Zambia Automation and Skills Atlas

Preliminary country diagnostic

Task-based evidence for skills, technology, and industrial policy

Based on the live March 2026 atlas build

This note provides a first Zambia-specific country diagnostic from the current automation atlas. It is designed to show, in a compact and readable format, where Zambia sits in the cross-country task-based evidence, which automation channels currently dominate its modeled exposure profile, and where high modeled exposure appears most concentrated across occupations, industries, and skills. The results are descriptive rather than causal, but they are intended to be decision-relevant for early conversations on skills policy, technology adoption, and industrial upgrading.

What stands out for Zambia

- Zambia's mean task exposure in the current build is above the Sub-Saharan African median, but below Kenya and South Africa.
- The exposed-task mix is dominated by software / rules and domain-specific digital tools, while robotics / physical channels remain much smaller.
- The highest-exposure occupations are concentrated in clerical, payroll, call-handling, database, and web-administration roles.
- On the industry side, the strongest signals appear in printing, recorded media, bakery products, petroleum refining, and selected computer- and media-related manufacturing activities.

How the diagnostic is built

This note starts from work tasks rather than from whole occupations or sectors. Each task is scored in the current atlas for likely automation exposure and for the main technology channel associated with that exposure. Occupation and industry results then aggregate those Zambia-relevant task scores using weighted bridges, so the bars should be read as *task-mix diagnostics* rather than as direct measures of realized adoption by firms or workers. The colors inside the bars show which technology channels account for the exposed task mass in each occupation or industry.

1. Zambia in cross-country context

This first figure places Zambia in the broad international pattern. It is best read as context: it shows where Zambia sits relative to its income level and a small peer set, rather than as a statement about whether Zambia is already highly automated in practice.

Table 1: Zambia in peer context.

Country	Mean exposure	Subst. share	High-exposure share	log GDP pc
Zambia	1.45	48.9%	53.0%	7.08
Kenya	1.67	61.1%	67.2%	7.67
South Africa	1.93	73.8%	80.7%	8.74
Sub-Saharan Africa median	1.21	35.5%	37.9%	6.99

Zambia is above the current Sub-Saharan African median on mean task exposure, but below Kenya and South Africa in this cross-country build.

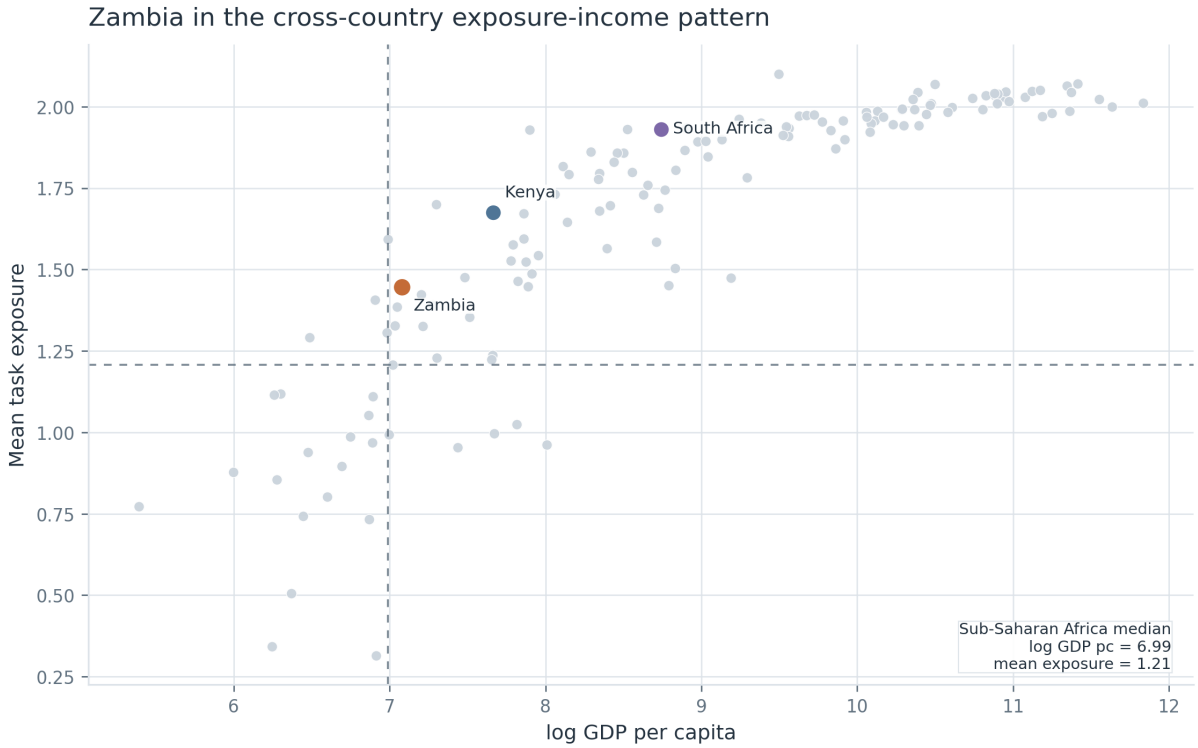

Figure 1: Zambia in the cross-country relationship between income and mean task exposure. Zambia is highlighted against Kenya, South Africa, and the Sub-Saharan African median benchmark.

