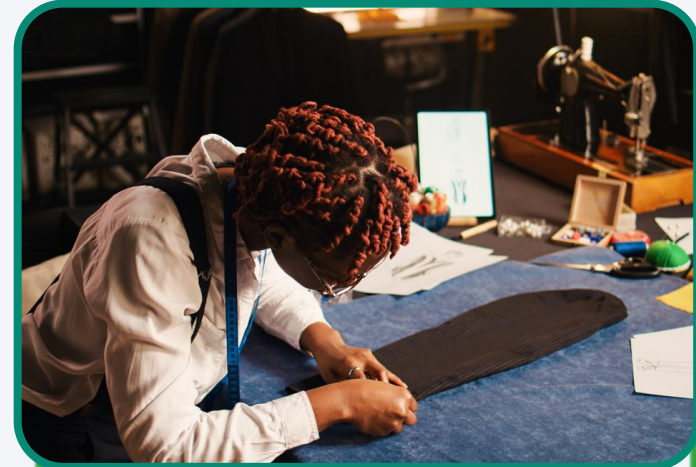


# Digital Maturity Assessment of Enterprises in Kenya

**2025 REPORT**





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DMA Survey Questionnaire



# Abbreviations and Acronyms

<b>DMA</b>	Digital Maturity Assessment
<b>MSMEs</b>	Micro Small and Medium Enterprises
<b>DIH</b>	Digital Innovation Hubs
<b>ESG</b>	Environmental Social Governance
<b>ICT</b>	Information Communication Technology
<b>ERP</b>	Enterprise Resource Planning
<b>SCM</b>	Supply Chain Management
<b>IOT</b>	Internet of Things
<b>IP</b>	Intellectual Property
<b>BSG</b>	Growth/share matrix
<b>OECD</b>	Organization for Economic Cooperation and Development



# Executive Summary

## Importance of DMA

The Digital Maturity Assessment (DMA) is essential for understanding how MSMEs are progressing in the “twin transition” toward a more digital and low-carbon economy. It provides evidence on whether enterprises have the infrastructure, skills, systems, and sustainability practices needed to remain competitive, access markets and finance, strengthen resilience, and align with national development priorities. For gDIH, the DMA also serves as a diagnostic tool to tailor support services, track enterprise transformation over time, and target high-impact interventions in areas such as cybersecurity, system integration, ESG measurement, and investment readiness.

## Objective for undertaking assessment

The assessment aimed to:

- Diagnose MSMEs’ current level of digital and green maturity across core operational, technological and sustainability dimensions
- Differentiate support pathways by comparing hub-supported MSMEs with unsupported enterprises
- Track progress and structural shifts over time by benchmarking 2025 findings against the 2023 DMA baseline
- Inform program design and prioritization under gDIH’s pillars

## Methodology

Data was collected through a DMA survey administered between 27 November 2024 and 8 June 2025. The report analyzes responses from 129 enterprises whereby 53 MSMEs were onboarded into the gDIH 2025 cohort, and comparative analysis from 76 SOMO hub-supported MSMEs. Responses were grouped into DMA domains—Enterprise Profile, Digital Readiness, Green Business Practices, Intellectual Property, and Funding Structure—and interpreted using qualitative and quantitative techniques.

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[1] [computechlimited.com](https://www.computechlimited.com)

[2] [www.undp.org](https://www.undp.org)

[3] [www.unep.org](https://www.unep.org)

[4] [https://www.preprints.org/frontend/manuscript/c20c4c59a01a2eaa3a892a381a59c9a5/download\\_pub](https://www.preprints.org/frontend/manuscript/c20c4c59a01a2eaa3a892a381a59c9a5/download_pub)

[5] [www.gdih.org](https://www.gdih.org)



# Executive Summary

## Key findings

- Enterprise profile: Most businesses were micro (67%; 1–9 employees) and youth-owned (61%; 18–35 years).
- Digital readiness: Cloud adoption is strong (77% use cloud-based tools daily), and many enterprises report ongoing ICT upgrades (44% undergoing transformation; 22% need upgrades). However, 56% indicated cybersecurity infrastructure needs improvement. Enterprises mainly rely on e-marketing and collaboration tools, with 31% investing more heavily in hardware than software.
- Digital strategy and business models: MSMEs primarily adopt digital tools for marketing and customer engagement, and new revenue models are emerging, including digital marketplaces (31%) and subscription services. ICT adoption is constrained equally by infrastructure limitations and low compatibility of ICT solutions.
- Green business practices: ESG awareness and motivation are high, but measurement is weak since only 17% track emissions, and 83% lack real-time carbon tracking tools. Environmental responsibility was the most common driver for adopting green practices.
- Intellectual property: While 81% recognize IP's importance to business strategy, 64.2% have not received IP training and most have only basic knowledge of IP registration. The most requested learning area is managing IP for business growth, alongside fundamentals and application processes.
- Funding structure: Financing remains a major constraint as nearly 70% rely on personal savings, 41% report needing KES 500,000–1,000,000 to accelerate growth, and many have limited exposure to external investors (with 38 reporting they have not pitched to venture capital).
- Supported vs unsupported MSMEs: SOMO hub-supported MSMEs were more gender-balanced and sector-diverse, while unsupported MSMEs were more male-led.

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# Executive Summary

## Conclusions and recommendations

The assessment shows that Kenyan MSMEs are no longer at the starting line of digital transformation. Most enterprises have embraced foundational digital tools, particularly cloud-based collaboration and digital marketing, and demonstrate strong willingness to engage in sustainability and innovation. This indicates that the primary challenge facing MSMEs is not lack of interest, but rather the ability to move from basic adoption to integrated, secure, and measurable systems that support growth and long-term competitiveness.

Key recommendations include:

- Strengthen ICT foundations and system integration: Support enterprises undergoing transformation (44%) or needing upgrades (22%) to build on high cloud uptake (77%) and progress toward integrated systems such as ERP/CRM.
- Address cybersecurity gaps: Respond to widespread security weaknesses, as 56% of MSMEs report the need to upgrade their cybersecurity infrastructure.
- Improve ESG measurement capability: Close the gap between strong sustainability motivation and low measurement capacity, given that only 17% track emissions and 83% lack real-time carbon tools.
- Strengthen IP as a business asset: Expand practical IP capacity beyond awareness, addressing the 64.2% of enterprises without IP training and the demand for IP management for business growth.
- Improve access to growth capital: Reduce reliance on personal savings ( $\approx 70\%$ ) by strengthening investment readiness and facilitating access to appropriately sized financing (KES 500,000–1,000,000).

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# Our Approach

The gDIH on-boarded its 2025 cohort of innovators by guiding them through a structured Digital Maturity Assessment designed to establish their existing capabilities and future direction towards digitization. Innovators self-administered the diagnostic tool that measured their capabilities across key maturity domains such as Digital Readiness, Green Business Practices, Intellectual Property and Funding Structures and across various sectors of operation. Each innovator received a personalized maturity profile with recommendation on how to tap into the gDIH's resources to enhance their capabilities. The DMA assessment further offered a baseline from which the transformation of the MSME could be measured.

The analysis in this report is based on data collected from the multi-design Digital Maturity Assessment survey, which compiled responses from a diverse range of enterprises. The survey captured key indicators related to digital maturity, including the state of ICT infrastructure, types of solutions used, cybersecurity ratings, technologies applied in farming, AI adoption, presence of digital strategies, ESG measures, challenges in ICT adoption, and budget allocations for innovation.

The data collection period spanned from November 27, 2024 to June 8, 2025, providing a recent snapshot of enterprise-level digital and sustainability practices across Kenya.

To structure the analysis, responses were mapped into six core domains of the Digital Maturity Assessment (DMA) framework: **Enterprise Details, Digital Readiness, Green Business Practices, Intellectual Property and Funding Structure**. Within each domain, a qualitative maturity level was assigned—ranging from Foundational to Developing, Strategic, and Leading—based on the depth and consistency of responses to relevant indicators.

Additionally, the analysis considered the sectoral distribution of respondents, which included agriculture, ICT, education, finance, health, smart cities, and other industries. This allowed for comparative insights across sectors, highlighting how digital maturity and sustainability practices vary depending on the nature of operations and enterprise context.

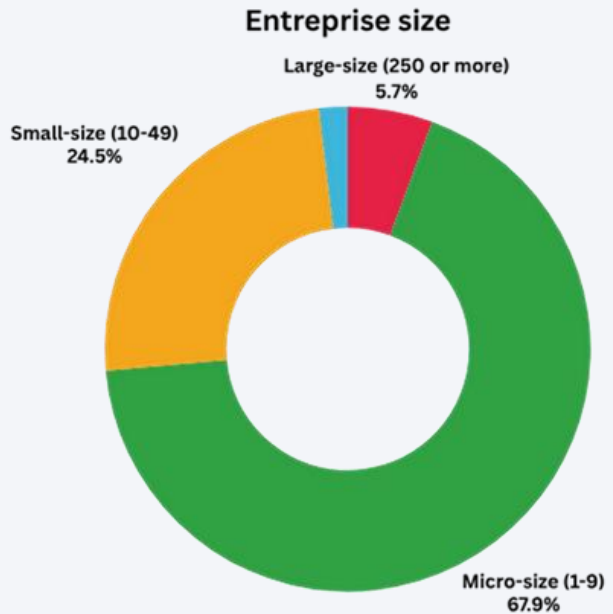
The assessment toolkit used for this analysis was adapted from the previous DMA survey conducted by the Green and Digital Innovation Hub (gDIH) and its partners. Minor modifications were made to reflect recent shifts in digital adoption trends, sustainability priorities, and enterprise needs, ensuring the framework remained relevant and responsive to current realities.



## **Section 1:**

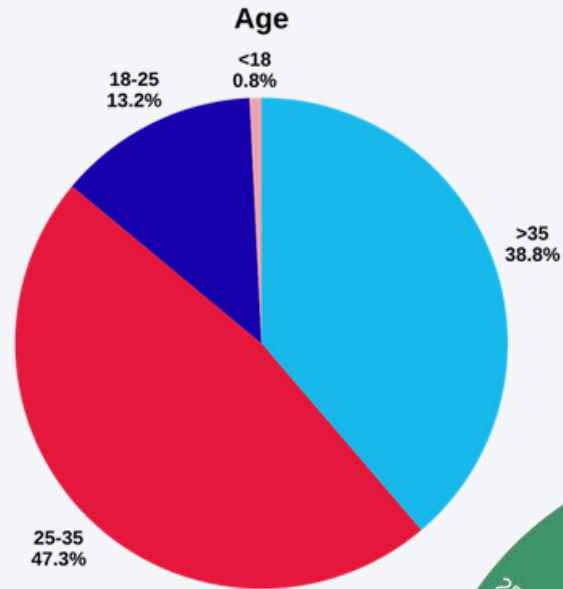
# **Enterprise Demographics**

## 1.1 Enterprise Size



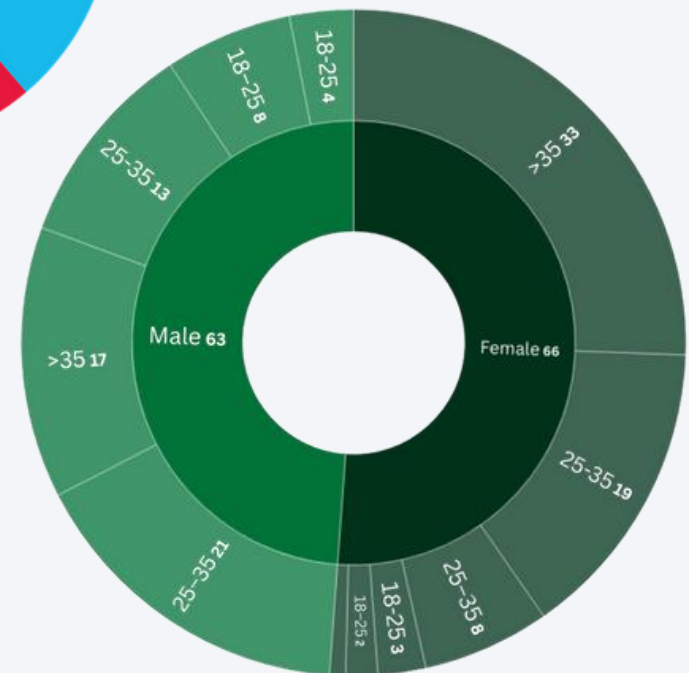
Our survey received responses from 129 respondents, 67% of whom reported that their businesses were in the Micro stage (1-9 employees).

