African EdTech Insights Report

VOLUME 2

2024

EXPLORING INTERDEPENDENCIES IN THE EDTECH ECOSYSTEM FOR SUSTAINABLE IMPACT



INSIGHTS REPORT, VOLUME 2

Exploring Interdependencies in the EdTech Ecosystem for Sustainable Impact

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Introduction

Foreword by Injini Executive Director

Welcome to Volume 2 of Injini's African EdTech Insights Report.

This publication showcases not only the culmination of our research efforts over 2023 but also represents the evolution and growth of our team at Injini. A considerable amount of this growth has been enabled by our partnership with the Mastercard Foundation and the launch of the EdTech Fellowship Program in South Africa. For this reason, you will notice that much of the data we reflect on in this report stems from work done within the country, although we believe many themes discussed permeate borders and apply elsewhere on the continent.

Within this report, you will find a narrative reflection of our findings and engagements over the last year. We've made efforts to make this report as readable, concise and relevant to our audience as possible – so I hope you'll enjoy engaging with the content as much as I have. 00



TO FOSTER COLLABORATION AMONGST STAKEHOLDERS IN THE EDUCATION SECTOR AND INFLUENCE THEIR DECISION-MAKING TO CREATE A MORE ENABLING ENVIRONMENT FOR EDUCATION INNOVATION ACROSS AFRICA



Having seen Injini through several phases of development over the last five years, and watching from afar since its inception two years prior, I am thrilled to share this report as a testament to the dedication and passion of our team, and in particular, the researchers sitting within what we call the Injini Think Tank.

As an organisation, Injini's mission has remained steadfast: to advance the quality, accessibility, and relevance of education throughout sub-Saharan Africa. To date, we've progressed towards the realisation of this mission by supporting promising African EdTech ventures – with a focus on increasing their impact – and developing the broader ecosystem to allow for the growth of more sustainable, evidencedriven education solutions.

The Injini Think Tank has a complementary, but even more focused mission: to foster collaboration amongst stakeholders in the education sector and influence their decision-making to create a more enabling environment for education innovation across Africa. To this end, we are committed to conducting localised industry research, generating insightful data-led publications, and providing bespoke market research to EdTech entrepreneurs.

Exploring Interdependencies in the EdTech Ecosystem for Sustainable Impact represents a progression in our work, reflecting the maturation of our inquiries and the expansion of our scope within the education sector. The questions we ask of ourselves and other stakeholders in the education sector have grown in sophistication, mirroring the complexity of the challenges we seek to address.

In the pages that follow, we attempt to untangle the complex web of interconnectedness between the stakeholders who make up the education sector. By better understanding their motivations and realities, we hope to be in a position to facilitate better fit-for-purpose innovation and promote collaboration in pursuit of our shared goal: to create a more equitable and inclusive educational landscape.

I extend my heartfelt gratitude to our team for their tireless efforts and dedication, as well as to our partners and stakeholders for their invaluable contributions. Together, let's embrace the possibilities ahead, trusting in our ability to make meaningful strides toward a brighter future.

Sincerely,

KRISTA DAVIDSON Executive Director, Injini



Given the monumental challenges facing the education system in Africa, it will require technology-based innovative solutions and the collaboration of all stakeholders in education to make any meaningful improvement in the quality and relevance of education available to young Africans.

This report highlights the complexity we are dealing with in the education landscape."

– JOSEPH NSENGIMANA

Director, Centre for Innovative Teaching and Learning at the Mastercard Foundation

Wesgro extends its support to Injini on the release of their EdTech Insights Report. With their unique position as the only EdTech specialised accelerator on the African continent, they are poised to offer invaluable market insights in the EdTech sector. Recognising the pivotal role of innovation in education, we commend their collaborative approach involving multiple stakeholders to drive meaningful change across the continent."

- WRENELLE STANDER CEO, Wesgro

EdTech provides a unique opportunity to leapfrog inequalities in learning in South Africa and on the continent. Practical research and the sharing of knowledge of what works, for whom, and in what context is critical if the benefits of EdTech are to be fully realised. Injini – as a convenor of government, capital, providers, and users – is well positioned to catalyse and facilitate such initiatives."

> - ROB URQUHART Chief Research and Insights Officer, Click Learning



TO BE A THOUGHT LEADER IN THE AFRICAN EDTECH COMMUNITY BY CONDUCTING LOCALISED RESEARCH, OPEN INNOVATION, AND ENGAGING WITH KEY DECISION-MAKERS ON EDUCATION POLICY IN AFRICA



Injini Think Tank

The Injini Think Tank's (ITT) vision is to be a thought leader in the African EdTech community by conducting localised research, open innovation, and engaging with key decisionmakers on education policy in Africa. This work makes a critical contribution towards achieving Injini's mission to increase the quality, access, and relevance of education throughout sub-Saharan Africa.

Should you have any research needs with the missions set out above, don't hesitate to get in touch with us by sending an email to **info@injini.africa**.

CC I have been deeply impressed with the work that Injini has done to unpack the complexity of the education landscape in South Africa and to bring the different stakeholders to the table; including government, investors, learners, teachers and technology-focused problem-solvers. The rapid pace of technological advancement and the challenges in the education ecosystem has resulted in many solutions being created in silos. The power of Injini is in creating a platform for collaboration across stakeholders to promote cohesion amongst what would otherwise be fragmented and, as a result, sub-optimal solutions and products. I firmly believe that education (and skills development) can unlock opportunities for social mobility and move us towards a more equitable, productive society."

> - NARASSA GOVENDER CSI Director, *NinetyOne*

C Through our work at Innovation Edge, it is very clear that the provision of quality and accessible education for all children can be transformative for the progression and sustainability of society. Although these sentiments are widely shared and understood, there doesn't appear to be a proportionate investment (financial and non-financial) into the critical levers that could lead to a thriving educational environment for our children. This highlights the value that Injini brings to the sector, as they leverage their networks and expertise to support ventures in bolstering innovation, sustainability and unlocking valuable partnerships within the sector. As an investor, we lean heavily on the experience and expertise of accelerator and think tank organisations that provide valuable evidence-based insights on the critical ingredients required for entrepreneurs to effectively thrive in the education ecosystem."

> - GILBERT ANYETEI Investment Lead, Innovation Edge



Executive Summary

Education is a complex ecosystem involving various stakeholders, including learners, teachers, parents, policymakers, the private sector, civil society, and academia. It encompasses more than the classroom and also includes informal education, extracurricular learning, and other lifelong learning opportunities. Each component interacts with and impacts the others, creating a web of relationships and dependencies.

EdTech is no exception. While innovation is at the core of EdTech design, it must also acknowledge the complex existing structures in which it functions.

This complex ecosystem has been simplified in **Figure 1** below. At the heart of the ecosystem are the stakeholders it serves: students, parents, and teachers. Surrounding them are the educational products and services they directly interact with, such as primary and secondary schools, early childhood development centres, universities, and EdTech products. To ensure that these products and services function sustainably, various inputs and resources are required, including funding, regulations and policy, advocacy, and research, among others. These inputs predominantly come from four key entities; government, private sector, academia, and civil society.

Navigating this ecosystem requires comprehensive strategies that address the interplay of these interdependencies.



