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Digital, development and decent work: how should international players support digital entrepreneurs in Kenya to create jobs and deliver on SDG 8?

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August, 2024

SOCIOLOGIA
E POLÍTICAS PÚBLICAS

Department of History

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Acknowledgements

This research simply would not have been possible without the entrepreneurs in Nairobi who took valuable time out from building their businesses to speak with me. The demands on their schedules are significant, so I am incredibly grateful for the generosity with which they shared their time and their thoughtful comments.

I want to also express my gratitude to my supervisor Renato Pereira, who has been a constant source of advice and expertise throughout the past year – and to ISCTE for providing such a supportive environment in which to stretch my mind, engage with new topics and to deeply explore this area of research.

Finally, none of this would have happened without Stuart, who always gives me the tools to be braver than I feel and to achieve more than I ever think I can.

Resumo

Passou mais de uma década desde que o termo "Africa Rising" foi cunhado, respondendo a um período de crescimento económico em que seis das dez economias com crescimento mais rápido no mundo eram africanas, impulsionadas por populações jovens, empreendedorismo e utilização crescente de tecnologias. Com a adoção global dos Objectivos de Desenvolvimento Sustentável (ODS) em 2015, o empreendedorismo e a inovação tecnológica passaram formalmente a fazer parte do conjunto de ferramentas de desenvolvimento. Os governos, os investidores e os doadores têm apoiado entusiasticamente o empreendedorismo digital africano, sendo o Quénia considerado um importante interveniente tecnológico africano. No entanto, a relação entre o crescimento económico, o empreendedorismo digital e a concretização dos ODS continua relativamente pouco estudada. Separar as narrativas da "Africa Rising" das realidades da construção de empresas digitais é fundamental para informar orientações práticas para apoiar os empresários digitais - particularmente em relação à tarefa urgente de criar trabalho digno para a população em rápido crescimento do Quénia. Este estudo adopta uma abordagem construtivista, dando prioridade aos pontos de vista dos empresários digitais quenianos através de entrevistas semi-estruturadas para explorar qualitativamente a forma como pensam sobre a criação de uma empresa geradora de emprego em Nairobi. As conclusões contribuem para o crescente campo das abordagens de desenvolvimento da base para o topo, para informar as recomendações dos intervenientes internacionais que procuram apoiar os empresários digitais quenianos na concretização do ODS 8: "crescimento económico sustentado, inclusivo e sustentável, emprego pleno e produtivo e trabalho digno para todos".

Palavras-chave: Empreendedorismo digital; Quénia; Trabalho digno; ODS 8; Desenvolvimento económico

Abstract

Over a decade has passed since the term 'Africa Rising' was coined, responding to a period of economic growth in which six of the ten fastest-growing economies in the world were African, powered by young populations, entrepreneurship, and growing use of technologies. With the global adoption of the Sustainable Development Goals (SDGs) in 2015, entrepreneurship and technological innovation formally became part of the development toolkit. Governments, investors and donors have enthusiastically backed African digital entrepreneurship, with Kenya considered a significant African technology player. However, the relationship between economic growth, digital entrepreneurialism and delivery of the SDGs remains relatively under researched. Separating the narratives of 'Africa Rising' from the realities of building digital businesses is critical to informing practical guidance for backing digital entrepreneurs – particularly in relation to the urgent task of creating decent work for Kenya's fast-growing population. This study takes a constructivist approach, prioritising the views of Kenyan digital entrepreneurs through semi-structured interviews to qualitatively explore how they think about building a job-creating business in Nairobi. The findings contribute to the growing field of bottom-up development approaches to inform recommendations for international players looking to support Kenyan digital entrepreneurs in the delivery of SDG 8: 'sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'.

Key words: Digital entrepreneurship; Kenya; Decent work; SDG 8; Economic development

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Glossary of acronyms

AI	Artificial Intelligence
BPO	Business Process Outsourcing
CAQDAS	Computer Assisted Qualitative Data Analysis Software
ICTs	Information Communication Technologies
ILO	The International Labour Organization
INGOs	International Non-Governmental Organisations
MDGS	Millenium Development Goals
NGOs	Non-Governmental Organisations
ODA	Overseas Development Assistance
SDGs	Sustainable Development Goals
UN	United Nations
VC	Venture Capital

Chapter 1: Introduction

Over a decade has passed since *The Economist* and *TIME Magazine* coined the term 'Africa Rising', responding to a period of economic growth in which six of the ten fastest-growing economies in the world were African, powered by young populations, entrepreneurship, and growing use of technologies (The Economist, 2011; Perry, 2012). *The Economist* proclaimed that 'Africa's enthusiasm for technology is boosting growth' (2011). With the global adoption of the Sustainable Development Goals (SDGs) in 2015, entrepreneurship and technological innovation formally became part of the development toolkit, included in official targets for the delivery of 'sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all' under SDG 8 (UN, 2015, p.19).

Today, multilateral organisations, governments and donors enthusiastically promote digital entrepreneurship across Sub-Saharan Africa (Friederici et al., 2020, p.9) – for example, Kenya's President Ruto has put information communication technologies (ICTs) at the centre of his development and jobs agenda, committing to 'create digital businesses, promote innovation and grow entrepreneurship' (Office of the President of the Republic of Kenya, 2022). Venture capital (VC) investors are also paying attention, with the African technology sector raising $3.5B in 547 deals in 2023 (Partech Partners, 2024, p.6) – of which, 67 deals in Kenya raised $335m in equity (Partech Partners, 2024, p.3).

Despite this great international interest, nine years on from the launch of the SDGs, the impact of digital entrepreneurialism across Sub-Saharan Africa remains relatively under researched and there is limited empirical evidence available into specific areas, such as the economic potential of technology hubs across the continent and whether digital entrepreneurs can support delivery of the SDGs (Friederici, 2019, p.205; Friederici et al., 2020, pp.9-10; UNDP ICPSD, 2023, p.3).

And yet, the task of supporting African entrepreneurs to build businesses that create jobs has arguably never been more urgent. In East Africa alone, 7.2 million young people will reach working age every year until 2030 – but as of 2021, only 20% of young people were in full-time waged employment (AUC/OECD, 2021, p.167). In Kenya, youth unemployment has been increasing since 2021, currently sitting at 12.3% (World Bank, 2024) – and the 18-35 population of Kenya is expected to grow from 13.2 million in 2019 to 19 million by 2035 (KNBS, 2022, cited in NCPD, 2023, p.17). The Kenyan Government notes that this

‘youth bulge’ can represent an economic growth opportunity, but only: ‘if they are gainfully engaged in economic and social activities for national development.’ (NCPD, 2023, p.16).

Separating out the narratives of ‘Africa Rising’ from the realities of building digital businesses is critical to providing entrepreneurs with the support they actually want and need to build businesses that create jobs for the incoming youth bulge – and ultimately, deliver on the SDGs. This study takes a constructivist approach, prioritising giving a voice to Kenyan digital entrepreneurs through semi-structured interviews, to qualitatively explore how they think about the concepts and challenges associated with building a job-creating digital business in Nairobi. The findings will contribute to the growing field of bottom-up development approaches, drawing influence from a grounded theory methodological approach, by using the entrepreneur-led findings to inform a set of recommendations for international players looking to support Kenyan digital entrepreneurs in creating quality jobs.

1.1. Digital Africa – the continental context

Access to digital technologies has grown significantly across Sub-Saharan Africa over the past decade, with internet usage growing from 8% in 2011 to 36% in 2021 (ITU/World Bank, n.d.). Mobile phone penetration is particularly noteworthy, with 86% of the population believed to have a SIM connection (GSMA Intelligence, 2023, p.6). Mobile internet usage is also growing – currently used by 25% of the population, by 2028 it is expected that 45% of the population of Sub-Saharan Africa will be accessing 4G networks (GSMA Intelligence, 2023, p.5).

There is evidence that greater digital and mobile technology use is translating into economic activity, most notably regarding the continent’s enthusiastic adoption of mobile money. As of 2022 28% of the population of Sub-Saharan Africa were using a mobile wallet, leading the World Bank to identify mobile money as ‘foundational to increasing financial inclusion’ across Africa (World Bank, 2024). Furthermore, it is estimated that mobile technologies and services generated 8.1% of Gross Domestic Product (GDP) across Sub-Saharan Africa in 2022 – with the mobile ecosystem directly creating 1.4 million jobs and supporting a further 2 million (GSMA Intelligence, 2023, p.20-21).

However, there remain challenges with access to and adoption of digital technologies. The percentage of people across the continent using mobile internet is low compared to the availability of mobile internet coverage, representing the largest usage gap in the world (Begazo et al., 2023, p.23). This is likely driven by affordability: for the 40% of Africans

living below the extreme poverty line, Begazo et al. calculate that mobile data plans typically cost individuals one-third of their income (2023, p.xxxii).

At the same time, digital entrepreneurship across the continent is growing, with financial technology or 'fintech' businesses particularly thriving, as symbolised in 2021 when four African fintech businesses gained 'unicorn' status – representing a business valued at over $1 billion (Bayuo et al., 2022, p.20). The number of active tech hubs across the continent more than doubled from 314 to 643 between 2016 and 2019 (AUC/OECD, 2021, p.23), and venture capital investors responded, with a recorded sevenfold increase in venture funding for African start-ups between 2015 and 2019 (AUC/OECD, 2021, p.95). In 2022 alone, African digital businesses raised $6.5 billion in 764 venture capital rounds (Partech Partners, 2023, p.2). However, African technology has not been spared from the current funding 'winter' which has seen venture funding fall globally and which delivered a 54% year-on-year fall in African VC funding between 2022 and 2023 (Partech Partners, 2024, p.11).

1.2. Kenya's 'Silicon Savannah' – the empirical and political context

Kenya has long been considered a significant player in the pan-African digital economy, representing one of the 'big four' – alongside Nigeria, South Africa and Egypt – which accounted for 87% of digital start-up funding in Africa from 2010-2020 (Bayuo et al., 2022, p.10). The 2009 laying of The East African Marine Systems (TEAMS) fibre-optic cable – the first on the Eastern Seaboard of Africa – was a crucial catalyst for a number of subsequent Kenyan technology successes (Ndemo, 2017, p.2). The global reputation of the iHub tech hub, the launch of M-PESA mobile money and high-profile visits from the likes of Facebook's founder Mark Zuckerberg contributed to Nairobi adopting the label of 'Silicon Savannah' (Hruby & Bright, 2015; Marchant, 2018, p.7).

The success of M-PESA was such that a 2020 study found that mobile money transactions made up 87% of Kenya's GDP (Creemers et al., 2020) – this embracing of mobile money made possible by the significant penetration of mobile phones. In 2024, over 66 million cellular mobile connections were active in Kenya – equivalent to 118.7% of the population (We Are Social, Meltwater, & DataReportal, 2024).

The country also continues to be a leader in African digital entrepreneurialism. In 2022 Kenyan firms raised $758 million across 103 deals – representing 15% of equity funding raised across the continent that year (Partech Partners, 2023, p.27). As of 2019, 48

tech hubs were based in Kenya (Briter Bridges, 2019) – which might contribute to why Kenya is home to 28% of Africa's regional digital-solution businesses which are expanding their services to other countries (Begazo et al., 2023, p.64). However, Kenya has not escaped the continent-wide funding challenges, experiencing a 56% year-on-year fall in equity funding between 2022 and 2023 (Partech Partners, 2024, p.3).

Consecutive Kenyan governments have identified ICTs as a key driver of their growth agendas. Science, technology and innovation are considered enablers of Kenya Vision 2030 – the 'long-term development blueprint for the country' (Kenya Vision 2030, n.d.) – and were named an official enabler of President Kenyatta's Big Four Agenda (Big 4 Agenda, n.d.). In 2021, President Kenyatta's government consolidated existing ICT plans into one National Digital Master Plan, which he said was a response to his 'government's quest to hasten economic growth and job creation' (Kenyatta, 2021, p.13). Since taking office in September 2022, President Ruto has also embraced digital technologies as a mechanism for job creation, targeting the creation of one million jobs in the Business Process Outsourcing (BPO) services sector (Office of the President of the Republic of Kenya, 2024), and embarking on a high-profile visit to Silicon Valley to market Kenya as a base for multinational businesses (Office of the President of the Republic of Kenya, 2023).

Non-governmental organisations (NGOs), international donors and foreign aid play a significant but arguably undefined role in Kenya's digital entrepreneurial ecosystem, with anecdotal evidence pointing to grant funding as a major source of start-up financing in the country (Friederici et al., 2020; Hersman, 2017; Hruby & Bright, 2015; Marchant, 2018).

1.3. Research questions

This contextual introduction has demonstrated both the urgency of the jobs challenge and the growing use of digital technologies – both across Africa and specifically in Kenya. Furthermore, it has illustrated how from multilateral fora to domestic governments, international donors to venture capital investors, digital entrepreneurialism is increasingly considered to be an important tool for leveraging technologies for economic growth and job creation. However, there remains a need for greater academic study of the relationship between economic growth, digital entrepreneurialism and delivery of the SDGs (Friederici, 2019, p.205; Friederici et al., 2020, pp.9-10; UNDP ICPSD, 2023, p.3) – especially with regards to identifying how digital entrepreneurs can create the 'decent work' opportunities set out in SDG 8.

Young populations, combined with access to technology, a greater level of private investment, and business-friendly policies, have the potential to build businesses that will create quality jobs (Begazo et al., 2023, p.4). Indeed, this is explicitly recognised within SDG 8, with target 8.3 to 'promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation...' (UN, 2015, p.19). It is unsurprising then, that NGOs and international donors are spending overseas development assistance (ODA) supporting enterprise activity across Africa (Friederici et al., 2020, pp.200-203). At the same time, whether driven entirely by the potential for returns – or perhaps influenced by growing retail investor appetite for 'impact' investing (The Rockefeller Foundation, 2019) – even with the recent downturn, venture capital flows into Africa generally and Kenya specifically have grown significantly in recent years (Partech Partners, 2024, p.7). As such, ensuring international players are targeting their funds towards interventions that will enable entrepreneurs to build job-creating businesses is critical to the delivery of SDG 8.

This study seeks to qualitatively examine how international players can support digital entrepreneurs in Kenya to create quality jobs in the delivery of SDG 8, through the examination of three research questions:

- To what extent is job creation a driver for Kenyan digital entrepreneurs when building their businesses?
- What challenges do digital entrepreneurs in Kenya experience in building businesses that create quality jobs?
- How can international players best support digital entrepreneurs to build businesses that create quality jobs in Kenya?

