



Research Dissertation

Towards an inclusive Higher Education curriculum for South African eCommerce entrepreneurs

Masters in Education (Higher Education)

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Signature:

Date: 10 June 2025

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ABSTRACT

This study investigated the development of an inclusive curriculum for eCommerce entrepreneurship in South Africa. The main research question posed in this study was ‘How can an inclusive curriculum be developed to support the development of eCommerce entrepreneurs in South Africa?’ The research question was broken down into three sub-questions addressing three domains, namely empirical, actual and real in the context of a South African eCommerce entrepreneurship curriculum, in line with a postcolonial critical realism theory as a theoretical framework.

The study sought to identify the development principles associated with a curriculum based on the skills and competencies required by eCommerce entrepreneurs within the context of conducting online business in South Africa that allowed them to not only fully comprehend the markets they operate in, but to also thrive within these markets and adjust to evolving circumstances. This required the exploration of the attributes needed for successful eCommerce entrepreneurs within the context in which the entrepreneur exists which then informs the curriculum development process required to develop a curriculum that addresses the needs of up-and-coming eCommerce entrepreneurs in the country.

Subject-matter experts in eCommerce entrepreneurship involved with curriculum development and the eCommerce industry were interviewed to analyse the requirements for an inclusive eCommerce entrepreneurship curriculum in South Africa. A thematic analysis was conducted to extract the main themes arising from the interviews. These were aligned with a conceptualised theory incorporating postcolonial critical realism which was used as the theoretical framework to interrogate the phenomenon. The themes were then analysed to derive design principles. By integrating these principles, the curriculum design for eCommerce entrepreneurship in South Africa can be both transformative and responsive to the needs and realities of a postcolonial society, leveraging education as a tool for empowerment and social change.

The findings of this study are aimed at informing curriculum development across South African Higher Education institutions, both in the public and private sectors, which could positively impact on both higher education policy in allocation of budget to appropriate areas of development and economic development in both the short and long terms.

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1. Chapter 1 – Background and Context

1.1. Title

The title for my study is:

Towards an inclusive Higher Education curriculum for South African eCommerce entrepreneurs

1.2. Socio-economic Context

Across the globe, entrepreneurs have been ear-marked by the private sector and governments alike as the panacea to drive a growing economy. This has been attributed mainly to them being perceived across private and public sectors as possessing the capabilities to both create jobs as well as contribute to socio-economic development (Yeh et al., 2021). But in order to drive socio-economic growth within a country the related impacting structural factors such as connectivity and funding need to be accessible and reliable. This has become even more prevalent with the advent of eCommerce thanks to the global reach that the internet has made available. But even if these structural factors are in place, a key missing component is the appropriate level of skills development required to see economic benefit. In South Africa, the push towards entrepreneurship, and specifically eCommerce entrepreneurship, as a means to economic growth has highlighted the significant challenges rooted in educational inequalities, specifically within the realms of both schooling and higher education.

Post-apartheid South Africa inherited a deeply fragmented education system characterised by significant disparities. Despite efforts to redress these inequalities, structural barriers persist, particularly in higher education. Jansen and Taylor (2023) highlight the pervasive impact of apartheid-era policies on contemporary education, noting that schools in predominantly ethnically black areas continue to suffer from inadequate resources and poor infrastructure. This disparity extends into higher education, where black students often face substantial hurdles in accessing and succeeding within tertiary institutions. According to Spaul (2015) research underscores the deep-seated inequalities within the schooling system, emphasising that early educational deficits in marginalised communities severely limit higher education opportunities. Powell (2012) extends this argument, illustrating how vocational and higher education pathways are often inaccessible to those from disadvantaged backgrounds due to systemic inequities in the schooling system.

Therefore, while it may be possible in developed economies that have the necessary skills development

elements in place to use eCommerce entrepreneurship to spur economic growth, this may not hold as true in developing economies in the Global South, defined as a general reference for decolonised nations that are roughly south of the old colonial centres of power (Haug, 2021). Countries in this grouping include large parts of Africa, South America and the sub-continent, including South Africa with its variety of inequality and educational issues which continue to persist (Mothibe and Sibanda, 2019).