## 1.2 Youth Owned (18-35 years) Enterprises



On age of MSME owner, most respondents were youth owned businesses coming in at 61%.

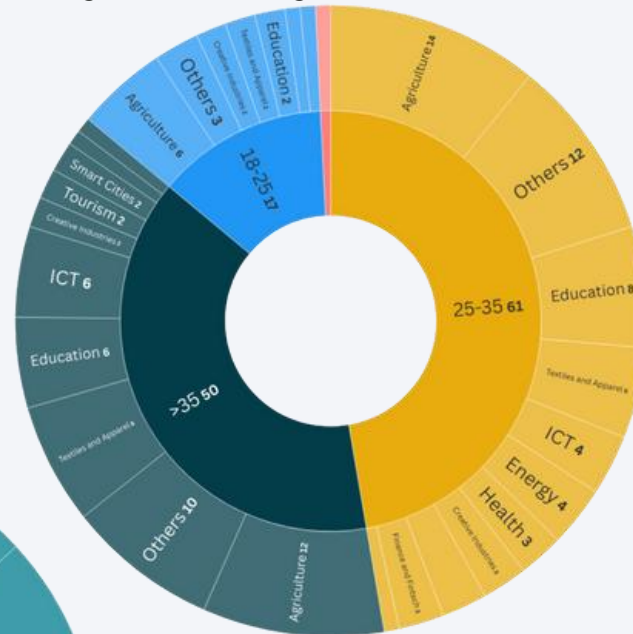
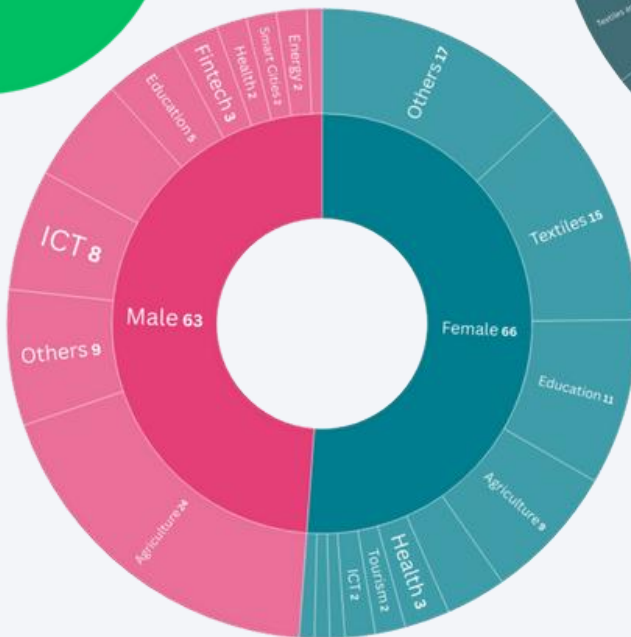
73 % of the male-led Businesses belonged to youth (under 35 years). In comparison 48% of the women-led businesses are by youth women.



### 1.3 Gender Representation and Ownership

Majority of the enterprises were female led; however it is worth noting that this average number was affected by the large female entrepreneurs supported by the SOMO Hubs

**Gender**  
N=(63-Male, 66-Female)

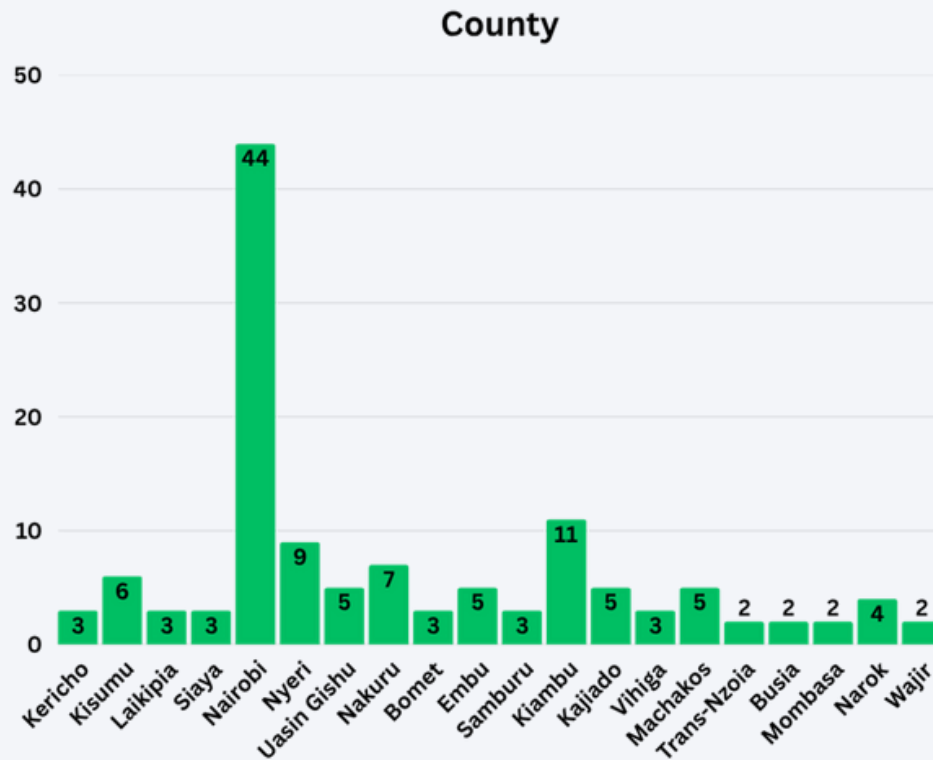


Of the participating youth-led businesses, 25% of these reported to be in the agriculture sector with Education, Textiles and apparels and creative industries following closely.

Most of the female-led enterprises were in other sectors such as waste management, plastic recycling, and branding and marketing followed by enterprises in Textile and Apparel.

Majority of the male-led enterprises were in the Agriculture sector Followed by other sectors such as Transport, manufacture of charcoal briquettes, waste management.

## 1.4. Geographic location



We received responses from 20 counties in Kenya, with 34% received from Nairobi County and 8% from Kiambu County.



# **Section 2:**

# **Digital Maturity**

## 2.1 Digital Readiness

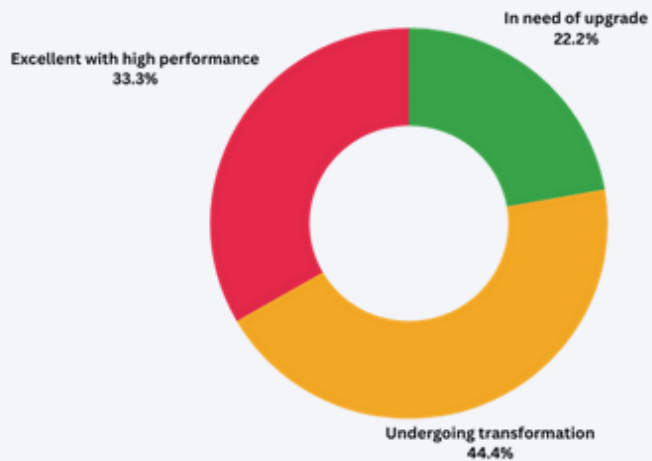
Assessing digital readiness is essential for Micro, Small, and Medium Enterprises (MSMEs) aiming to stay competitive in an increasingly technology-driven marketplace. Three key components that can significantly help an MSME evaluate its digital readiness are digital infrastructure assessment, workforce capability evaluation, and process-maturity analysis.

The gDIH DMA toolkit is structured to help MSMEs self-assess their digital readiness on these 3 key parameters. The outcome of the assessment, enables the Hub to create a pathway on how an MSME can increase their digital readiness.

This section captures responses for 53 MSMEs that were on boarded to be part of the 2025 cohort. This group was represented by a higher percentage of male-led enterprises, most of whom reported to be in the agricultural sector.

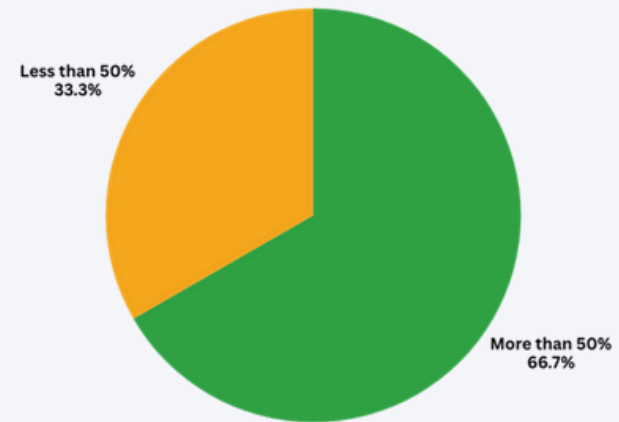


### How would you describe the overall state of your company's ICT infrastructure?

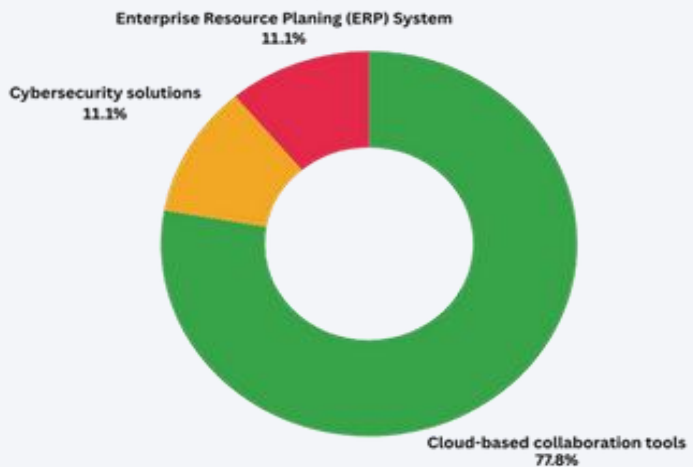


44% of respondents noted that their ICT infrastructure was going through transformation, with 22% noting that their ICT infrastructure still needed an upgrade. Additionally, 66% of respondents said that more than 50% of their company's budget is dedicated to ICT development.