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POLICYMAKERS





CIVIL SOCIETY





THIS REPORT PRIMARILY AIMS TO FOSTER EMPATHY AND CULTIVATE A DEEPER UNDERSTANDING OF THE DIVERSE STAKEHOLDERS WITHIN THE EDTECH ECOSYSTEM THAT ARE ESSENTIAL FOR ITS SUCCESS.

The results and insights discussed in this report are the culmination of primary and secondary research completed by the Injini Think Tank during 2023. We focus on unpacking three of the ecosystem's interdependencies to explore how EdTech companies and solutions can better position themselves to achieve both business sustainability and enhance learning outcomes. Given the Injini Think Tank's focus in 2023, this theme is unpacked primarily through the lens of South African-focused case studies and research.

CHAPTER ONE starts at the centre of the education ecosystem, focusing on the interconnections between EdTech products and the parents and teachers who often form the bridge between young learners and these products. It considers how products that creatively address the pain points and necessities of these key stakeholders, in tandem with the requirements of the learners, are more likely to reach their target audience sustainably.

Subsequently, the influence of government on the educational landscape runs deep and penetrates every aspect – especially in the South African context. As a policymaker, funder, and education provider, this cannot be ignored. CHAPTER TWO considers the relationship between the government and the EdTech market within South Africa. Through our engagements with government stakeholders, we unpack their challenges and perspectives to understand how the linkages between the government and EdTech companies can be strengthened and ultimately improve access to quality education.

Finally, **CHAPTER THREE** focuses on the dynamics and signals that are precursors for capital entering the ecosystem. In particular, it explores how EdTech can enhance its appeal to investors and address the current misalignment between venture capitalists' expectations for growth and scale and the unique characteristics of EdTech ventures.

These three chapters are visually summarised in **Figure 2**.

While it certainly does not tackle every challenge, this report primarily aims to foster empathy and cultivate a deeper understanding of the diverse stakeholders within the EdTech ecosystem that are essential for its success. Its overarching objective is to foster ecosystem development, promote collaboration, and catalyse transformative initiatives that leverage technology to enhance learning experiences and drive educational equity globally.

Overview

Chapter One

Parents and Teachers

- EdTech products often rely on intermediate stakeholders (e.g., parents and teachers) to reach their end-users (students).
- 2 These intermediate stakeholders must be understood and incorporated in the design of EdTech products (e.g., time sensitivity among teachers, OR parents' preferences for physical vs digital ECD reading materials).
- 3 EdTech solutions benefit from collecting user feedback to improve not only the product but also the sales/onboarding process.
- Pedagogical best practices may not always align with market preferences. In such cases, marketing campaigns may need to include an educational component.



KEY FINDINGS

- South African EdTech products face difficulties in reaching and engaging with public schools.
- 2 The government is sceptical about the role of technology in education, both due to its past experiences and the nature of the challenges it faces.
- The government has an outdated understanding of e-Education while EdTech stakeholders often lack an understanding of government educational strategies and policies
- Better mechanisms for sharing data and information are needed and advocated for by both parties.

Chapter Three

Investors and Funders

- Compared to sectors like FinTech and CleanTech, African-based EdTech companies struggle to secure investment.
- 2 EdTech often struggles to align with VC expectations for growth and scale due to challenges like slow customer acquisition and high content development costs.
- 3 EdTech experiences a disconnect between end-users (students and teachers) and purchasers (educational institutions or governments). This, coupled with a lack of clear efficacy indicators, poses a risk that many VCs are hesitant to take on.
- Other forms of capital, such as grants, revenue-based financing, or bank loans, are often more suitable for EdTech startups.

CONCLUSION Chapter Four

- 1 By examining the misalignments between EdTech and other stakeholders in the education ecosystem, it sheds light on some prevalent challenges and potential solutions.
- 2 These misalignments can be addressed and mitigated through proactive measures such as fostering collaboration, promoting transparency, and prioritising usercentric design.

Chapter One

EdTech Allies. The Role of Teachers and Parents in Supporting Learners Through EdTech

Effective and sustainable EdTech implementation extends beyond enhancing the learner's experience. While prioritising the learner journey is crucial, the complex interplay of socio-economic conditions within the educational landscape requires acknowledging other stakeholders who significantly influence student adoption and learning outcomes.

EdTech design must therefore consider the needs and perspectives of these stakeholders, particularly the teachers and parents who often act as the bridge between young learners and educational products. By incorporating their input in its design, EdTech can foster a more inclusive, collaborative, and ultimately impactful educational environment.

Using two case studies, we explore this important concept: How can we better understand and design EdTech solutions that accommodate the pre-conditions within the home or classroom, enabling successful integration? These case studies provide summaries of recent research completed within the past year.

To access the full reports and detailed research findings, kindly contact info@injini.africa

EdTech in the Classroom

CASE STUDY

Implementing Coding and Robotics-focused EdTech Solutions in South African Classrooms

Recognising the need for a technologically proficient generation capable of seizing opportunities within the digital age, South Africa's Department of Basic Education has implemented a Coding and Robotics curriculum for students up until and including Grade 9 (DBE, 2021; DBE, n.d.).

The effectiveness of this educational transformation hinges not only on the Coding and Robotics curriculum itself but also on the proficiency, adaptability, and willingness of teachers to implement it.

Teachers, including those specialising in ICT, face numerous challenges, many of which have been welldocumented. Among the ICT teachers surveyed in this study, the most significant obstacles to effectively integrating coding and robotics in their classrooms include resource limitations, time constraints, and insufficient training. Interestingly, resistance from students and colleagues is not identified as a primary challenge in this context.

Data Collection and Methodology

Data was collected via an online survey and WhatsApp outreach between June and August 2023. The survey aimed to capture a snapshot of ICT teachers' opinions and attitudes concerning the implementation of the Coding and Robotics curriculum in the classroom and the role that EdTech plays in this context.

The analysis included responses from 227 ICT teachers in South Africa. (Among the surveyed teachers, 43.2% (n=98) had used EdTech solutions in their classroom, while 56.8% (n=129) had not. Additionally, **four semi-structured interviews** took place via phone call or video conference to further explore ICT teacher preferences and opinions.

The following results highlight some of the key findings from this analysis.

FIGURE 3 ICT teachers' perceptions of the primary challenges faced in implementing coding and robotics in the classroom (n=227)

Lack of resources (such as devices and robotics kits) Insufficient training or support Limited time allocated in the current curriculum Resistance from learners or other teachers Unclear guidelines from Education Department Other None





(N=98) TEACHERS THAT HAVE USED EDTECH SOLUTIONS



(N=129) TEACHERS HAD NOT USED EDTECH SOLUTIONS

*Note that teachers were able to select the two most critical challenges. The percentages are calculated based on the total number of responses and therefore do not sum to 100%.

***Other" challenges identified by respondents include device troubleshooting and issues with logging onto software, delays in the delivery of resources, rolling blackouts (load shedding) impacting lesson time, and general time constraints unrelated to coding and robotics. Acknowledging these challenges and constraints, we explore methods in which EdTech solutions and marketing strategies that alleviate these stressors can have greater success in reaching learners.

