

Services-Enabled Industrialisation in Kenya: Evidence and Policy Priorities, 2006–2024

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Abstract

Kenya’s service-sector expansion has not automatically produced structural transformation. This article combines descriptive World Development Indicators for 2006–2024 with a structured integrative synthesis of peer-reviewed and institutional evidence. It assesses how services can support productivity, exports, employment and production linkages. Services increased from 50.4% to 55.7% of GDP between 2006 and 2024, while their employment share rose from 33.1% to 41.2%. Over the same period, industry’s share of GDP declined from 19.4% to 16.3%. Average services growth exceeded overall GDP growth. However, services trade fell from 14.9% to 11.4% of GDP, indicating weak external orientation. The article develops a five-channel framework and differentiates six service portfolios using scalability, tradability, linkages and inclusion. It concludes that Kenya should combine modern tradable services, production-enabling services and upgraded local services. The study offers a diagnostic policy framework rather than causal estimates.

Keywords: Structural transformation, Services trade, Industrialisation, Productivity, Kenya.

How to Cite: Kimatu, J. N., & Ndeto, E. M. (2026). Services-Enabled Industrialisation in Kenya: Evidence and Policy Priorities, 2006–2024. African Journal of Economics and Sustainable Development, 9(4), 85–102. <https://doi.org/10.52589/AJESD-GGA7DDUC>

INTRODUCTION

Development strategy has traditionally treated manufacturing as the principal escalator from low-productivity agriculture to higher productivity, urban employment and export diversification. That historical pathway remains important, but it has become harder to reproduce. Automation, fragmented global value chains, more demanding standards and premature deindustrialisation have reduced the capacity of labour-intensive manufacturing to absorb workers at the scale observed in earlier industrialisers (Rodrik, 2016). At the same time, digital technologies have made many services more storable, scalable and internationally tradable. Finance, information and communication technology (ICT), professional services, logistics, education, health, tourism and creative services increasingly shape firm productivity and market access across the economy (Nayyar et al., 2021).

Kenya is an instructive case. It is a regional centre for finance, mobile money, transport, tourism, professional services and digital entrepreneurship. World Development Indicators (WDI) show that services accounted for 55.7% of GDP in 2024, while the Kenya National Bureau of Statistics (KNBS, 2025) reported strong 2024 growth in financial and insurance activities (7.6%), transport and storage (4.4%) and real estate (5.3%). Formal financial access reached 84.8% of adults in 2024, principally because mobile money broadened inclusion (Central Bank of Kenya et al., 2024). Tourism welcomed approximately 2.4 million international visitors and earned 452.2 billion Kenyan shillings (KSh) in 2024, demonstrating renewed export and employment capacity (Tourism Research Institute, 2025). By June 2025, 4G coverage reached 97.3% of the population and smartphone penetration was estimated at 83.5%, although subscription-based indicators should not be confused with unique users (Communications Authority of Kenya, 2025).

Yet service-sector size is not equivalent to development quality. Kenya's service economy contains globally competitive firms alongside millions of informal microenterprises in retail, hospitality, transport and personal services. The World Bank (2023a) estimated that knowledge-intensive 'global innovator' services employed only about 2% of workers but contributed 14% of GDP and 19% of growth. In contrast, most new service employment has appeared in lower-productivity domestic activities. Kenya also exports a relatively small share of service value added, and production linkages from sophisticated services to agriculture and manufacturing remain weaker than they could be. The policy question is therefore not whether Kenya should 'choose services'. Services are already dominant. The relevant question is how their composition, productivity, linkages, export orientation and job quality can be transformed.

This article makes three contributions. First, it updates a consistent structural diagnosis through 2024 and separates sector size, real growth, labour absorption, digital reach and external orientation. Second, it integrates five transmission channels—productivity and innovation, trade and investment, production linkages, employment and enterprise development, and resilience—within a Kenya-specific framework that makes institutional conditions explicit. Third, it converts the diagnosis into a transparent portfolio-screening logic based on scalability, tradability, inter-sectoral linkages and inclusive labour absorption. The contribution is interpretive and decision-oriented: it does not claim that a short aggregate time series identifies the causal effect of services on growth.

This complementarity is also consistent with the Economic Report on Africa 2026, which treats manufacturing as an anchor of structural transformation while identifying digital services, finance, logistics, frontier technologies and regional integration as essential to industrial

upgrading and diversification (United Nations Economic Commission for Africa [UNECA], 2026).

Research Problem and Knowledge Gap

Kenya's national development discourse continues to emphasise manufacturing, housing, agriculture, health, the digital economy and micro, small and medium enterprises (Republic of Kenya, 2023). These priorities are not mutually exclusive; each depends on finance, logistics, information, standards, professional expertise, education and public administration. Yet sector policies and budgets often remain organised in silos, obscuring the enabling contribution of services and encouraging narrow comparisons between manufacturing and services.