### What percentage of your company's budget is dedicated to ICT innovation and development?

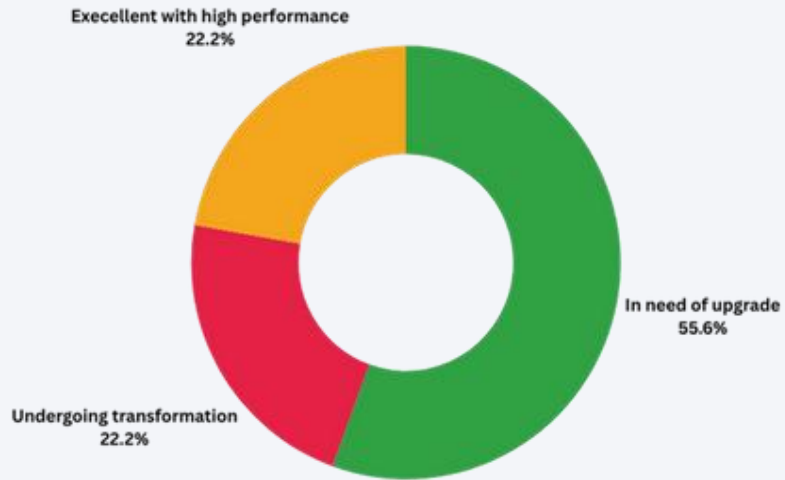


### What ICT solutions does your business rely on for daily operations?



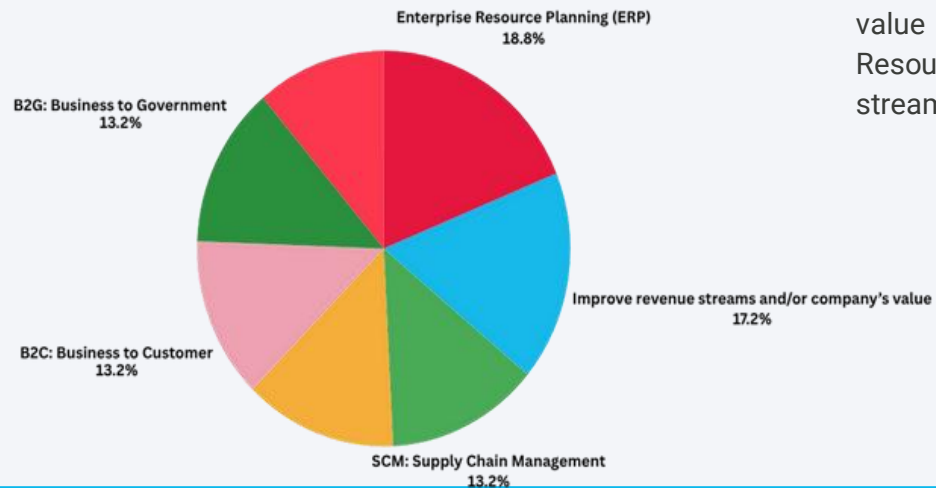
77% of respondents indicated that they were already using cloud based tools for their daily business operations.

### How would you rate your company's cybersecurity infrastructure?



56% of respondents noted that their cybersecurity infrastructure is in need of an upgrade.

### In which business areas would you like to see added value from digital technologies?



Enterprises see the greatest potential for added value from digital technologies in Enterprise Resource Planning (ERP) and improving revenue streams or company value.

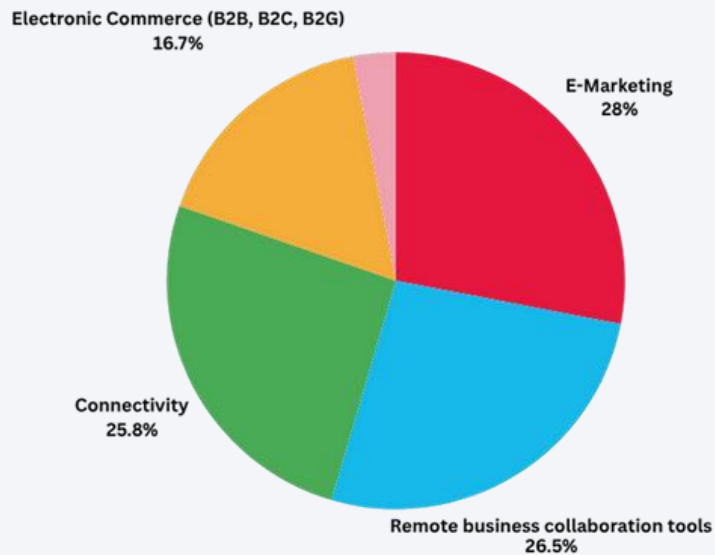
## 2.2 Digital Business Strategies

Based on the digital readiness analysis, the gDIH recommends the appropriate digital business strategy that MSME can adopt.

For example to strengthen its digital infrastructure an MSME may choose to migrate key operations to cloud-based tools, improving cybersecurity, and integrating systems such as CRM or inventory software. Additionally, to upgrade workforce capabilities an MSME owner can support employees through continuous digital skills training and by encouraging data-driven decision-making. The MSME can also digitize and streamline business processes by implementing e-commerce platforms, automating repetitive tasks, and using digital marketing to reach wider audiences.

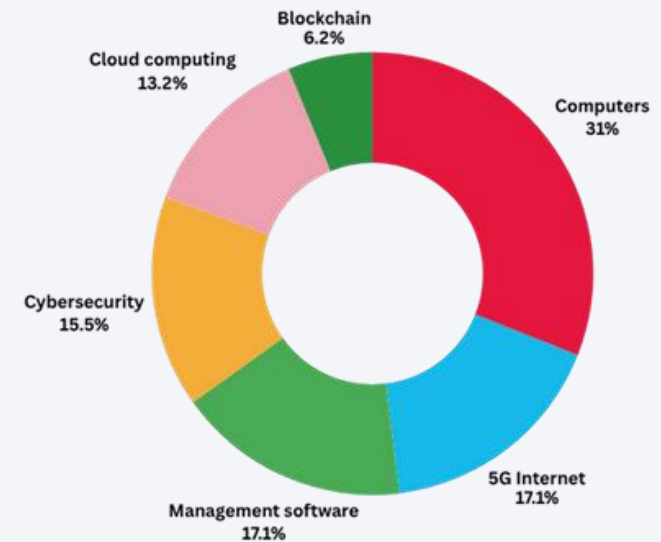
The DMA survey sought to identify the type of digital business strategies that were already in place for participating MSMEs

**Which of the following business digital tools/means are actually used by your enterprise?**

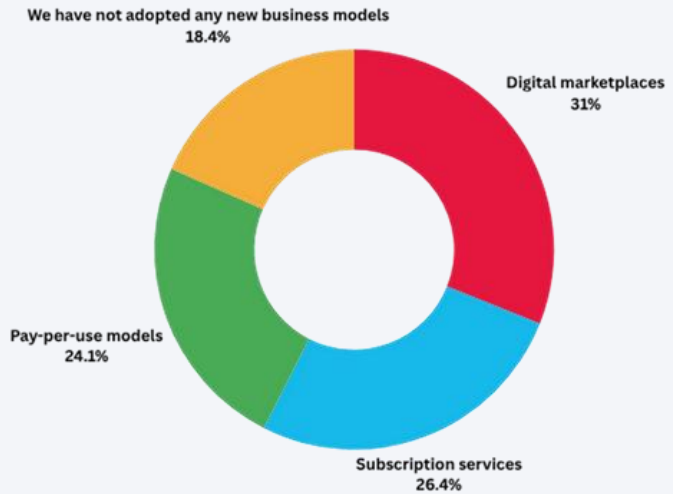


Enterprises primarily use e-marketing tools, followed by remote business collaboration tools and connectivity solutions. 31% of the Businesses have invested most heavily in hardware (computers) compared to software solutions

**Which of the following digital infrastructure tools has your business invested in?**

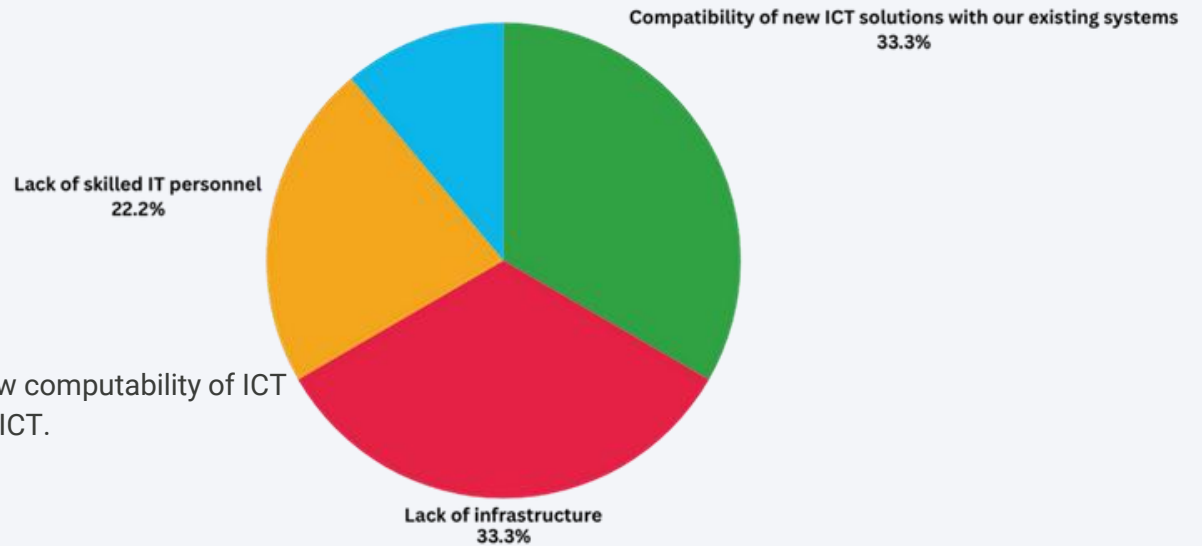


**Which of these business models or revenue streams through digital transformation has your business adopted?**



Enterprises have mainly adopted digital marketplaces (31%) and subscription services as new revenue models through digital transformation.

**What are the main challenges your business faces in adopting new ICT solutions?**



Enterprises felt that both lack of infrastructure and low computability of ICT solutions contributed equally to their low adoption of ICT.