Interpretation. Zambia's current atlas position is not one of the highest-exposure countries in the sample, but it is clearly above the Sub-Saharan African median. That makes it a relevant case for forward-looking skills and technology policy even before one reaches the very highest-income or highest-exposure country profiles. The useful reading is comparative: Zambia already sits in a part of the distribution where preparedness on administrative systems, worker capabilities, and process redesign is likely to matter.

2. Which automation channels matter most in Zambia?

The channel view helps separate *what kind* of technology pressure is showing up in the task data. That matters because a software-heavy profile implies different policy priorities from a robotics-heavy one.

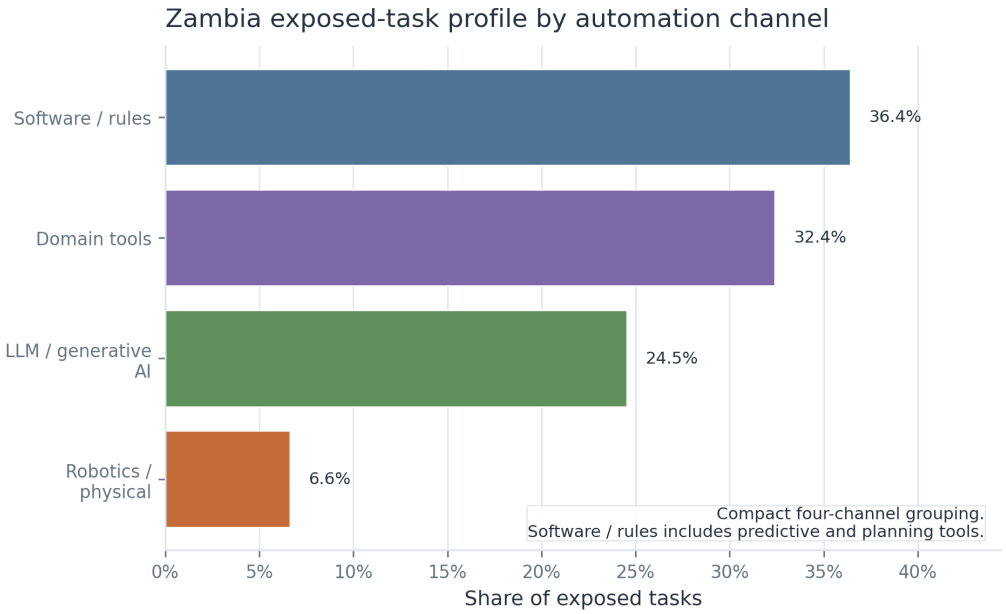

Figure 2: Compact Zambia channel profile over exposed tasks. The four public buckets are used for readability; the software / rules bucket absorbs predictive and planning tools.

Interpretation. The Zambia profile is much more digital-workflow-heavy than robotics-heavy in the current build. That matters for policy because it points toward administrative systems, digital coordination, data handling, and software-enabled process change as more immediate channels than broad physical automation. In practical terms, the near-term pressure looks more like reorganization of office, transaction, and information-processing work than an economy-wide wave of physical machine substitution.

3. Where is modeled exposure most concentrated?

The ranked bars below move from national averages to specific exposure pockets. The bar length shows the overall exposure level for each occupation or industry, while the internal color mix shows which technology channels drive that exposure signal.

