Redesigned every workflow

AI will pay off only after firms...

- Redesign workflows around it — not bolt it on
- Retrain staff in prompting and verification
- Adopt new review methods — source trails, sign-off
- Standardise templates and the knowledge bank
- Write the firm's AI policy

A new motor on old shafts changed little. A new intelligence on old workflows will change just as little. The boom belongs to the firms that redesign.

AI is the next general-purpose technology

\$15.7 tn

added to global GDP by 2030 —
more than the GDP of India, Japan
and Germany combined

PwC

+7%

lift to global GDP over the next
decade from generative AI

Goldman Sachs

\$1.2–1.5 tn

added to India's GDP by FY 2029-
30 (as per EY estimates)

EY India

“By 2005 or so, it will become clear that the Internet's impact on the economy has been no greater than the fax machine's.”

— Paul Krugman, Nobel laureate, 1998. He later admitted he got it wrong.

When AI goes to work unsupervised

Mata v. Avianca · New York, 2023

A lawyer with 30 years at the bar filed six precedents supplied by a chatbot. None existed — and when asked, the chatbot insisted they were real. \$5,000 sanction, worldwide infamy.

Never let AI verify AI — check the primary source.

India · ITAT, Bombay HC, Supreme Court

ITAT Bengaluru recalled an order citing non-existent authorities (2024). Bombay HC quashed an assessment where the AO relied on three fake rulings (2025). The SC flagged AI-generated case law (2025).

The source-trail rule: no source link, no entry into your workflow.

Air Canada · 2024

Its website chatbot invented a refund policy. The tribunal rejected the defence that the bot was “a separate legal entity” — the airline paid.

You own your AI's output — human sign-off before it leaves the firm.

Samsung · 2023

Engineers pasted confidential source code into a public chatbot to debug it. Generative AI was banned company-wide within weeks; global banks followed.

Anonymise before upload — names, PANs and identifiers out.

1,600+ court-detected AI hallucination cases worldwide · 11 in India. None argues against AI — everyone argues against unsupervised AI. The AI is the civil engineer; the CA remains the architect.

Map AI to functions — and the tools to start with

Function	Use AI for	Free options	Paid / professional
Research	First-pass answers from statute & case law	ChatGPT, NotebookLM — verify everything	Grounded legal platforms: Taxmann AI
Drafting	SCN replies, appeals, opinions	ChatGPT, Claude, Gemini (free tiers)	ChatGPT Plus, Claude Pro, Copilot in Word
Review & comparison	Compare two drafts or versions in seconds	Draftable (online)	Draftable Legal
Knowledge bank	Past opinions searchable by meaning	NotebookLM (Google)	Dropbox, Google Drive
Client communication	150-word, WhatsApp-ready client alerts	Free chatbot + WhatsApp Business	Zapier / Make automation + paid chatbot
Reporting	First-draft summaries, variance narratives	Free chatbot tiers (no client data)	Copilot in Excel, ChatGPT / Claude data analysis
Language	Sense reading	Grammarly	Grammarly Pro

Examples, not endorsements — apply the two-question test before any research tool. Free tiers: never client data. Tonight: rank the seven by hours leaked; your top two are your starting points.

The tax-notice pipeline



Detect

Notice lands in the firm's inbox — auto-identified by keywords or attachment.

Summarise

An AI step reads the PDF: executive summary, action points, due date.