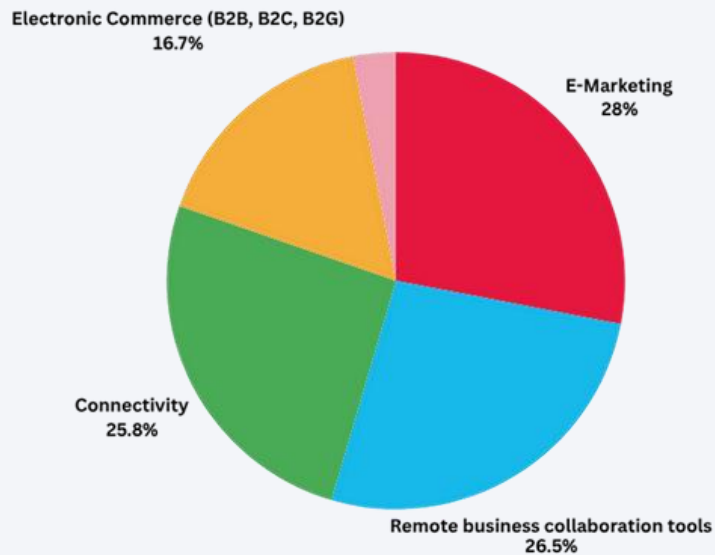
## **Section 3:**

# **Green Business Practices**

### 3.1 Green Business Practices

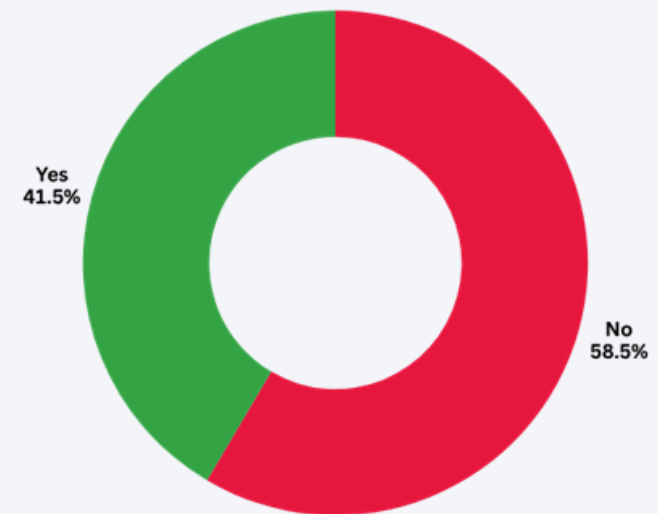
MSMEs can assess their green business practices by reviewing resource efficiency, operational sustainability, and environmental impact management. First, they can track energy use, water consumption, and waste generation through simple audits or monthly utility comparisons to identify inefficiencies. Second, they can evaluate how sustainable their processes are—checking if materials are responsibly sourced, packaging is eco-friendly, and logistics minimize emissions. Third, they can measure their environmental impact by monitoring carbon footprint, waste disposal methods, and compliance with local environmental regulations. Using basic tools like carbon calculators or waste logs helps MSMEs quantify progress and identify areas needing improvement.

**Which of the following business digital tools/means are actually used by your enterprise?**

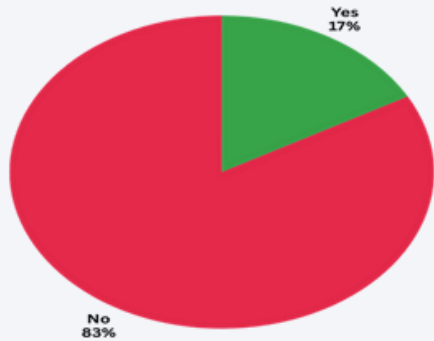


Enterprises primarily use e-marketing tools, followed by remote business collaboration tools and connectivity solutions. 31% of the Businesses have invested most heavily in hardware (computers) compared to software solutions.

**Did you know your organization's carbon footprint?**

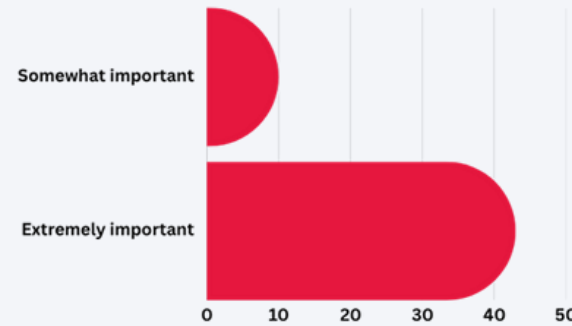


**Does your enterprise have digital tools to measure and track carbon emissions in real-time?**



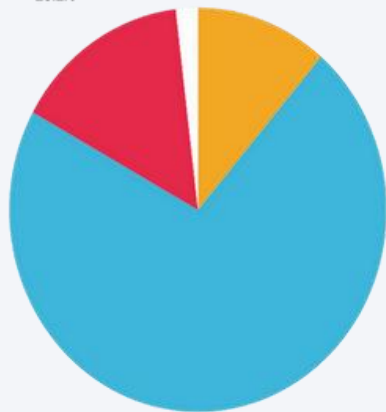
Additionally only 17% of Enterprises are able to track their carbon emissions. Surprisingly, majority of enterprise owners state that carbon credit participation is extremely important for their long term sustainability and profitability goals.

**How important is carbon credit participation for your enterprise's long-term sustainability and profitability goals?**



**Which of the following motivates your business to adopt green practices?**

It gives our business a competitive edge in the market  
15.1%



We recognize our responsibility to protect the environment  
71.7%

It was encouraging to note that recognition of the responsibility to protect the environment is the most stated reason as to why business owners are motivated to adopt green business practices.



## **Section 4:**

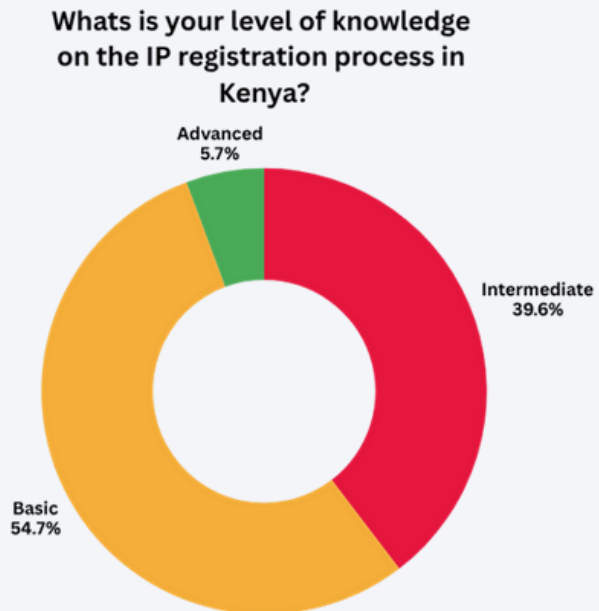
# **Intellectual Property**

## 4.1 Intellectual Property (IP)

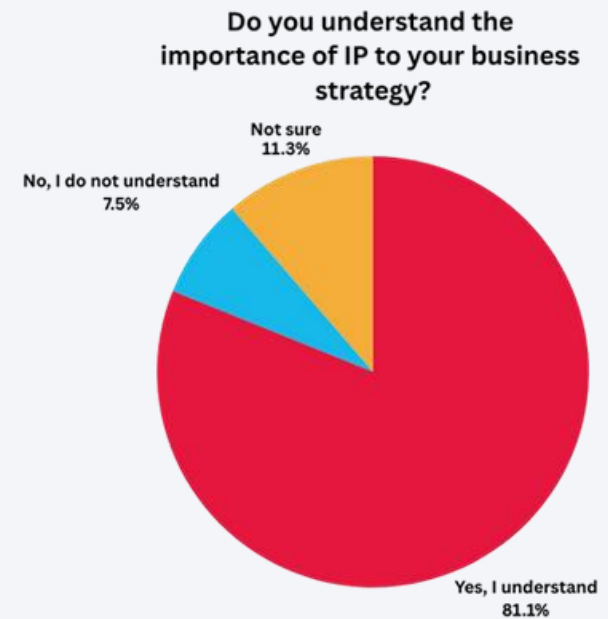
Intellectual property (IP) adoption in MSMEs is closely linked to their level of digital maturity because both reflect how strategically and systematically a business uses innovation, technology, and information assets to grow. As digital capabilities increase, the enterprise becomes better equipped to create, track, protect, and leverage intangible assets, including IP. Low digital maturity often limits awareness of IP value, resulting in missed opportunities for protection and monetization. Without digital systems, innovations may remain undocumented or vulnerable to misuse.

While an overwhelmingly high number of business owners (81%) understand the importance of IP to their business strategy, most respondents' level of knowledge in IP registration in Kenya is basic.

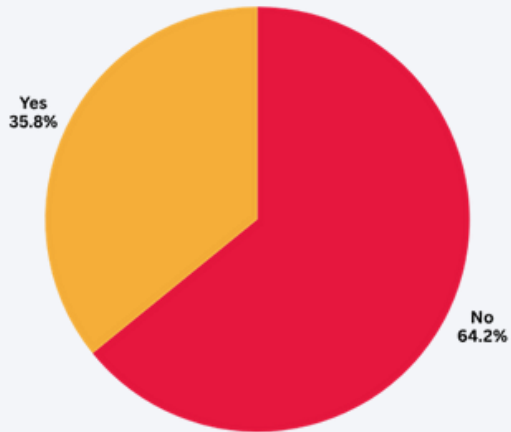
The gDIH aims to support MSMEs' capacity to identify, safeguard, and commercialize their intellectual assets.



While an overwhelmingly high number of business owners (81%) understand the importance of IP to their business strategy, most respondents' level of knowledge in IP registration in Kenya is basic.



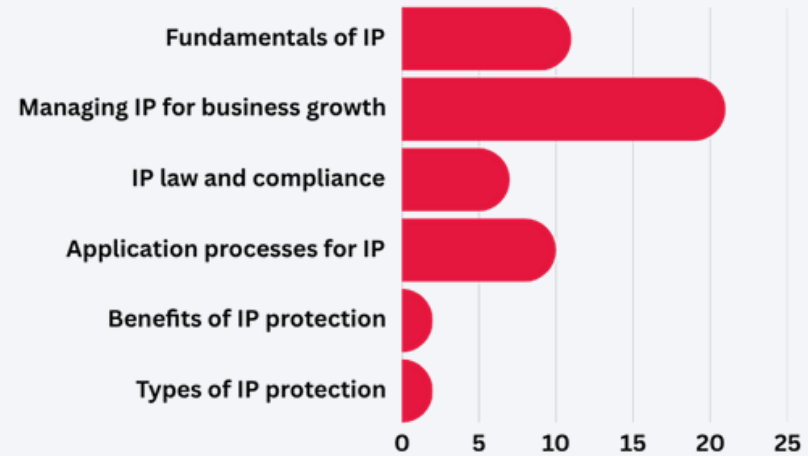
### Have you previously attended any training on IP



Majority (64.2%) have not received any IP training.

The most (21) cited topic of interest in IP is Managing IP for business growth. Another larger majority would be interested train on fundamentals of IP and IP application process.

### What IP topics are you interested in learning more about





# **Section 5:**

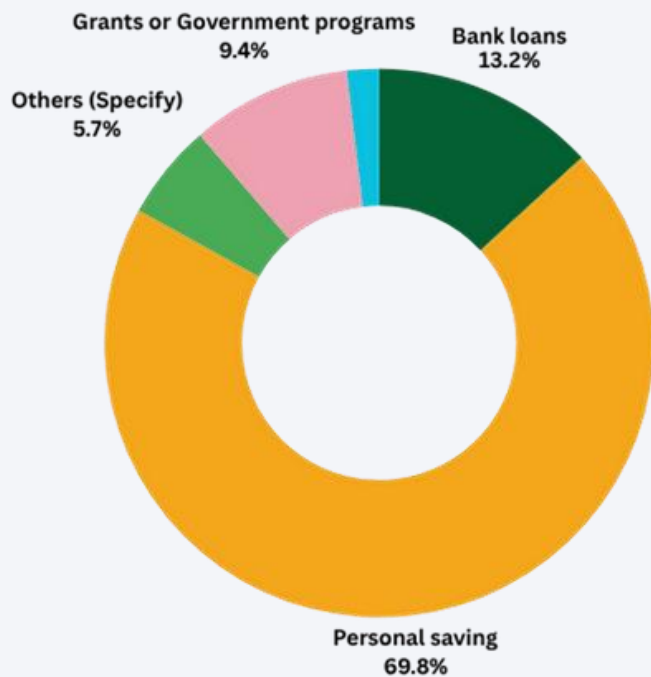
# **Funding Structure**

## 5.1 Funding Structure

For MSMEs in Kenya, the relationship between funding structure and digital maturity is particularly significant due to the country's rapidly digitizing economy and persistent financing gaps. Many Kenyan MSMEs rely heavily on internal funds, short-term loans, or informal financing, which often limits their capacity to invest in digital tools such as e-commerce platforms, digital payment systems.