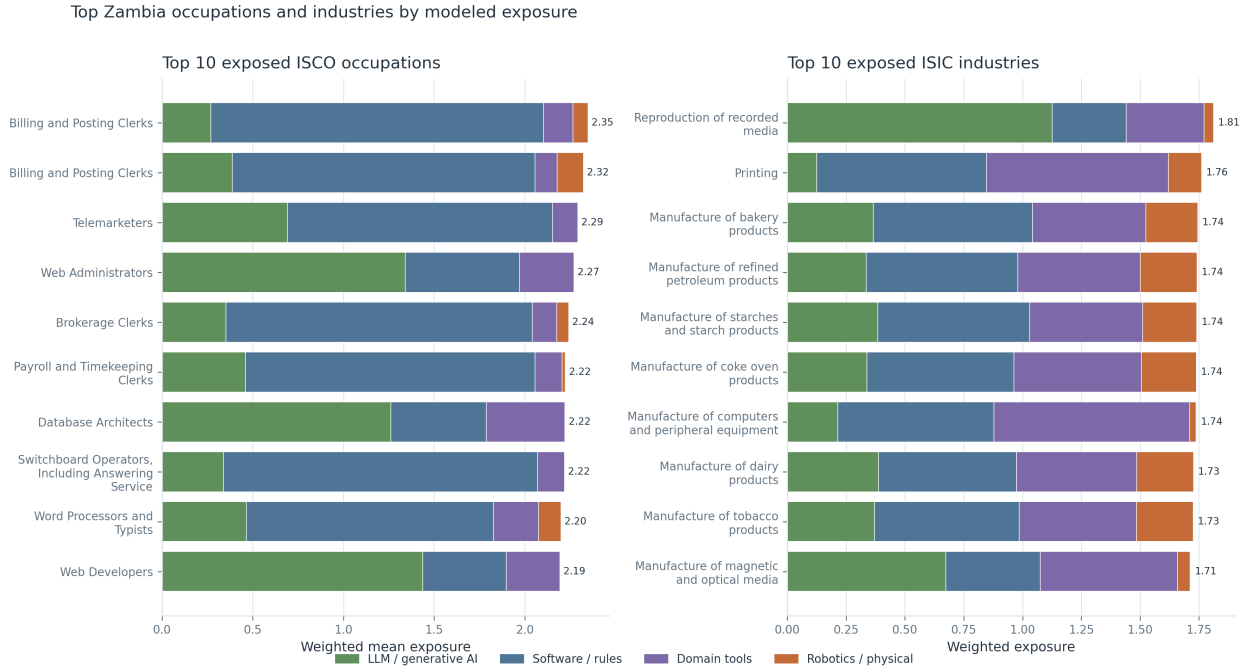

Figure 3: Top exposed Zambia occupations and industries, with channel composition shown inside each bar. Occupations are transported from SOC to ISCO using the weighted crosswalk; industries are reported through the live ISIC task-weight build. Labels are simplified for readability.

Interpretation. The occupation side is led by clerical, billing, telemarketing, payroll, database, and web-administration roles. The industry side is led by printing, recorded media, food-processing segments, petroleum-related production, and selected computer/media manufacturing categories. In other words, the early Zambia signal is not a single-sector story: it combines back-office workflow exposure with pockets of manufacturing process exposure. For a policy audience, the key point is that exposure appears in a mix of service-adjacent administrative functions and selected industrial production niches, so the capability agenda is likely to cut across ministries and sectors rather than sit in one narrow policy silo.

4. Skills and capability signals

Table 2: Zambia headline automation metrics.

Metric	Value
Mean task exposure	1.45
Substitution share	48.9%
Augmentation share	88.2%
Share high exposure	53.0%
Substitution minus augmentation	-39.2%
log GDP per capita	7.08

Descriptive country-level results from the current atlas build.

This section complements the occupation and industry rankings with capability-oriented signals. The headline table summarizes the country-level picture, while the skill tables indicate where the underlying task exposure is most associated with worker capabilities and knowledge areas.

Table 3: Zambia broad skill-family summary.

Broad skill family	Mean exposure	Substitute share	Matched tasks
Knowledge	1.59	56.3%	13391
Transversal Skills And Competences	1.57	56.3%	9902
Skills	1.51	53.5%	45531

Interpretation. The broad-family view is intentionally simple. The live taxonomy currently yields only three broad ESCO family groups, so this should be read as a high-level orientation rather than as a deep ranking of narrowly defined skill clusters.

Table 4: Top 10 specific skills in Zambia, ranked by exposure mass.

Skill	Mean exp.	Subst. share	Tasks
Type texts accurately at high speed	2.76	100.0%	17
create, edit, and integrate multimedia content and digital media	2.30	100.0%	20
operate accounting software for financial recording and analysis	2.50	100.0%	18
Visualize data using charts and diagrams for clear communication	2.50	100.0%	18
maintain and update company general ledger financial records	2.50	100.0%	18
prepare financial reports and analyze budget discrepancies	2.50	100.0%	18
Manage hardware, software, and network components for ICT services	2.37	100.0%	19
Operating computer systems, networks, and data manipulation technologies	2.37	100.0%	19
Detect and rectify errors in financial accounting records	2.44	100.0%	18
Transcribe spoken dialogues into written text	2.53	100.0%	17

The specific-skill table provides the finer-grained companion to the broad-family summary. To keep the ranking stable, it is ordered by exposure mass rather than by raw mean exposure alone, so highly exposed but extremely thin skills do not dominate the list. This makes the list easier to read as a practical capability signal rather than as a noisy tail ranking.