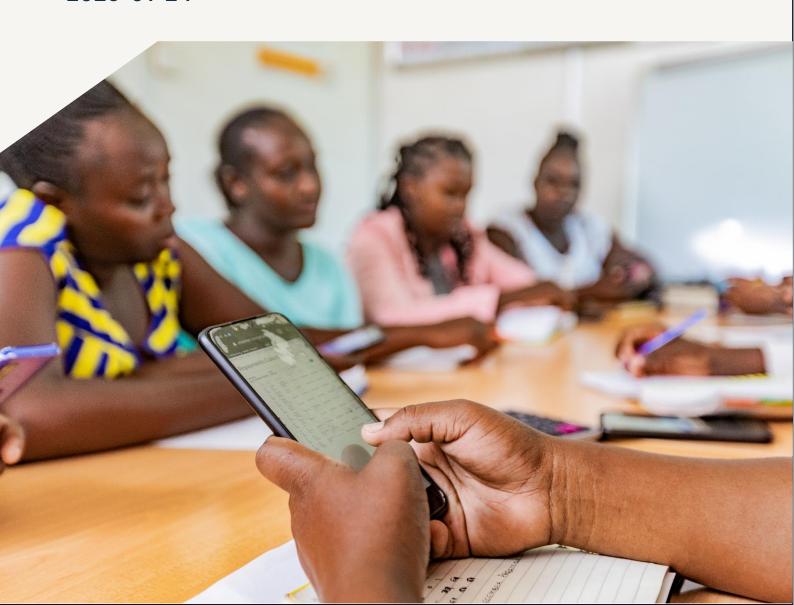
Swedfund's Guiding Note on Sustainable and Inclusive Digitalization

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Swedfund

Guiding Note: Digitalization

Guiding notes describe Swedfund's view and process for implementation of the key sustainability themes that are defined in Swedfund's Policy for Sustainable Development and Anti-Corruption such as Climate, Decent Work, Gender and Human Rights. We recognize that the key sustainability themes are closely interlinked and overlap, however only one theme is described per Guiding Note. Guiding notes are updated regularly as we develop. We welcome stakeholder feedback to continuously improve our work.

1. Background and Strategic Intent

Technology development and digitalization, e.g. the fourth industrial revolution¹, is reshaping worldwide economies, politics, and societal norms. This shift is pivotal for achieving Agenda 2030, offering a path to more equitable, sustainable, and forward-thinking societies through improved productivity, job quality, innovation, and inclusive growth.

Simultaneously, the digital divide remains a significant barrier, with unequal access to technology leaving billions behind², especially in developing countries/areas and among women, rural, and older populations. Inclusive digitalization requires robust infrastructure, skilled human capital, and financial resources. However, more than expanding internet access is needed. For example, Al holds specific potential to accelerate digitalisation, efficiency and productivity growth in developing societies, but its usage also poses significant risks that could potentially widen inequalities and further reinforce digital divides³. Moreover, as the IFC projects⁴, by 2030, about 230 million jobs in Africa will demand digital skills. It requires addressing literacy, trust, and awareness challenges. Only then will

¹ Building on the widespread availability of digital technologies that were the result of the Third Industrial, or Digital, Revolution, the Fourth Industrial Revolution will be driven largely by the convergence of digital, biological, and physical innovations. Encyclopedia Britannica, 2023.

² For example, two billion people globally, remained offline in 2022 according to the International Telecommunication Union report - *Measuring digital development Facts and Figures* (ITU, Telecommunication Development Bureau, Geneva).

³ Artificial Intelligence: Revolutionary Potential and Huge Uncertainties – Digital progress and trends report 2023, Worldbank.

⁴ International Finance Corporation & LEK Consulting 2019, Digital skills in Sub-Saharan Africa: spotlight on Ghana, International Finance Corporation, Washington

inclusive digitalization allow transformative benefits for vulnerable communities and provide a digital experience that is safe, enriching, and affordable for all.