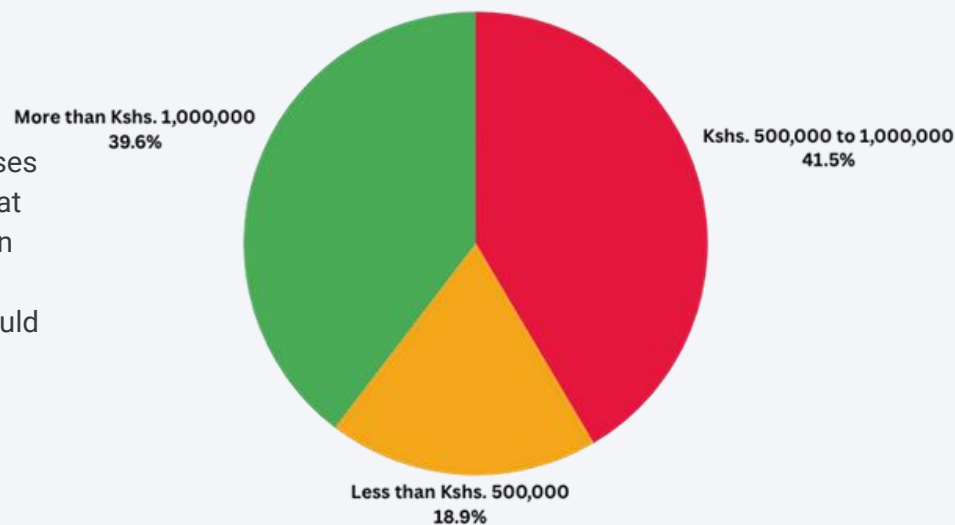
The gDIH aims to support MSMEs to access to stable capital to enable investments in digital infrastructure, cybersecurity, and staff training, all of which enhance efficiency and competitiveness.

### What has been your primary source of funding for your business?

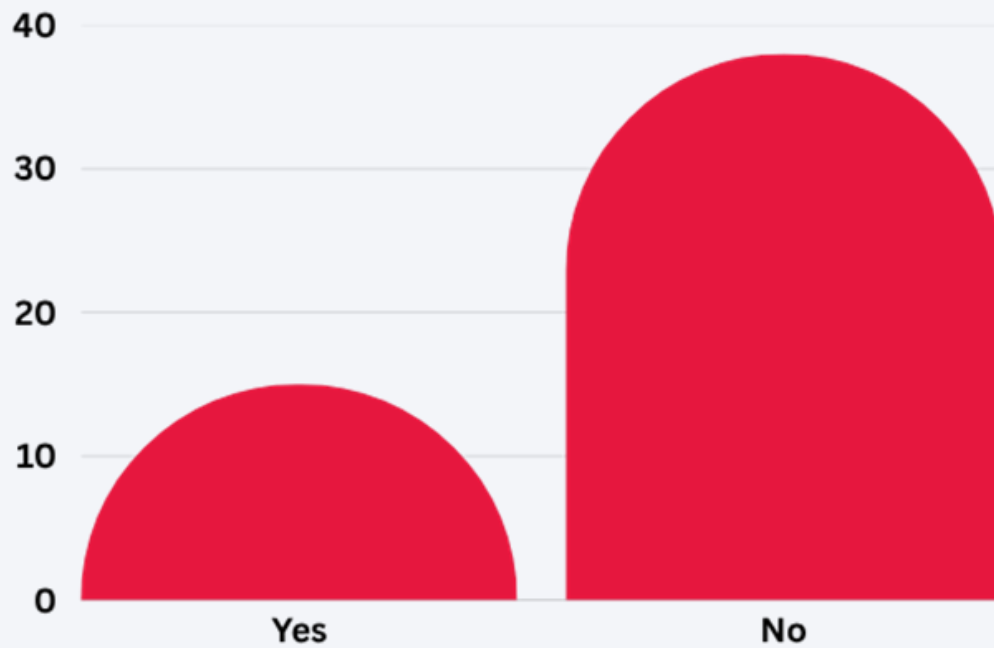


Personal savings is the most common primary source of funding for almost 70% of enterprises. Additionally, 41% felt that a capital injection within the range of Kshs. 500,000 to 1 Million would ensure their business growth.

### How much capital injection would your business need to ensure growth?



## Have you pitched your idea to a venture capital fund?



Majority (38) of enterprise owners have not pitched their ideas to a venture capital fund.



## **Section 6:**

**Insights from MSMEs**

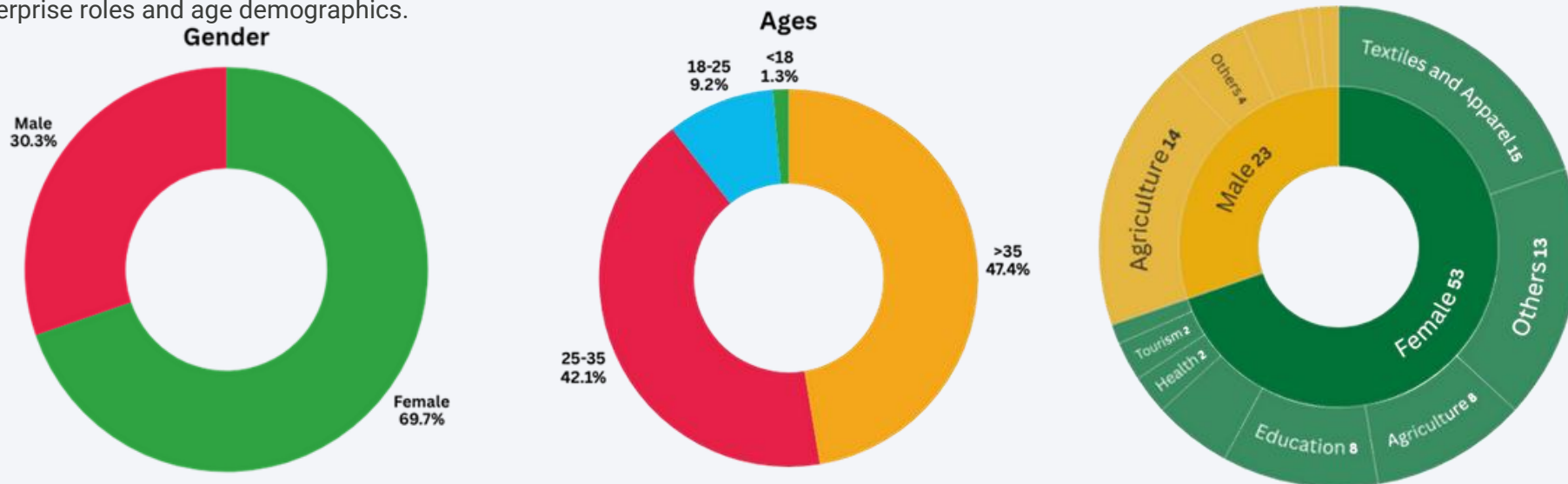
**Supported through the Hub**

Digital Maturity Assessment insights for MSMEs supported through innovation or entrepreneurship hubs often differ significantly from those of unsupported enterprises due to the structured guidance, resources, and exposure hubs provide. MSMEs operating within hubs typically benefit from access to digital training, mentorship, shared facilities, and networking opportunities that accelerate their adoption of relevant technologies. As a result, DMA insights for these hub-supported firms usually reflect higher awareness of digital tools, better integration of digital processes, and a clearer strategic outlook toward digital transformation.

The gDIH partnered with SOMO hubs to support their MSMEs to upskill their green business practices. The DMA toolkit was self-administered by 76 participating MSMEs, who received an assessment of their digital maturing to guide their planned capacity building boot camp. This section aims to compare the findings of the DMA survey for unsupported MSMEs with those MSMEs supported through the SOMO Hubs network.

## 6.1 Enterprise Details

The **SOMO Supported MSMEs** dataset presents a more gender-balanced profile, with a significant representation of female-led enterprises, particularly in sectors like textiles, agriculture, and creative industries. Most of these businesses are micro-sized, typically employing fewer than 10 people. In contrast, the **Unsupported MSMEs** Survey dataset is predominantly male-led, with 75.5% of respondents identifying as male. The sectors represented are broader, including agriculture, ICT, education, and finance, but still skew toward micro-sized enterprises. Both datasets show a strong focus on marketing, delivery, and customer service as key business functions, though **SOMO Supported MSMEs** includes more diversity in enterprise roles and age demographics.

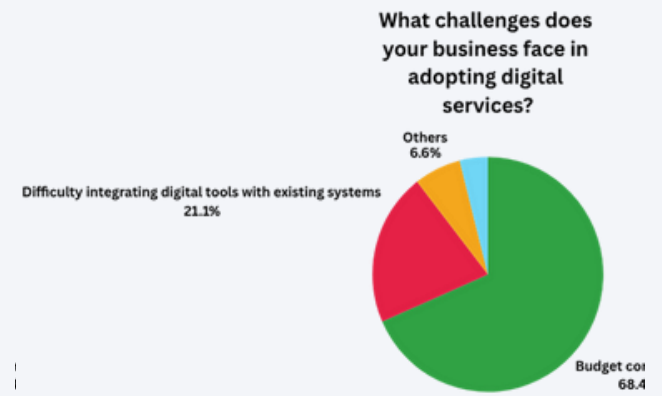
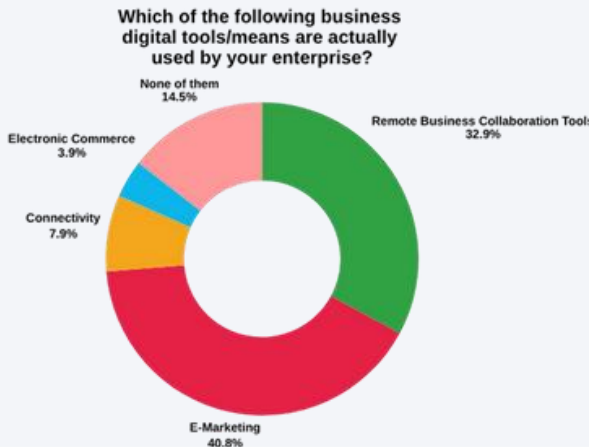
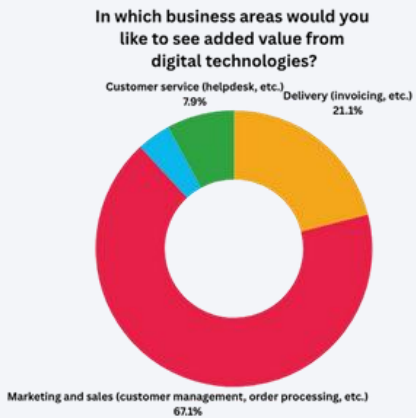


Feature	SOMO Supported MSMEs	Unsupported MSMEs
Gender Distribution	Female-led enterprises dominate; 69.7% Female, 30.3% Male	Male-led enterprises dominate (75.5%), 24.5% Female
Age Range	>35 years (47.4%), 25–35 years (42.1%)	More diverse, including 18–55 years
Sector Representation	Agriculture, Textiles, Creative Industries, Education, Health, Tourism, ICT	Agriculture (20.8%), ICT (17%), Education (13.2%), Others
Enterprise Size	Micro (67.1%), Small (21.1%), Medium (10.5%), Large (1.3%)	Micro (67.9%), Small (24.5%), Large (5.7%)
Business Functions	Marketing, Delivery, Customer Service	Similar focus, with emphasis on marketing and delivery

**SOMO Supported MSMEs** have a more gender-balanced and sector-diverse representation, while **Unsupported MSMEs** leans heavily toward male-led, micro-sized enterprises in agriculture and ICT.