Nevertheless, there is an increasing drive from governments across the world to look towards eCommerce for rapid economic growth as it allows entrepreneurs who were previously restricted thanks to geographical, socio-political and/or economic barriers to now participate in a global market with access to a combination of local and international customers (Giones et al., 2020; Vries, 2021). In South Africa the government has increasingly looked to eCommerce as a pathway to economic development. The digital economy promises to bridge some of the gaps created by historical inequalities by providing broader access to markets. However, this potential is undermined by the same socio-economic and educational inequalities that hinder traditional economic participation. The digital divide, as highlighted by Van Dijk (2020) reflects broader social inequalities, where access to technology and digital literacy is skewed towards urban, affluent, and predominantly ethnically white populations. According to Belshaw (2014), digital literacy tends to be an ambiguous concept that is not neutral in relation to power, social identity and political ideology, and the skills underpinning digital literacies are not learned in isolation but rather developed within a context.

Self-employment through the use of technology, and in particular the concept of 'gig-work', or short stints of work originating from technology platforms such as an Uber driver, has increasingly become more precarious while still being portrayed as preferable to dependence on a broken economic system (Martinez Dy et al., 2018). While entrepreneurship and self-employment are not precisely the same phenomena, in most contemporary cultures with an 'enterprising spirit' ideology, self-employment is portrayed as a significant component. Current entrepreneurial earning data has also been found to be heavily skewed, overrepresented at the highest and lowest points of overall income distribution with the lowest self-employed earners falling into the group earning less than equivalent wage-based work. This in turn is portrayed as holding high emancipatory potential in the context of a deregulated neoliberal economic system (Martinez Dy et al., 2018).

Therefore, the notion of entrepreneurship represented as meritocracy is increasingly argued by critics as being overstated, with the success of new ventures heavily dependent on the resource base available. It is argued that success is driven not only by ingenuity or agency but also in large part by other factors including resource accrual and specifically the access to finance, the ability to develop appropriate networks, extended family and community support, accessibility to markets, access to educational resources and high rates of human capital (Martinez Dy et al., 2018). Entrepreneurship within the digital sphere is seen to bring with it new digital artefacts, platforms and infrastructure used to pursue innovative and entrepreneurial opportunities. This phenomenon has reignited arguments regarding meritocracy and on whether unbounded opportunities through virtual exchanges truly facilitate access within the existing contexts of reduced entry costs and embedded discrimination for underrepresented groups such as women, youth and people of different ethnicities (Martinez Dy et al., 2018).

Post-apartheid South Africa saw a flurry of policy implementations to bring the country into the global economy. Key amongst these was the Reconstruction and Development Plan (RDP), which provided a framework for economic development through a reduction of inequality and the elimination of poverty through amongst others Broad Based Black Economic Empowerment (BBBEE) (Salahuddin et al., 2020). Despite these implementations, poverty remains high with more than half the country's population still living below the upper bound poverty line (Fransman and Yu, 2019). Ngcamu (2002) highlighted that most black entrepreneurs are still stuck in survivalist activities due to persistent high levels of education inequality in the country despite a robust Constitution as well as a significant number of laws and policies aimed at addressing this issue (Badat and Sayed, 2014; Ngcamu, 2002). South Africa policy makers, like many around the globe, have seen the digital economy as the route to eradicating economic inequality in the country, as has been demonstrated by the implementation of a Presidential Fourth Industrial Revolution (4IR) committee (Department of Communications and Digital Technologies, 2020). However, digital inequality is in actuality being reinforced in cases like South Africa where social inequality is already rampant (Van Dijk, 2020).

In fact, the group that has most benefitted economically by increased digital access in the last twenty-five years tended to be the youth, people with high education and high paying occupations, and in most countries mainly males and groups holding the most economic power in the country. These are normally made up of people living in an urban setting and in comparatively more developed surroundings (Van Dijk,

2020). In South Africa's case this group tends to be urban white males, the same demographic that has been and still remains the most active in the entrepreneurial environment (Southafrica-info.com, 2023). In contrast, those that have least benefitted have been the elderly, people with low education and low occupations or unemployed, people with the least economic power who tend to most often be female, and those in rural areas (Van Dijk, 2020). With South Africa's history of enforced inequality based on racial lines, this group tends overwhelmingly to remain ethnically black South African people (Southafrica-info.com, 2023).