To seize the opportunities offered by digitalization and reduce the digital divide, further investments in infrastructure and business models based on local needs will be necessary. At the same time, digitalization, if not managed in a responsible way, may also bring adverse effects (e.g., job losses for vulnerable populations unable to find replacement income, misuse of personal data and other information, increased emissions and harmful environmental effects). The net impact of digitalization will depend on societal choices regarding its application and governance. Development finance institutions have an important role to play in the digital ecosystem to support sustainable and inclusive digitalization that has the potential to accelerate development. This is done by investing in cost- and energy-effective digital infrastructure and solutions that contribute to the creation of jobs with decent working conditions, increased access to digital goods and services, and the emergence of new and innovative solutions, e.g. within education, healthcare, financial services and logistics.

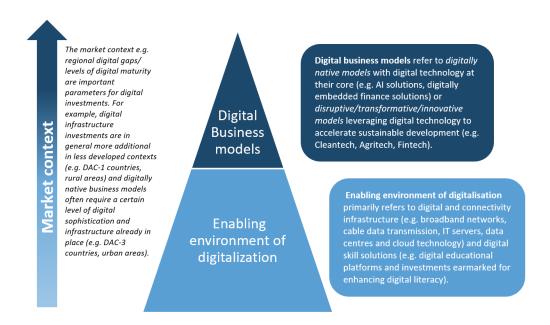
1.1 Key Focus Areas

Digitalization is one of Swedfund's investment themes, chosen for its potential to accelerate sustainable development and bridge the digital divide. Swedfund's investments target the entire digital ecosystem. Swedfund aims to enhance access to digital technology including shared data infrastructures and mobile networks, and to essential services (e.g. healthcare, electricity and finance) through digital solutions. We define a digital investment as an investment⁵ that either:

- Contributes to enabling environment of digitalization, addressing mainly the lack of performant and sustainable digital infrastructure and adequate digital skills; and/or
- Leverages digital business models where digital technology is at the core of the business model or (innovative/new) digital technology is being leveraged to accelerate development.

⁵ An investment refers to both direct investments into a companies/funds and investments into an i.e. Fls where Swedfund's use of proceeds, to a significant extent, are dedicated for a the purposes aligning with the digital investment definition (*enabling environment of digitalization* or *digital business model*).

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Many investees have a digitalization strategy or an action plan for the digitalization of operations, such as transforming information/processes into a digital format to increase the efficiency / competitiveness of operations. This is critical for long-term competitiveness of many businesses but is not sufficient to classify an investment as a digital investment.

The net impact of digitalization will depend on choices regarding its application and governance. Sustainable and inclusive digitalization refers to the process of integrating digital technology into a business in a way that is ethical, sustainable, inclusive, and respectful of people and the planet.

1.2 Collaborations and definitions

Swedfund is a strategic minority investor and therefore collaborates with carefully selected partners to align efforts and amplify impact. Swedfund seeks to unify definitions, practices and indicators related to digitalization with our stakeholders, such as the European Development Finance Institutions' (EDFI), and with industry best practice. In the absence of unified or standardized definitions for several relevant concepts relating to digitalization, Swedfund refers to the following concepts. The Digital Economy incorporates all economic activity reliant on, or significantly enhanced by, digital inputs, including digital technologies, infrastructure, services and data. While *digitization* refers to the conversion of information into digital formats, digitalization encompasses the use of digital technologies to change business models into leveraging new value creation opportunities. Digital transformation refers to system-level restructuring of economies, institutions and societies. Sustainable digitalization refers to the process of integrating digital technology into a business in a way that is ethical, sustainable, and respectful of human values, people's integrity and privacy, society as a whole and the planet. *Inclusive digitalization* ensures that digital technologies and their benefits are accessible to everyone, regardless of socio-economic status, geographical location, gender, age, or

abilities. It aims to bridge the digital divide by promoting equitable access to digital infrastructure, skills, and services, enabling all individuals and communities to participate in and benefit from the digital economy.