Through the voices of entrepreneurs, this study will deliver a snapshot of the Nairobi digital ecosystem in 2024. It will make the case that the fluidity with which entrepreneurs are engaging different funding sources and the way they are playing with formalities in the workplace are enabling them to overcome frustrations in order to deliver on socially-driven ambitions for the future – and that international players need to adapt their approaches to support them to build digital businesses that create decent work and deliver on SDG 8.

Chapter 2: Conceptualisation

This research routinely engages with four key concepts: sustainable development, bottom-up development, decent work and digital entrepreneurship. In line with the constructivist paradigm of this study, it is the entrepreneurs' 'local and specific' construction of concepts that is most important – and provides greatest validity – in the exploration of how they think about building a job-creating business in Nairobi (Waller et al., 2015, p.11, 25). Nevertheless, it remains important to operationally define these concepts (Bryman, 2012, p.8; Berg, 2001, p.26).

2.1. Sustainable development

Sustainable development is the prevailing development consensus. The term 'sustainable development' first appeared in the UN's 1987 Brundtland Commission, defined as: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (UN, 1987, p.54). Today, the concept is best associated with the UN's Sustainable Development Goals (SDGs).

Originally conceived of as 'ecodevelopment' (Vinaver & Monteiro, 2019, p.377), the concept of a sustainable development that balances intergenerational economic, social and environmental responsibilities emerged in the 1970's – the result of debate about how to balance post-war Keynesian economic growth with ecological protections, which took place at the 1972 UN Conference in Stockholm (I. Sachs, 2009, p.9). This event was followed by the publication of *Limits to Growth*, warning of the consequences of when economic growth overshoots the Earth's finite capacity (J. Sachs, 2015, p.4).

Jeffery Sachs, Director of the UN Sustainable Development Solutions Network, suggests that while the intergenerational justice highlighted in the Brundtland Commission remains important, sustainable development today is a holistic approach that 'embraces economic, social and environmental objectives' (J. Sachs, 2015, p. 6) – an evolution that may have been influenced by the strength of global social movements on environmental and poverty issues in the 2000's, such as the Make Poverty History campaign.

This change was made official by the launch of the SDGs in 2015. Formulated over the course of a three-year, multi-stakeholder dialogue, the *2030 Agenda for Sustainable Development* resolution agreed 17 SDGs for a 'global agenda for sustainable development' (Fukuda-Parr, 2016, p.2). The goals are designed to be 'integrated and indivisible and balance

the three dimensions of sustainable development: the economic, social and environmental' (UN, 2015, p.1).

This study takes as its basis that the sustainable development model promoted by the SDGs is a normative approach (J. Sachs, 2015, p.3). The agreement of all 193 members of the UN demonstrates that it has mainstream support. Furthermore, with 17 SDGs underpinned by 169 targets – and promoted by the accessible Global Goals campaign – the SDGs provide precisely the type of 'clear mandate for action' that Rodrik identifies as being attractive in a prevailing development consensus (2010, p.40). Sustainable development is evidently the current development consensus, and the lens through which this study is conducted.

2.2. Bottom-up development

The interconnected nature of the SDGs has led to accusations that they are overly complex (Fukuda-Parr, 2016, p.50), require contradictory trade-offs (Jiménez-Aceituno et al., 2020, p.730), and – for de-growth scholars who advocate for a reversal of global consumption levels – are incompatible with our planetary limits (Belmonte-Ureña et al., 2021, p.3-4). One proposal for managing these challenges is more locally determined development, whereby significance is placed on how communities themselves identify and address the SDG-related challenges they face (Jiménez-Aceituno et al., 2020; Satterthwaite, 2016).

Bottom-up development – a post-modernist approach that challenges centralised, government-led approaches towards development – has grown in prominence since the 1970's (Parnwell, 2012, p.113). By putting the perspectives of communities receiving aid at the heart of the planning process, advocates argue that development initiatives are more likely to be 'localized and contextually rooted', to empower people, and to challenge the culture of paternalism in development (Parnwell, 2012, p.113).

Critics of bottom-up approaches argue that such measures are 'tokenistic' (Parnwell, 2012, p.114) and lack the empirical and theoretical justification that decades of top-down approaches are based on (Crescenzi & Rodríguez-Pose, 2011, p.773). Nevertheless, evidence suggests the international community is embracing more locally focused action. Examples arguably include: the recent restructuring of international non-governmental organisations (INGOs), such as Oxfam (Walton et al., 2016, p.2769); the 2006 awarding of the Nobel Prize for Peace to Muhammad Yunus for Grameen Bank, the archetypal bottom-up initiative in Bangladesh; and recent localisation commitments by the United States' international

development agency (USAID, 2024). There have also been growing calls for a greater reconciliation of bottom-up and top-down approaches (Crescenzi & Rodríguez-Pose, 2011; Jiménez-Aceituno et al., 2020; Walton et al., 2016).

Bottom-up approaches need not be tokenistic, particularly if applied alongside robust diagnostics. In William Easterly's renowned critique of the aid industry, he advocates for the bottom-up searchers who 'find out what is in demand' over top-down planners who 'determine what to supply' (2006, p.5). This mirrors the growth diagnostics framework of Hausmann, Rodrik, and Velasco, which established a method for diagnosing the constraints on an economy's growth in order to prescribe context-specific solutions (Rodrik, 2010, p.35-36). Rodrik and Easterly arrive at similar conclusions about the future of development: that it lies not in utopian ideas or blueprints, but in specific and locally contextualised solutions (Easterly, 2006, p.321; Rodrik, 2010, p.43).

As such, whilst development academic Michael Parnwell argues that bottom-up development is unlikely to influence the mainstream industry (2012, p.114), this position disregards the changes already occurring in the development industry – such as the Doing Development Differently initiative (Green, 2015, p.8) – and calls from respected writers for a more locally-specific and diagnostically driven approach to development. The constructivist paradigm of this study contributes to a bottom-up approach by placing significance on the lived experiences of those who may be recipients of development funding.

2.3. Decent work

The role of employment in poverty reduction was recognised in 1995 at the World Summit for Social Development in Copenhagen, and again at the 2005 World Summit, where it was agreed that decent work for all was critical to the delivery of the Millenium Development Goals (MDGs) (Ocampo & Sundaram, 2007, p.xiv) – the precursor to the SDGs. This recognition was then formalised in SDG 8, to 'promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all' (UN, 2015, p.14). The word 'decent' comes up again in the entrepreneur-related target 8.3 to 'promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation...' (UN, 2015, p.19).

However, the terminology of what constitutes 'decent' work has been identified as being 'necessarily slippery', covering everything from core labour protections and enough money for basic expenses, through to good career prospects, fulfilment and 'middle class'

standards (Rodrik and Sabel, 2022, p.62 cited in Begazo et al., 2023, p.2). The International Labour Organization (ILO) definition of decent work is also broad, covering work that 'delivers a fair income, security in the workplace and social protection for all, better prospects for personal development' as well as one that protects freedom of expression and equality of opportunity (ILO, n.d., (a)). In their report for the World Bank, Begazo et al. opt instead for a more core needs definition of a 'good job' as one that a) generates sufficient income to prevent a household from falling back into poverty, and b) enables for increased earnings over time (2023, p.2).

The ILO is custodian for SDG target 8.3, with responsibility for monitoring the official indicator – proportion of informal employment in total employment by sex and sector (ILO, n.d.(b)). This approach presents some challenges, as informal enterprises and informal labour markets are highly prevalent across Sub-Saharan Africa (Nguimkeu and Okou, 2021, p.708). Informal workers are less likely to be protected by labour rights and health insurance, lack social security and on average earn lower wages (Chigbu & Nekhwevha, 2023, p.8; Tokman, 2007, p.266; World Bank, 2019, p.19). However, the ILO itself recognises the role the informal sector plays in employment and income creation in lower-income countries (ILO, n.d. (c)). Accounting for approximately 75 percent of total employment in Sub-Saharan Africa between 2000-2016 (World Bank, 2019, p.7/8), it can be argued that a focus purely on informality fails to recognise some crucial complexities of job creation.

Debates about informality versus large-scale job creation are particularly acute in the context of digital gig economy work. Whilst the gig economy is often associated with instability of work, unsociable hours and a lack of labour rights (Heeks, 2017, p.17), it has been argued that policy changes at the platform level could in fact support a global decent digital work agenda (Ayentimi et al., 2023, p.122; Heeks, 2017). A similar debate is emerging with the growth of data-labelling jobs to train artificial intelligence (AI) software – a recent investigation by *Financial Times* journalist Madhumita Murgia explored whether companies hiring people in Nairobi to train AI technologies are providing 'empowering' employment opportunities or are 'extractive' and contributing to societal inequality (2024, p.24).

2.4. Digital entrepreneurship

Entrepreneurship is commonly understood to reference the creation of new ventures, epitomised by fast growth, innovation and a level of risk-taking (Rwigema, 2007, p.5). In recent years, scholars – most notably Satish Nambisan – have recognised that the spread of

digital technologies has fundamentally changed the processes, outcomes and agency of entrepreneurship, including the level of uncertainty or risk that entrepreneurs are willing to take on (Nambisan, 2017, p.19). As such, digital entrepreneurialism is a discrete concept.

Management scholar definitions of digital entrepreneurship typically cover practical opportunities presented by new technologies: the opportunity presented by digital infrastructure, value creation through digital production, the spatial decoupling potential of the digital economy, and the role of inspirational 'big five' technology firms as platforms (Friederici et al., 2020, pp.14-23). Whilst the Kenyan government uses the phrase of 'innovation-driven entrepreneurship', their definition also draws on these practical elements of digital business, highlighting the characteristics of a business that utilises new digital technologies to improve business operations, invent new business models, develop business intelligence and engage with customers and stakeholders (Republic of Kenya, 2019, p.55).

Yet, to focus purely on digital technologies as a tool for conducting otherwise traditional business operations via a new medium, arguably risks ignoring the ways in which digital entrepreneurialism is culturally different to other forms of entrepreneurialism. For example, the success of businesses like Facebook and Google, and the growth in global technology media outlets, have arguably led to the narrative of the 'hero' founder, whereby significance is placed on the character attributes of the individual founders (Abubakre et al., 2021, p.841).

There is also a community aspect to digital entrepreneurship, characterised by hubs, co-working spaces and entrepreneurial meetups, which bring entrepreneurs, investors and advisors together into a shared ecosystem 'based on long-term trust and a localized culture that encourages networking and connecting' (Spiegel & Harrison, 2018, p.161) – for example, hubs are a prominent feature of the Kenyan technology ecosystem (Littlewood & Kiyumbu, 2018). Whilst individual hubs may differ according to services and sectoral focus, they are considered to share four common features: collaborative communities; a bringing together of diverse knowledge; the facilitation of creativity through digital and physical spaces; and the localisation of global entrepreneurial culture (Toivonen & Friederici, 2015).

Chapter 3: Literature Review

The study of development, economic growth, job creation and digital entrepreneurship necessarily draws from a wide range of academic disciplines. This literature review will provide an overview of the key arguments and lines of study, providing a state of the art review of the research problem regarding how international players should support digital entrepreneurs in Kenya to create quality jobs in the delivery of sustainable development and economic growth.

As set out in the conceptualisation of sustainable development, this study is focused on the normative development approach outlined in the SDGs – which explicitly identify 'sustained, inclusive and sustainable economic growth' as a driver of sustainable development (UN, 2015, p.14). It is on this basis that this review will examine the field of study in relation to aid and economic growth; entrepreneurialism and development; and African digital entrepreneurialism.

3.1. Aid, economic growth and development

Early development studies considered economic growth to be the primary driver of development (Potter, 2008, p.68; I. Sachs, 2009, p.8). Whilst growing concerns about the climate crisis have prompted the emergence of alternative movements – including de-growth approaches – the explicit inclusion of economic growth in SDG 8 demonstrates the extent to which it continues to be considered a key tool for delivering development.

Where there is less normative agreement is the question of how to deliver economic growth within a development strategy. One approach is the 'Big Push': the theory that a significant injection of foreign aid will enable poorer countries to 'take-off' economically (Easterly, 2006, p.33). A leading champion of this approach is Jeffery Sachs – an architect of the MDGs and Director of the UN Sustainable Development Solutions Network – who advocates for rich countries to assist poorer countries to get a foot on the development ladder, in order for 'the tremendous dynamism of self-sustaining economic growth' to occur (2005, p.73).

The SDGs are emblematic of the 'Big Push' approach and mainstream acceptance of aid as a tool for eliminating poverty and delivering development – as popularised with the Make Poverty History campaign and formalised on the world stage by the UN target for donor countries to spend 0.7% of national income on official development assistance (ODA)

(OECD, n.d.). However, the question of whether aid supports economic growth remains contentious.

In William Easterly's examination of the 'Big Push' he questions whether bad governance – not a lack of funds – is the key barrier to economic growth (Easterly, 2006). Dambisa Moyo goes further in her impassioned pro-market argument that aid is a direct impediment to economic growth (2009). Both critics point to Peter Boone's 1996 empirical study, which concluded that aid cannot deliver economic growth, in part because he finds that foreign aid sent without conditions increases government consumption, with little benefit for the poorest (1996, p.322).

These concerns are the basis of World Bank economists Craig Burnside and David Dollar's 1997 robust empirical contribution to the study, which demonstrates that aid does have a positive effect on economic growth, when allocated in a good policy environment (1997, p.3) – contributing to a prominent line of argument regarding the influence of institutions on economic growth. Proponents of this theory argue that extractive institutions – that is, economic and political bodies, policies or frameworks designed to extract resources from a population – deter economic growth (Acemoglu et al., 2001; Acemoglu & Robinson, 2013; Moyo, 2009). Daron Acemoglu and James Robinson set out two reasons why extractive institutions cannot sustain economic growth: firstly, because they create political instability as people vie for lucrative positions of power, and secondly, because the elites will resist the creative destruction required for innovation to happen (2013, p.430).

3.2. Entrepreneurialism and development

The concept of creative destruction was developed by Joseph Schumpeter, to describe the 'essential fact' of capitalism whereby old technologies, industries and processes are replaced by new ones (Schumpeter, 1943/1976 p.83). An example is the role technologies played in the Industrial Revolution, which subsequently challenged the old economic structure of protected incomes for landowners (Acemoglu & Robinson, 2013, p.85).