The international literature shows that some services increasingly share manufacturing's development-relevant properties—tradability, scale, innovation and linkages—while others remain local, informal and labour intensive (Eichengreen & Gupta, 2013; Nayyar et al., 2021). Kenya-specific research documents service-export survival, digital growth and broad services momentum (Majune & Mwanja, 2022; World Bank, 2023a). The unresolved problem is therefore not whether services matter, but how aggregate servicification can be translated into an evidence-based portfolio of exportable, production-enabling and labour-absorbing activities. A transparent bridge between structural diagnosis, portfolio differentiation and implementation sequencing remains underdeveloped.

Objective and Research Questions

The objective is to develop a diagnostic framework for assessing how Kenya can use services to support productive, inclusive and externally competitive structural change. Four questions guide the analysis: RQ1: How have the scale, growth, employment contribution, digital reach and external orientation of Kenya's services sector changed since 2006? RQ2: How do major service portfolios differ in scalability, tradability, production linkages and inclusive labour absorption? RQ3: Which institutional and capability constraints limit the conversion of service-sector expansion into development outcomes? RQ4: What sequencing of policy actions follows from the combined structural diagnosis and evidence synthesis?

LITERATURE REVIEW AND THEORETICAL GROUNDING

Structural Transformation and the Manufacturing Benchmark

Classical structural transformation describes development as the movement of labour and capital from subsistence agriculture into modern activities with higher productivity and stronger learning effects (Lewis, 1954). Manufacturing historically supported this transition through scale economies, learning by doing, exportability and the capacity to employ workers without advanced qualifications. Empirical work continues to find a positive association between manufacturing development and growth, particularly where manufacturing is integrated into competitive export markets (Szirmai & Verspagen, 2015).

However, the manufacturing share of employment now peaks at lower income levels in many developing economies. Rodrik (2016) describes this as premature deindustrialisation and attributes it partly to global competition and labour-saving technical change. Urbanisation has also occurred without commensurate industrialisation in parts of Africa, producing cities whose expansion is driven more by consumption and non-tradable services than by production and exports (Gollin et al., 2016). This does not make industrial policy irrelevant. It means that

the benchmark against which services are assessed should include productivity, employment, export and linkage properties rather than sector labels alone.

From Baumol’S Cost Disease to Heterogeneous Modern Services

Early pessimism about service-led growth drew on the observation that many services require simultaneous provider-client interaction and offer limited scope for mechanisation. When wages rise with the productive sectors but labour requirements remain fixed, relative service costs increase, a process commonly called Baumol’s cost disease (Baumol, 1967). This remains relevant in care, education, hospitality and personal services, although quality improvements are difficult to measure and technology can change delivery models.

Contemporary services are heterogeneous. Modern business, financial, communications and professional services can be digitised, codified, exported and delivered at scale. Traditional services can also become more productive through platforms, digital payments, inventory systems, logistics and standards. Eichengreen and Gupta (2013) identify an early wave of traditional service expansion and a later wave of modern, technology-intensive services, with the latter increasingly appearing at lower income levels. Nayyar et al. (2021) organise services by their potential for scale, innovation, linkages and low-skill employment, showing that no single sub-sector necessarily delivers high productivity and mass low-skill employment simultaneously. Policy must therefore manage a portfolio rather than search for one universal ‘growth engine’.

Services as Tradable Outputs and Productive Inputs

Trade and foreign investment enlarge markets, expose firms to competition, transfer technology and generate foreign exchange. Digital delivery reduces the importance of distance for software, accounting, design, customer support, education and selected health and professional services. Francois and Hoekman (2010) show that services trade policy affects both service performance and economy-wide efficiency. In Kenya, cross-border supply is the most prominent mode of service exports, and digital service exports grew rapidly during 2005–2021 (World Bank, 2023a). Trade agreements may also improve the survival of Kenyan service exports, although their effects depend on agreement design and domestic capability (Majune & Mwania, 2022).

Services are also intermediate inputs. Reliable transport, telecommunications, finance, insurance, testing, certification, legal advice and software affect the cost and quality of manufactured and agricultural products. Firm-level evidence across developing countries links more productive services to stronger manufacturing productivity and exports (Hoekman & Shepherd, 2017). Lower services-trade barriers improve downstream manufacturing productivity particularly where institutions are capable and predictable (Beverelli et al., 2017). These findings support complementarity: competitive services enable industrialisation rather than displace it.

Employment, Inequality and the Digital Transition

Service expansion often absorbs labour leaving agriculture, but job quality varies sharply. Consumer services can reduce prices and improve welfare, yet their benefits may accrue disproportionately to higher-income urban consumers and skilled workers (Fan et al., 2023). The latest theoretical work similarly cautions that service-led urban growth may remain dependent on local demand and may not generate convergence or broad exports automatically.

(Peters et al., 2026). Kenya's high informality and regional inequalities make this distributional question central.

Digitalisation can raise productivity and extend markets, but it can also intensify skill bias, algorithmic control, job churn and exclusion. Evidence from nearly 4.9 million online job vacancies across four African economies, including 490,088 Kenyan postings, finds that almost half of advertised jobs require at least one digital skill; communication and problem solving are also consistently demanded (Chinen & Montorsi, 2025). Kenya's platform and digitally delivered work therefore requires simultaneous investment in skills, connectivity, labour standards, consumer protection and portable social protection (World Economic Forum, 2025).