File & alert

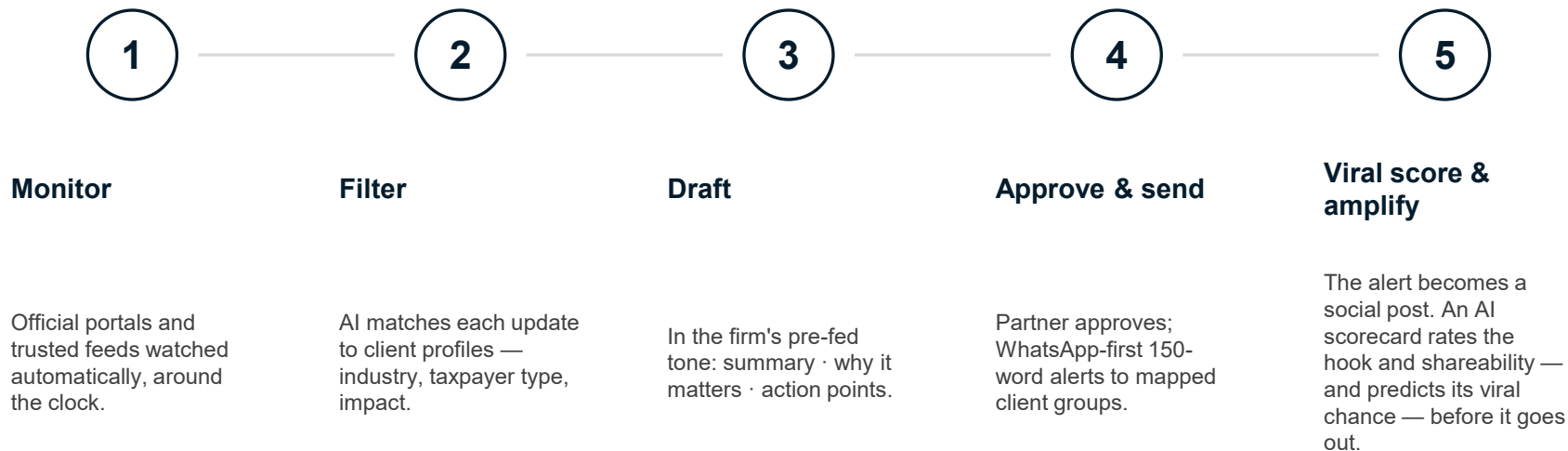
Original + summary auto-filed on the cloud drive; assigned team member pinged with links.

Review

The team's draft reply returns to the same folder for partner sign-off.

Notice to action with zero manual hand-offs — and a full audit trail. Needs: a no-code automation platform + an AI step + your existing cloud drive.

The client-alert engine



The 7 PM notification, answered by 9 AM — then amplified. First to the client's phone, first to the profession's feed: visibility that draws both clients and talent.

The 30-second knowledge bank



Collect

One master folder on a secure cloud drive: your best opinions and templates — golden sources only.

Anonymise

Client identifiers out; facts, sections and quantum stay.

Connect

Sync the folder to a secure, sandboxed AI tool with file-chat capability.

Protocol

“Research first”: juniors query the bank before escalating to the partner.

25 years of the partner's thinking, searchable by an article clerk in 30 seconds. If finding a past opinion takes more than 30 seconds, your system is broken.

The data-safety starter kit



A one-page AI policy

Which tools are approved, for which tasks, by whom. Most firms' current policy is “whatever each junior privately does.”



Anonymisation protocol

Identifiers out before upload — names, PANs, addresses. Facts, sections and quantum stay in.



Human sign-off rule

Nothing AI-drafted leaves the firm without partner review — and the reviewer clicks every citation.



Approved-tool list

Paid or enterprise tiers with training turned off. Document comparison and translation inside approved tools only.

The one-person firm that behaves like a fifty-person firm



Base44 · Israel

Built essentially solo (8 staff). 250,000 users in six months; reportedly \$189k profit in a single month. Sold to Wix for \$80M cash — at six months old (2025).



Cal AI · US

Two 17-year-olds. 15M+ downloads, reportedly \$30M+ annual revenue — with seven employees. Acquired in 2026.



Medvi

Matthew Gallagher built Medvi, a telehealth startup selling weight-loss drugs (GLP-1s) online, to \$1.8 billion in annual sales.

'You'll Have Billion-Dollar Companies Run By Two Or Three People With AI,' Says Sam Altman

For 800 years nothing happened — then everything happened, because someone killed an inefficiency.

Electricity rewarded the factories that redesigned themselves, not the ones that replaced the engine. The firms that win won't be the largest — they'll be the ones that stopped billing for inefficiency first.

Thank you

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