## 6.2 Digital Readiness

Digital readiness varies significantly between the two datasets. **SOMO Supported MSMEs** reveals a grassroots-level adoption of digital tools, with many enterprises using basic technologies such as e-marketing, cloud computing, and mobile apps. However, integration challenges and budget constraints are common. On the other hand, **Unsupported MSMEs** shows a more structured approach to digital infrastructure. A majority of businesses are undergoing digital transformation, and many report having excellent ICT systems. Cloud-based collaboration tools are widely used, and cybersecurity is a growing concern, with over half of the enterprises indicating a need for upgrades. Despite this, challenges such as compatibility with existing systems and lack of skilled IT personnel persist.

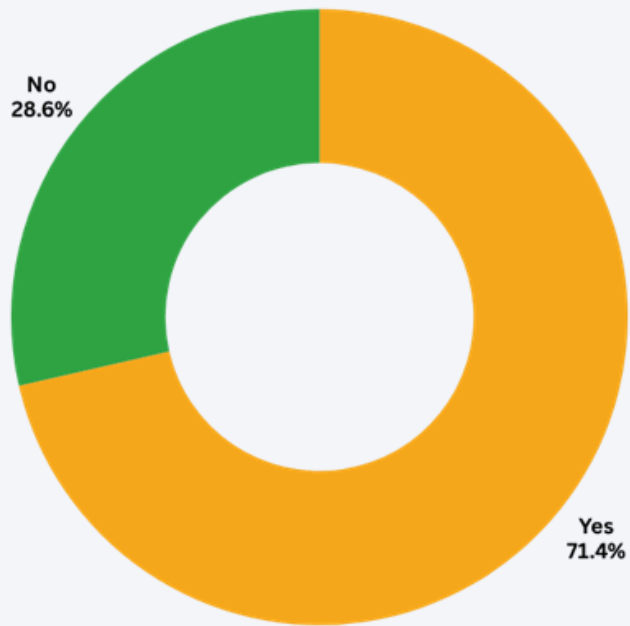


Feature	SOMO Supported MSMEs	Unsupported MSMEs
Digital Tools Used	E-marketing (40.8%), Remote collaboration {cloud computing, mobile apps, ERP, SCM} (32.9%), None (14.5%)	Cloud collaboration (77.8%), ERP (11.1%), cybersecurity (11.1%)
ICT Infrastructure	5G Internet (43.4%), Cloud (42.1%), Management Software (10.5%), Cybersecurity (2.6%) .Mixed readiness; some undergoing transformation	44.4% undergoing transformation, 33.3% excellent, 22.2% need upgrade
Cybersecurity	Basic understanding, some lack awareness. Low adoption (2.6%)	55.6% need upgrade, 22.2% excellent
Challenges	Budget constraints, integration issues	Compatibility (33.3%), infrastructure gaps (33.3%), lack of skilled personnel (22.2%)

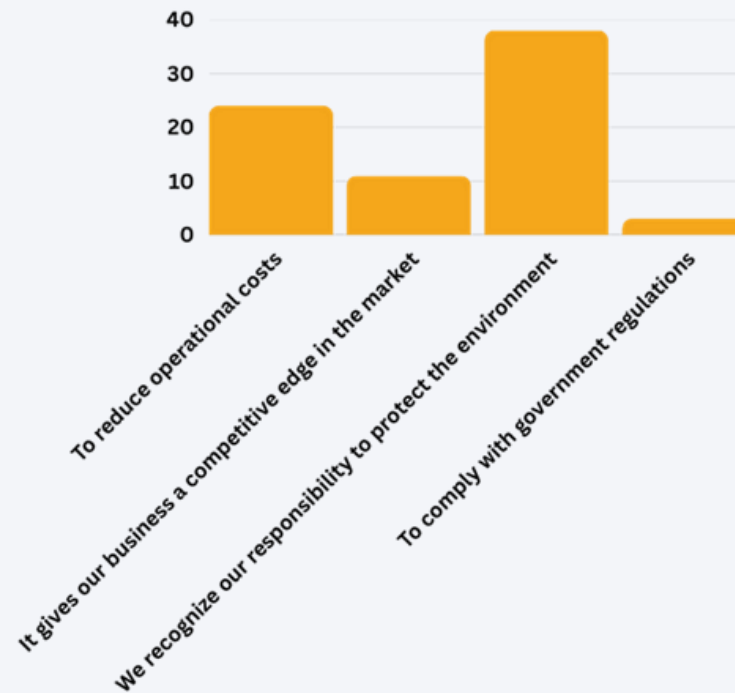
## 6.3 Green Business Practices

Both datasets reflect a growing awareness of sustainability, but Unsupported MSMEs Survey provides more measurable insights. In SOMO Supported MSMEs, green practices are often conceptual, with mentions of sustainable production and emissions reduction. However, 2025 DMA Survey includes specific data points, such as 50.9% of enterprises having ESG policies and 81.1% considering carbon credit participation extremely important. Despite this, 83% of businesses in Unsupported MSMEs Survey lack digital tools to track carbon emissions in real time. The motivation to adopt green practices is strong across both datasets, with most enterprises recognizing their environmental responsibility.

**Do you have a project that can earn money in the carbon credits markets?**



**What motivates your business to adopt green practices**



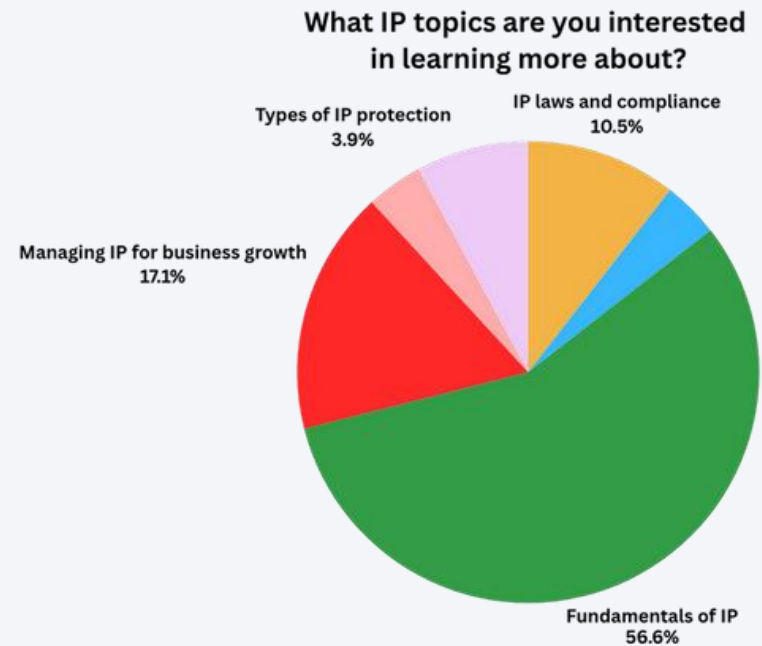
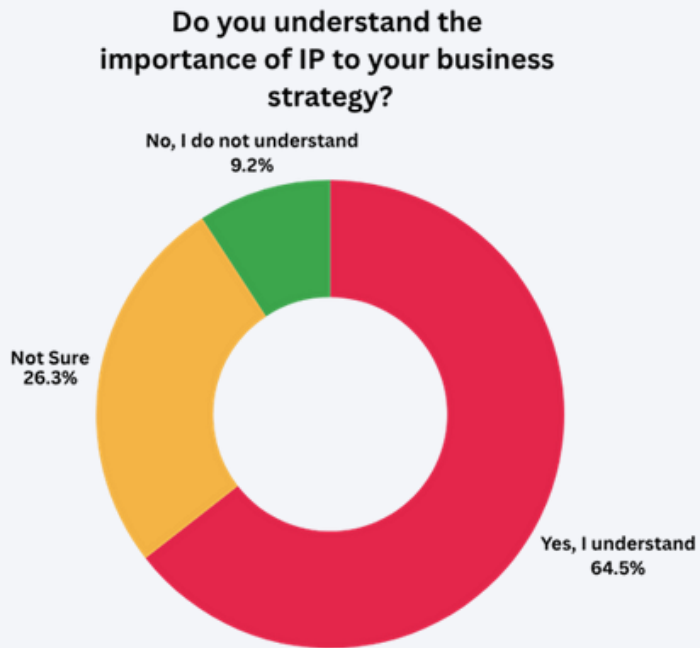


Feature	SOMO Supported MSMEs	Unsupported MSMEs
Green Technologies	Sustainable production, emissions reduction	45.5% do not use digital tech in farming; 54.5% use AI in agriculture while others use drones and IOT
ESG Policies	77.1% have ESG policies	50.9% have ESG policies
Carbon Tracking	Limited tools and awareness	83% lack real-time carbon tracking tools
Motivation	48.6% cost reduction, 40% environmental responsibility	71.7% motivated by environmental responsibility

Both datasets show a strong motivation toward sustainability, but surprisingly **Unsupported MSMEs** provides clearer metrics on ESG adoption and carbon tracking gaps.

## 6.4 Intellectual Property (IP)

Intellectual property remains an underutilized asset in both datasets. SOMO Supported MSMEs insights shows that many entrepreneurs have a basic understanding of IP, often gained through introductory training. Patents are the most mentioned form of IP, though awareness of trademarks and copyrights is growing. Unsupported MSMEs Survey echoes these findings but provides more structured feedback. High costs, complexity, and lack of resources are major barriers to IP adoption. While some enterprises have begun the registration process, many are still in the early stages of understanding how IP can benefit their business.





Feature	SOMO Supported MSMEs	Unsupported MSMEs
IP Awareness	Many lack understanding; basic training common	High costs and lack of awareness are major barriers
Types of IP	Patents dominate; some mention trademarks and copyrights	Patents, trademarks, copyrights, trade secrets mentioned
Challenges	High costs, lack of awareness, complexity	Complexity, lack of resources, and high costs are consistent issues

Both datasets highlight IP as an underutilized asset, with SOMO Supported MSMEs showing more grassroots-level challenges and Unsupported MSMEs reflecting more structured but still limited engagement.