Analytical Synthesis

The reviewed literature yields four conclusions. First, aggregate services-sector size is analytically insufficient because sub-sectors differ in productivity, tradability, employment intensity and skill requirements. Second, modern services can contribute directly through exports and productivity. Third, enabling services contribute indirectly by improving agriculture, manufacturing and other services. Fourth, the distribution of gains depends on institutions, skills, infrastructure and worker protections. These conclusions motivate the conceptual framework below.

Accordingly, this study adopts an integrated services-enabled structural transformation framework. It combines Lewis's structural transformation theory, Baumol's cost-disease perspective and the modern heterogeneous-services approach (Lewis, 1954; Baumol, 1967; Eichengreen & Gupta, 2013; Nayyar et al., 2021). Lewis explains the reallocation of labour and capital towards higher-productivity activities; Baumol identifies productivity constraints in labour-intensive services; and modern services theory explains how digitalisation, tradability, scalability and production linkages allow selected services to support industrialisation. Institutions and productive capabilities are treated as conditioning factors that determine the strength and distribution of these effects.

Conceptual Framework and Analytical Propositions

The framework treats service-sector transformation, rather than service-sector expansion alone, as the principal analytical construct. Transformation comprises movement towards higher-value activities, within-firm productivity, digital adoption, export readiness, formalisation and broader geographic and demographic participation. Five mechanisms connect this transformation to development outcomes, while complementary capabilities condition the strength and distribution of the effects (Figure 1). The propositions below organise the synthesis and specify claims for future testing; they are not hypotheses tested causally in this article.

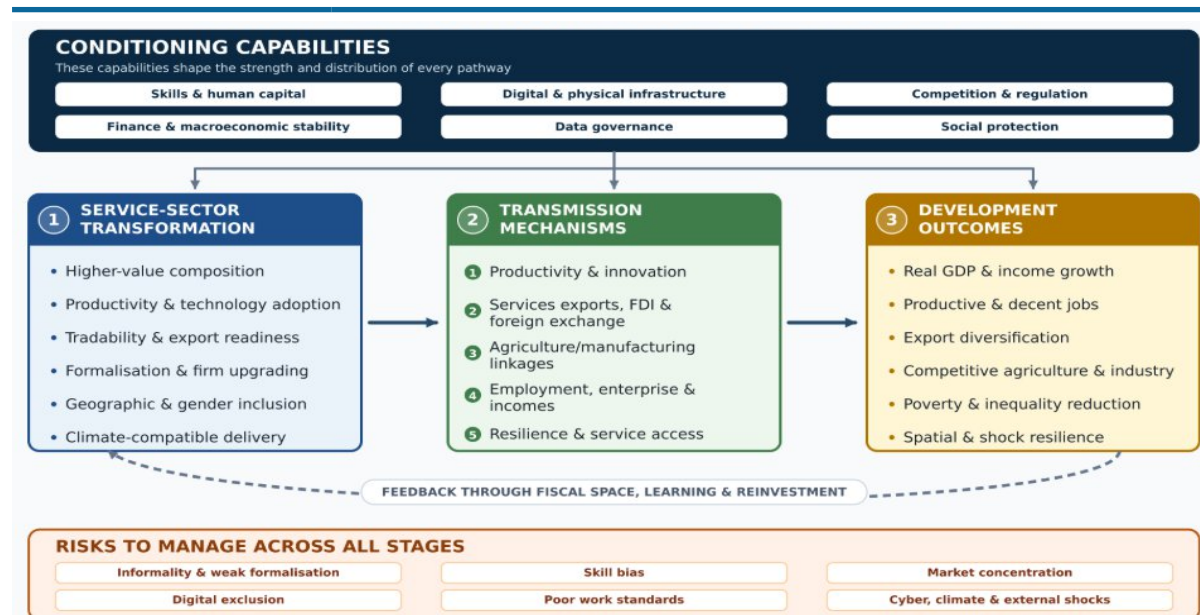


Figure 1: Conceptual framework for services-enabled structural transformation in Kenya. Source: Authors' synthesis (2026), based on Baumol (1967), Rodrik (2016), Nayyar et al. (2021), Fan et al. (2023), World Bank (2023a) and Peters et al. (2026).

Analytical proposition 1—productivity: movement towards more productive services, combined with technology and managerial upgrading, should improve aggregate productivity. Analytical proposition 2—trade and investment: services contribute more strongly when firms can export, attract capability-enhancing investment and participate in regional and global value chains. Analytical proposition 3—production linkages: economy-wide gains increase when finance, logistics, ICT, professional and standards services are embedded in agricultural and manufacturing value chains. Analytical proposition 4—employment and inclusion: service expansion becomes inclusive only when it improves earnings, formality, capabilities and market access across skill, gender and geographic groups. Analytical proposition 5—institutional complementarity: human capital, infrastructure, competition, finance, macroeconomic stability, data governance and social protection condition the contribution of services to development.