Schumpeter's influence is evident throughout studies into the relationship between entrepreneurs and economic development. Development scholar Wim Naudé draws from Schumpeter's concept of radical innovation in his identification of two prominent hypotheses in the literature on entrepreneurship, economic growth and development: one, that entrepreneurship contributes to development by delivering economic growth and employment; and a second, which notes the wider developmental contributions entrepreneurs

make, for example, influencing a culture of risk-taking, knowledge-sharing and innovation (2011, p.34). Naudé's categorisation points to the broad agreement amongst scholars that entrepreneurship plays an important role in economic development – but not necessarily agreement about why or how.

William Baumol and Robert Strom attempt to bridge this divide in their paper, which holds up entrepreneurs as contributors to economic growth and argues that their existence is itself evidence that pro-growth 'institutions and norms' are at play (2007, p.236). Where they make a differentiation is in their assertion that it is specifically productive entrepreneurship that 'encourages growth' (2007, p.236). Baumol's test of productive versus unproductive entrepreneurship is based on whether one's entrepreneurial action is solely focused on personal gain and whether it 'adds much or little to the social product' (1990, p.6).

A further differentiation Baumol et al. identified is of the innovative versus the replicative entrepreneur – a replicative entrepreneur being someone who builds a business as 'a route out of poverty' but who is unlikely to contribute to economic growth (2007, cited in Naudé, 2011, p.36). Naudé suggests that advanced economies are more likely to produce innovative entrepreneurs, as such, suggesting that entrepreneurs in developing economies are more likely to be replicative (Naudé, 2011, p.36).

An empirical study by Michael Adusei interrogates this theory in the African context, studying eight years of World Bank and International Monetary Fund (IMF) data from 12 African countries, to assess the relationship between per capita GDP and the registration of new businesses (2016). Adusei finds that entrepreneurship has a strong positive effect on economic growth – and as such, even replicative African entrepreneurship 'wields enough force to positively drive economic growth' (2016, p.209).

3.3. Entrepreneurial firms in Africa

The theory that developing countries produce more replicative entrepreneurs fits the well-documented prominence of informal enterprises in developing markets. 90% of entrepreneurial and self-employment activities in Sub-Saharan Africa are considered to be informal – driven by enterprises that are small, with constrained finances, limited access to markets and unskilled employees (Nguimkeu & Okou, 2021, p.713).

Moses Kiggundu's 2002 literature review study of African entrepreneurs identifies similar characteristics in his categorisation of micro-enterprises. Kiggundu notes that these businesses are generally set up by women as a form of self-employment, contribute a small

amount to family incomes, and are highly vulnerable to failing within two to five years (2002, p.246).

A similar but alternative classification is used by Renato Pereira and Redento Maia, who adopt the Global Entrepreneurship Monitor (GEM) concepts of developmental 'survival' versus business 'opportunity' to differentiate between informal economy businesses and entrepreneurial enterprises (2018, p.120). Applying these concepts to the framework of factor-driven, efficiency-driven and innovation-driven economies (Porter et al., 2002, cited in Pereira & Maia, 2018, p.113), the theoretical assumption is that factor-driven economies create more 'survival' entrepreneurs. This is in line with the findings of this literature review, which has demonstrated the characteristic parallels between the concepts of replicative, informal, survival and micro-enterprise entrepreneurship. However, contrary to the theoretical hypothesis, the data Pereira and Maia analyse in fact shows high levels of 'opportunity' entrepreneurship across the continent – with, for example, 69% of entrepreneurs in Ethiopia self-identifying as being opportunity-driven (2018, p.119).

One explanation for the disparity between theoretical ideas and empirical studies regarding African entrepreneurs, may be that the categorisation of entrepreneurs in developing countries as typically replicative, survival-focused, unproductive and informal is simply outdated in the digital era. If Schumpeter's creative destruction – through which economic development occurs – can be read as referring to innovative entrepreneurs who challenge the status quo (Naudé, 2011), then it stands to reason that the growing cohort of digital entrepreneurs across the African continent have the potential to embody innovative entrepreneurialism and deliver the associated economic development.

3.4. African digital entrepreneurialism

A significant contribution to the growing field of research into digital entrepreneurialism in the African context comes from Nicolas Friederici, Michel Wahome, and Mark Graham's 2020 mixed method study of 11 African countries (2020). This ambitious study provides a wealth of insight into the challenges for digital entrepreneurs across Africa, including the different bottlenecks entrepreneurs face in a mature digital hub like Nairobi – for example, hiring specialist technology talent – compared to a more nascent ecosystem (Friederici et al., 2020, p.153).

Ultimately, they conclude that the Africa Rising narrative is not yet a reality – on average, African digital businesses struggle to scale up, are less likely to trade internationally

and are not successfully disrupting traditional supply chains (Friederici et al., 2020, p.209). By studying 11 African countries of varying stages in digital ecosystem development, this is an invaluable but understandably broad overview of digital entrepreneurialism across the continent.

Kenya is one of Africa's most developed technology ecosystems – a status Kenyan academic and diplomat Bitange Ndemo attributes to factors including pro-entrepreneurial policies, the laying of the TEAMS undersea fibre optic cable, and societal recognition of the role technology can play in job creation (Ndemo, 2017, p.2).

One measure of market maturity is arguably the prevalence of 'hub' organisations, which are well established in Kenya and seen as a model for the rest of the continent (Littlewood & Kiyumbu, 2018, p.276). David Littlewood and Wilkister Kiyumbu's qualitative study of hubs in Kenya highlighted the critical intermediary role hubs play in the Kenyan ecosystem – providing physical infrastructure, facilitating networking, and supporting skill development (2018, p.284). This echoes Johannes Ulrich Bramann's findings about the enabling effects of Nairobi's hubs (2017, p.237) – and is in line with Bitange Ndemo and Tim Weiss's theoretical work on the significance of international and local networks of knowledge-sharing that occurs in hubs in the resource-scarce African context (Ndemo & Weiss, 2017, p.338). However, studies also reference institutional challenges, including low levels of trust in the system – suggesting that hubs are, to some extent, plugging institutional gaps (Littlewood & Kiyumbu, 2018, p.279; Bramann, 2017, p.235).

Bramann proposes a four-phase model of ecosystem development and establishes that Kenya – at the time of his fieldwork in 2013 – was in the third stage, whereby an ecosystem exists but 'stark challenges' to entrepreneurship remain (2017, p.246). In the fourth stage, a critical mass of successful ventures operate, creating spin-off benefits for the wider ecosystem (Bramann, 2017). Whilst this research is no longer timely, Bramann's categorisation of the Kenyan ecosystem as existing but still nascent fits with the broader field of study – entrepreneurs in Nairobi told Frierderici et al. 'that things are just getting started' (Bramann, 2017; Friederici et al., 2020, p.266).

3.5. Technology and job creation in Africa

As established, entrepreneurial theories posit that entrepreneurialism supports development through economic growth and employment (Naudé, 2011, p.34). It is unsurprising then, in the internet era, that we see growing interest in the development potential of combining

technology and entrepreneurship – referred to by Friederici et al. as the 'gospels' of African digital entrepreneurship (2020, p.10). Indicative of the normative agreement Frederici et al. refer to – that technology supports development outcomes – a target to increase affordable access to ICTs features under SDG 9 (UN, 2015, p.21). Indeed, empirical evidence does demonstrate a positive relationship between economic growth and ICT access in developing markets (Calderón & Cantú, 2021; Niebel, 2018) – although Calderón and Cantú flag a notable caveat about affordability barriers in the African context (2021, p.31).

There is also much optimism about the potential for technology to directly support job-creation, particularly in Kenya (Ndemo, 2017, p.2; Wamukoya & Ng'weno, 2017) – and early empirical results across Africa have shown promise. A 2023 World Bank report highlights data from Nigeria where mobile internet exposure led to a three-percentage point increase in labour market participation and a one-percentage point increase in wages, with a particular boost for women (Bahia et al. 2020, as cited in Begazo et al., 2023, p.14). In Tanzania this figure rose to an eight-percentage point increase in labour market participation and four-percentage point increase in wages (Bahia et al., 2021, as cited in Begazo et al., 2023, p.15). An improved earning potential for women was similarly highlighted in relation to use of the Kenyan mobile money application, M-PESA (Suri and Jack, 2016, as cited in Begazo et al., 2023, p.18).

These World Bank findings are supported by Adejumo et al.'s 2020 statistical analysis of the impact of ICT on development indicators in African countries, which concludes that in the long-run, ICT access positively impacts employment, equality and income distribution (2020, p.6). Their timeframe caveat, noting the longer-term potential for job-creation, is an important contribution to the field of study, and arguably links to concerns about affordability and accessibility of technology across the continent – barriers identified by other Africa-focused studies, particularly in relation to women (Begazo et al., 2023; Calderón & Cantú, 2021; Thioune, 2003).

3.6. Barriers to digital enterprise job creation

There is a wealth of literature available on the barriers to successful entrepreneurship. For example, Bramann adapts Isenberg's framework for entrepreneurial ecosystems to assess seven enabler and barrier conditions within the Nairobi ecosystem: 1) conducive sociocultural norms around entrepreneurship; 2) availability of entrepreneurial support systems; 3) availability of qualified human capital; 4) presence of appropriate financing

sources; 5) relevant entrepreneurship policy; 6) venture-friendly markets for new products; and 7) ICT infrastructure (Bramann, 2017, p.230). There are parallels here to Ndemo and Weiss's identification of the economic, organisational, political, social and cultural environments that they posit will enable Africa's digital transformation (2017, p.334).

Availability of people with the right skillset has been identified as a barrier to both entrepreneurship and employment across the continent (African Union Commission, 2015, p.9; Brixiova et al., 2014; Morsy & Mukasa, 2020). There is, however, limited study into the specific skills shortage impacting digital entrepreneurship on the African continent. Friederici et al. point to a trend of firms either hiring software engineers from high-income countries or foreign-educated Africans (2020, p.135). Bramann notes the same trend for expatriate hires in his Kenyan study, in which respondents call for local universities to teach more specific entrepreneurial skills (2017, p.239). Further study into the skillsets digital entrepreneurs look for when hiring is important for understanding skills-related barriers to job creation.

3.7. Entrepreneurial status in Africa

The literature presents a divergence on the question of perceived prestige and status of entrepreneurs across Africa. This matters for a few reasons: firstly, because societal support for entrepreneurialism is conducive to an environment whereby ambitious individuals have the necessary risk appetite for choosing entrepreneurialism over a traditional job opportunity (Bramann, 2017, p.235). Secondly, a society that values entrepreneurialism is more likely to invest in the requisite entrepreneurial skills and training (Brixiovia et al., 2014).

In Bramann's qualitative interviews with Kenyan digital entrepreneurs he explicitly identifies a feeling of low prestige associated with the entrepreneurial career path (2017, p.235). This finding is at odds with the data Pereira and Maia draw on, in which 76% of entrepreneurs across the continent identify entrepreneurialism as a good career choice – one of the highest rates in the world (2018, p.117).

This question of entrepreneurial prestige is particularly interesting when considered against the 'hero' status often associated with Silicon Valley founders. Abubakre et al. considered this question in relation to South African digital entrepreneurs, with their study finding evidence of *Ubuntu* values – traditional South African values of humility, reciprocity and benevolence – practised amongst entrepreneurs in Johannesburg, which they view as being 'in contrast to the dominant heroic view' commonly found in narratives related to entrepreneurs (2021, p.857).

Their findings align with other studies in this field reporting cultural differences between African and Silicon Valley approaches to entrepreneurship (Friederici et al., 2020; Littlewood et al., 2022). One related line of study is focused on social entrepreneurialism, defined by David Littlewood et al. as 'venturing for sustainable development' (2022, p.260). This does not necessarily mean the enterprises are not profit-making – one suggestion is that any profit made is a byproduct of creating positive social outcomes (Wamukoya & Ng'weno, 2017, p.165). However, in one study, entrepreneurs in Nairobi expressed concern that a focus on social enterprises was limiting the ecosystem's development of for-profit companies (Friederici et al., 2020, p.202). Recognising this complexity, Littlewood et al. call for more studies into how African entrepreneurs balance the 'hybridities' of social and business objectives (2022, p.264).

3.8. Foreign players in Kenya's digital ecosystem

A 2016 visit to Nairobi by Facebook founder Mark Zuckerberg is the opening story of Eleanor Marchant's ethnographic study of iHub, providing a metaphor for the notable presence of foreign players in Nairobi's technology ecosystem – entrepreneurs, investors and non-governmental organisations (2018).

The role of non-governmental organisations and foreign aid in digital entrepreneurialism has been noted across the continent. Friederici et al. dedicate a segment of their study to the question of how foreign aid donors engage with African digital entrepreneurialism, reporting mixed feelings amongst entrepreneurs about the role of NGOs, both as providers of grant funding and as early clients (2020, pp.200-201). Their study notes particular questions regarding whether grant funding ultimately helps or hinders an ecosystem – for example, a respondent in Lagos expressed concerns that grant funding feeds nonprofit business models (Friederici et al., 2020, p.201).

This tension is also evident in qualitative research in Kenya, including Littlewood and Kiyumbu's study of Nairobi hubs, where respondents building socially conscious businesses were keen to stress the sustainability of their for-profit enterprises (2018, p.280). Likewise, respondents in Bramann's study use the term 'compepreneur' pejoratively to describe entrepreneurs who are perceived to spend more time attending competitions for grant-funded prize money than building their venture (2017, p.240) – although he also highlights that a 'large part' of his respondents self-identified as building social impact ventures whereby monetisation is provided by grants (2017, p.241).

Marchant argues that Kenyan entrepreneurs have been pigeonholed by foreign players 'coming to Kenya [to] look only for startups that will have a "social impact"' (2018, p.9) – but also, conversely, that the subsequent prevalence of grant funding is itself a driver for the creation of social impact start-ups in Nairobi (2018, p.90). Separately, Marchant concludes that a hybrid approach – bringing together both for-profit and nonprofit cultures – is in fact necessary for the growth of the Kenyan technology sector (2017, p.321).

These lines of study relate to emerging concerns about neo-colonial influences on Africa's technology sector, which Marchant touches on by referencing the role of internationally 'pervasive cultural narratives' about Africa as a driver for foreign players entering the market (2018, p.9). Ndemo and Weiss's 2017 study on Africa's digital transformation considers the potential for technology to empower Africa versus the risk that it embeds a form of foreign power-led neocolonialism (2017, p.342). Friederici et al. touch on issues about foreign influence in African technology ecosystems, including their conversations with entrepreneurs about 'white fronting' whereby African start-ups hire a white business partner for the purpose of fundraising (2020, p. 198). Marchant reflects on a trend she observed of mistrust of foreign investors, which she attributed in part to a high-profile story during her time in Nairobi, in which investors were accused of racial discrimination (2018, p.102).