Crafting Sales Strategies: Addressing Teachers' Pain Points

It's not surprising that 59.9% of ICT teachers highlight cost as a pivotal factor influencing schools' decisions on ICT and EdTech purchases. While recognising the significance of affordability, not all EdTech companies are inclined to solely rely on this aspect to differentiate their products. Instead, it is beneficial to explore alternative methods through which the product can effectively address this challenge.

For example, due to budgetary constraints, schools may only invest in one coding and robotics EdTech solution at a time. Consequently, school administrators and ICT teachers need assurance that the chosen solution aligns seamlessly with the curriculum, with 75.3% of ICT teachers indicating that alignment with the Coding and Robotics curriculum significantly influences their decision to procure ICT products and EdTech solutions. Therefore, EdTech companies specialising in coding and robotics may increase their chances of success by establishing connections between their product and the new curriculum and emphasising this alignment throughout the sales process.

FIGURE 4 Factors that impact schools' ICT purchasing decisions (n=227)



OF ICT TEACHERS HIGHLIGHT COST AS A PIVOTAL FACTOR WHEN PURCHASING ICT PRODUCTS AND EDTECH SOLUTIONS



OF ICT TEACHERS INDICATING THAT ALIGNMENT WITH THE CODING AND ROBOTICS CURRICULUM INFLUENCES THEIR DECISION TO PROCURE ICT PRODUCTS AND EDTECH SOLUTIONS



There are advantages to involving multiple stakeholders in the sales process. While overall satisfaction with the school's ICT and EdTech purchasing decisions was high, ICT teachers expressed higher satisfaction when they were included in purchasing decisions alongside school principals and/or administrators. When purchasing decisions were made solely by the school administration, 80% of teachers either strongly agreed or agreed with those decisions.

However, when these decisions are made in collaboration with the ICT coordinator and/ or department, the percentage increased to 96.4%. EdTech companies that deliberately structure their sales and onboarding processes to engage both stakeholder groups (school administration and ICT teachers) could enhance their chances of seamless integration into schools and are more likely to achieve long-term adoption.

FIGURE 5 ICT teacher satisfaction with ICT purchasing decisions vs their involvement in the decision-making process





OF TEACHERS EITHER STRONGLY AGREED OR AGREED WHEN PURCHASING DECISIONS WERE MADE SOLELY BY THE SCHOOL ADMINISTRATION INCREASE WHEN THESE DECISIONS ARE MADE IN COLLABORATION WITH THE ICT COORDINATOR AND/ OR DEPARTMENT





OF TEACHERS WHO ATTEND TRAINING FREQUENTLY EXPRESS HIGH CONFIDENCE IN THEIR ABILITY TO TEACH CODING AND ROBOTICS

COMPARED TO



OF TEACHERS WHO ATTEND TRAINING OCCASIONALLY

Effective EdTech Teacher Training: Approaches for Teacher Success in Coding and Robotics

Teacher training and user-friendliness, encompassing both content and technical aspects, are also recognised as crucial factors in purchasing decisions. In crafting training and onboarding materials, teachers' responses indicate that a one-size-fits-all approach is unsuitable. Instead, teachers express diverse preferences, with a slight inclination towards online courses and in-person workshops.

Even though this study didn't delve into the direct impact of teacher training on comprehension, it does indicate a correlation between teacher training and increased confidence in teaching the new Coding and Robotics curriculum. Notably, 86.8% of teachers who attend training frequently (monthly or more) express high confidence in their ability to teach coding and robotics, compared to 38.7% of teachers who attend training occasionally (once or twice a year).

However, teachers are also highly timeconstrained and often struggle to allocate sufficient time for all expected tasks. Training initiatives should therefore be tailored to accommodate these factors. For instance, implementing just-in-time training sessions that occur right before a lesson commences could be beneficial. TABLE 1ICT teacher confidence to effectively teach coding and roboticsto their learners vs the frequency of teachers engaging in professionaldevelopment activities related to ICT

		HIGHLY CONFIDENT	SOMEWHAT CONFIDENT	NOT CONFIDENT	TOTAL
	FREQUENTLY Monthly or more	86.9%	13.1%	0%	100% n=84
	REGULARLY Several times a year	40%	58.8%	1.2%	100% n=85
	OCCASIONALLY Once or twice a year	year 38.7% 61.3%	0%	100% n=31	
	RARELY OR NEVER	73.1%	26.9%	0%	100% n=26



EdTech in the Home

CASE STUDY

Parental Preferences for Early Childhood Development (ECD) Reading Materials in Rural KwaZulu-Natal

Early Childhood Development (ECD) is a critical phase characterised by rapid brain growth and remarkable adaptability (Venter, 2022). At the heart of ECD's educational goals lies the nurturing of fundamental literacy and reading abilities.

During this stage, young children heavily rely on others (e.g., parents, siblings, peers, teachers, and community members) to provide them with access to reading materials. The advantages of such access are significant; research indicates that children with greater exposure to books and literacy resources tend to acquire reading skills more effortlessly compared to those with limited access (Soulen & Tedrow, 2022). Consequently, it is essential to examine the factors driving parents' decisions to purchase ECD reading materials and how EdTech can play a role in promoting such choices.

Data Collection and Methodology

Data was collected via a WhatsApp-based data collection platform between July and August 2023. The target population comprises KwaZulu-Natal (KZN) parents with children between the ages of four and seven living outside of the metropolitan area (i.e., small towns, townships, or rural farming areas). The research objective was to unpack parents' preference for ECD reading, specifically as it relates to digital reading materials within the KZN, South African context.

The sample comprised 145 KZN-based parents and other caretakers (hence further referred to as parents) living outside the metropolitan. On analysis, it was found that the sampled parents were likely more digitally literate than the average KZN population. For example, 80% report having a computer, laptop, or tablet in the home. The results that follow should be interpreted within this context and do not necessarily reflect the preferences of the rural KZN population with low digital literacy.

80%

OF THE SAMPLED PARENTS REPORT HAVING A COMPUTER, LAPTOP, OR TABLET IN THE HOME

Navigating Parental Preferences: Digital vs Physical ECD Reading Materials

In our study, it was evident that a significant majority of sampled parents favoured printed copies of ECD and Foundation Phase reading materials over digital alternatives. Specifically, 75.2% of parents expressed a preference for physical children's books and reading materials, while only 17.2% indicated a preference for digital books for their young children. The data indicates that this preference is primarily motivated by parents' desire to reduce screen time for their children or their observation that digital devices often lead to increased distractions.

As mentioned earlier, there is compelling evidence indicating that the parents sampled exhibit higher levels of digital literacy compared to the average population in KZN. Building on this, one might expect that the parents' increased digital literacy would lead to a greater preference for digital reading materials. However, despite their digital literacy, there remains a distinct preference among parents for physically printed ECD and Foundation Phase reading materials. This preference is likely even more pronounced within the broader population.

As a result, when developing digital reading materials and EdTech solutions for home integration, it's crucial to recognise and acknowledge this parental preference. For example, ECD EdTech reading solutions may resonate more effectively with parents if they incorporate digital elements and physical components, catering to a range of parental preferences regarding technology use.







Navigating Parental Preferences: Balancing Pedagogy with Parental Choices

Pedagogical theory and research demonstrate that children learn best when their home language is used as the primary language of instruction. With 12 official languages and the majority of the population being multilingual, questions about the impact of language diversity on educational outcomes are especially important in South Africa.