Portfolio Assessment Logic

The framework is operationalised as a four-criterion screening matrix. Each service portfolio is examined for: (1) productivity scalability; (2) tradability and foreign-exchange potential; (3) the strength of its input linkages with agriculture, manufacturing and other services; and (4) labour absorption and inclusion. Kenya's revealed capabilities and the principal implementation constraint are considered alongside these criteria. The assessment is ordinal and decision-oriented. It deliberately avoids a composite numerical score because the evidence is heterogeneous and assigning weights to growth, exports, linkages and inclusion would impose untested normative assumptions. The operationalisation of the constructs, mechanisms, conditioning capabilities and outcomes for future empirical testing is summarised in Supplementary Table S1.

MATERIALS AND METHODS

Research Design

The study uses a convergent secondary-data design combining (a) a longitudinal descriptive assessment of Kenya’s economic structure and (b) a structured integrative evidence synthesis. The quantitative component establishes scale, direction, volatility and structural contrasts. The synthesis interprets mechanisms, differentiates service portfolios and identifies institutional constraints. The two components are integrated through the four screening criteria specified in Section 3.1. Triangulation across national statistics, regulatory evidence, international datasets and peer-reviewed research reduces dependence on any single source.

Quantitative Data and Indicators

For 2006–2024, the Annual WDI data were downloaded on 21 July 2026, the continuous period available for the current services value-added series. National accounts and employment indicators can be revised; the extraction date is therefore reported for reproducibility. WDI series were supplemented by KNBS Economic Survey 2025, the 2024 FinAccess survey, communications-sector statistics and the 2024 Tourism Sector Performance Report. Table 1 presents the principal measures.

Table 1: Core quantitative indicators and analytical roles. Source: World Bank, World Development Indicators (2026 extraction). Asterisks denote the corresponding share and real-growth series.

Indicator	WDI code	Analytical role	Coverage
Real GDP growth	NY.GDP.MKTP.KD.ZG	Overall economic performance	2006–2024
Services value added: share and growth	NV.SRV.TOTL.ZS; NV.SRV.TOTL.KD.ZG	Scale and real performance of services	2006–2024; growth 2007–2024
Agriculture and industry: share and growth	NV.AGR.TOTL.*; NV.IND.TOTL.*	Structural comparison and controls	2006–2024
Employment in services	SL.SRV.EMPL.ZS	Labour absorption (modelled ILO estimate)	2006–2024
Individuals using the internet	IT.NET.USER.ZS	Digital access and enabling infrastructure	2006–2024
Trade in services	BG.GSR.NFSV.GD.ZS	External orientation: service exports plus imports as % of GDP	2006–2024
ICT service exports	BX.GSR.CCIS.ZS	Digital export composition	2006–2024

Evidence Selection and Synthesis

The structured integrative synthesis used purposive selection appropriate to a diagnostic policy review. It prioritised peer-reviewed research and primary institutional evidence published

mainly from 2000 to July 2026, while retaining seminal earlier works required for theory. Search concepts combined services or tertiary sector with structural transformation, productivity, employment, trade, digital economy, Africa and Kenya; reference chaining identified additional seminal and Kenya-specific studies. Sources were retained when they contributed theory, empirical evidence relevant to lower- or middle-income economies, official Kenyan statistics or an applicable policy instrument. Duplicate summaries and commentary without a transparent evidentiary basis were excluded.

Evidence was organised into four source classes—theoretical foundations, peer-reviewed empirical studies, Kenyan official statistics and regulations, and recent development-policy diagnostics—and coded under seven domains: productivity and scale; tradability and foreign exchange; inter-sectoral linkage; employment and skills; inclusion and informality; resilience and sustainability; and institutional feasibility. The coding informed the portfolio assessment. This is not a PRISMA systematic review or meta-analysis because the evidence includes national accounts, firm studies, policy simulations, statutes and sector reports that do not estimate a common effect size. The synthesis is used to compare mechanisms and policy options, not to estimate a pooled causal effect.

Statistical Analysis and Interpretation

The descriptive analysis reports endpoint changes, arithmetic means, sample standard deviations, minima and maxima. Values are rounded only for presentation. Given only 18 annual growth observations, the quantitative analysis is deliberately descriptive; multivariable estimation would create a high risk of spurious precision. Accordingly, the results establish structural patterns and magnitudes, while causal language is reserved for findings from peer-reviewed studies included in the synthesis.

Reliability, Validity and Ethics

Construct validity is strengthened by distinguishing services share, real growth, employment, digital access and trade rather than treating services development as a single measure. Source triangulation supports credibility, while indicator codes and the extraction date permit reconstruction of the descriptive analysis. The screening criteria are reported explicitly so readers can contest the portfolio interpretation or apply alternative policy weights. The study uses public aggregate secondary data and involves no human participants, personal data or intervention; institutional ethics approval was therefore not required.

RESULTS

Structural Diagnosis: Large, Growing and Labour Absorbing

Services increased from 50.4% of GDP in 2006 to 55.7% in 2024, a gain of 5.3 percentage points. Over the same period, the modelled service-employment share rose from 33.1% to 41.2%, while industry's GDP share fell from 19.4% to 16.3%. Agriculture's share was volatile and ended at 22.4%. Kenya has therefore experienced servicification without a decisive withdrawal from agriculture and with a declining industrial share (Figure 2).