Chapter 4: Methodology

Between January and April 2024, the researcher digitally engaged with 40 entrepreneurs in the Nairobi technology ecosystem, initially through the business social media network LinkedIn, conducting subsequent conversations on channels chosen by the respondents: LinkedIn, email and WhatsApp. This inductive, qualitative research used convenience and snowball sampling to ultimately conduct semi-structured video interviews with 10 digital entrepreneurs. The study's constructivist approach prioritised giving a voice to entrepreneurs in exploring how they think about concepts related to building a job-creating business in Nairobi.

4.1. Sampling

Snowball sampling was conducted to recruit participants, using LinkedIn. Monitoring keyword searches on Google Alerts, X (formerly Twitter), LinkedIn and news articles over a period of six months, 38 initial seeds were identified and invited to connect using LinkedIn's Premium private messaging function, inviting individuals to participate in the research and to recommend other eligible participants.

Snowball sampling – the act of identifying people who meet a criterion, and then asking them to recommend similar people to participate in the study – is a non-probability sampling approach (Berg & Lune, 2012, p.52), best associated with engaging hard-to-reach populations (Baltar & Brunet, 2012, p.60). Hard-to-reach is defined as populations that are geographically spread (Baltar & Brunet, 2012, p.61), where there is no complete sample frame (Marpsat & Razafindratsima, 2010, p.4), or where low response rates are a risk (Dusek et al., 2015, p.281) – all of which apply to the target population in this study.

Snowball sampling also relies on the target population being part of a social network (Waller et al., 2015, p.67), and as such is suitable for engaging Kenyan digital entrepreneurs, given the propensity of 'hub' organisations in the Nairobi ecosystem (Littlewood & Kiyumbu, 2018; Ndemo, 2017, p.1). In this study, two contacts were initiated via snowball recommendation.

LinkedIn promotes itself as the world's largest professional network website, with 950 million users (LinkedIn, n.d.). Of this, an estimated 9.4 million users are based in East Africa (We Are Social, Hootsuite & DataReportal, 2022) – making it an appropriate place to identify and contact Kenyan digital entrepreneurs.

4.1.1. Sampling challenges

All sampling approaches involve trade-offs (Fricker, 2017, p.164) – and social media snowball sampling is no exception, presenting risks of selection bias, perception of spam and challenges regarding generalisability of findings. In this study, the initial convenience sample of seed participants does create a selection bias (Baltar & Brunet, 2012, p.60), favouring entrepreneurs who are active on social media and prominent in technology sector news. However, this risk of bias is traded-off against the access to and documented increased responsiveness that this method provides when engaging hard-to-reach populations (Berg & Lune, 2012, p.50; Dusek et al., 2015, p.291).

Ensuring recruitment approaches are not considered spam by the recipient is a major challenge for online researchers (Dusek et al., 2015, p. 290). This research drew from previous studies to counter this risk by: sending personalised and adapted messages to potential participants (Dusek et al., 2015, p.287); adopting an 'expert outsider' researcher stance by sharing information about the researcher's professional experience to build trust (Blaikie, 2007, p.11; Dusek et al., 2015, p.285); applying cultural knowledge by not starting recruitment approaches until after the December holiday month (Dusek et al., 2015, p.286); and sending multiple messages to potential participants to build greater familiarity with the researcher, which is shown to lower the risk of no-shows at interview stage (Deakin & Wakefield, 2014, p.612). With seven no-shows experienced during the four-month interview period, this research experienced a significantly higher rate than the 15% absentee levels Deakin and Wakefield reported (2014, p.612). Nevertheless, the time spent building virtual rapport resulted in a total of 5 hours and 47 minutes of voice and video conversations.

It could be critiqued that these measures still cannot deliver the levels of representativeness required for generalisability of the findings – a common challenge in qualitative studies (Berg & Lune, 2012, p.50; Silverman, 2017, p.265; Waller et al., 2015, p.69). However, these measures create a quasi-random sample (Berg & Lune, 2012, p.50) – as the researcher had no control over who would agree to participate and who was recommended through snowball sampling. Furthermore, comparison between data analysis and existing literature enabled the researcher to ascertain to what extent the sample reflects the broader population (Berg & Lune, 2012, p.50; Coomber, 1997, p.4).

4.2. Data collection

Using video conferencing software, 10 semi-structured dramaturgical interviews were conducted. Applying constructivist approaches, participants were offered a choice of medium for the interview, between Zoom and Microsoft Teams – empowering the respondents and creating a more equal relationship between researcher and researched (Hanna, 2012, p.239).

Previously considered to be a compromise compared to face-to-face interviewing, the growth of video conferencing – catalysed during the COVID-19 pandemic – has resulted in growing acceptance of video interviewing as a robust research medium (Deakin & Wakefield, 2014; Hanna, 2012; Keen et al. 2022; Lobe et al., 2020). The pandemic accelerated public comfort levels with virtual communication technologies (Keen et al., 2022, p.4). As such, previous criticisms associated with internet research – such as a lack of representativeness of internet users, lack of respondent experience using the internet, and technological challenges (Evans & Mathur, 2005) – are now outdated. In addition, as this study targeted a narrowly defined population who engage with an online phenomenon and are digitally fluent, online methods were highly suitable for engaging them (O'Connor & Madge, 2017, p.425).

The literature recommends the following requirements are met for the medium of video interviewing to be successful: stable internet connection, the requisite equipment and a quiet space (Lobe et al., 2020, p.2). Offering participants a choice of medium ensured the interview took place on a platform they were familiar with, reducing the risk of equipment and location challenges. A back-up option of using WhatsApp as a non-broadband reliant alternative for use in the event of power cuts proved unnecessary. All interviews began with the camera on, with the option to switch to voice only in the event of internet bandwidth challenges.

4.2.1. Benefits of video interviewing

For this study's purposes, video interviewing also offered specific benefits. The ability to access populations located elsewhere in the world increases the opportunity for international research whilst keeping costs down (Deakin & Wakefield, 2014, p,605) – an important consideration for research at the master's level. Given that this research is engaging with the SDGs, the ecological benefits of video interviewing are also noteworthy, removing the need for the researcher to embark on carbon-intensive travel (Hanna, 2012, p.239).

Video interviewing also offered greater flexibility to fit into participants' schedules and rearrange with ease (Deakin & Wakefield, 2014, p.607; Hanna, 2012, p.241; Keen et al., 2022, p.4). Given the workloads of entrepreneurs, this was particularly relevant to this research. Not only does this flexibility create a more equal relationship between researcher and participant, Deakin and Wakefield conclude it also increases responsiveness (2014, p.609). There are also technological and time benefits to researchers in adopting video interviewing techniques, such as the ability to record and download interviews (Keen et al., 2022, p.3; Lobe et al., 2020) – and the compatibility of video conferencing software with transcription services (Lobe et al., 2020, p.3).

Keen et al. argue that video interviewing provides greater ecological and theoretical validity, by allowing participants to conduct the interview in a location of their choosing, where they feel more comfortable (Keen et al., 2022, p.5). Given that digital entrepreneurs conduct business online, video calls are a familiar environment for them and likely encouraged them to speak candidly, improving the validity of the subsequent findings. Additionally, evidence shows that when given the choice, participants prefer video to face-to-face interviewing (Deakin & Wakefield, 2014, p.607/8) – as such, a researcher can reasonably expect larger sample sizes when offering video interviews, which further contributes to validity.

4.2.2. Dramaturgical interviewing

This study adopted a dramaturgical approach to interviewing. Dramaturgical interviewing recognises the performative nature of interactions, particularly by those carrying out a 'social role' (Berg & Lune, 2012, p.106). This aligns with constructivist approaches to interviews as a 'non-innocent conversation' (Waller et al., 2015, p.14), acknowledging that interview responses are themselves 'products of interpretive practice' (Holstein & Gubrium, 1995, p.18). For digital entrepreneurs in the Silicon Valley tradition, the social role and related discourse is often considered to be associated with narratives of 'hero' founders (Abubakre et al., 2021, p.841) – exploring to what extent Kenyan entrepreneurs identify with this narrative formed an element of this research.

A semi-structured interview guide was developed (see Annex A) and pre-tested (Berg & Lune, 2012, p.127). A semi-structured approach was chosen to ensure the consistent coverage of relevant topics in all interviews, but with the freedom to 'probe far beyond' answers given by respondents (Berg & Lune, 2012, p.112). This too reflects the constructivist approach, recognising that how people think about topics – their 'stock of knowledge' – is context-dependent (Holstein & Gubrium, 1995, p.31) and that different people will respond to different types of probes (Berg & Lune, 2012, p.113). The guide was designed to start with less sensitive questions – to build trust and rapport – before moving on to trickier topics, with validating questions built in throughout to re-probe the key topic of job creation (Berg & Lune, 2012, p.119).

The use of video interviewing supports Berg and Lune's dramaturgical approach – which equates managing an interview as akin to 'stagecraft and theatre management' (2012, p.107) – by allowing the researcher to subtly monitor time and notes without appearing distracted, creating a more natural-seeming conversation and easier rapport (Keen et al., 2022, p.4).

4.3. Data analysis

Using transcription service Otter.ai to provide initial transcriptions, a general interpretive approach to data analysis was applied (Berg & Lune, 2012, p.350), using the MAXQDA content analysis software to support a grounded theory methodological approach to uncovering patterns in the interview data.

It has been argued that the transcribing of interviews by the researcher is a key element of the data analysis process, critical for the researcher to 'become familiar with the material' (Waller et al., 2015, p.161). However – in line with the long-standing research tradition of outsourcing transcription for time efficiency purposes (Keen et al., 2022, p.6) – for this study, recordings were transcribed using Otter.ai, and then manually checked by the researcher to ensure accuracy, to build researcher familiarity with the text and to de-identify the interviews (Waller et al., 2015, p.163). Respondents were invited to review their transcripts and were explicitly informed of the de-identification approach taken.

4.3.1. MAXQDA and Constructivist Grounded Theory

The process of applying line-by-line coding to transcripts to inductively identify themes and patterns – without the initial application of a theoretical or empirical hypothesis – is characteristic of a grounded theory methodological approach (Berg & Lune, 2012, p.352). Bryman identifies two central features of grounded theory in the Straussian tradition: as 'the development of theory out of data' and that 'the approach is iterative...meaning that data collection and analysis proceed in tandem' (2008, p.541). Both approaches were taken in this study. However, data analysis was conducted more in line with Charmaz's Constructivist Grounded Theory, which puts an emphasis on engaging with respondents in their natural setting, a process of simultaneous data collection and analysis, with two-stage data coding – *open coding* and the identification of *categories* – continuous comparison and extensive memo writing (2000, p.510). Practical steps taken to support this grounded theory approach included: the use of a research diary and memos to support iterative comparison throughout (Berg & Lune, 2012, p,366; Bryman, 2008, p.542; Charmaz, 2000, p.517); the use of visual tools for identifying linkages and patterns (Waller et al., 2016, p.167); repeated re-consultation with existing literature in the field (Waller et al., 2016, p.165); and repeated re-coding of the data (Charmaz, 2000, p.526).

MAXQDA was chosen as the most suitable computer-assisted qualitative data analysis software (CAQDAS) for this study, as it enables the researcher to digitally code and sub-code data, using colours for visual identification (MAXQDA, 2022, p.186) and tools to easily redefine, split or merge codes (MAXQDA, 2022, p.194-195). The software also has a purpose-built Open Coding Mode for line-by-line coding (MAXQDA, 2022, p.218) and a wide selection of visualisation tools, such as MAXMaps (MAXQDA, 2022, p.440). Charmaz's criticism that CAQDAS provides a one-dimensional view by breaking text into too small fragments was mitigated against by purposely coding larger segments of data (2000, p.521). MAXQDA also supports a constructivist approach by ensuring consistency and thus validity in data interpretation: the colour-coded use of a coding system holds the researcher to account in applying codes to every piece of data (Seale, 2017, p.364).

4.4. Data management, security and ethics

The growth of online research methods during the COVID-19 pandemic prompted debate over ethical and security considerations (Keen et al., 2022, p.1; Lobe et al., 2020, p.2) – resulting in growing agreement that existing ethical standards are suitable for online versions of face-to-face research, such as video interviewing (Deakin & Wakefield, 2014, p.609; Eynon et al., 2009, p.188; Lobe et al., 2020, p.5). This study was designed and conducted in line with ISCTE's Code of Ethical Conduct in Research, and this methodology sets out the practical and theoretical steps taken to prevent research misconduct, ensure rigour, support validity, and protect participants.

4.4.1. Data security

Online research does present new challenges for researchers in data security (Roberts et al., 2021, p.11). Whilst entrepreneurs' profiles were identified using public spaces, the interviews were conducted in private spaces and the contents treated as such – including de-identification of transcripts (Waller et al. 2016, p.163). To maintain validity of the data, first name, age, business size and business sector were included in transcripts.

Following Waller et al.'s recommendations, additional data management steps in this study included: keeping transcript files separate from the anonymity log (2016, p.163) and recordings (2016, p.160). Storage of files was split between ISCTE's Microsoft 365 cloud storage and files on a password-protected personal laptop. Consent form signatures were tracked and stored on the Qualtrics platform. To protect the confidentiality of participants in the video interviewing process, 'waiting room' entry functions were utilised before starting an interview (Lobe et al., 2020, p.5; Roberts et al., 2021, p11).

Zoom, Microsoft Teams and WhatsApp are GDPR compliant (Vliem, n.d.; WhatsApp, 2021; Zoom, 2023). All three encrypt audio and video calls – with Zoom and WhatsApp offering end-to-end encryption (Microsoft, n.d.; WhatsApp, 2021; Zoom, 2021). Keen et al. also flag that researchers must ensure data is not automatically uploaded to cloud services by online transcription services (2022, p.6). Otter.ai is GDPR compliant, with two-factor authentication and data is encrypted (Otter.ai, n.d.), furthermore, recordings and transcriptions were immediately deleted from the platform by the researcher once downloaded.

4.4.2. Consent and ethical considerations

Video interviewing presents a challenge regarding how best to achieve informed consent (Keen et al., 2022, p.7). One option was to ask participants to print, sign and scan a consent form (Keen et al., 2022, p.4) – a process that is too time-consuming for busy entrepreneurs. Alternatively, Deakin and Wakefield accepted verbal consent at the start of the interview (2014, p.610). However, previous studies have found that local norms in East Africa may make it 'difficult to say 'no' to a researcher's request' (Silverman, 2017, p.67). As such, further steps were required to achieve truly informed consent.