Despite evidence that children learn best when instructed in their home language, 89.7% of the parents surveyed expressed a preference for their children to read in English. This preference remained consistent across various home languages. For instance, in KZN, where isiZulu is predominantly spoken as the first language, parents still indicated a preference for English reading materials for their children. Parents justify this preference by highlighting English as a universal language offering future employment prospects, whereas isiZulu may not provide similar opportunities.

EdTech companies specialising in multilingual ECD reading and literacy could enhance their sales strategies by integrating this aspect and recognising the need to educate the market accordingly.

TABLE 2Parents' preference for printed vs electronic readingmaterial for their children

LANGUAGE	PARENTS (N=145)
isiZulu	20.7%
English	89.7%
Other South African languages	8.3%

*Note: Respondents were able to select more than one language, with the percentage calculated from the total number of parents, n=145.



Through the exploration of two case studies, we delve into the essential question:

HOW CAN WE DEVELOP EDTECH SOLUTIONS THAT ACCOUNT FOR THE CONTEXTUAL PRECONDITIONS WITHIN BOTH THE CLASSROOM AND HOME ENVIRONMENTS, THUS FACILITATING THEIR SUCCESSFUL INTEGRATION AND MEANINGFUL IMPACT?

From this, five key findings are extrapolated.

- 1. In the realm of educational products, including EdTech, the purchaser and ultimate beneficiary often differ. This is especially noticeable in products aimed at Early Childhood Development (ECD) or school-aged learners. While ensuring effective learning design is essential, sales strategies can significantly benefit from addressing the concerns of the buyer.
- 2. The market for educational goods and services frequently demonstrates a high degree of cost sensitivity, as seen in the preferences for coding and robotics-focused EdTech solutions in schools. However, not all EdTech companies can base their entire sales strategy on this concern. Therefore, it's crucial to explore other issues, for example, the time and capacity constraints faced by teachers.
- 3. The key to achieving business sustainability and growth often lies in retaining buyers. Buyer satisfaction with a product begins with the sales process, as evidenced by ICT teachers expressing higher satisfaction with ICT products when both they and the school administration were involved in the purchase. EdTech solutions can benefit from collecting user feedback to improve not only the product but also the sales/ onboarding process.
- 4. Pedagogical best practices may not always align with market preferences, as shown by parents preferring their children to read in English rather than their home language. It's crucial for EdTech solutions to identify such discrepancies and integrate educational market strategies targeted at buyers.
- 5. Buyers have diverse views on technology and its integration into education, with parents, for example, preferring physical children's books over digital ones. Thorough market research and the creation of user personas can help understand these preferences and, when appropriate, incorporate them into product design.

Teachers and parents are undoubtedly pivotal in enabling children's access to EdTech solutions. They serve as essential intermediaries, guiding and supporting children in their educational journeys. Founders must prioritise involving teachers and parents in the design and development of EdTech solutions through an iterative process that involves collecting data (insights) and continuously refining their solutions based on feedback.

However, beyond these primary stakeholders, other key players significantly influence the success of EdTech initiatives. Among these is the government, whose policies and initiatives shape the educational landscape and infrastructure. In the next chapter, we shift focus to other stakeholders and institutions that supply vital inputs into the ecosystem.

Ghosted by Government? EdTech's Failure to Land Partnerships for the Future

Governments play a pivotal role in shaping education, setting standards, and ensuring access and equity. There is an opportunity for governments to establish the foundations for a more resilient and dynamic education ecosystem overall.

As a prime example, the Rwandan Ministry of Education is actively crafting a new policy framework to bolster the growth of the EdTech industry within Rwanda. This initiative involves proactive engagement with tech hubs to gain deeper insights into the ecosystem and collaborating with funders, foundations, and other organisations dedicated to education, thereby streamlining the flow of resources into the ecosystem (Laterite, 2023).

Additionally, governments service the majority of learners. The latest statistics on education show that nearly 98% of learners in South Africa are enrolled in public schools (Hall, 2023). Thus, to effectively impact South Africa at scale, EdTech solution providers need to consider the challenges and perspectives of the government and secure their support. Key role players within the government have echoed this sentiment. The South African Minister of Basic Education, Mrs Angie Motshekga, emphasised the importance of collaboration between education stakeholders and the government in improving quality teaching and learning in schools (Department of Basic Education, 2021). It is also well understood within the government that technology needs to be integrated into South African schools to enhance teaching and learning outcomes. This is reflected in the White Paper on e-Education of 2004, otherwise known as the Education White Paper 7.

Despite apparent mutual understanding and recognition of the need for collaboration and innovative solutions, South African EdTech companies have frequently encountered significant challenges in engaging with government representatives and, consequently, public schools.

Government stakeholders have been slow to adapt to rapid technological advancements, leading to a misalignment between the government and EdTech stakeholders. As of 2024, many of the goals outlined in Education White Paper 7 have not been achieved (Department of Basic Education, 2023). For example, it is the primary objective stated in Chapter 2 (22) of the White Paper that "Every South African learner in the general and further education and training bands will be ICT capable (that is, use ICT confidently and creatively to help develop the skills and knowledge they need to achieve personal goals and to be full participants in the global community) by 2013." (Department of Education, 2004).

In recognising progress, it's important to note that in the past year, the Department of Basic Education (DBE) has collaborated with education sector stakeholders to establish digital guidelines for teaching and learning in South African schools. This project aims to operationalise and administer the guidelines from the Education White Paper 7.

The Education White Paper 7, along with its strategy document, was formulated in 2004 and remains the most recent policy on this topic developed by the DBE. Twenty years later, this policy is outdated, as the focus on technology skills has progressed beyond basic ICT or computer proficiency to include a broader array of technological advancements.

To achieve alignment, the government needs to redefine e-education to incorporate innovative educational solutions such as EdTech, Artificial Intelligence (AI), coding, and robotics. In doing so, the government must follow a collaborative approach, by engaging with the stakeholders that design and build EdTech products. Neglecting this interaction will likely further perpetuate the misalignment between market dynamics and policy. PLEASE READ MORE ABOUT THESE DIGITAL STANDARDS

> TO ACHIEVE ALIGNMENT, THE GOVERNMENT NEEDS TO REDEFINE E-EDUCATION TO INCORPORATE INNOVATIVE EDUCATIONAL SOLUTIONS SUCH AS EDTECH, ARTIFICIAL INTELLIGENCE (AI), CODING, AND ROBOTICS."

Data Collection and Methodology

In October 2023, Injini hosted a two-part government engagement session in the form of a breakfast forum and panel discussion focused on "Multi-stakeholder partnerships for enhancing education outcomes". These sessions were attended by 14 delegates from across the education sector, including representatives from various institutions such as the Department of Basic Education (DBE), the Western Cape Education Department (WCED), Wesgro (the official Trade, tourism and investment agency for the Western Cape), the World Bank, Mastercard Foundation, and other EdTech representatives.

The objective of this engagement session was to:

- Foster a dialogue between the South African government and education innovation stakeholders,
- Empower key government stakeholders with essential tools and insights for propelling the adoption of EdTech tools and,
- 3. Drive effective multi-stakeholder partnerships across the education ecosystem.