During 2007–2024, real service value added grew by an average of 5.5% a year. This exceeded average GDP growth of 4.6%, industry growth of 4.4% and agriculture growth of 2.5%. Agriculture was the most volatile sector. Services contracted by 1.8% in 2020 as tourism and contact-intensive activities were disrupted, then grew by 9.6% in 2021 (Table 2). The aggregate

therefore combines shock-sensitive activities with digitally deliverable and financial services that were more resilient.

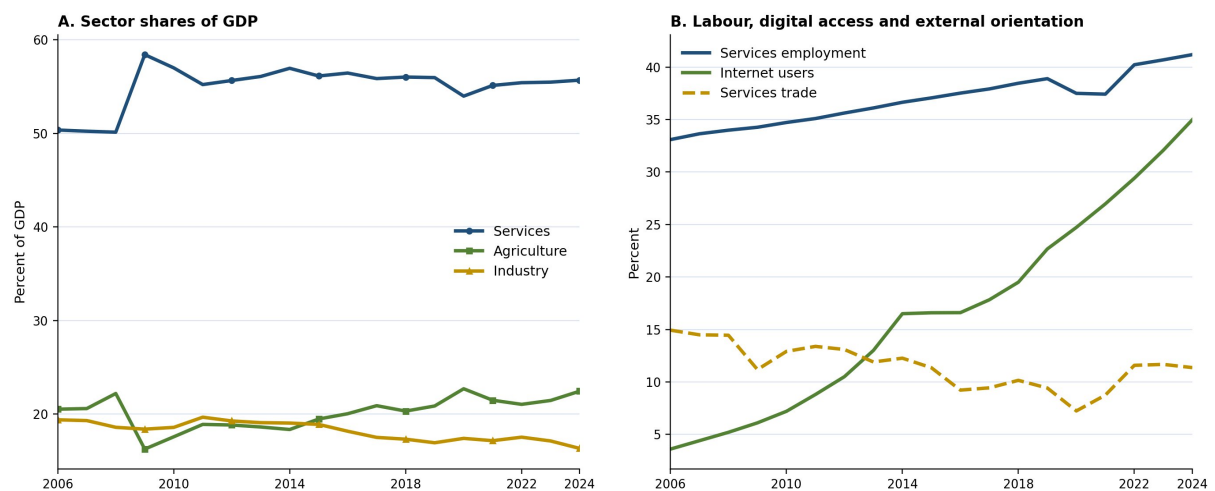


Figure 2: Kenya's services-sector scale, labour absorption, digital access and external orientation, 2006–2024. Source: Authors' calculations (2026) using World Bank, World Development Indicators, 2006–2024. Employment in services is a modelled ILO estimate. Services trade is exports plus imports as a percentage of GDP.

Table 2: Descriptive growth statistics, 2007–2024. Source: Authors' calculations (2026) using World Bank, World Development Indicators, 2007–2024. SD = sample standard deviation.

Series	n	Mean (%)	SD	Minimum	Maximum
Real GDP	18	4.63	2.10	-0.27	8.06
Services value added	18	5.52	2.40	-1.83	9.60
Agriculture value added	18	2.50	3.67	-4.98	10.35
Industry value added	18	4.40	2.42	-0.05	8.93

The External-Orientation and Productivity Conversion Gaps

The sector's domestic scale has not translated proportionately into external orientation. Services trade declined from 14.9% of GDP in 2006 to 11.4% in 2024. ICT services represented 10.6% of service exports in 2024, close to their 2006 share, even though the composition of digitally deliverable exports has broadened to include finance and other business services. The World Bank (2023a) similarly found that only about 12% of service value added was exported and that service exports contributed a modest share of GDP growth. Kenya's opportunity is therefore not simply 'more services', but a higher share of exportable and linkage-intensive services.

Digital capacity expanded rapidly: the WDI estimate of individual internet use rose from 3.6% in 2006 to 35.0% in 2024. Communications-sector subscriptions and network coverage increased even faster, although unique use remains lower than subscription penetration. The conversion gap lies between connectivity and productive adoption. Many firms use digital payments but lag in software, cloud systems, data analytics, inventory, customer management

and sector-specific applications (World Bank, 2023a, 2023b). Finance, affordability, management capability, trust and demand constrain deeper adoption.

Labour productivity and firm capability are similarly uneven. Kenya contains sophisticated digital, financial and professional firms, but most service establishments are micro and informal. The World Bank (2023a) reported more than 7.4 million micro, small and medium enterprises, of which 6.4 million were informal micro establishments. A strategy centred only on frontier firms would therefore raise output without solving the mass-employment challenge. Conversely, supporting subsistence services without productivity and market discipline would preserve low earnings. A dual upgrading strategy is required.