For this study, informed consent was achieved using the ISCTE informed consent data template, delivered through the Qualtrics platform (see Annex B). Benefits of using Qualtrics included: the form could be accessed on any device (Roberts et al., 2021, p.8/9); separating sections on different pages made it easier for participants to read each element; and the signature function of Qualtrics allows participants to use their finger on a touchpad to provide signed consent.

This study did not involve vulnerable populations, children, people with physical or psychological difficulties, nor persons with relations of dependence with the researcher. The research approach did not involve any means of deception, and the risk for participants was perceived to be low given the non-sensitive subject matter (Silverman, 2017, p.60). Finally, there were no conflicts of interest presented by this study. The researcher was previously an employee of an international donor but had no involvement during that time developing programmes related to entrepreneurs.

Chapter 5: Findings

Through conversations with entrepreneurs building digital businesses in Nairobi – conducted over the course of four months – what emerged was a snapshot of a maturing ecosystem, where ambitions for future social impact abound and where, whilst frustrations undoubtedly still exist, actors are deploying solutions with fluidity and playing with workplace formalities. Conducted in line with Charmaz's constructivist method of grounded theory (2000, p.510) – intensive coding, re-coding and constructivist analysis of the interviews – four significant categories emerged:

- Fluidity
- Formality
- Future
- Frustrations

5.1. Fluidity

In conversations with the entrepreneurs, a theme of fluidity was repeatedly observed, whereby both traditionally nonprofit and for-profit funding sources are assessed and accessed in the pursuit of business experiments and growth.

5.1.1. Funding fluidity

A confidence in fluidly accessing, assessing and – if necessary – rejecting different funding sources, according to business needs, was abundant. A co-founder of an education technology company summed up the sentiment echoed by others: *"I know for a fact internally, we really look in-depth. Other than this money, what else is it coming with? And is it going to help us move forward?".* An agriculture technology co-founder similarly insists on their investors committing to the concept of 'patient capital' – long-term funding where investors are not anticipating a fast return on their money. They commented: *"A lot of funders, a lot of investors we met, and they didn't just disqualify us, we also disqualify them very quickly. It was because we measured their 'patiency'".* Another education firm co-founder said: "*money has to come with other kinds of support, that is beyond our knowledge".*

For others, a rejection of funding or a preference for bootstrapping – using revenues to fund growth – was informed by personal experience. A serial entrepreneur in the supply

chain sector reflected on their previous business experience – where investors pulled out during COVID-19 – when considering how to approach funding in the future: *"And the lessons that I've learned is if you build a business too fast, you don't want to be over-ambitious. You just build it organically. And if investors are going to come, they're going to find us halfway."* Another serial entrepreneur running a technology consultancy business likewise pointed to a previous business closure and subsequently being *"really wary of getting money from VCs"* to explain a preference for bootstrapping or *"organic"* growth.

This confidence in rejecting funding if it is not the right fit might be explained by the recurring theme that smaller cheque funding – such as grants from nonprofit organisations – are perceived to be readily available, particularly with the right pitch. The technology consultancy founder said of grant funding: "*once you get a possible traction, you can tell a good story, and you find that you will attract different kinds of funds.*" This was echoed by another co-founder, who shared an assessment that at this stage in the business' growth: "*we could get any grant we want. We don't want it because then, at this point we don't want to dilute our commercial focus.".*

There was some evidence of a negative perception of grant funding, which one entrepreneur defined as "*free money from the grant, from development agencies, NGOs, and donors".* They described how "*you have a few that are very successful at attracting these investments and grants. And they eventually become 'donor babies' and they don't do the real business."* A co-founder of an education technology firm likewise explained their wariness of falling into a grant cycle, whereby founders "*literally are in business of raising money, but not in solving problems"*

5.1.2. Experimentation and fluidity

Despite some negative references to grants, a related phenomenon of fluidity was the concept of using grants to fund business experiments. A solar technology business founder summarised this approach, explaining how *"advance pilot grants"* enabled them to test out new technologies and *"iterate the business models and see that we are reaching the right impact, get the right numbers".* Another co-founder spoke of using grants *"to test different things in our business"*, whilst another spoke of needing grants early in the journey *"to develop the concept and to prove the concept"* before explaining: "*Right now we are just focusing on receiving equity investments, debt investments".*

This was not the only entrepreneur who discussed moving fluidly between nonprofit

and for-profit sources of funding. A health technology founder, whose funding to date has primarily been secured through competitions, described that these were run by *"a blend of nonprofits and some institutions."* A co-founder of a financial technology firm described receiving grants as well as funding from "*blockchain protocols".* Two other entrepreneurs also talked about moving from grants to institutional investors, with one describing plans to use "*smaller tickets that will just help us get to the next joint"* before moving into fundraising, while the other said: "*once we are satisfied that… we have the right product, and we have identified the right market for it, then I can get into venture capital."*

5.2. Formality

Throughout the interviews evidence emerged indicating that digital entrepreneurs in Nairobi are playing with, adapting or rejecting traditional formalities in and related to the workplace.

5.2.1. Challenging hiring formalities

A recurring theme was the prevalence with which entrepreneurs were building businesses with a relatively small core team – made-up of software engineers, business operations, sales, marketing and country managers – supplemented by a larger workforce, engaged on a more informal basis. The founder of the supply chain firm, for example, uses "*casuals*" – "*people who come in the morning, they are not fixed term employees, but they work at the warehouse, we are giving them a source of livelihood*". A similar approach is taken by the agriculture firm, which hires around 200 seasonal workers – mostly women – at harvest time for "*handling and packing"* work. Alternatively, one of the serial entrepreneurs' previous business operated as a marketplace – which they compared to Uber or Bolt – whereby people log on, work for as long as they wish, and then, as they described it: "*if I were to switch off, then I switch off and I do something else ".*

Other entrepreneurs were exploring innovative ways outside of formal employment to meet their business needs and create income opportunities for disadvantaged communities. For example, the founder of a logistics and communications business runs a youth programme, signing up young people to help sell their product for *"around 50 Kenya shillings"* for each sign-up. Similarly, the CTO and co-founder of a health technology firm explained how they pay community health workers to *"go house-to-house in the rural areas"* to on-board patients.

There was also evidence of entrepreneurs trailing alternative methods for recruiting

specialist skills. For example, two entrepreneurs were exploring partnering with universities for their talent stream. One of the education technology businesses was partnering with a pool of 30 teachers periodically, while one of the health firms uses *"service agreements"* to scale-up delivery as needed for specific tasks. Another entrepreneur mentioned a *"developer organisation in Uganda"* which was supplying their firm with software developers.

This sense of playing with formal mechanisms for hiring also played out in how some entrepreneurs handle their in-role training processes, suggesting a level of comfort hiring people who subsequently require further training. One summarised their approach whereby it is anticipated that employees develop within a job, as: "*we believe, first, that an individual has just the necessary skills to grow within the work environment.".* Another also pointed to on-the-job training as being essential because "*we are using technologies that most people don't learn in school."* Likewise, one of the serial entrepreneurs pointed to how their previous business hired their then CTO: "*We got him as an intern, now in 2011, and you have to train him. He had to go through an internship all the way."*

5.2.2. Playing with formal workplace cultures

Reflecting on this past choice to hire *"not really a proper CTO"* and then train them up on-the-job, this serial entrepreneur went on to explain:

> *"Because most employees are the traditional type where, you know, 'I got to check-in an office from eight and I leave at five', you know, and they sit in my desk, I push papers and I leave, you know. But now with a start-up, you really have to look at, you know, what are the results? What are the impact? You know, what do you need to do?"*

An education technology firm co-founder also reflected on previous workplace cultures they had experienced:

> *"I have seen a lot of Kenyan offices work on the precedent of: 'if it's not under my docket, I don't care. So I wouldn't bother with it'. And the other one is: 'if I can throw you under the bus to save myself, I will throw you under the bus'."*

A sense that start-up and digital businesses in Nairobi are disrupting some of these *"traditional type"* ways of working was reflected in a number of the interviews. For the

education technology firm co-founder, challenging this meant creating an environment whereby a culture of "*you could actually test, and if you fail, what have you learned from that failure"* is in-built into the company. They described a desire to build a culture that encouraged "*breaking barriers, thinking for yourself, doing things on your own initiative"* – an empowering workplace culture another co-founder had experienced in the UK, where there was a sense that "*you had the freedom to switch, to move very fast, to break things"*. A third entrepreneur also talked about moving away from traditional hierarchies in the office, to emulate a flat structure with an "*environment where we are readily available to people, so that if someone has a problem, they can readily reach out to me"*.

For other entrepreneurs, their reflections about what constitutes 'decent work' prompted them to identify workplace attributes arguably juxtaposed to the *"traditional"* types of workplaces described above. One pointed to a work environment where staff are listened to, saying: "*They must be heard. Their opinions must be respected as well."*. Another felt it was important that work "*does not ask of you to compromise on your moral or religious compass"* whilst a third pointed to the responsibility of a business to provide healthcare insurance *"to take care of me"*.

5.2.3. Rejecting the formalities of the status quo

A number of the entrepreneurs positioned their very decision to start and grow a business as being in juxtaposition to the status quo. One described this as *"the typical story: have a family, few kids, a house and live happily ever after*" – going on to conclude: "*that hasn't ever appealed to me."*. It was also proposed that choosing an entrepreneurial path was particularly noteworthy in the Kenyan societal context. One co-founder summarised this, saying: *"coming from an African household in the Global South, every parent expects once you finish your degree, you go get a good job and you bring home some of that money to help us"*. Another also referenced how their upbringing *"in a community where we believe that you go to school to get a job"* created an *"in-built*" expectation to strive to get a government job – echoing comments a separate founder made regarding the continued prestige attributed to careers in politics over entrepreneurship.

What drives these entrepreneurs to challenge the formalities and expectations of the status quo – as one entrepreneur describes it, to actively reject a "*comfortable job"*? One felt that a fundamental personality difference between entrepreneurs and "*nine-to-five kind of folks*" explained why entrepreneurs do not: "*...just go and settle and get a good job, have a*

nice family, buy a car and, and just relax". Another also pointed to the characteristics of an entrepreneur, explaining they never set out to be an entrepreneur but "*that intrinsic nature of asking questions, of challenging the status quo, is what pushed me to entrepreneurship.*" For another co-founder, this difference is illustrated by a comfort with risk-taking, saying: "*deep inside, entrepreneurs have something inside that it's not easy for people, even family, to understand why we do some of these things."*

5.3. Future

Often connected to discussions about societal expectations were conversations about ambitions for the future – and how these personal and social impact goals drive them forward in the face of wider pressures.

5.3.1. Securing future income security

Many of the entrepreneurs identified personal income creation or the ability to create their own opportunities as a contributing factor in their entrepreneurship journey. This was fundamental to one entrepreneur who reflected that growing up *"in a slum*" in Western Kenya instilled "*the desire to do more, to support your parents, to support your siblings, to just see the change around you. This was purely my drive towards becoming an entrepreneur."*

Likewise, having taken on the family business after the death of a parent, one of the entrepreneurs said: *"I don't come from a well-to-do family. So, the only way I could be able to change a number of things was through entrepreneurship. I am able to determine how much I can quickly earn"*. Another admits their parents were "*quite shocked"* when they left their previous career to pursue the entrepreneurial path, but they argued that "*employment opportunities are not as readily available"* in an emerging market and more "*value*" could be created through entrepreneurialism. Others spoke more generally about the desire to make money, including one founder who pointed to the use of *"side hustles"* during university to "*make a shilling or two*".

Another common theme however, was around personal money-making alongside delivering social impact. The founder of a health technology firm spoke about the transition from a previous "*cut-throat, for-profit business"* to the current enterprise, through which *"apart from making money, we're also improving access, and reducing the cost of health care"*. Another health entrepreneur calls this approach "*do well and do good"*, meaning

"make some money, but also do good in society" – or as another entrepreneur preferred to put it: "*Make money, of course. {Laughs} But then changing lives."*

5.3.2. Solving societal problems for the future

When asked about personality traits common to entrepreneurs, one of the interviewees responded: *"Of course, they are problem solvers."* Another said of being an entrepreneur: "*we are created to solve problems*". Throughout the interviews, problem-solving and a desire to find solutions to social challenges was frequently cited as a driver for the entrepreneurs interviewed.

For some, problem-solving is considered the very indicator of an entrepreneur. One respondent defined a digital entrepreneur as *"somebody who leverages technology to solve problems"* – a categorisation echoed by another who said, "*digital entrepreneurs are people who have found ways of using digital systems to solve problems.*" The co-founder of a health technology firm reflected on the close relationship between digital and social entrepreneurship, concluding: *"you need to maximise everything that you have today to attack those problems".*

The link between solving problems and social impact was often overt, and most of the entrepreneurs interviewed identified social impact as a significant influence on their endeavours. One co-founder defined the ambition of their education technology company as *"inspiring the next generation".* Another co-founder talked about the importance of creating jobs to *"help us build the economy"* and tackling the fact that "*only a small fraction of Kenyans… have access to some form of health care insurance".* One entrepreneur's experience watching a family member manage a chronic illness inspired the goal to "*reduce cost and access"* to healthcare, while another pointed to the influence of their background on their subsequent ambition to improve "*access to safe drinking water, access to productive use of clean energy".* An education technology firm co-founder pointed to a past experience of living on the streets as contributing to their passion to *"make sure the future learners have a big, a better opportunity"*. For another founder, the driver was more general: *"I'm really focused on, you know, solving problems, whether in Africa, whether in Kenya."*

A number of the entrepreneurs identified direct job creation as an inspiration for their entrepreneurial efforts. One identified a desire to "*create jobs, not just for our employees but also for the farmers".* Another pointed to the "*impacts*" of job creation as part of the appeal, explaining that if: "*each employee is looking after three people or two people – then already*

you are affecting, you know, about, let's say 600 families." This entrepreneur described the job losses experienced when their first business closed as "*one of the saddest moments in my life"*. Another entrepreneur also sets themselves high targets for employment, describing their ambition through their supply chain company to *"create opportunity and jobs, not only for Kenyans but also various Africans"*.

For others interviewed, direct job creation was less of a driver, but they were interested in knock-on income opportunities generated as a result of their businesses. For example, the solar technology firm founder described using solar products to create "*an income generation tool for local women"*. Another founder also described how knock-on impacts of their firm enable young people to monetise their social media, while the founder of a health technology business explained their firm was indirectly creating more jobs by "*enabling neighbourhood pharmacies to scale-up"*.