The role of education in the development and support of economic growth and in turn entrepreneurship has been increasingly recognised within academia, with a number of Technical and Vocational Education and Training (TVET) and higher education institutions now developing and implementing systems and curricula to promote entrepreneurial competencies and intentions (Dou et al., 2019). But majority of these do not necessarily address the inherent socio-economic issues embedded within South Africa. Questions also arise around whether the South African government's drive to shift to online commercial activity can truly ease resource requirements for sustainable business ventures while simultaneously offsetting discrimination that arises from negative social ascriptions inherent in previously colonised societies such as South Africa, or whether it is merely reassigning responsibility rather than creating true economic development. In particular, issues around equitable structural distribution, resource accrual and mobilisation of resources still exist and hence cannot remove already present impediments nor equate social positions in a developing economy such as South Africa (Martinez Dy et al., 2018).

An inclusive curriculum is commonly defined as one that recognises and accommodates all students, incorporating students that have different experiences and requirements, for example those from lower socio-economic backgrounds, disabled students, and those speaking English as an additional language, and might have specific needs or challenges that need to be overcome (Stentiford and Koutsouris, 2022). However, the very definition of 'inclusive' in higher education is a contested one, as higher education researchers do not share a common understanding of inclusive pedagogies due to differing philosophical stances. This then also needs to be reflected in discussions around inclusive curricula, sometimes going against current performative and market-driven trends which tend to emphasise quick fixes over the acknowledgment of the complexity of pedagogic issues (Stentiford and Koutsouris, 2021).

In order to develop an inclusive eCommerce entrepreneurship curriculum in South Africa, it becomes

essential to consider the empirical (that which can be observed), the actual (the events behind the observable), and the real (the structures on which events are built) elements as seen through the lens of Bhaskar (1978)'s critical realism methodology which is used as the one of the significant components of a framework for critical analysis in this paper, that shape entrepreneurial opportunities. This involves a critical assessment of existing educational frameworks and their ability to address socio-economic disparities. Martinez Dy et al. (2018) proposed that a new ontology for digital entrepreneurship that is cognisant of structural distribution of resources to act on opportunities is required. To this end, Martinez Dy et al. (2018) recommends an alternative ontology for digital entrepreneurship based on critical realism conceptual tools that incorporates an in-depth ontology, a causal powers framework centred upon enabling conditions, and a model of the social world that focuses on structure, culture and agency as they apply to entrepreneurship (Archer, 1996; Martinez Dy et al., 2018). Given South Africa's history and current socio-economic position, this ontology therefore needs to start with the critical assessment of eCommerce entrepreneurship curriculum development in order to be truly effective.

1.3. Educational Context

Answers to the issues associated with eCommerce entrepreneurship in South Africa may largely lie within the country's higher education system. In fact, Beránek (2015) defines entrepreneurship generally as a taught skill that has positive relationships with both higher levels of education as well as entrepreneurial activity. However, the academic program cannot exist in isolation from the environment in which it occurs, and the impact of the hidden curriculum in South Africa, which incorporates inherent cultural values and norms that tend to be unspoken or implicit but impact behaviours, procedures, and norms within the education space, needs to be incorporated (Zipin, 2017; Matorevhu and Madzamba, 2022). Linking back to critical realism in the context of the hidden curriculum the empirical would be elements such as behaviours, attitudes, and outcomes that are observable in students, the actual would be elements such as events and processes within the education system that contribute to the shaping of students' experiences, and the real with elements such as underlying social structures, ideologies, and power relations that create and sustain the hidden curriculum. The concept of the hidden curriculum within the context of an eCommerce entrepreneurial curriculum will be unpacked further in Chapter 2.

The constructs of entrepreneurial teaching and learning have been further delved into in current literature and divided into two key concepts that work hand in hand, namely entrepreneurial intentions and

entrepreneurial education (Bae et al., 2014). Entrepreneurial intentions, which are one's desire to start or own a business, have proven to not be enough alone to lead to the creation of a successful entrepreneur (Bae et al., 2014). It is only together with entrepreneurial education, defined as the transfer of entrepreneurial skills and attitudes that has a significant and positive influence on the capabilities and confidence of aspiring entrepreneurs, that true long-term success in entrepreneurship can be seen (Bae et al., 2014).