1.3 Measurement & Goals

Swedfund has formulated Theories of Change (ToC) for its overall institutional mission, as well as for its focus sectors and themes, including digitalization. Swedfund's Digitalization ToC frames the impact rationale and potential of (digital) investments in advancing Agenda 2030 and the Sustainable Development Goals (SDGs) through digitalization and digital transformation. Digitalisation has potential to contribute to all of Swedfund's core SDGs (1, 5, 8, 10 and 13)⁶ but SDG 9 on Industry, innovation and infrastructure is especially relevant (e.g. given its specific focus on technology development and innovation, increased access to information and communications technology and internet in developing countries). The content and relevance of the ToCs are regularly revised based on evidence gathered through impact studies and dialogues with internal and external stakeholders.

In terms of impact measurement, Swedfund has collected relevant metrics (including number of digital clients) related to digitalization to monitor the development of digitalization of portfolio companies. Going forward, Swedfund seeks to integrate the recently developed HIPSO Disruptive Digital Technologies metrics covering outcomes related to Access, Livelihood, Productivity, Innovation and Skills, in a fast-evolving technology landscape.

2. Responsible Digitalization Lens

Swedfund applies a digital lens to its investment process to capture the impact potential of digital investments, alongside potential risks and mitigation measures. The digitalization lens is integrated in Swedfund's investment process and applied to current and potential investments. The responsible digitalization lens comprises analysis conducted within the framework of the Impact and E&S processes and tools, throughout the investment lifecycle (from concept clearance to exit).

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⁶ SDG 1 – No Poverty, SDG 5 – Gender Equality, SDG 8 – Decent Work and Economic Growth, SDG 10 – Reduced Inequalities and SDG 13 – Climate Action.

2.1 Concept clearance phase – initial impact and risk assessment

During the concept clearance phase, a preliminary assessment of projected digital impacts and risks is undertaken. Here, Swedfund gets an indication of whether the investment is expected to (i) qualify as a digital investment and/or (ii) be exposed to digital risks. This is captured as part of the concept clearance memo presented to the Investment Committee and guides the level of digitalization assessment performed during due diligence.

The assessment at this stage primarily focuses on qualitative angles and digitalization insights from available material.

2.2 New investments – deeper digitalization impact and risk assessment

During due diligence, the digital impacts and risks of the potential investment are assessed in more detail. Digitalization data and information is collected to understand the contextual (country, sector) and company-specific (technology, business model) impact potential and risks.

The assessment of impact potential of digitalization is based on Swedfund's standardised Impact approach, which addresses level of expected impact in alignment with the Impact Management Project's (IMP) Five Impact
Dimensions
Digitalization aspects are also integrated in the scoring system of Swedfund's Impact Rating Tool (IRT), which is used to illustrate the impact drivers of individual investments (and the overall portfolio).

Impact assessment of digitalization will typically include assessments of:

- **Context**: The digital maturity of the market as we all the potential and needs in the country of operations to accelerate sustainable development and bridge the digital divide.
- Company: Company's potential to enhance access to digital technology and/or essential products and services, either through improved enabling environment (infrastructure or digital competence/skills) and/or digital business models (digital technology at the core of the business model or disruptive/transformative/innovative models leveraging technology). Furthermore, it is essential to assess whether a company has a credible digitalization strategy and the competence to implement it.

<u>Environmental & Social assessment</u> of digitalization will typically include assessment of:

 Contextual risks: Identification of potential contextual risks including weak governance/regulation and implementation/enforcement of regulation, as well as certain high-risk indicators, "triggers", which might heighten the risks (e.g. operation in conflict sensitive situations or geographies experiencing government-initiated internet shutdowns).

- Company-specific risks: Identification of potential risks related to a
 company's operations depending on its business, technology used
 and certain high-risk factors, which might heighten the risk (including
 factors that enhance existing power imbalances, e.g. access to large
 amounts of sensitive customer or employee information, the
 development or distribution of surveillance technologies, ethical use
 of Al).
- Companies' management systems: Assessment of companies' policies, systems and capacity to identify, manage and mitigate risks related to digitalization, e.g. data privacy policies and potential ISO and other certifications.