## 6.5 Funding Structure

Funding is a critical challenge for enterprises in both datasets. Personal savings are the predominant source of capital, especially for early-stage businesses. SOMO Supported MSMEs highlights this reliance, with most enterprises in the seed or idea generation phase. Unsupported MSMEs offers more detailed financial data, showing that while some businesses have accessed grants or bank loans, funding gaps remain significant. Budget constraints are a recurring theme, particularly in relation to digital adoption and IP registration. The lack of structured funding mechanisms limits the scalability and innovation potential of many enterprises.

Feature	SOMO Supported MSMEs	Unsupported MSMEs
Primary Source	Personal savings dominate	Personal savings (majority), some grants and bank loans
Funding Challenges	High IP costs, lack of awareness	Budget constraints, lack of capital, limited access to grants
Stage of Development	Mostly seed and idea generation	Seed stage (majority), some pre-seed and maturity stages

## 6.6 Summary of Key Differences

Category	SOMO Supported MSMEs	Unsupported MSMEs
Demographics	More female-led, older entrepreneurs	Male-dominated, broader age range
Digital Readiness	Basic tools, integration challenges	Structured ICT systems, cybersecurity concerns
Green Practices	Conceptual adoption	Measurable ESG engagement and AI use in agriculture
IP Engagement	Low awareness, basic training	Structured training, but high costs and complexity persist
Funding	Personal savings, early-stage	Personal savings, some grants, clearer financial data



## **Section 7:**

# **Longitudinal Analysis**


The DMA toolkit was developed as a diagnostic tool for the gDIH under the Test-before-invest pillar. The toolkit enables the hub to diagnose the MSMEs' current digital capabilities across key areas such as operations, marketing, data management, financial systems, and cybersecurity. This baseline assessment helps the gDIH tailor support services to the specific needs and readiness levels of each business and enhance progress tracking. The first DMA survey was conducted in 2023, and the baseline offered critical insights for the setup of the gDIH. Subsequent surveys will provide the hub with valuable evidence on trends and shifts in MSMEs' needs.

For example, MSMEs may have advanced from basic digital adoption in 2023 to more strategic or automated systems by 2025, suggesting the need for higher-level support such as AI tools, data analytics training, or advanced cloud solutions. Additionally, by understanding what has improved and what has not, the hub can prioritize high-impact programs and discontinue ineffective ones.

This section offers a comparison of the 2023 and 2025 DMA surveys.

## 7.1 Summary Table: 2025 DMA vs 2023 DMA

Dimension	2025 DMA Survey	2023 DMA Survey
Digital Strategy	81.8% have a digital strategy	68.13% integrate digitalization into business model
ESG Policy	50.9% have ESG policies	64% have ESG policies
Digital Readiness	72.7% very prepared	76.9% offer digital training; 85.7% staff willing
ICT Tools Used	77.8% use cloud tools; 11.1% ERP/cybersecurity	85.7% use connectivity; 71.4% e-marketing; 68.1% e-commerce
Carbon Tracking	17% use tracking tools; 58.5% unaware of footprint	Digital waste tracking and carbon credit tools present
Cybersecurity	55.6% need upgrade	35.2% have ICT security policies
Business Functions	Focus on marketing & sales (37.7%)	Broader: revenue, quality, process optimization
Digital Models	Subscription, e-commerce, social media	Marketplace, freemium, ecosystem, experience models
Data & Analytics	Limited use; 83% lack carbon tracking tools	48.35% use data for process improvement.



The 2023 DMA report includes more intermediaries and Enterprise support organizations, while 2025 DMA survey focuses more on operational MSMEs. Both surveys show strong adoption of cloud-based tools. However, 2025 DMA survey indicates lower use of ERP and cybersecurity tools, suggesting a gap in enterprise-level digital systems. The 2023 DMA report shows broader interest in digital transformation across multiple business functions, while 2025 DMA survey emphasizes marketing and customer engagement. Both datasets show growing awareness of ESG, but 2025 DMA survey reveals a significant gap in carbon tracking tools and data-driven sustainability.

## 7.2 Identified Trends

1. **Cloud & collaboration tools** → stable and strong adoption.
2. **Cybersecurity** → consistently weak; explicit in 2025.
3. **AI in agriculture** → moved from intent (2023) to actual adoption (2025).
4. **ESG** → awareness strong, but tools for measurement still absent both years.
5. **Skills & budget constraints** → unchanged; 2025 adds integration/compatibility issues as a new pain point.
6. **Sector scope** → expanded in 2025 beyond ICT & agriculture to education, fintech, health, smart cities.

## 7.3 Quick benchmark vs regional/global DMA trends (European DIH)

Comparison of 2025 DMA survey report with recent SME/DMA studies and frameworks (OECD D4SME survey, Digitopia Digital Maturity 2024, Deloitte/BCG models). Key comparisons:

- **Cloud adoption:** 2025 DMA survey report high cloud collaboration uptake aligns with global/region trends where SMEs are increasingly cloud-first. (see Digitopia 2024 findings on rising cloud use and Digitopia/industry analyses). [6]
- **Cybersecurity gap:** The 2025 DMA survey report (majority needing upgrades) mirrors OECD and other global SME studies that find SMEs often lag in security practices even when they adopt cloud tools. OECD D4SME highlights limited embedding of digital security across SMEs. [7]
- **SME readiness & constraints:** Budget constraints and lack of skilled staff in 2025 DMA survey report are consistent with broader Sub-Saharan Africa findings: digital adoption is limited by infrastructure, skills and finance. World Trade Organization (WTO) and regional studies highlight the connectivity and device gaps that constrain deeper digitalization. [8]

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[6] [Digitopia+1](#)

[7] [OECD](#)

[8] [World Trade Organization](#)



# **Section 8:**

# **Conclusion**



In conclusion, Kenya's enterprises have **matured in cloud collaboration and begun adopting AI in agriculture, but cybersecurity, ESG measurement, integration, and workforce skills remain the critical gaps** – the same areas highlighted in 2023, now more clearly quantified.

## 8.1 High-Priority Risks & Gaps within the Domains

- 1.Cybersecurity Weaknesses:** Over half of enterprises lack robust cybersecurity infrastructure, making them vulnerable to data breaches and operational disruptions.
- 2.Carbon Tracking Deficiency:** 83% of businesses do not use digital tools to monitor emissions, undermining ESG credibility and carbon credit participation.
- 3.Limited Use of Advanced Tools:** ERP systems, IoT, and automated farming technologies are underutilized, especially among micro-enterprises.
- 4.Skills Shortage:** A lack of skilled IT personnel and digital literacy hampers effective implementation of digital strategies.
- 5.Data Blind Spots:** Poor visibility into carbon footprint and operational analytics limits strategic decision-making and sustainability reporting.
- 6.Infrastructure Gaps:** Compatibility issues and lack of digital infrastructure (33.3%) hinder adoption of new ICT solutions.



**Section 9:**

**Recommendation**



## Recommendations to Enhance Digital Readiness

- 1. Upgrade ICT infrastructure to strengthen digital foundations**, as 44% of enterprises reported that their ICT systems are currently undergoing transformation and 22% indicated that their infrastructure still requires upgrading. Besides, strengthening infrastructure is critical given that 56% of respondents also rated their cybersecurity systems as needing improvement.
- 2. Increase investment in digital capabilities**, especially since 66% of enterprises already allocate more than half of their budget to ICT development. This indicates willingness to invest but highlights the need for structured investment pathways that ensure funds are directed toward strategic upgrades such as cloud systems, security enhancements, and integrated software tools.
- 3. Leverage high cloud adoption to deepen system integration**, considering that 77% of enterprises already use cloud-based tools for daily operations. This foundation can support more advanced tools such as ERP and CRM systems, which were identified as offering the greatest added value by respondents.
- 4. Prioritize cybersecurity improvements** since more than half of the MSMEs (56%) stated that their cybersecurity infrastructure needs an upgrade. With growing digital adoption, enhanced cybersecurity protocols are essential to safeguard data and maintain trust.
- 5. Address compatibility challenges and ICT solution gaps**, as enterprises noted that lack of digital infrastructure and low compatibility of ICT solutions equally hinder adoption. Resolving these issues requires interoperable systems and user-friendly tools aligned with MSME capacity.

## Recommendations to Improve Green Business Practices

- 1. Increase enterprise capacity to measure carbon emissions**, as 58% of enterprises reported that they do not know their carbon footprint and only 17% actively track their emissions. This gap undermines eligibility for carbon markets, despite strong interest in carbon credit participation.
- 2. Leverage strong environmental motivation among MSMEs**, noting that the most stated reason for adopting green practices is recognition of environmental responsibility (over 70% motivation among unsupported MSMEs). This high level of willingness can be converted.



## Recommendations to Strengthen IP Capacity

- 1. Expand IP awareness and training programs**, as 64.2% of enterprise owners have never received any IP training despite 81% recognizing the strategic importance of IP to their business. This gap demonstrates strong demand but low access to structured knowledge.
- 2. Support MSMEs to navigate IP registration processes**, since most respondents reported only basic knowledge of the IP registration system in Kenya. Clear guidance can reduce registration barriers linked to complexity and high costs.
- 3. Align IP training with MSME priorities**, as the most requested topic was Managing IP for business growth. Training programs should therefore focus not only on registration but also on commercialization and strategic use of IP.

## Recommendations to Strengthen Funding Structures

- 1. Promote diversified funding options beyond personal savings**, since nearly 70% of enterprises rely primarily on personal savings, limiting growth opportunities. This highlights the need for structured funding pathways, including grants, seed capital, and concessional loans.
- 2. Improve MSME investment readiness**, as most respondents reported never pitching to venture capital funds. This highlights the need for pitch training, financial documentation support, and investor matchmaking.
- 3. Facilitate access to catalytic capital**, noting that 41% of enterprises believe a capital injection between KES 500,000 and 1,000,000 would significantly accelerate growth. Tailored financing products in this range can directly unlock MSME scaling potential.
- 4. Address budget-related barriers to digital adoption**, majority reported budget constraints as a major challenge affecting digital tool acquisition and IP registration. Financial support mechanisms can help bridge this affordability gap.



## **Section 10:**

# **DMA Survey Questionnaire**

# 1. Enterprise Details

**I. Name**

**II. Email**

**III. Gender**

Male

Female

**IV Age**

<18

18-25

25-35

>35

**V. Sector**

Health

Education

Tourism

Finance and FinTech

Creative Industries (e.g., Media, Art, Design,

Entertainment)

ICT

Energy

Agriculture

Smart Cities

Textiles and Apparel

Others (Please Specify)

**VI. Country** (If Kenya select County)

VII Enterprise Size: Micro/ SME

Micro-size (1-9)

Small-size (10-49)

Medium-size (50-249)

Large-size (250 or more)

# 2. Digital Readiness

**I. In which business areas would you like to see added value from digital technologies?**

Delivery (invoicing, etc.)

Customer service (helpdesk, etc.)

Marketing and sales (customer management, order processing, etc.)