Current eCommerce curricula in South Africa are heavily dominated by skills discourses and individualist conceptions of entrepreneurial success. These curricula often emphasise technical skills and personal attributes necessary for entrepreneurial ventures, sidelining the broader socio-economic context that shapes opportunities. This focus aligns with middle-class conceptions of education as a means of upskilling individuals, promoting a meritocratic view of entrepreneurship that overlooks systemic barriers. The work by Ajani (2024) highlights the need for curricula that address these systemic issues. By incorporating socio-economic context into entrepreneurial education, these programs can better equip students to navigate and challenge the structural barriers they face (Ajani, 2024).

1.4. Research Question

The main research question posed in this study was:

1. How can an inclusive curriculum be developed to support the development of eCommerce entrepreneurs in South Africa?

The research sub-questions that informed the main research question were adapted from the critical realist framework proposed by Bhaskar (1978), which will be unpacked further in the next two chapters. These sub-questions were:

1. What are the empirical elements that need to be addressed in an inclusive South African eCommerce entrepreneurship curriculum?
2. What are the actual elements that need to be addressed in an inclusive South African eCommerce entrepreneurship curriculum?
3. What are the real elements that need to be addressed in an inclusive South African eCommerce entrepreneurship curriculum?

1.5. Rationale and purpose

The overall aim of this study was to critically investigate the development principles associated with a curriculum based on the skills and competencies required by eCommerce entrepreneurs within the context of conducting online business in South Africa that allows them to not only fully comprehend the markets they operate in, but to also thrive within these markets and adjust to evolving circumstances. This requires not only the exploration of the attributes needed for successful eCommerce entrepreneurs but to also understand the context in which the entrepreneur exists. This can then inform the curriculum development process required to develop a curriculum that addresses the needs of up-and-coming eCommerce entrepreneurs.

For the purposes of this study, only eCommerce entrepreneurship was focused on. To this end subject matter experts as well as academics and researchers in the field were interviewed to analyse the requirements for an inclusive eCommerce entrepreneurship curriculum in South Africa using critical realism and postcolonial methods and tools as a base of analysis. In addition, secondary information on curricula that already existed in other contexts and geographical settings were explored. The study examined the different themes that emerged in an attempt to understand the attributes and capabilities that South African eCommerce entrepreneurs require and how best they are developed through higher education.

The findings of this study are aimed at informing curriculum development across South African Higher Education institutions, both in the public and private sectors. This, in turn, could positively impact on both higher education policy in allocation of budget to appropriate areas of development and economic development in both the short and long terms. Should the findings of this study be well received, these can then be used as a springboard to motivate for further research into other levels of eCommerce development needs such as operational and strategic.

1.6. Researcher Context

As someone who has spent the past two decades immersed in the intersection of information systems, economics, higher education and digital innovation, I have had first-hand experience of both the transformative potential of technology as well as the entrenched inequalities that continue to shape

access to opportunity in South Africa.

My academic and professional journey has crossed a number of disciplines, from a PhD in Information Systems focused on the business value of Business Intelligence Systems, to a master's in Financial and Developmental Economics, and more recently a master's in creative writing. These diverse experiences have collectively shaped how I view systems, people and narratives.

Over the years I've supervised and mentored numerous postgraduate students working on topics ranging from mobile commerce and artificial intelligence (AI) to inclusive digital platforms and the role of human-centred design. Many of these students come from communities where access to education and digital infrastructure remains limited, and yet they bring with them extraordinary insight, resilience and potential. I've often found myself asking how we can reshape our curricula to meet these students where they are, and help them not just survive, but thrive.

This thesis is an attempt to address that question. Of particular interest to me is how we can develop inclusive, responsive and contextually grounded curricula that support eCommerce entrepreneurs, not just in terms of skills, but in terms of voice, agency and recognition. The adoption of a postcolonial critical realist lens reflects the conviction that we cannot design truly inclusive curricula without addressing the structural and historical forces that shape who gets to participate in entrepreneurship in the first place.