Alongside personal and social impacts, the ambition to build a long-term legacy for the future was cited as a driving factor. For some, this was a dream of building an African 'unicorn'. For others, this legacy could be measured in social impact, such as when one founder talked about the ambition to "*actually put my finger on 100,000 lives, impacted households or lives impacted"*. Likewise, when one of the co-founders pointed to ambitions for a modern education system as a "*bigger moment that I hope my company and myself will make a contribution towards"*. This sense of legacy, problem-solving, ambition and opportunity was well summed up by another founder, who reflected:

> *"There is still huge, huge opportunity. And Africa has a young population, the average age is still under 30. So that's still a huge market. So what about even the next 20 years, there's still a huge opportunity to build something that can work to solve African problems. And that's where I want to be."*

5.4. Frustrations

While a sense of opportunity and ambition was notable, the digital entrepreneurs interviewed had experienced day-to-day challenges of building a business – such as managing late payments, navigating regulations and the stresses faced by founders – alongside more specific frustrations, arguably related to operating in an emerging market.

5.4.1. Funding and institutional capital frustrations

Whilst entrepreneurs expressed confidence about moving fluidly between funding sources, the availability of institutional capital cheques and investor relations repeatedly emerged as an ongoing challenge in the Nairobi market. When one entrepreneur was asked whether funding was the biggest challenge facing their expansion plans, the answer was emphatic: "*Yes, funding is the biggest challenge. Yes."*

The two serial entrepreneurs shared how their previous experiences of having to close businesses informs their current wariness of institutional funding. One explained, for example, how a change in *"market dynamics"* impacted investor expectations in their last business: "*What initially investors were looking for and what we were currently doing cannot keep up. We tried to change and start looking at profitability. But it was too late.*" The other also pointed to the role of investors, explaining: "*I decided to fold the company because I couldn't meet... all the investors were backing off."* The impact of these types of stories within the Nairobi ecosystem was also evident in how others talked about their approaches to institutional funding. For example, another co-founder reflected that they see a lot of Nairobi businesses that *"are struggling to stay afloat. A lot of them built quickly, maybe too quickly. And they ran out of cash."*

There was also evidence that stories of past business closures were partly the inspiration for entrepreneurs demanding a different type of engagement from investors. One talked about expecting investment to come with industry-specific support, explaining: *"if you get an investor who does not understand the industry like that, and they expect certain returns and milestones every month, for example, then it ends up become unnecessary pressure that is not constructive"*. Another also pointed to examples where *"it comes to the point where if you've taken in debt and it's being recovered, then if the founder didn't read clearly, right, becomes, 'oh this investor is looking down on me and harassing me'"*. They went on to conclude "*it's something that many are learning, that, yes, the money comes, but what else is it coming in with? Is it coming with expertise as well?"*

5.4.2. Emerging market frustrations

A recurring theme was the sense amongst the entrepreneurs that the challenges they faced were worse or exacerbated as a result of building a business in an emerging market. One co-founder – who has built companies in the UK and in Kenya – summarised their thoughts:

"I've had the privilege to experience two different fronts. I've been in an established market, and I've been in an emerging market... Those two experiences are really different."

One widely expressed perceived difference was the sense that African entrepreneurs face greater challenges raising venture funding compared to other founders. One of the serial entrepreneurs described their experience as: "*I'll say for sure in Africa, it's very hard. It's really, really, really, really hard.*" Another co-founder said simply that "*raising money in Africa is hard"*, with another agreeing, saying *"I think it's very difficult to raise in Africa. It's super difficult to raise as an African."*

Some referenced a sense that international venture capital or institutional investors lack relevant knowledge about their local market and context. A health technology co-founder described how *"a US VC or US investor won't really understand an African market*" to explain that their business is pitching for both local and international investment because "*the only disadvantage locally is the cheque sizes are not that big."* The agriculture company co-founder referenced assumptions investors have made about a greater technical application of their product: "*every investor, every donor, wants to say 'you're a tech company, can we see your tech platform, why are you not doing an e-extension, you know, training farmers on their mobile?' - and we say the reality on the ground is different"*. A financial technology co-founder made a similar point, using the example of "*how a VC or an entrepreneur from the West"* might not consider *"that close to 60% of mobile phone subscribers in Africa still use second generation devices that do not have internet capacity."*

One entrepreneur suggested that this lack of local knowledge manifested itself in funding with financial conditions unsuited to the market, saying: "*they're not factoring in inflation and our currencies"*. Another also referred to the role of financial markets to posit that interest rates in the US create a *"demand-supply"* market for technology investment, explaining that *"people want to come and experiment and test and see if they can get better returns"* in Kenya. This is closely linked to another commonly heard sentiment about institutional investors that – as one founder described it – *"it's not about impact for them, but returns for them"*. Another shared their frustration that despite discussions about impact "*at the end of the day... they also want to see your profits in the first or even in the second year."*

Another emerging theme related to a perceived lack of local societal understanding

about start-up financing, meaning Kenyan enterprises find it challenging to build an initial 'friends and family' funding round – described by one entrepreneur as how *"the US people do fundraising - it's your uncle, it's your auntie, it's your brother. They give you some small money to start this thing."* Another explained that in the past it was easier for Silicon Valley businesses to "*take it off the ground"* compared to Kenyan start-ups because investors locally *"don't understand the concept of entrepreneurship"*. This could also explain the sense, voiced by another co-founder, that if "*you have a similar business that is in Silicon Valley, I think they will have raised more money, more than us, even with very minimal traction."*

5.4.3. International talent market frustrations

There was evidence in the interviews that the maturation of the Nairobi technology ecosystem has driven greater availability of technology talent locally. The solar technology founder described Nairobi as having *"a huge pool of talent, of very creative people"*, while the agriculture co-founder ranked Nairobi's technology talent "*among the top three in this region"*. Asked whether they had hired people internationally, another person said *"I don't think we've experienced the challenge of getting talent in Nairobi"*. One of the serial entrepreneurs reflected that by 2019 a greater number of people *"understand the start-up and scale-up world"* which helped recruitment. Nevertheless, some of the entrepreneurs described significant time and effort involved in hiring and training up new joiners – one estimated that "*you have to spend months trying to onboard a dev"*.

A common related frustration was the risk that talent is poached – particularly by large multinational companies. One founder described how they would *"spend a lot of time training the guy"* and then "*their salary is doubled by guys like Microsoft, and they come in... Amazon"*. Another shared their frustration: "*If we get the best they are poached easily with the likes of Microsoft here in Kenya, the likes of Google will come and get them - or any other start-up that has better funding than us."*

Potentially linked to the global exposure of the international technology talent market were mentions of the growing costs of recruitment. Whether it was one entrepreneur pointing out that *"the challenge is usually affording the right talent"* or another sharing that in their specific blockchain area *"if you find a developer who can do what you want, it's someone who is very expensive"*, there was a sense that the talent is available – but at a cost.

Chapter 6: Discussion

This study seeks to examine how international players can support digital entrepreneurs in Kenya to create quality jobs in the delivery of SDG 8, through the examination of three research questions:

1. To what extent is job creation a driver for Kenyan digital entrepreneurs when building their businesses?
2. What challenges do digital entrepreneurs in Kenya experience in building businesses that create quality jobs?
3. How can international players best support digital entrepreneurs to build businesses that create quality jobs in Kenya?

This chapter will now discuss how the qualitative findings from interviews, conducted with Nairobi-based digital entrepreneurs between February and April 2024, relate to the existing body of literature. This will explore what the prominent emergent categories – fluidity, formality, future and frustrations – tell us about the relationship between digital entrepreneurialism, economic growth and job creation, in order to examine the research questions. In line with the constructivist paradigm of this study, attention and significance will first be given to the 'local and specific' construction of relevant concepts (Waller et al., 2015, p.11): digital entrepreneurialism and decent work.

6.1. Defining the concept: digital entrepreneurialism

On the concept of digital entrepreneurialism, the respondents strongly correlated around definitions related to leveraging new technologies to solve problems – whether considering how digital tools can enhance a business, or making the case that in the current technological era *"technology cannot be detached from any solution that you're developing"*.

In this approach, the entrepreneurs moved away from scholarly characterisations of digital entrepreneurialism related to risk-taking (Nambisan, 2017, p.19), 'hero' founders (Abubakre et al., 2021, p.841) or the role of hubs and networking (Spiegel & Harrison, 2018, p.161; Toivonen & Friederici, 2015). Indeed, there was some evidence of the entrepreneurs seeking to distance themselves from the "*fuss about digital entrepreneurship"* – not wanting

to categorise themselves as purely digital-play entrepreneurs, but rather someone who seeks to solve a problem through the best available means.

By aligning their definitions less with Silicon Valley-esque features of digital entrepreneurship and more with the practicalities of using digital to "*to do things better, to do things quicker",* the entrepreneurs interviewed demonstrated greater alignment with the characteristics of 'innovation-driven entrepreneurship' identified by the Kenyan Government in their 2019 digital plan (Republic of Kenya, 2019, p.55). Here – under former President Kenyatta – the goal established was 'to make every business a digital business' for the purposes of 'improved productivity, efficiency and, most importantly, profitability.' (Republic of Kenya, 2019, p.55).

6.2. Defining the concept: decent work

If the definition of 'decent work' constitutes a spectrum – ranging from a job with basic labour protections to one that provides 'possibilities of self-development, flexibility, responsibility, and fulfilment' with 'a middle class existence' (Rodrik and Sabel, 2022, p.62 cited in Begazo et al., 2023, p.2), then the entrepreneurs interviewed tended towards the more expansive end of the definition.

A fair salary was an oft-cited characteristic of decent work. Whether expressed as "*fair pay for work put in"*, a "*proper salary or wage for the work that you do"*, or "*being paid what you're supposed to be paid",* the respondents demonstrated alignment with the ILO's definition that decent work 'delivers a fair income' (ILO, n.d., (a)). There was slightly greater variety regarding the standard of living this salary should support. Some opted for a more core needs-based approach, wherein decent work constitutes "*work that will be able to first meet your needs*", "*get your basic needs sorted out"* or should cover "*basic needs in terms of health, food, and for our part of the world, education*". Others broadened this definition out to include an expectation of comfortable living, where workers should be able to live "*essentially a moderately decent life*". Regularity was also mentioned in relation to a consistent source of income and peace of mind that people *"can wake up to go and do, and to be engaged"* every day.

Respondents also pointed to broader definitions with regard to the type of workplace they associate with decent work – including providing an "*environment to grow"* or a space that "*inspires you*" and a safe workplace that does not present a risk of "*injuries*", where health insurance is provided, and where no one is asked to compromise on their "*moral or*

religious compass". In the round, the entrepreneurs interviewed demonstrated closer alignment with Hovhannisyan et al.'s metrics to measure the 'quality' of a job in developing countries: 'sufficient earnings to move a family out of poverty, access to employment benefits, job stability, and acceptable working conditions' (2022, p.26).

6.3. Digital entrepreneurs and economic growth

The literature review demonstrated the parallels between the replicative, unproductive, informal, micro-enterprise or survival forms of entrepreneurialism thought to be most prevalent in developing or African markets (Kiggundu, 2002; Naudé, 2011; Nguimkeu & Okou, 2021; Pereira & Maia, 2018). Replicative businesses specifically were characterised by Baumol et al. as being an important 'route out of poverty' for individuals but unlikely to contribute to economic growth (2007, p.3, cited in Naudé, 2011, p.36). This suggestion, however, is disputed by the empirical evidence. Data shows that entrepreneurialism – even when considered to be replicative – is supporting economic growth in the African context (Adusei, 2016, p.202).

The responses of the Kenyan digital entrepreneurs interviewed for this study contradict a number of these previously-identified characteristics of entrepreneurs in developing markets. For one thing, they overwhelmingly spoke of being driven by a future-focused desire to solve problems and deliver social impact – indicating that they can be discounted from Baumol's description of an unproductive entrepreneur, which he defines as an entrepreneur with little concern for 'the social product' of their activities (1990, p.6). Furthermore, their use of digital technologies to deliver social benefits challenges Naudé's description of a replicative entrepreneur – who he associates as operating 'within the technological frontier' and unlikely to drive economic growth (2011, p.36).

Finally, whilst several respondents did make reference to the economic benefits entrepreneurship offers them – such as a source of employment and financial control for the future – references to personal income creation were either outnumbered by mentions of a desire to deliver social impact or these drivers were presented as parallel outcomes, expressed in terms such as "*do well and do good".* This suggests greater complexity is at play than the binary Global Entrepreneurship Monitor (GEM) definitions of 'opportunity' entrepreneurs versus 'necessity' entrepreneurs – those said to resort to entrepreneurship when 'other options for economic activity are absent or unsatisfactory' (Wong et al., 2005, p.340). Indeed, the findings of this study are more aligned to Pereira and Maia's analysis of GEM data, which

showed that most African entrepreneurs self-identified as being driven by opportunity over necessity (2018, p.119).

A potential explanation for the prominence with which respondents identified social drivers is posited by Marchant's theory that the availability of grant funding in Nairobi is itself a driver for social impact start-ups (2018, p.90). It is true that amongst the entrepreneurs interviewed many characterised their business as having a social impact and many had also received grant funding. However, as demonstrated, many also identified social and personal outcomes as the driver for their enterprise. This study does not enable us to ascertain to what extent the presence of grant funding also influenced initial business choices. Regardless, the respondents' oft-cited use of innovative technologies – long considered to be a critical driver of economic development (Schumpeter, 1943/1976) – supports the argument that the digital entrepreneurs interviewed do not fit the definitions of replicative entrepreneur established by Baumol or Naudé, and as such are likely to be supporting economic growth.

6.4. Job creation and social enterprises

Understanding entrepreneurial attitudes towards the potential societal impacts of their digital ventures is critical for exploring how – and to what extent – entrepreneurs are thinking about sustainable development and the creation of jobs when building their businesses. The literature review exposed a divergence of reported perspectives on the relationship between the growth of the Kenyan digital ecosystem and its potential to create jobs. At one end of the spectrum is Ndemo's techno-optimist approach (2017, p.2) – brought to life by Wamukoya & Ng'weno's case study of BPO for job creation (2017, p.165). At the other end of the spectrum are the studies reporting the prevalence with which digital enterprises in Nairobi have hired from overseas (Bramann, 2017, p.239; Friederici et al., 2020, p.135).