The following is a summary of the key points and insights gathered from this discussion.



Does EdTech Need a Reality Check?

While there is potential for the government to revise its policies to better align with market realities, EdTech stakeholders and companies also play a crucial role in bridging the gap between the two entities.

EdTech stakeholders and companies often feel that the government lacks an understanding of the digital sector, while government representatives believe that digital innovators lack an understanding of educational strategies and policies. This disconnect was evident during Injini's engagement sessions, highlighting the need for improved understanding between the two parties.

In addition to this misalignment, government stakeholders express scepticism towards technology in education, citing valid concerns. It is recognised that, due to the sector being nascent, there have been cases where the government, and by extension public schools, have invested in EdTech products that ultimately failed to scale. This development has caused some hesitation within the government regarding further investment in EdTech solutions.

The DBE further cited other challenges and limitations that hinder the implementation of innovation and technology-driven solutions in public schools. These issues can be categorised into two main themes; resource allocation and accessibility.

Resource Allocation



DEPARTMENTAL PRIORITIES

The DBE is required to address fundamental barriers that limit access to education, such as food insecurity and transport, in addition to its educational priorities. This diverts resources, time, and capacity from education innovation, as addressing more basic needs takes precedence.



GOVERNMENT SPENDING

Provincial Education Departments (PEDs) face challenges in addressing educational gaps due to the ongoing reallocation of funds, particularly at the national level. Funds are often redirected from critical areas like education and health to other priorities, exacerbating resource shortages.



SEMIGRATION

The domestic migration between rural and urban areas, or between provinces, leads to demographic and demand shifts. This complicates strategic planning and the distribution of educational resources in schools and various regions.

Accessibility



Inadequate access to ICT infrastructure creates a digital divide that disproportionately affects schools in low-income communities, limiting their access to EdTech and digital solutions.



Equipping educators with the skills and knowledge

needed to integrate EdTech into their teaching practices is crucial for enhancing digital literacy and improving pedagogical approaches.



LANGUAGE BARRIERS

In schools where English is not the primary language of instruction, language barriers limit access to and the use of digital content. Customising digital resources to accommodate various South African languages is essential for promoting inclusivity and improving learning outcomes through technology.



RISING COSTS OF LIVING AND OTHER SOCIO-ECONOMIC FACTORS

Rising costs and socio-economic factors directly impact South African families ability to invest in education. The prioritisation of essential resources over educational expenses, including technology, disproportionately affects poorer households. Targeted interventions are necessary to alleviate financial strain on low-income families.

CC DEVELOPING SUCCESSFUL GOVERNMENT PARTNERSHIPS WILL REQUIRE THE EDTECH SECTOR TO CREATE INNOVATIVE SOLUTIONS THAT ARE RELEVANT, FIT FOR PURPOSE, AND **RELIABLE AT SCALE.**





The aovernment requires solutions that seamlessly integrate with and improve its current systems and processes. These solutions also need to have the ability to be implemented at scale. Solutions that fail to align with these parameters are unlikely to succeed in public schools. However, many business leaders in the EdTech sector express dissatisfaction with the status quo and a desire for change. yet they often hesitate to engage with the government on its terms. Ultimately, this attitude is counterproductive.

- South African EdTech products face difficulties in reaching and engaging with public schools, which represent the largest segment of the South African market. Developing effective strategies to penetrate and serve this market is essential for both business sustainability and maximising impact.
- 2. In South Africa, there is a lack of alignment between the government and EdTech stakeholders. The government maintains an outdated perspective on technology's role in education, as evidenced by its last policy draft in 2004. Conversely, EdTech stakeholders often lack a comprehensive understanding of government educational strategies and policies, as perceived by government officials.
- 3. Both the government and EdTech stakeholders feel they lack sufficient information and data about each other. This information gap likely contributes to the existing misalignment between the two groups. There is a shared need, advocated by both parties, to establish mechanisms that facilitate the effective sharing of information and data.
- 4. The government faces various challenges that lead to scepticism regarding the role of technology in education, stemming from financial constraints and accessibility issues. EdTech solutions must understand and address these obstacles to effectively engage with public schools.

C UNDERSTANDING THE INTENTIONS OF ALL STAKEHOLDERS IS CRITICAL AND CAN MAKE OPERATING IN THIS COMPLEX SYSTEM LESS FRUSTRATING.

To bridge the gap in understanding, EdTech companies are encouraged to familiarise themselves with educational strategies and policies, which can be found on the DBE's website, and engage with district leaders, thereby ensuring alignment with government objectives aimed at broader educational aims. Similarly, crafting solutions that directly address the government's identified areas for development, such as language barriers and the need for scalable solutions, is essential. In cases where solutions fall outside of these government objectives, EdTech companies should be prepared to provide evidence that speaks to the solution working and the need for such a solution at scale.

While EdTech leaders often view government systems as bureaucratic obstacles, these processes serve a purpose. Those within the EdTech industry need to understand the challenges the government faces, as the DBE is responsible for educating over 13 million learners. Procurement processes are designed to safeguard these learners and ensure accountability for how funds are allocated. While reality may not always align with these intentions, understanding them can alleviate some frustration when operating within this complex system.

Ultimately, most individuals have good intentions and strive for the success of our learners. This sentiment extends to bureaucrats, even when their actions may not always seem aligned with this goal.

Preparing for Growth. Not All Investment

is a Match for EdTech In this final exploration of the education ecosystem's interdependencies, we delve into the intricate relationship between EdTech ventures and the private and civil sectors, particularly regarding capital and investment.

Venture capital (VC) has been a crucial driver in the growth and scalability of numerous technology enterprises, attracting substantial financial investment, coupled with mentorship and strategic guidance. This has made it a desirable funding option among founders, including those in the EdTech sector.

Aligning VC expectations with the inherent qualities of the EdTech sector often proves challenging. The key areas of misalignment include VC's preference for rapid growth and quick exits, the complexity of developing scalable EdTech business models, and the necessity for EdTech ventures to demonstrate efficacy.

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Data Collection and Methodology

Injini's EdTech Fellowship Program, delivered in partnership with Mastercard Foundation, is a six-month, equity-free, hybrid venture support program that takes a partnership approach to business acceleration. A core pillar of this program is to improve financial sustainability, including investment readiness support, where appropriate. Twelve companies (also referred to as "Fellows") were onboarded to the program in 2023, and Injini has the intention of onboarding a further 24 Fellows by the end of 2025.

Throughout the program's duration in 2023, the Injini team facilitated 15 introductions to investors and funders, resulting in three fellows successfully securing a total of R10 million (or around \$528,000) in funding.

This chapter serves as a synthesis of the insights gathered via interviews, focus groups, and one-on-one feedback sessions from investors, funders, and EdTech entrepreneurs. The challenge for African-based EdTech companies is further exacerbated by the fact that Africa attracts less than 1% of global VC, creating a highly competitive funding landscape on the continent. This competition was intensified by a global "funding winter," attributed to macroeconomic headwinds such as high interest rates, currency devaluation, and inflation, resulting in a notable reduction in investment activity. In 2023, Africa's venture capital equity funding dropped to \$2.3 billion, marking a 54% decrease from the year before (Partech, 2023). EdTech was particularly affected, securing merely 1% (\$27 million) of the total investments.