Service Portfolios and Growth Potential

Table 3 differentiates six service portfolios using the four criteria established in Section 3.1 together with Kenya's revealed capabilities and binding constraints. The exercise identifies each portfolio's dominant development function rather than declaring a single 'winning' sector. It remains directional because the criteria are not commensurable and their relative policy weights depend on whether the immediate objective is productivity, foreign exchange, production linkages, employment or inclusion.

Table 3: Directional screening of service portfolios and strategic priorities. Source: Authors' evidence synthesis (2026). BPO = business-process outsourcing; FDI = foreign direct investment; MICE = meetings, incentives, conferences and exhibitions; MRV = measurement, reporting and verification.

Portfolio	Dominant contribution and Kenyan evidence	Principal constraint	Priority response
Modern tradable services	ICT, software, BPO, finance, insurance, and professional and technical services: scalable exports, FDI and knowledge spillovers; Kenya has a strong digital and financial base.	Advanced skills, scale finance, data rules and market concentration	Export acceleration; interoperable data governance; STEM and professional skills; effective competition
Enabling network services	Logistics, transport, telecommunications, payments, wholesale, testing and certification: lower transaction costs and strengthen agricultural and manufacturing productivity.	High logistics costs, fragmented systems and uneven reliability	Digital trade corridors; port and customs reform; rural logistics; quality infrastructure
Tourism and experience services	Hospitality, MICE, culture, sports, creative and conservation services: foreign exchange and dispersed jobs; 2.4 million arrivals and KSh 452.2 billion receipts in 2024.	Seasonality, shocks, leakage, skills gaps and environmental pressure	Diversify products and regions; raise visitor spending; strengthen local procurement and green standards
Human-capital and care services	Education, research, health, care and training: workforce capability, regional exports and high social returns; strong	Quality variation, specialist shortages,	Quality assurance; digital delivery; research–commercial links; regional

Portfolio	Dominant contribution and Kenyan evidence	Principal constraint	Priority response
	domestic demand and regional reputation.	affordability and regulation	recognition of credentials
Local livelihood services	Retail, repair, food, transport, personal and platform-mediated services: mass labour absorption and household welfare; Kenya's largest employment base.	Informality, weak protection, low capital intensity and low margins	Simple formalisation; shared digital tools; finance; associations; skills and portable protection
Green and climate services	Climate information, water management, carbon MRV, renewable-energy operations and circular-economy services: new exports, resilience and low-carbon competitiveness.	Standards, verification capacity, project finance and greenwashing risk	Accreditation; open climate data; green finance; county demonstration markets

The screening produces differentiated—not hierarchical—results. Modern tradable services have the strongest direct scalability and export potential; enabling network services have the clearest production-linkage role; tourism combines foreign exchange with geographically dispersed employment; human-capital and care services build capabilities and regional service exports; local livelihood services have the broadest immediate labour-absorption function; and green services offer emerging resilience and export opportunities. These differences provide the basis for the three implementation portfolios in Section 6.2.

Binding and Emerging Constraints

Skills and Capability Mismatch: Modern services require technical, managerial, language and socio-emotional skills. Almost half of employers in Kenya's global innovator services reported that graduates did not meet their skill needs in the evidence reviewed by the World Bank (2023a). Digital skills are also becoming foundational across non-ICT occupations (Chinen & Montorsi, 2025).

Digital Access, Affordability and Productive Use: Network coverage has expanded faster than individual use and sophisticated enterprise adoption. Device cost, data affordability, electricity reliability, cybersecurity and weak management capability limit productivity gains, especially among rural and micro enterprises.

Competition and Regulatory Fragmentation: Restrictive entry, state participation, licensing burdens and inconsistent county or sector regulation can protect incumbents and reduce innovation. Liberalisation produces the strongest downstream gains when domestic institutions are effective (Beverelli et al., 2017).

Trade and Data Governance: Kenya requires trusted cross-border data flows, interoperable payments, mutual recognition of qualifications, e-signatures, consumer protection and predictable taxation. Excessive localisation can raise costs, while weak implementation of privacy and cybersecurity safeguards can erode trust (Republic of Kenya, 2019).

Finance and Firm Scaling: Digital credit has widened access but does not substitute for patient growth capital, collateral reform, procurement access and managerial capability. Only

18.3% of adults were financially healthy in the 2024 FinAccess survey, indicating that access and welfare are not equivalent (Central Bank of Kenya et al., 2024).

Informality and Job Quality: Complex compliance can discourage formalisation, while unprotected platform and casual work can transfer risks to workers. The policy objective should be progressive formalisation that delivers visible benefits, not registration as an end in itself.

Macroeconomic and Fiscal Constraints: High public financing needs can crowd out private credit and policy uncertainty can delay investment. Service-led growth cannot substitute for debt sustainability, stable taxation, inflation control and reliable infrastructure finance (World Bank, 2025).

Spatial Concentration and Climate Exposure: Nairobi’s agglomeration supports modern services, but over-concentration raises costs and exclusion. Tourism and transport are climate- and shock-sensitive. Secondary-city and county service hubs require broadband, skills, transport and local demand.