Purchasing and procurement

**II. Which of the following expectations lead your enterprise willingness to embark in a digitalisation process?**

Improve revenue streams and/or company's value

ERP: Enterprise Resource Planning;

CRM: Customers Relationship Management;

SCM: Supply Chain Management

B2B: Business to business; B2C: Business to Consumer;

B2G: Business to Government



**III. Which of the following business digital tools/means are actually used by your enterprise?**

- Remote business collaboration tools (e.g. teleworking platform, videoconferencing, cloud services, virtual learning, business-specific)
- Connectivity (intranet, internet access, remote access to office systems via internet/VPN)
- Electronic Commerce (B2B, B2C, B2G)
- E-Marketing (online ads, social media for business purposes, etc.)
- None of them

**IV. Which of the following digital infrastructure tools has your business invested in? ( tick all that apply)**

- Cloud, computing,
- 5G internet, computers,
- Cybersecurity,
- Management software,
- Block chain

**V. How does your enterprise make use of digital technologies to contribute to environmental sustainability?**

- Emissions, pollution and/or waste management;
- Paperless administrative processes;
- Sustainable products;
- Reduction of transport and packaging costs

**VI. Which of these Digital Services does your business currently utilize to enhance customer experience?**

- Online ordering,
- Digital payments,
- Personalized recommendation,
- We do not currently use digital services

**VII. Which of these Business models or revenue streams through digital transformation has your business adopted?**

- Subscription services,
- Digital marketplaces,
- Pay-per-use models,
- We have not adopted any new business models

### **VIII. Which digital platforms does your business use to reach and engage customers?**

Social media,  
E-commerce sites,  
Mobile apps

### **IX. What challenges does your business face in adopting digital services?**

Budget constraints;  
Resistance to change among staff;  
Difficulty integrating digital tools with existing systems;  
Others (specify)

## **3. Green Business Practices**

**Environmental, Social, and Governance (ESG) Definition:** ESG refers to a set of standards used to measure an organization's impact on the environment, its contribution to social causes, and the strength of its internal governance systems. "Environmental" covers aspects like energy use, waste, pollution, and resource conservation. "Social" focuses on how a company manages relationships with employees, suppliers, customers, and communities. "Governance" deals with company leadership, audits, internal controls, and shareholder rights.

### **I. As an organization, do you have any environmental, sustainability and governance (ESG) policies internally to guide your green practices?**

Yes: Score 5  
No: Score 1

### **II. If you have adopted green business practices, which ones?**

#### **III. What is your level of knowledge in ESG?**

Basic: Score 2  
Intermediate: Score 4  
Advanced: Score 5

### **IV. Have you previously attended any training on ESG?**

Yes: Score 5  
No: Score 1

### **V. How educated and engaged are your employees on green practices?**

Very engaged: Score 5  
Somewhat engaged: Score 3  
Not engaged at all: Score 1



**VI. Have you previously attended any training on Carbon Credits?**

Yes: Score 5

No: Score 1

**VII What is your level of knowledge in Carbon Credits?**

Basic: Score 2

Intermediate: Score 4

Advanced: Score 5

**VIII. Do you have a project that can earn money in the carbon credits markets?**

Yes: Score 5

No: Score 1

**IX. Does your enterprise have digital tools to measure and track carbon emissions in real-time?**

Yes: Score 5

No: Score 1

**X. Do you know your organization's carbon footprint?**

Yes: Score 5

No: Score 1

**XI. How important is carbon credit participation for your enterprise's long-term sustainability and profitability goals?**

Extremely important: Score 5

Somewhat important: Score 4

Not important: Score 2

**XII. What motivates your business to adopt green practices (e.g., cost savings, regulatory compliance, customer demand, and environmental responsibility)?**

To reduce operational costs

To comply with government regulations

We recognize our responsibility to protect the environment

It gives our business a competitive edge in the market

Advanced

## 4. Intellectual Property

Intellectual Property refers to creations of the mind, such as inventions, literary and artistic works, designs, symbols, names, and images used in commerce.

Patents: Protect new inventions or processes that are novel, useful, and non-obvious.

Utility Model: Similar to patents but usually for smaller or incremental innovations, with shorter protection periods.

Trademarks: Protect words, logos, symbols, or designs that distinguish goods or services of one entity from another.

Industrial Design: Protects the aesthetic or ornamental aspects of a product, such as its shape, pattern, or color.

Copyrights: Protect original literary, artistic, musical, or dramatic works from unauthorized reproduction or use.

Trade Secrets: Protect confidential business information that provides a competitive edge (e.g., formulas, processes).

Traditional Knowledge: Refers to the knowledge, innovations, and practices of indigenous and local communities, passed down through generations.

Geographical Indication: Protects products that have a specific geographical origin and possess qualities or a reputation linked to that location (e.g., Kenyan coffee).

### I. What is your level of awareness on the following Intellectual Property Rights?

#### a. Patents

Very good;  
Good;  
Poor

#### b. Utility Model

Very good;  
Good;  
Poor

#### c. Trademarks

Very good;  
Good;  
Poor

#### d. Industrial Design

Very good;  
Good;  
Poor

#### e. Copyrights;

Very good;  
Good;  
Poor

#### f. Traditional Knowledge

Very good;  
Good;  
Poor

#### g. Geographical indication

Very good;  
Good;  
Poor



**II. Have you previously attended any training on Intellectual Property?**

Yes: Score 5

No: Score 1

**III. Do you understand the importance of IP to your business strategy?**

Yes, I understand;

No, I do not understand;

Not Sure

**IV. Do you currently hold any Intellectual Property Rights (IPRs)?**

Yes: Score 5

No: Score 1

**V. If yes, please indicate below quantity of each IPR held.**

Patents (Specify Number)

Utility Model (Specify Number)

Trademarks (Specify Number)

Industrial Design (Specify Number)

Copyrights (Specify Number)

Trade Secret (Specify Number)

**VI. How do you currently protect your intellectual property (if any)?**

**VII. What challenges do you face in managing IP in your business?**

Lack of Awareness and Understanding

High Costs of IP Protection

Lack of Resources for IP Management

Complexity in IP Licensing

**VIII. Have you previously attended any training on IP? [Yes; No]**

**IX. If yes, please specify the nature of the training**

**X. What IP topics are you interested in learning more about?**

Fundamentals of IP;

Types of IP protection;

IP laws and compliance;

Benefits of IP protection;

Application processes for IP;

Managing IP for business growth

**XI. What specific outcomes would you like to achieve if given a scholarship on IP training program?**



## 5. Funding Structure

### I. At what stage of development is your product or service currently?

Idea Generation

Concept Development

Pre-seed Stage

Seed Stage

Maturity

### II. What has been your primary source of funding for your business?

Personal Savings

Bank Loans

Crowdfunding

Grants or Government Programs

Microfinance

Others (Specify)

### III. Have you pitched your idea to a venture capital fund? (Yes, No)

### IV. Have you participated in a funding bootcamp? (Yes[specify], No)

### V. How much capital injection would your business need to ensure growth?

Less than Ksh. 500,000

Ksh. 500,000 to 1,000,000

More than Ksh 1,000,000

### VI. How much have you spent so far on developing your enterprise?

Less than Ksh. 500,000

Ksh. 500,000 to 1,000,000

More than Ksh 1,000,000

### VII. Please describe the problem(s) your venture is addressing.



## 6. Sector Specific Questions

### A. ICT

#### I. How would you describe the overall state of your company's ICT infrastructure?

Excellent with High Performance

Undergoing Transformation

In Need of Upgrade

#### II. What ICT solutions does your business rely on for daily operations?

Cloud-Based Collaboration Tools

Enterprise Resource Planning (ERP) System

Cybersecurity Solutions

Other (Specify)

#### III. How would you rate your company's cybersecurity infrastructure?

Excellent with high performance

Undergoing transformation

In need for upgrade

#### IV. What are the main challenges your business faces in adopting new ICT solutions?

Lack of Skilled IT Personnel

Lack of Infrastructure

Challenge with Regulatory Compliance of new ICT solutions

Compatibility of new ICT solutions with our existing systems

Other (Specify)

#### V. Which of the following cybersecurity measures does your company have in place?

Firewalls

Antivirus and Anti-Malware Protection

Data Encryption


Endpoint Security

Others (Specify)

#### VI. What percentage of your company's budget is dedicated to ICT innovation and development?

More than 50 %

Less than 50 %



## B. AGRICULTURE

### I. Which of the following digital technologies does your enterprise use to reduce consumption in farming practices?

- IoT sensors to monitor soil moisture levels
- Drones for monitoring crops
- Automated irrigation crops
- Automated irrigation systems
- Robotic harvesters
- Energy-efficient tractors
- We do not use any digital technologies

### II. Has your enterprise adopted artificial intelligence to optimize agricultural operations? (Yes, No)

### III. How would you rate your enterprises readiness to adopt digital tools in farming, processing, or distribution processes?

- Very prepared
- Somewhat prepared
- Very unprepared

### IV. Does your organization have a digital strategy focused on improving agricultural efficiency, sustainability, and resource management? (Yes, No)

### V. Do you collaborate with agritech startups or research institutions to implement new digital innovations in farming practices? (Yes (Specify), No)

### VI. Does your Organization have a digital strategy focused on improving agricultural efficiency, sustainability, and resource management? (Yes, No)

### VII. How often does your enterprise engage with farmers to ensure digital solutions are relevant and user-friendly?

- Very oftenly
- Rarely
- We do not engage with the farmers



## C. ENERGY

**I. Does your enterprise have a dedicated digital business strategy to drive innovation and efficiency in energy production, distribution, or management? (Yes, No)**

**II. To what extent does your business utilize data analytics to forecast energy demand and improve operational efficiency?**

Extensively

Moderately

Occasionally

Not at all

**III. What digital tools are in place in your enterprise to enhance efficiency in energy production, distribution, or management?**

Smart metering systems

Smart grid technology

Energy storage management systems to store excess energy

We do not have any digital tools

**IV. Does your organization use automation or AI to manage and maintain energy infrastructure? (Yes, No)**

**V. What role do digital technologies (e.g., IoT, smart grids, blockchain) play in your efforts to integrate renewable energy sources?**

Digital technologies are not used;

We use basic technologies to support renewable energy efforts;

We actively deploy digital tools to integrate renewable energy sources;

Our renewable energy strategy is heavily reliant on advanced digital technologies

**VI. Does your enterprise provide training for employees on digital tools related to energy management and efficiency? (Yes, No)**



## D. SMART CITIES

### I. In which focus area is your innovation in relation to smart cities?

Infrastructure

Mobility (e-cars, e-bikes)

Waste management

Governance

Smart surveillance

Open data & interconnectivity

### II. Which of the following technologies has your business integrated?

AI

IoT

5G

We have not adopted any

### III. To what extent does your business contribute to enhancing urban resilience through digital innovations (e.g., disaster management, public safety technologies)?

Extensively

Moderately

Occasionally

Not at all

### IV. How does your business ensure that your smart solutions are inclusive and accessible to diverse urban populations (e.g., low-income residents, persons with disabilities)?

We do not focus on inclusivity in our smart solutions;

We consider inclusivity occasionally but without a structured approach;

We design solutions with inclusivity as a key consideration;

Inclusivity is at the heart of all our smart city-related efforts

### V. To what degree is your business prepared to adopt or integrate emerging technologies (e.g., 5G, AI, edge computing) that enable smart city advancements?

Very prepared

Somewhat prepared

Unprepared

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### VI. Does your business use smart city data (e.g., open data platforms, city sensors) to improve your operations or services? (Yes, No)



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