EdTech companies are often frustrated by the challenges they face in securing investments and can become disheartened by repeated failure. However, success for EdTech requires a keen awareness of what VCs are looking for, and if they are unable to meet these needs – looking for alternative funding options.



DECREASE FROM THE YEAR BEFORE

OF THE TOTAL INVESTMENTS

BUSINESS CASE ONE

REFLECTIVE LEARNING

Eugene Pelteret, Co-Founder

Reflective Learning's catch-up programme addresses learning gaps, particularly in Mathematics and English (reading for meaning), using sophisticated diagnostics to pinpoint specific learning gaps, trace their origins, and guide learners through a personalised path to mastery.

Since its inception in 2017, Reflective Learning initially relied on funding from another technology company. However, the concept of "catch-up learning" didn't seem to appeal to the foundations, grants, and impact investors they approached, forcing them to turn to venture capitalists for support in further growth.

It was a little bit hard to communicate what we're trying to achieve, and perhaps the agendas weren't matching ... There were many places we went, but because education is also a very long game, there are not very many VCs that will take a [gamble], knowing that it's going to take many years to see a return."

So we were lucky to be meeting with a group of people, who at that time took a [gamble] on us. We were very fortunate because they were long-term thinkers. They believed in what we were doing and saw the potential for what we could do. But let's just say that it wasn't easy back in that time"

- EUGENE PELTERET

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Scaling Challenges in a Sector with Moderate Growth

VCs are drawn to investments that promise rapid growth and swift exits, aiming for substantial returns within a 7 to 10-year horizon through public offerings (IPOs) or acquisitions. The FinTech sector epitomises this, with a projected Compound Annual Growth Rate (CAGR) of 23.58% from 2021 to 2025 (Research and Markets, 2020). Such a significant CAGR reflects not only broad sector growth but also strong market adoption and the capacity for individual companies within the sector to rapidly increase their value.

In contrast, the EdTech sector, while growing steadily, presents a different picture. With a CAGR of 16% from 2021 to 2025 (HolonIQ, 2020), it indicates lower sector-wide growth and also suggests potential challenges for the rapid growth of individual companies. This more moderate rate of expansion also reflects the inherent challenges of the EdTech market, including longer sales cycles, significant content development requirements, and the complexity of achieving widespread adoption.

Such factors often impact the speed at which EdTech companies can scale and achieve the valuation milestones that make them attractive for acquisitions.



PROJECTED COMPOUND ANNUAL GROWTH RATE (CAGR) OF THE FINTECH SECTOR (Research and Markets, 2020)





INSTILL EDUCATION

Tom Parry, Director of Development and Alim Ladha, Founder and CEO

Instill Education is focused on tackling the shortage of qualified teachers and school leaders, and the need for their ongoing professional development. Instill's mission centres on bridging these gaps through accredited higher education, digital upskilling platforms, and micro-credentialing programs. These initiatives aim to enhance the quality of teaching, thereby improving educational outcomes for students across the continent.

Instill has reached over 70,000 teachers. predominantly in Ghana and Kenya, but with growing numbers in South Africa and Nigeria. In their 9 years of existence, the Instill team pointed to several lessons in finding success in fundraising.

Firstly, identify the right funder, and understand that not all funders are right for you.

L At the start of the process, the brief strateav we had drawn up auickly went out of the window. Investors and donors don't care about your fundraising strategy; they care about whether you fit within their mandate and their funding timelines. Most of the time, the answer to that question is no.

We have sent thousands of emails, have taken (high) hundreds of calls, and lost count of the number of rejections a very long time ago. Over time, we whittled down our list to those who seemed genuinely interested in us, and on very rare occasions they gave us money. I should add that we've never been in a position where we were offered money by someone who wasn't mission and values aligned.

But ... before getting to alignment on vision and mission, the biggest challenge was to get that first investor to believe in us. In this instance, we owe our existence to Optimizer Foundation for that first. crucial investment. Once one investor came in. others followed. Finding that first investor can be brutal, but it's an essential first step. They will help you find more investors once they're convinced to invest themselves."

Secondly, EdTech businesses should mentally prepare for long timelines that span over 12–24 months. Over these long timelines, it is critical to preserve and maintain these relationships.

The second [challenge] is to align with [the funder's or investor's] timelines. If investors are still raisina money, have closed a fund, or are simply re-strategising (which we've been told many times), then the alianment ages out the window - they still won't give you money. When we started engaging with Goodwell Investments, they didn't invest in education. We scheduled sporadic updates over the course of 2 years, providing them numbers and insights. but never believing they'd invest. It turns out we were wrong. We were their first education investment, and they are by some margin our largest investor. Our lesson coming out of this; persevere. Send out regular, targeted investor updates. Keep as many people warm as you can, whilst (of course) keeping your other priorities moving forward."

Thirdly, the Instill team recognises the importance of getting your foot in the door. Even if a lead may not seem worth the time initially, these relationships can still be hugely valuable.

The final challenge in identifying aligned investors hinges around the cliche, "You miss 100% of the shots you don't take." We applied for the Mastercard Foundation EdTech Fellowship in 2019. They were offering \$40,000 to the winners. In all honesty, we didn't believe the amount was worth the time to complete the application. It takes the same time to apply for \$40k, or \$1m. We were a very small team working from a founder's home office, with barely enough (money) in the bank to pay ourselves.

However, we took the long view. Mastercard Foundation is the biggest donor on the continent. and we needed a foot in the door. A month after being accepted to the Mastercard Foundation accelerator, COVID hit, causing us to transform our entire delivery model. Mastercard Foundation was willing to fund our biggest and craziest ideas, and the past 4 years have seen us achieve things we didn't believe possible. Our lesson here is that values-alianed donors are worth building relationships with. These relationships take time. Take the small money early on, and build a reputation and relationship so you can ask for bigger money further down the line."

- TOM PARRY AND ALIM LADHA

Navigating the EdTech Scalability Maze

One of the key challenges facing EdTech ventures is the creation of scalable business models that can achieve exponential revenue growth without a corresponding increase in operational costs. Several hurdles impede this scalability:

- Customer segmentation: The largest customer segment in South Africa, public government-funded schools, presents a significant scalability barrier. These schools operate under strict budget constraints and lengthy procurement cycles. EdTech founders often pivot to targeting private institutions as an alternative, but this narrows the market size and limits growth potential.
- High diversity in education systems: The EdTech market requires tailored solutions to accommodate diverse educational systems and must comply with stringent regulatory environments across regions. This combined with mandates governing curriculum standards and student data privacy hinders market penetration and expansion. These challenges are further compounded by the need for content to remain relevant, engaging, and pedagogically sound, requiring continuous investment, and leading to higher product development and adaptation costs.
- Slow customer acquisition cycles and ۲ retention: EdTech companies need to integrate their solutions into educational workflows seamlessly, demonstrating clear value to institutions, schools, and educators. This integration often involves navigating extended decision-making and procurement processes, delaying revenue growth and enhancing scalability challenges.

These hurdles often prevent EdTech companies from achieving the level of success necessary to attract venture capital. Balancing development and operational costs while meeting the specific needs of a diverse educational landscape proves challenging, resulting in many startups finding it difficult to secure the investment needed to sustain and grow their operations.