DISCUSSION

Interpreting Kenya’s Services Momentum

The evidence indicates servicification with incomplete structural transformation. Services dominate output, absorb a growing share of workers and have grown faster than the overall economy. Financial technology, digital entrepreneurship, professional capability, transport connectivity and tourism reveal important strengths. Nevertheless, the fall in services trade relative to GDP, limited productive adoption and the concentration of employment in low-productivity activities show that expansion remains domestically oriented and uneven (Table 4).

This interpretation reconciles two apparently competing positions. Manufacturing-centred scholarship is correct that tradability, scale, learning and employment quality matter. Services-led scholarship is correct that these properties are no longer unique to factories. The practical implication is to apply a development-property test to activities: can the activity raise productivity, earn or save foreign exchange, create learning, support other sectors, absorb labour at improving earnings and withstand shocks? Modern services can meet several criteria directly; enabling services do so indirectly; and local services require deliberate upgrading to improve earnings and inclusion.

Kenya should therefore avoid ‘skipping the factory’ as a policy slogan. A binary services-versus-manufacturing framing is economically misleading because modern production bundles goods and services. Agricultural exports depend on cold chains, certification, finance, traceability, extension and market intelligence. Manufacturing depends on design, software, logistics, testing, insurance and after-sales service. Tourism depends on transport, conservation, digital marketing, payments, security and creative content. The strongest strategy thickens these complementarities.

The Kenyan case also has wider African relevance. Many economies combine expanding services, a constrained manufacturing base, rapid digital diffusion and persistent informality. The applicable portfolio weights will nevertheless differ with market size, skills, infrastructure, resource endowments and regional access. The framework is therefore transferable as a diagnostic method, not as a uniform sector blueprint (UNECA, 2026).

6.2 A three-portfolio transformation strategy

Portfolio A: Frontier and Export Services: Kenya should scale ICT, BPO, fintech, professional, research, creative and digitally delivered services. Priorities are skills, quality certification, global client acquisition, data trust, investment facilitation and regional regulatory interoperability. Success should be measured in export revenue, value per worker, firm scaling and diversification rather than startup counts alone.

Portfolio B: Production-Enabling Services: Policy should lower the cost and raise the reliability of logistics, telecommunications, finance, standards, extension, energy-related services and professional inputs used by agriculture and manufacturing. This portfolio creates indirect productivity and export gains that conventional sector statistics understate.

Portfolio C: Inclusive Local Services: Retail, repair, hospitality, transport, care and personal services require technology diffusion, shared infrastructure, simple compliance, business development, collective purchasing, affordable finance and portable protection. The objective is to move enterprises from survival to capability without destroying entry-level livelihoods.

Policy Architecture and Implementation Sequence

Table 4: Sequenced implementation framework. Source: Authors' synthesis (2026). Indicators should be disaggregated by sex, age, disability, county, firm size and formality where feasible.

Horizon	Priority actions	Illustrative performance indicators
0–2 years: remove binding frictions	Publish a national services transformation strategy; establish a services data observatory; review licensing, competition and cross-border data barriers; expand work-linked digital and transversal skills; simplify MSME compliance.	Baseline measures established; time/cost to license; internet use and affordability; number of interoperable digital processes; employer-validated training completion.
3–5 years: build scale and linkages	Create export-ready service clusters in Nairobi and secondary cities; digitise trade corridors; strengthen standards and professional recognition; link service suppliers to agro-industrial and manufacturing anchors; expand growth finance and procurement access.	Services exports/GDP; domestic service inputs in production; exporting firms by county and ownership; logistics time; SME software/cloud adoption; private investment.
6–10 years: deepen sophistication	Move from routine outsourcing to knowledge-process, artificial intelligence (AI)-enabled and intellectual-property services; position Kenya as a regional education, health, research and climate-services hub; institutionalise portable benefits and continuous reskilling.	Service value added per worker; export complexity and diversification; patents and intellectual property (IP) and research contracts; formal and protected jobs; female/youth earnings; regional market share.

Governance Principles

Implementation requires a whole-of-economy approach. A cabinet-level or National Economic and Social Council mechanism should align the National Treasury, trade, ICT, education, labour, tourism, transport, agriculture, industry and county governments. The private sector, universities, Technical and Vocational Education and Training (TVET) institutions, worker organisations and consumer groups should participate in sector compacts with measurable commitments. Coordination should not become discretionary sector favouritism: support should be transparent, contestable, time-bound and linked to productivity, exports, skills or inclusion outcomes.

Devolution can turn service growth into spatial transformation. Counties should specialise around capabilities and value chains rather than replicate identical technology parks. Coastal counties can integrate tourism, logistics and blue-economy services; agricultural counties can develop extension, testing, finance, cold-chain and market services; university towns can support education, research, health and BPO; and secondary cities can host remote-work and professional-service clusters. National policy must supply interoperability, quality standards and backbone infrastructure while counties improve local execution.

Implications for Research and Measurement

Kenya's service statistics should move beyond broad value-added categories. Priority measures include service value added per worker; firm-level technology adoption; services embodied in goods exports; county-level formal and informal employment; task and skill content; cross-border digital delivery; platform work; tourism leakage and local procurement; and the price and quality of enabling services. Satellite accounts for the digital and creative economies would improve comparability, but definitions must prevent double counting.