The creation of jobs was identified as a direct inspiration for venture building by several entrepreneurs interviewed for this study, who referenced creating *"opportunities", "income generation",* and creating *"new jobs that never existed before"* as drivers for their entrepreneurial efforts. More commonly expressed, however, was the desire to deliver social impact. In addition to explicit mentions of socially-related ambitions, problem-solving and knock-on effects, this also manifested itself in the propensity for entrepreneurs to self-identify as a 'social entrepreneur'.

The digital entrepreneurs Friederici et al. interviewed in Nairobi expressed concern that a focus on social enterprises disincentivises the development of for-profit companies

(Friederici et al., 2020, p.202). This polarising narrative of a business being either a commercially focused for-profit (and presumed to be funded by institutional investment) or a socially focused business (and thus presumed to be funded by grants) was studied in the Nairobi context by Eleanor Marchant, who argued that a combination of both for-profit and nonprofit cultures was necessary for the growth of the Kenyan technology sector (2017, p.321).

The interviews conducted for this study suggest these types of binary views may still linger. For example, one entrepreneur referenced the sense that it is easier for social entrepreneurs "*to raise money with different people"* – which can arguably be read as a reference to grant funding. There was evidence too, however, that entrepreneurs are seeking to move beyond them, with another insisting that being a social enterprise "*doesn't mean we operate like an NGO. We operate with the efficiencies of a commercial enterprise".*

The regularity with which the entrepreneurs referenced moving fluidly between nonprofit and for-profit sources of funding – and were comfortable expressing their drivers as both personal and social – points to investors also being increasingly comfortable with this fluidity, by backing grant-funded businesses. This aligns with Marchant's proposition that what we are seeing in Kenya is part of a global trend for impact investing or the adoption by for-profit investors of social impact goals (2017, p.322-323). One explanation for this could be a desire from institutions to respond to retail investor appetite for supporting sustainability – surveys suggest 78% of retail investors are already making 'impact' investments (The Rockefeller Foundation, 2019).

6.5. Assessing the maturation of Nairobi's entrepreneurial ecosystem

Assessing whether Narobi's entrepreneurial ecosystem can be a meaningful source of jobs, requires an analysis of the development and maturation of the sector. For his study of Nairobi, Bramann adopted Isenberg's framework for assessing entrepreneurial ecosystems: 1) conducive sociocultural norms around entrepreneurship; 2) availability of entrepreneurial support systems; 3) availability of qualified human capital; 4) presence of appropriate financing sources; 5) relevant entrepreneurship policy; 6) venture-friendly markets for new products; and 7) ICT infrastructure (2017, p.230). Through this lens, Bramann developed his own phases of development for ICT ecosystems in resource-scarce countries, concluding that Nairobi was at phase three (2017, p.245-246) – with the fourth and final stage signified by the

formation of ventures that create 'spin-off effects that help build the conditions for further entrepreneurship' (2017, p.245).

Respondents for this study touched on a number of these conditions. One area that appears notably different to Bramann's findings and the wider literature review, relates to the availability of qualified human capital. Availability of people with the right skillset has been identified as a barrier to entrepreneurship and employment across the African continent (African Union Commission, 2015, p.9; Brixiova et al., 2014; Morsy & Mukasa, 2020) – and recent studies from Nairobi have concurred on the prevalence of non-Kenyan hires into digital enterprises (Bramann, 2017, p.239; Friederici et al., 2020, p.135). However, the entrepreneurs interviewed for this study indicated that the talent they required was available in Nairobi – albeit at a high cost, with great competition, and subject to the risk of poaching from multinationals. Where they do experience recruitment challenges, they expressed a willingness to play with previously held hiring formalities, including by training people up on the job as long as they could demonstrate "*the necessary skills to grow within the work environment",* and by trialling alternative ways of hiring specialist talent, for example through university partnerships.

Likewise, all of the entrepreneurs interviewed had engaged in some way with an entrepreneurial support system, such as an accelerator or hub – with some entrepreneurs having taken part in multiple. They had also all accessed sources of funding and many projected a sense of confidence about moving between different types of funding and calling for greater expertise and patience with any funding offers. During Bramann's 2013 fieldwork, he identified a scarcity in early-stage funding – such as 'personal savings, family, friends, angel investors' – and described a local venture capital market that 'had not yet formed' (2017, p.239-240). Whilst 'friends and family' rounds appear to remain allusive, there were several mentions by entrepreneurs about seeking a "*blend of local and international capital"* and a sense that "*a local investor will appreciate more what we are doing",* suggesting the presence of a local investor market. Where the evidence from this study does point to a continued gap is regarding larger investment rounds, with "*smaller tickets"* or "*cheque sizes"* mentioned in association with grants and local investors. This might explain the perceptions shared by entrepreneurs that they face greater challenges raising money than their established market counterparts.

There was some evidence of small changes around conducive sociocultural norms related to entrepreneurship – described by Bramann as including societal attitudes towards

'tolerance for risk, innovation, and experimentation' (2017, p.235). From anecdotes around rejecting "*a 9-5"*, "*challenging the status quo"* and stories about their families' reactions to embarking on entrepreneurship instead of "*a good job"*, it was evident that the digital entrepreneurs in Nairobi today are still pushing against the sociocultural norm. There were small indicators that this is changing: from mentions of a growing awareness that people can "*make money from start-ups"* to reflections that the education system is adapting to "*the start-up and scale-up world"* – but also hope: "*I think another 10 years? People will start understanding it well"*.

Despite the remaining gap on conducive sociocultural norms, the interviews conducted for this study point to the conclusion that Nairobi fits the brief for Bramanns's phase four mature ICT ecosystem. The fluidity demonstrated by the respondents – from accessing and assessing funding sources, to learning from personal and ecosystem past business failures – suggests that other ventures in Nairobi are creating spin-off effects which in turn are enabling the conditions for a more developed entrepreneurial ecosystem. Bramann points to the existence of serial entrepreneurs as one indicator of a phase four ecosystem (2017, p.247) – three of the entrepreneurs interviewed for this study spoke of having built businesses before, with two of them having raised venture capital in their previous enterprises. Furthermore, previously identified barriers to job creation, such as skill shortages, appear to be less of a problem – and where accessing affordable talent is a challenge, entrepreneurs are playing with recruitment formalities and alternative approaches in order to navigate this.

Chapter 7: Recommendations

This study has applied a constructivist research paradigm to the exploration of how digital entrepreneurs in Nairobi think about the concepts and challenges of building a job-creating business. Drawing on the analysis of qualitative interview findings and subsequent discussion, this study will now contribute to the growing field of bottom-up development approaches by using entrepreneur-led findings to inform a set of recommendations for international donors and investors to support Kenyan digital entrepreneurs in creating quality jobs.

Recommendation 1: International donors and investors should take a bottom-up approach to designing their support for the Kenyan digital ecosystem.

Previously posited theories about the nature of entrepreneurship and economic growth in developing countries are arguably outdated in an era of digital technology. Recent empirical studies from across Africa demonstrate positive relationships between ICT access and economic growth (Calderón & Cantú, 2021), job creation (Begazo et al., 2023) and sustainable development (Adejumo et al., 2020). Considered in light of Adusei's empirical study demonstrating that entrepreneurialism is supporting economic growth in the African context (2016, p.202), the body of evidence suggests theories that entrepreneurship in developing countries is unlikely to support economic growth (Baumol et al., 2007 cited in Naudé, 2011; Naudé, 2011) may now be outdated. This study contributes to the body of evidence by dispelling binary theoretical notions of opportunity versus necessity entrepreneurs (Wong et al., 2005, p.340), by demonstrating the broadly held ambitions the Kenyan digital entrepreneurs interviewed shared for income security, job-creation and wider societal impact.

This distance between theoretical and empirical studies is a good example of why international donors and investors considering entering the Kenyan digital market should take a bottom-up approach to designing engagement. International donors are already committing to greater localisation efforts, but there is still some distance to go turning commitment into action – for example, USAID is committed to local actors designing 50% of their programmes by 2030, but the percentage of funding to local partners actually fell slightly from 2022 (USAID, 2024, p.2). For investors, taking the time to embed in and talk to the

actors engaged in the Nairobi technology ecosystem is critical to dispelling the sense amongst entrepreneurs that international investors lack relevant knowledge about the market.

Recommendation 2: Travel outside the Nairobi 'bubble' to understand the wider societal norms founders are working within – and the problems they seek to solve.

Societal attitudes towards entrepreneurialism play an important role in the creation of a fertile environment for new business development: where entrepreneurs are more open to eschewing traditional career paths (Bramann, 2017, p.235); there is a national culture of sharing entrepreneurial ideas (Adusei, 2016, p.209); and individuals are comfortable with risk and failure (Isenberg, 2010). Whilst Nairobi is undoubtedly a hub of entrepreneurial support systems – such as accelerators (Littlewood & Kiyumbu, 2018; Ndemo, 2017, p.1) – the qualitative evidence suggests that Kenyan entrepreneurs continue to build their businesses in defiance of wider sociocultural norms.

Whether rejecting the status quo of a '9-5' lifestyle or recalling times they've had to reassure friends and family of their career choice, this study confirms that attitudes towards entrepreneurialism in Kenya have not yet changed significantly since Bramann's 2013 fieldwork, from which he reported on a perception that 'professional careers' were deemed the more appropriate choice (2017, p.235). To international investors more familiar with Silicon Valley and technology media narratives of 'heroic' entrepreneurs (Abubakre et al., 2021, p.840), the impact of this cultural environment might be easy to underestimate, particularly with regards to the level of personal risk entrepreneurs feel exposed to compared to their counterparts in more mature markets. Travelling and meeting people outside the Nairobi ecosystem will not just enable international investors to build up a more nuanced picture of how Kenyan societal approaches to entrepreneurialism differ to those in Silicon Valley and elsewhere, helping inform the types of funding they might require to thrive and survive. It would also improve investor understanding of the types of locally contextual problems the entrepreneurs are seeking to solve, including the limitations of some technology solutions amongst areas of the population where internet penetration remains low.

Recommendation 3: Founders are demanding more from their funding – donors and investors need to adapt their support accordingly.

For Bramann, the fourth development phase of technology ecosystems in resource-scarce countries has been reached when ventures from a market start providing spin-off benefits for

broader entrepreneurial success – such as greater legitimacy for entrepreneurialism, more experienced people in the ecosystem, and a greater abundance of capital (2017, p.245). In line with Bramann's definition, the entrepreneurs interviewed demonstrated time-and-again a fluid confidence in assessing the quality of funding and rejecting offers that do not fit their needs. Interestingly, the findings suggest that it has been specifically the failures of previous ventures in the ecosystem that have had a knock-on effect, by influencing current entrepreneurs to demand more from their investors: greater patience, greater expertise and more focus on impact.

For a couple of the entrepreneurs interviewed, a preference for bootstrapping over institutional investment was informed by their own past business failures – for others, their approach was informed by stories of others' failures. A similarly thoughtful approach to funding was evidenced too in attitudes towards grant funding. Whilst there were references to pejorative perceptions about grant funding and nonprofits – partly confirming similar findings from other qualitative Nairobi-based studies (Bramann, 2017, p.240; Friederici et al. 2020; Littlewood & Kiyumbu, 2018, p.280; Marchant, 2017, p.318) – the respondents in this study were choosing not to reject grant funding entirely, but instead change what they expect from it.

This study demonstrates that to remain relevant and attractive to the best entrepreneurial talent, both international donors and international investors need to be re-examining their programmes and offers, adapting them to ensure they are providing the "*patiency"*, expertise and authentic dedication to impact that Kenyan digital entrepreneurs are increasingly demanding.

Recommendation 4: Donors and investors need to match the fluidity with which Nairobi entrepreneurs are moving between funding sources.

Analysis of the interviews conducted for this study suggests that overtly negative sentiments about grant funding are increasingly being supplemented – or even replaced – by a desire to deliver both social and commercial outcomes, with a confidence regarding accessing a mixture of nonprofit and for-profit financing sources. This finding is aligned with Marchant's conclusions that a 'mixing of nonprofit and for-profit beliefs and practices gives the Kenyan tech sector access to more and different resources' (2017, p.306).

Indeed, the entrepreneurs interviewed often referred to using grant funding to iterate models or test approaches ahead of seeking institutional or equity investment – arguably

engaging with grant funding in much the same way as a pre-seed 'friends and family' investment round, which also are not necessarily equity-based (U.S. Chamber of Commerce, n.d.). Whilst further studies are required into the extent to which Nairobi digital entrepreneurs are leapfrogging the 'friends and family' round with grant funding – and what the consequence of this would be – what is clear, is that if entrepreneurs are comfortable combining nonprofit and for-profit worlds, international donors and investors need to think outside their usual definition boxes too when designing their engagement with digital entrepreneurs in Kenya.

Recommendation 5: Consider the different ways digital entrepreneurs in Nairobi can create decent work.

In a guide for businesses looking to support SDG 8, the UN Global Compact recommends firms support the creation of 'decent formal-sector jobs in labour-intensive sectors' (UN Global Compact, n.d.). With evidence accumulating that digital access and entrepreneurship supports job creation and economic growth in the African context (Adejumo et al., 2020; Adusei, 2016; Begazo et al., 2023; Calderón & Cantú, 2021), international donors and investors seeking to support SDG 8 should consider financing digital entrepreneurs in Kenya a critical way of doing this. However, this study suggests that donors and investors should consider broadening their scope – beyond formal-sector jobs in labour-intensive sectors – when identifying which businesses have the potential to create decent work.

Firstly, whilst the ILO's official indicator for SDG target 8.3 focuses on informal employment (ILO, n.d.(b)), they also separately acknowledge the significance of informal sector employment and income creation in lower-income countries (ILO, n.d. (c)). Secondly, the entrepreneurs interviewed for this study spoke not just of creating jobs but more widely of their ambitions to create social impact with knock-on effects – such as income generating opportunities – and were frequently using informal and alternative methods to achieve this.

When considering applications for grant funding or assessing how investments deliver on corporate social responsibility targets, donors and investors should think outside of the box about the potential for a business to create decent work – including considering how firms are challenging formal hiring practices to create marketplace or informal work. One option proposed by Ayentimi et al. is that stakeholders, such as NGOs and investors, use their economic leverage to implement a code of practice for decent work conditions within the gig

economy (2023, p.119) – a recommendation which could be broaden out to advocate for a decent work agenda within all types of informal work.