Where the due diligence findings are satisfactory but reveal gaps against Swedfund's requirements and/or the company's capacity to meet the requirements, these are addressed in the ESG and Impact Action Plan. The Action Plan sets out time-bound activities with priorities, goals and targets for reaching the necessary standards.

2.3 Active ownership – monitoring and support

During the active ownership phase, Swedfund seeks to regularly assess how the portfolio company is performing regarding responsible digitalization and how positive development effects could be enhanced. Annual data on relevant digital metrics and performance is collected through Swedfund's sustainability reports and reports of the portfolio companies, the implementation of ESG and Impact Action Plans is monitored, and site visits and other joint activities are organized.

As part of its active ownership, Swedfund supports portfolio companies using technical assistance (TA) funds to enhance the development effects of digitalization and/or mitigate and manage potential adverse impacts of digitalization. This can include the implementation of requirements stated in the ESG and Impact Action Plans. Examples of Swedfund's digitalization-related TA include support for certifications (e.g. ISO27001 Information Security Management System), trainings and capacity building, development of policies (e.g. on data protection and privacy), and in selected cases support with implementation of digital systems (e.g. Electronic Practice Management Systems for small businesses).

2.4 Exit – Assessment of withstanding impact and residual risks

An integral commitment of Swedfund's responsible ownership is to assess the (i) results of risk mitigating and value-adding activities, and subsequently the (ii) long-term impact of Swedfund's engagement with its portfolio companies. This is an integral part of the investment cycle as the realization of wider impact primarily occurs in the long-term.

3. Further Information

For further information and feedback, please contact Swedfund's ESG & Impact team – johanna.raynal@swedfund.se or markus.forster@swedfund.se

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Swedfund's Theory of Change on Digitalization

Advancing Agenda 2030 and the Sustainable Development Goals in developing countries through digitalization and digital transformation

THE CHALLENGE INPUT ACTIVITY OUTPUT OUTCOME WIDER IMPACT Invest in digitally Private sector and Establishment and · Inclusive and Technological development native* business growth of innovative market development sustainable and digitalization - i.e., the businesses with digital industrialization, models fourth industrial revolution -Improved access to products/services fostering innovation shows potential to contribute Investment products and services Invest in digitally to sustainable development. Debt transformative** for the underserved · Promote climate Support businesses Equity business models (incl. finance, health, aiming to accelerate resilience and Affordability, accessibility, electricity) Capital adaptation/mitigation sustainable low-quality infrastructure, mobilization Invest in digital and development via digital More efficient use of skills and trust affects the connectivity Inclusive economic solutions earth's resources and usage of digital solutions and infrastructure growth and decent lower emissions via Improved digital and work for all technologies. digital solutions connectivity enabling Invest in solutions to the infrastructure in target Reduced inequalities · Digital divides threats to Improved access to Active ownership digital divide markets and improved living digital technology and impede the positive effect of Knowledge standards Support improved digital bridged digital divide digitalization - affecting the transfer Support technologies competence. female, elderly and rurallythrough Development of affordability, trust etc. Increase of decent and and solutions driving based populations the most. representation resilient and digitization and future-proof in LPACs, sustainable digital automation employment Increased effectiveness infrastructure Business ecosystems are committees, and capacity building in becoming more digitalized Boards, etc. Support capacity Improved digital portfolio companies building and trainings in and future jobs will require Collaborations inclusion and literacy digital skills higher levels of digital skills. Technical Increased long-term Assistance Management and Develop safeguards for competitiveness and mitigation of negative Digital investments negative impacts of financial viability of impacts of digitalization digitalization Digital business models portfolio companies Enabling environment of Indirect effects Direct effects digitalization

Digitally native business models are investments with a digital technology in the core (e.g., Al solutions, digitally embedded finance solutions).
 ** Transformative business models are investments that leverage a digital technology to accelerate sustainable development (e.g., Cleantech, Agritech).