The analytical propositions require testing through complementary designs. Longer national series could support time-series analysis after unit-root, structural-break and endogeneity diagnostics. County panels could exploit variation in fibre rollout, road access, training investments and regulatory implementation. Firm panels could test whether adopting software, logistics, professional or financial services improves productivity and export entry. Input-output or social-accounting-matrix analysis could quantify services embodied in agricultural and manufacturing output. Quasi-experimental designs should be preferred where policy rollouts create plausibly exogenous variation.

Future research should also compare employment quantity with employment quality. Key outcomes include earnings, hours, stability, occupational mobility, social protection and bargaining power. Distributional analysis is necessary because service-led productivity gains can favour educated urban households unless access, skills and labour institutions broaden participation (Fan et al., 2023).

Limitations

The analysis has five limitations. First, aggregate series conceal divergent sub-sector performance. Second, value added and employment estimates are subject to revision, modelling and informal-sector measurement error. Third, quality-adjusted services productivity is difficult to measure. Fourth, the short national series supports structural description but not causal identification. Fifth, the integrative synthesis is not exhaustive, applies no formal risk-of-bias score and combines heterogeneous evidence types. The portfolio

screening is therefore directional and sensitive to the policy weights assigned to productivity, exports, linkages and inclusion.

CONCLUSION

Kenya's central policy problem is no longer whether services will expand, but whether their expansion will remain concentrated in domestic, low-productivity and informal activities or become a platform for productivity, exports, better jobs and stronger agriculture and manufacturing. Between 2006 and 2024, services increased their shares of GDP and employment and grew faster than the economy on average. Yet services trade declined relative to GDP, indicating unrealised external potential and a need to convert connectivity and sector size into productive capability.

The diagnostic evidence supports services-enabled industrialisation rather than substitution between services and manufacturing. Kenya should scale modern tradable services, strengthen services that lower production costs across agriculture and manufacturing, and upgrade labour-absorbing local services. Human capital, affordable connectivity, competition, growth finance, macroeconomic stability, trustworthy data governance and social protection determine whether these portfolios produce broad development gains. The framework clarifies the choices and indicators, while future firm-, county- and input–output research must test their causal and distributional effects.

Declarations

Data availability: The World Development Indicators used in the descriptive analysis are publicly available from the World Bank. Table 1 reports the indicator codes and the extraction date needed to reconstruct the dataset. The cited Kenyan institutional reports are available from the issuing organisations.

Ethics statement: The study uses public aggregate secondary data and involved no human participants, personal data or intervention; institutional ethics approval and informed consent were therefore not applicable.

Conflicts of interest: All authors declare that they have no conflicts of interest.

Acknowledgments

Generative artificial intelligence (AI), specifically ChatGPT, was used solely to support language editing, structural refinement and document formatting. The authors independently verified the data, analysis, citations and conclusions and accept full responsibility for the final manuscript.

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LIST OF ABBREVIATIONS

- AI** — Artificial Intelligence
- BPO** — Business-Process Outsourcing
- FDI** — Foreign Direct Investment
- GDP** — Gross Domestic Product
- ICT** — Information and Communication Technology
- ILO** — International Labour Organization
- IP** — Intellectual Property
- KNBS** — Kenya National Bureau of Statistics
- KSh** — Kenyan Shilling
- MICE** — Meetings, Incentives, Conferences and Exhibitions
- MRV** — Measurement, Reporting and Verification
- MSME** — Micro, Small and Medium Enterprise
- PRISMA** — Preferred Reporting Items for Systematic Reviews and Meta-Analyses
- RQ** — Research Question
- SD** — Standard Deviation
- SME** — Small and Medium Enterprise
- STEM** — Science, Technology, Engineering and Mathematics
- TVET** — Technical and Vocational Education and Training
- UNECA** — United Nations Economic Commission for Africa
- WDI** — World Development Indicators

Support Information

Supplementary Table S1: Operationalisation for future empirical testing of the conceptual framework. Exact measures should be selected according to data frequency, identification strategy and level of analysis. Source: Authors' synthesis (2026).

Role	Construct	Illustrative measures
Independent construct	Service-sector transformation	Service value-added growth/share; high-value service composition; labour productivity; digital adoption; formalisation; service export share
Mediators	Transmission mechanisms	Productivity/innovation; service exports and FDI; service inputs into agriculture/manufacturing; job

Role	Construct	Illustrative measures
		and enterprise quality; resilience/access
Moderators	Conditioning capabilities	Digital and physical infrastructure; human capital; competition/regulatory quality; finance; macro stability; data governance and social protection
Dependent outcomes	Inclusive structural transformation	Real GDP per capita growth; labour productivity; formal and protected jobs; export diversification; poverty/inequality; county convergence; shock recovery
Controls	Alternative growth drivers and shocks	Agriculture/industry growth; investment; population; terms of trade; fiscal/monetary conditions; rainfall and climate events; global demand