Chapter 8: Conclusion

A 2008 World Bank report concluded that 'no single recipe exists' for economic growth, only 'ingredients' (Commission on Growth and Development, 2008, p.16). The literature review confirmed that while there is little agreement amongst theoretical and empirical studies about the exact recipe for economic growth in developing countries, entrepreneurialism is one ingredient (Adusei, 2016; Baumol & Strom, 2007; Naudé, 2011). Yet, despite narratives of 'Africa Rising' and 'Silicon Savannah' – with endorsement and funding from governments, development organisations and investors (Friederici et al., 2020, p.9) – the relationship between digital entrepreneurialism and delivery of the SDGs across Sub-Saharan Africa has been under researched (Friederici, 2019, p.205; Friederici et al., 2020, p.9/10; UNDP ICPSD, 2023, p.3). This is particularly surprising in relation to SDG 8, given the growing body of research demonstrating the economic and job-creating potential of ICTs across the continent (Adejumo et al., 2020; Begazo et al., 2023; Calderón & Cantú, 2021). Furthermore, it is a timely issue, given the fast-emerging need for significant job creation across the continent, in East Africa, and in Kenya (AUC/OECD, 2021, p.167; NCPD, 2023, p.16)

This study has sought to make a contribution to the field of research, taking a constructivist approach that prioritises the experiences of Kenyan digital entrepreneurs; separating out the narratives of 'Africa Rising' from the realities of building digital businesses to inform practical guidance for backing digital entrepreneurialism that creates quality jobs in Kenya. As set out in the methodology, whilst steps were taken to create a quasi-random sample (Berg & Lune, 2012, p.50), the convenience and snowball sampling approaches used to recruit respondents are not intended to deliver the levels of representativeness required for generalisability of the findings. In particular, the use of technology media for initial seed recruitment created a selection bias (Baltar & Brunet, 2012, p.60) – arguably creating potential for a greater prevalence of media-friendly social impact businesses. However, comparing the data collected with existing literature can provide an indication of the extent to which a sample reflects a broader population (Berg & Lune, 2012, p.50; Coomber, 1997, p.4) – and the near ubiquity of social impact businesses in this study is reflected in other recent studies of Nairobi's digital ecosystem (Marchant, 2017; Marchant, 2018).

Nevertheless, these findings represent a snapshot in time, conveyed through the voices of 10 entrepreneurs building digital businesses in Nairobi in early 2024. It cannot

claim to offer a conclusive representation of the Nairobi ecosystem – particularly, given that the researcher was not physically on the ground in Kenya – but is an insight into conversations about the concepts and challenges associated with building a job-creating business in Nairobi.

8.1. Research questions

The research asked to what extent job creation is a driver for Kenyan digital entrepreneurs when building their businesses. Whilst some of the entrepreneurs explicitly pointed to job creation, ambitions were more commonly communicated in terms of social impact, problem solving and the opportunities for knock-on income generation. Other studies suggest that the abundance of social impact businesses in Nairobi is influenced by the prevalence of grant funding available (Marchant, 2018, p.90). Entrepreneurs in this study, however, pointed instead to a desire to solve social problems.

Regardless of the incentive for prioritising social impact, the evident fluidity in engaging grant and investor sources of funding demonstrates that for the entrepreneurs interviewed, sustainable development outcomes – including income generation opportunities – can go hand-in-hand with building a for-profit digital business. This supports the case for an end to the binary debate about nonprofit versus for-profit cultures in the Nairobi ecosystem (Marchant, 2017, p.321). Furthermore, the entrepreneurs' oft-cited ambition to use innovative technologies to deliver socially impactful and commercial businesses demonstrates how digital entrepreneurs in Kenya may not fit previous definitions of replicative entrepreneurs (Baumol 2007, p.3, cited in Naudé, 2011, p.36; Naudé, 2011, p.36) – contributing to evidence that entrepreneurship in developing countries can deliver economic growth (Adusei, 2016).

This research also sought to understand what challenges digital entrepreneurs in Kenya experience building businesses that create quality jobs. The entrepreneurs interviewed demonstrated that the conditions in Bramann's adaptation of Isenberg's assessment of entrepreneurial ecosystems have been met in Nairobi (2017, p.230) – from the prevalence of accelerators, the availability of talent and access to different funding sources. The confidence with which entrepreneurs talked about moving fluidly between funding sources and demanding greater "*patiency"* and expertise from their funders, arguably exemplified the maturity of the ecosystem.

Nevertheless, frustrations remain – particularly in relation to institutional investment, with challenges regarding funding round sizes and a perception that international investors lack critical local contextual knowledge. There was evidence too that one aspect of Isenberg's framework – conducive sociocultural norms around entrepreneurship (Bramann, 2017, p.230) – is still challenging for the entrepreneurs interviewed, many of whom suggested that their pursuit of entrepreneurship goes against societal expectations. This matters because societal attitudes contribute to the entrepreneurial fertility of an environment (Adusei, 2016, p.209; Bramann, 2017, p.235; Isenberg, 2010).

It was also evident that where the entrepreneurs do encounter challenges with job creation – from finding the right talent, to hiring at scale or securing large enough funding rounds – they are playing with previously held formalities of hiring. From hiring seasonal "*casuals*" to using "*marketplaces*", developing youth programmes, partnering with universities or training people on the job, a sense of playing with formal hiring mechanisms to find the workers they need and create alternative income opportunities was evident. It is true that the irregular nature of some of these roles does not fit the ILO's SDG 8.3 indicator for 'decent work', which stresses formality (ILO, n.d.(b)). However, in light of the need to create opportunities for the emerging Kenyan 'youth bulge' to be 'gainfully engaged in economic and social activities' (NCPD, 2023, p.16), it can be argued that policymakers should consider how to embed a decent work agenda within informal and gig economy roles (Ayentimi et al., 2023, p.119).

Finally, the research sought to answer the question of how international players can best support digital entrepreneurs to build businesses that create quality jobs in Kenya, by making the following recommendations:

1. International donors and investors should take a bottom-up approach to designing their support for the Kenyan digital ecosystem.
2. They should travel outside the Nairobi 'bubble' to understand the wider societal norms founders are working within – and the problems they seek to solve.
3. Founders are demanding more from their funding – donors and investors need to adapt their support accordingly.
4. Donors and investors need to match the fluidity with which Nairobi entrepreneurs are moving between funding sources.

5. International donors and investors should consider the different ways digital entrepreneurs in Nairobi can create decent work.

8.2. Avenues for future research

It is clear that whilst the growth of technology does present opportunities for job and income creation across Africa, it also creates new categories of jobs – marketplaces, gig economy, global contractor, or project-based roles – that do not meet existing indicators of formal decent work (ILO, n.d.(b)). The Kenyan entrepreneurs interviewed for this study had relatively expansive views of what constitutes decent work, even whilst playing with the formalities of job creation in their own businesses. Future research should build on existing studies into how policymakers and institutional stakeholders can advocate for a decent work agenda within informal or new digital roles (Ayentimi et al., 2023, p.122; Heeks, 2017) – considering how to combine the imperative to create a significant number of jobs with the ILO's definition of decent work (ILO, n.d., (a)). The fast-growing role of AI in the workplace brings a new urgency to the development of decent digital work frameworks. In light of reports about the working conditions of Kenyans training generative AI for multinationals (Murgia, 2024, p.24; Perrigo, 2023), this is particularly relevant in the Kenyan context.

This research qualitatively explored how 10 digital entrepreneurs think about the concepts and challenges associated with building a job-creating business in Nairobi. The findings demonstrate that they are engaging different funding sources with fluidity and playing with formalities in the workplace, to overcome frustrations and deliver on socially-driven goals for the future. The study progresses and provides a timely update on several threads of study into digital entrepreneurialism in Kenya: about the relationship with economic growth, approaches to job creation, the growing adoption of nonprofit and for-profit business approaches, and the concept of decent work in Kenya's increasingly mature digital economy. These findings have informed recommendations for international players to support Kenyan digital entrepreneurs in creating decent work and delivering towards SDG 8, and provided avenues for future research. More detailed study into the decent digital work agenda – particularly in light of AI-related job creation – is a critical next step in assessing how to leverage the evident opportunities digital entrepreneurialism offers for new forms of job creation for Kenya's fast-growing youth population, whilst still protecting and mainstreaming decent work principles.

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Annex A: Interview guide

Interview opening (5 mins):

- **Thank you** for taking the time to speak with me today. I really appreciate how busy you are, so I am very grateful to you for agreeing to participate in this study. As mentioned over email, my name is Emma Parrott and I am a master's student at the University Institute of Lisbon in Portugal.
- Before we start, I'm just going to start by saying **a few words about the study** and how this interview will be used.
- My aim is that through conversations with digital entrepreneurs in Nairobi like yourself, I can explore some of the **goals, challenges and experiences of building a business that creates quality jobs**. This will inform a series of recommendations aimed at international players looking to support sustainable development in Kenya through digital entrepreneurship.
- Thank you for providing the **written consent form** using the link I sent you - did you have **any questions** about the study, or about how your data will be used or processed?
- In which case, I am now going to **start recording.** As I'm recording, I won't be taking notes, but might occasionally jot things down.
- We've set aside **30 minutes to one hour** for this conversation, so if I move us on to new topics it's just so we can cover everything without taking up any more of your time.

Part 1: Introduction, motivation and concepts (10 mins max):

1. Could you begin by introducing yourself and telling me a bit about your journey to becoming an entrepreneur?
    - First/main/only business or project?

2. Did you always want to be an entrepreneur?
    - Appeal of entrepreneurship
    - Low/high prestige of being an entrepreneur?

3. How would you define digital entrepreneurship?

- Different to ‘social entrepreneurship’?
- Concept for discussion - ‘hero founder’

Part 2: Job creation and challenges (20 mins max):

4. How many people do you currently hire?
   - Plans to expand?
   - Challenges blocking hiring - financing, customers, growth, talent pool, right skills, inflation?

5. Was the potential to create jobs for other people something that was important to you when first thinking about becoming an entrepreneur?
   - Knock-on job creation of business i.e. improving outcomes for farmers, creating delivery jobs etc.?

6. What are the characteristics of decent work?
   - Does ‘quality’ of a job matter?
   - Concepts for discussion - ‘decent work’/‘formal work’/‘informal work’/’gig economy’

7. Can you tell me about any challenges you have faced in building your business?
   - Reality vs. expectations?
   - Impact of shocks - Covid-19, inflation?
   - What impact have challenges had on your ability to create quality jobs?

8. Is the Silicon Valley model a helpful one?

Part 3: Formal support and international players (20 mins max):

9. Have you accessed any formal support whilst building your business? Like a tech hub, an angel investor or an accelerator programme?
   - Best type of support? Examples?

10. What support would/did help unblock barriers to job creation in your business?

11. How aware are you of international investors or international aid funding Kenyan start-ups?
    - What has been your experience/is the reputation of outside players?
    - Mismatch of expectations between Kenyan start-ups and international investors? Role of grant funding?

12. And to bring this interview to a close: what are your goals and ambitions for your business in the next five years?

Interview closing (5 mins):

- Thank you again for having participated in this study, and for taking the time to have this hugely insightful conversation with me. As discussed in the email, you have **my contact details** - please do get in touch with any questions or any further comments you wish to share.
- As mentioned, it would be fantastic if you could **recommend anyone in your network** you think I should reach out to for this study.
- Is it okay with you if I follow-up on email if I have anything I want to double-check? Would you be interested in **receiving the transcript or information about the main conclusions of the study?**
- Before we finish off, is there **anything else** you wanted to say? Once again, **thank you** for your participation.

Annex B: Informed consent

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Informed consent form regarding your participation in a research study

Thank you for agreeing to take part in this study - your time is valuable and your generosity in agreeing to participate is greatly appreciated.

About the study: This study is being undertaken as part of a Master's research project taking place at Iscte – University Institute of Lisbon. It will draw on the experiences of digital entrepreneurs in Nairobi, to explore the **goals and challenges of building a business that supports delivery of the Sustainable Development Goals**. These findings will inform a series of recommendations for international players looking to support Kenyan digital entrepreneurs in creating quality jobs.

About your role in the study: Your participation in the study is highly valued as it will contribute to the advancement of knowledge in this field. It will consist of an **online video interview** - conducted on a platform of your choice (Zoom, Teams or WhatsApp) - for between **30 minutes to one hour**. During the interview, you will be asked a series of questions related to entrepreneurship and job creation.

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Your data and the study:

Iscte is responsible for the processing of your personal data that is collected and processed exclusively for the purposes of the study, legally based on Article 9(2) (a) of the GDPR.

The study is conducted by Emma Parrott (erpte@iscte-iul.pt), who you may contact at any time to:

- discuss any doubts, share comments or exercise your rights in relation to the processing of your personal data.
- request access, rectification, erasure or limitation of the processing of your personal data.

iscte INSTITUTO UNIVERSITÁRIO DE LISBOA

Your data and the study:

Iscte does not disclose, or share with third parties, information related to its personal data. In some cases, the research team may share data with other research teams, or even service providers acting under our supervision and responsibility.

In this study, personal data will be disclosed to the following entities:

- **Otter.ai -** an online tool for transcribing interviews and meetings. Otter.ai is covered by the EU-US Data Privacy Framework. https://otter.ai/

Iscte has a Data Protection Officer (dpo@iscte-iul.pt). If you consider this necessary, you also have the right to submit a complaint to the Portuguese Data Protection Authority (CNDP).

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Confidentiality, consent and the study:

Your participation in this study is confidential. Your personal data will always be processed by authorised personnel bound to the duty of secrecy and confidentiality. Iscte assures the use of appropriate techniques, organisational and security measures to protect personal information. All investigators are required to keep all personal data confidential.

For the purposes of this study:

- The online interview will be recorded and transcribed. In the transcription, personal and identifying details disclosed during your interview - such as your name and business name - will be anonymised.
- The audio recording and de-identified transcripts will be retained for 6 months after the defence of the study, after which they will be destroyed.
- Your anonymity is assured in the study's results, with de-identified transcripts being disclosed only for purposes of statistics, teaching, communication in scientific meetings, books or articles.

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Confidentiality, consent and the study:

In addition to being confidential, **participation in the study is strictly voluntary:** you may choose freely whether to participate or not.

If you have decided to participate, you may stop your participation and withdraw your consent to the processing of your personal data at any time, without having to provide any justification. The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal.

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If you are **content and give informed consent for the use of your data** as set out, please sign in the box below:

I declare *that I have understood the aims of what was proposed to me, as explained by the investigator, that I was given the opportunity to ask any questions about this study and received a clarifying reply to all such questions.* ***I accept*** *participating in the study and consent to my personal data being used in accordance with the information that was given to me.*