BUSINESS CASE THREE

RESOLUTE EDUCATION *Rajesh Pasungili, CEO and Founder*

Resolute Education offers reusable robotic kits purchased by schools, replenished annually, alongside annual subscriptions to an online learning management system. This system includes a comprehensive video database, quizzes, e-books, and new courses. To ensure successful integration into the classroom, Resolute Education provides training programmes designed to upskill educators, demystify the Fourth Industrial Revolution (4IR) tech-based movement, and empower teachers to confidently lead their classes.

Resolute Education's investment journey began with angel investors, who later introduced them to venture capitalists, informing their initial investment strategies.

A significant challenge faced by Resolute Education was understanding the market dynamics specific to South Africa.

One significant challenge I faced was grasping the market dynamics specific to South Africa, especially in comparison to the EdTech sectors in larger markets like America and India, where EdTech has flourished post-COVID. These markets witnessed exponential growth and surges in valuations, setting unrealistic expectations for similar South African companies due to the different market sizes.

To tackle this, it was crucial to conduct thorough market research to align our expectations and strategies with the realities of the South African EdTech landscape. This involved focusing on our unique value proposition and leveraging local insights to tailor our approach, rather than attempting to replicate models from larger markets directly. Another challenge involved demonstrating to VCs the potential for exponential growth and scalability across borders. While having a strong presence in the home country is beneficial, proving our ability to expand internationally and convert schools in new markets posed a substantial hurdle.

We refined our international expansion strategy by developing a clear, actionable go-to-market plan. This included detailed analysis and selection of target markets based on similarities to our home market, building partnerships with local entities, and creating a focused marketing strategy to enhance school conversions and retention abroad."

EdTech solutions that include a hardware component, like Resolute Education, can face challenges in convincing venture capitalists of the scalability and financial viability of their products due to the additional complexities of inventory management, cost, and supply chain logistics.

We addressed this by forming strategic partnerships with hardware manufacturers and logistics providers. These partnerships allowed us to offload the complexities of hardware supply chain management and distribution, enabling us to present a more scalable and financially viable model to potential investors. By sharing revenue or costs with these partners, we mitigated the financial burden and logistical challenges, making our hardware offering more attractive to VCs."

- RAJESH PASUNGILI

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Proving Efficacy in EdTech Ventures

The necessity for EdTech ventures to demonstrate efficacy is an additional factor that complicates their ability to attract venture capital investment. This requirement stems from the distinctive characteristic of the EdTech sector, where there is often a notable disconnect between the end-user (i.e., students and teachers) and the purchaser (i.e., educational institutions or governments).

This gap can obscure the visibility of a product's effectiveness, leading to delays in recognising quality solutions and the risk of subpar products becoming entrenched through prolonged software review cycles.

Thus, unlike other tech sectors where demonstrating a strong product-market fit could straightforwardly signal potential demand and scalability, EdTech ventures must navigate the added complexity of proving their solutions' educational impact in a quantifiable manner.

The challenge is that measuring EdTech efficacy typically requires conducting expensive, resource-intensive research projects without standardised, universally accepted metrics for success. This challenge is not specific to Africa. The Brookings Centre for Universal Education's global catalogue featured 1,640 EdTech solutions from around the world and only 11% had been externally evaluated (Vegas et al., 2019).

However, the lack of clear efficacy indicators makes it challenging for investors to gauge the potential for product adoption and effectiveness, thereby introducing a further level of risk and uncertainty that many venture capitalists are hesitant to take on.

BUSINESS CASE ONE

REFLECTIVE LEARNING *Eugene Pelteret, Co-Founder*

Being able to implement and see the tangible impact is important in the educational space. Without tangible, measurable impact, or customers that are willing to share their positive experience, the investor can't see if there is any tangible value felt by the customer. So that becomes a very important milestone for securing investment.

For us, there have been specific schools along the way that have been important in our journey. These schools have implemented Reflective Learning well and have gotten tangible outcomes from the product that shows we can achieve what we set out to. It provided a nod of understanding from a customer and market perspective that our product is something that is going to meet their needs."

THE BROOKINGS CENTRE FOR UNIVERSAL EDUCATION'S GLOBAL CATALOGUE FEATURED



FROM AROUND THE WORLD AND ONLY



HAD BEEN EXTERNALLY EVALUATED (Vegas et al., 2019)





Beyond Silicon Dreams: Financing EdTech's Future

While securing venture capital for EdTech ventures presents challenges, it remains achievable. However, the unique hurdles EdTech startups encounter suggest the need to explore a wider array of funding avenues outside of VC. This exploration is vital for developing tailored funding strategies that not only deliver essential capital but also align with the mission of advancing educational innovation and social impact.

Here, we briefly consider two successful investment strategies for EdTech companies that directly alleviate some of the misalignment issues between VC and EdTech discussed earlier.

RESOLUTE EDUCATION Rajesh Pasunaili, CEO and Founder

BUSINESS CASE THREE

K Continued from page 30

On reflection of their investment journey, Rajesh Pasungili advocates for seeking investment beyond VC and identifying the right partnerships.

[At first] we believed venture capital was our only avenue for raising funds, It was only last year that we began exploring alternative financing methods, thanks to the [EdTech Fellowship Program].

It's crucial to understand that venture capital is among the most costly forms of capital. Therefore, ensuring that the capital raised will be allocated towards assets that will significantly enhance the company's revenue and valuation is vital.

One of the most critical insights from our fundraising journey is the array of steps a company can take before seeking external funding ... When founders look to initiate fundraising for their startup, my advice is first to explore all possible non-equity-based funding such as applying for grants, considering revenue-based financing, utilising bank loans, or overdraft facilities. Maximising these resources can significantly reduce the need for immediate venture capital, preserving equity and ownership.

Staying true to your startup's goals is paramount. If investor demands deviate from your mission, the potential funding might not be worth the compromise. Maintain your "true North," and focus on finding a VC whose values and vision align with yours. The right investor will believe in your vision and support your journey with more than just capital." Firstly, with traditional VC, social outcomes are often viewed as being distinct from financial returns. Yet, there is a growing emergence of financial instruments that integrate both social and financial considerations. Unlike VC, these investment options are less likely to struggle with the EdTech sector's slower growth and scalability challenges as the social outcomes are costed into its returns. In practice that can take different forms, either being costed into the investment by the investors themselves or by a secondary party or body, as is the case for Impact First Private Capital and Social Impact Bonds respectively.

Secondly, another method that EdTech companies have found success with is blended financing, which merges philanthropic funds and private investment. By strategically utilising philanthropic funds to mitigate early-stage risks and prove the concept, this approach effectively lowers the investment threshold for private investors. This reduction in perceived risk encourages more capital flow into ventures, such as EdTech, that might otherwise be deemed too risky or unconventional for traditional funding mechanisms. This method not only supports the initial development and scaling of innovative educational solutions but also demonstrates their viability and impact potential to attract further investment. Organisations engaging in blended finance, like the Global Innovation Fund and Convergence, demonstrate the potential of this model to unlock new opportunities for growth and impact in the EdTech sector, ensuring that financial resources are channelled towards initiatives with the power to transform education landscapes globally.

Impact First Private Capital: In the EdTech sector, Impact First Private Capital supports ventures that broaden educational access, improve equity, and enhance the quality of education. By aligning capital with these startups' core missions, impact venture capital, angel investors, and general impact funds ensure that financial investments also advance wider societal objectives. This alignment of profit and purpose enables investors to contribute meaningfully to educational advancement while achieving viable financial gains.

Social Impact Bonds (SIBs): These are an innovative subset of financing models where private investors provide upfront capital to NGOs tasked with delivering social welfare services. Unlike Impact First Private Capital, SIBs have third-party entities, such as governments, that adjust for and record social impact into the return. The distinctiveness of SIBs lies in their performancebased approach: investors are repaid by government entities, and potentially supplemented by private actors such as donors or philanthropic foundations, only if the NGOs achieve predefined outcomes, like successfully placing job-seekers into employment. This model effectively transfers the risk of service failure from the providers to the investors, distinguishing SIBs from other models where risk is retained by service providers or beneficiaries. Success, or lack thereof, is rigorously verified by independent auditors, ensuring that payments are made only for verified outcomes. In instances where outcome funders are donor agencies or development banks, these arrangements are termed Development Impact Bonds. Interestingly, complete failure is rare; more often, payments to investors are made in proportion to the degree of success achieved, underscoring the SIB's flexibility. By bridging private investment with public welfare goals, SIBs pave the way for more accountable, efficient, and outcome-focused social service delivery, promoting a strategic collaboration across high-impact sectors like EdTech to tackle societal challenges effectively.

For a comprehensive overview of the full spectrum of alternative funding options for EdTech solutions. REFER TO PAGE 35



Conclusion

EdTech has often struggled to attract and secure funding, a process that can be frustrating and disheartening for founders who believe in their products' potential to positively impact the education landscape.

One core reason behind this struggle is that EdTech's unique characteristics often clash with traditional VC expectations and needs. Success for EdTech companies will require understanding these investors' expectations and critically reflecting on whether they are a suitable match. While success can be found with VC, other investment types, such as Impact First Private Capital, Social Impact Bonds and blended financing, are often better structured for EdTech.

EdTech startups more often than not find success by remaining faithful to their objectives above all else. If investor expectations diverge from this mission, the funding they offer might not justify the deviation. The ideal investor should share the EdTech company's vision and provide more than just financial backing to nurture its venture.

σ^{O} KEY FINDINGS

- African-based EdTech companies face specific challenges in securing investment, with Africa receiving less than 1% of global venture capital. EdTech companies capture only a fraction of this capital compared to sectors like FinTech and CleanTech.
- 2. The EdTech sector frequently grapples with a misalignment between venture capitalists' needs for growth and scale versus the inherent characteristics of EdTech ventures. Factors such as slow customer acquisition cycles and differences in education landscapes, which make content development more costly, can hinder scalability. EdTech service providers that cannot provide robust evidence of significant scale may find it more beneficial to seek out other forms of capital.
- 3. Unlike many other sectors, EdTech has a notable disconnect between the end-user (i.e., students and teachers) and the purchaser (i.e., educational institutions or governments). Without clear, robust efficacy indicators, this disconnect can introduce a level of risk that many VCs are hesitant to take on.
- **4.** Other forms of capital, including grants and revenue-based financing, are often better suited to EdTech startups.

EDTECH STARTUPS MORE OFTEN THAN NOT FIND SUCCESS BY REMAINING FAITHFUL TO THEIR OBJECTIVES ABOVE ALL ELSE.

Alternative Funding Options for EdTech Solutions

FUNDING TYPE	DESCRIPTION	PROS	CONS
ANGEL INVESTORS	High-net-worth individuals investing personal funds.	Valuable expertise and networks.	Dilutive; varying expectations.
BOOTSTRAPPING	Self-funding the startup through personal savings and revenue.	Full control and ownership.	Limited by available personal resources.
CONVERTIBLE DEBT	A form of financing that converts into equity at a future financing round or event under specified conditions.	Less initial financial burden.	Eventually dilutive.
CONVERTIBLE GRANTS	Grants that convert into equity or a loan upon reaching certain milestones.	Initially non-dilutive.	Potentially dilutive or repayable.
CROWDFUNDING	Raising small amounts of money from a large number of people, typically via the Internet.	Broadens access to funds; market validation.	Time-consuming and not always successful.
DEBT	Traditional loans must be repaid over time with interest.	Predictable terms; retain equity.	Interest payments; may require collateral.
EQUITY CROWDFUNDING	Sale of company ownership to a large group of individuals.	Broad investor base, marketing benefits.	Dilutive, regulatory considerations.
FORGIVABLE LOANS	Loans that may be forgiven based on meeting certain criteria are often related to achieving specific social goals.	Potentially convertible to grants.	Conditions for forgiveness.
GRANTS	Non-repayable funds from governments, foundations, or corporations.	Non-dilutive.	Competitive and restrictive.
IMPACT INVESTMENTS	Investments are made to generate positive, measurable social and environmental impact alongside a financial return.	Aligns with EdTech's mission; potential for support beyond the capital.	Requires demonstrating measurable impact; potentially longer due diligence.
INCUBATORS/ ACCELERATORS	Programmes offering funding, mentorship, and resources to early-stage startups.	Access to networks and growth support.	Highly competitive; may require equity.
LOANS	Traditional loans from banks or financial institutions.	Immediate capital access.	Requires repayment with interest.
MEZZANINE FINANCING	A hybrid of debt and equity financing that gives the lender the right to convert to an ownership or equity interest.	Flexible financing option; less dilutive.	Expensive; potentially dilutive.
RECOVERABLE GRANTS	Grants that are expected to be repaid only under certain conditions.	Low-risk funding.	Repayment obligations under conditions.
REVENUE-BASED FINANCING	Financing where repayment is tied to future revenues, making the repayments variable based on income.	Flexible repayment terms.	Can take a significant revenue share.
SOCIAL IMPACT BONDS	A contract with the public sector or governing authority, where a commitment is made to pay for improved social outcomes that result in public sector savings.	Focus on measurable social impact.	Complex to structure; outcome-dependent.
TAX INCENTIVES	Government incentives for startups, such as tax credits and deductions, are aimed at fostering innovation and growth.	Financial benefits to reduce operational costs.	Eligibility and application processes can be complex.
VENTURE DEBT	Loans are provided to venture-backed companies, often in the growth stage.	Non-dilutive; flexible compared to equity.	Requires venture backing; and repayment obligations.

Chapter Four

Conclusion

As discussed in this report, the success of EdTech ventures depends not only on their product design and implementation but also on their ability to recognise other stakeholders' diverse needs and motivations. These include educators, parents, government, investors, and funders, who play a key role in their product and business success. While this analysis does not encompass all interdependencies within the EdTech landscape, it has concentrated on areas where many EdTech companies have expressed frustration.

By examining the misalignments between EdTech and other stakeholders in the education ecosystem, this report aims to shed light on some prevalent challenges and potential solutions. These misalignments can be addressed and mitigated through proactive measures such as fostering collaboration, promoting transparency, and prioritising user-centric design.

In essence, by embracing the intricate interplay of relationships and dependencies within the EdTech landscape, businesses can position themselves to better serve the educational community, ultimately contributing to meaningful advancements in learning outcomes and educational equity.

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