1.7. Summary of Chapter 1

Much of the focus of eCommerce in South Africa is on its ability to drive job creation and economic growth by integrating South Africa into the global digital economy, with emphasise on market access, technology adoption, and entrepreneurial activity as the primary vehicles for this economic development. This is particularly appealing in a context like South Africa where historical inequalities and structural unemployment persist. By pushing for eCommerce, it is believed that new jobs can be created, marginalised groups can be empowered, and overall socio-economic development can be driven. However, the success of this strategy is contingent on access to education, skills development, and technology, areas where inequality remains a significant challenge. This includes the addressing of deep-rooted inequalities in access to education, digital literacy, and the structural barriers that continue to prevent marginalised groups from benefiting from eCommerce opportunities.

The tendency to look to the Global North, and particularly the Western world, for curriculum solutions stems from a legacy of colonialism and the ongoing perception that Western models are superior. Post-apartheid South Africa inherited an educational system heavily influenced by Western ideals and practices. Additionally, Western economies, which have embraced digitalization and entrepreneurship, are often viewed as models of success. However, these models have proven to not be fully applicable to South Africa's unique socio-economic and historical context. There is therefore a pressing need to develop a curriculum that aligns with the demands of the eCommerce sector in South Africa and across the African continent. Current educational frameworks largely do not adequately address the skills and competencies that have been identified for success in digital entrepreneurship in these contexts. The current educational curriculum in South Africa has historically served the interests of middle- and upper-class populations, who remain predominantly white, urban groups. This is a legacy of apartheid-era policies that continue to shape the distribution of resources and opportunities. The curriculum is often designed with a meritocratic view, emphasising individual success and technical skills, which overlooks the structural inequalities faced by underprivileged groups. As a result, the power dynamics within education have reinforced the socio-economic divides along race, class, and spatial lines. A new perspective on curriculum is therefore needed that is inclusive and accounts for the socio-economic realities of the region, such as existing inequalities along ethnic and community lines, inherent structural limitations, limited access to technology and entrenched inequalities in education.

2. Chapter 2 - Literature Review

2.1. Defining eCommerce

From a commercial perspective, electronic commerce (eCommerce) is the buying and selling or trade of goods through the medium of the technology, specifically the internet (Alhassan and Adam, 2021; Johnson and Iyamu, 2019). Over time this definition has become significantly more socially and contextually nuanced. eCommerce is a fairly embedded concept in academic literature that continues to develop rapidly, spurred on further by the impact of the Covid-19 pandemic global lockdowns and their associated restrictions on movement when online shopping had become a de facto standard due to global lockdown restrictions (Choshin and Ghaffari, 2017; Ūsas et al., 2021). Thus, eCommerce increasingly has provided an attractive opportunity for entrepreneurs but is not without its challenges (Cuellar-Fernández et al., 2021).

2.1.1. eCommerce Challenges, Benefits and Opportunities

eCommerce and online businesses are seen as key for ensuring sustainable economic growth, most especially for the success of small, micro, and medium sized enterprises (Ashraf et al., 2021; Worku and Muchie, 2019). Haji (2021) proposed that eCommerce has the ability to alleviate poverty and improve standards of living. Despite the general consensus on the importance of eCommerce and all its benefits, a number of studies highlight the challenges of eCommerce, especially within developing economies such as South Africa. Worku and Muchie (2019) and Haji (2021) suggest that the main obstacles facing the spread of eCommerce are poor, limited infrastructure (including electricity and internet access), lack of enforcement of both governance and consumer protection policies, and the lack of awareness of and education around eCommerce benefits.

Haji (2021) further recognised limited economic opportunities, a lack of trust in eCommerce and poor accessibility to goods and services as challenges to the growth of eCommerce. To address these challenges, Haji (2021) recommended cooperation between developing countries such as the BRICS (Brazil, Russia, India, China, South Africa and others) grouping or countries falling within the Global South rubric as essential to contribute to their respective economic growth.

Choshin and Ghaffari (2017) and Yeh et al., (2021) investigated the major factors that contribute to eCommerce success. Both studies concur that customer trust, website usability and design, financial

performance, and infrastructure costs are among some of the major factors that determine eCommerce success. In addition, Choshin and Ghaffari (2017) also identified customer awareness and employee knowledge as significant drivers, while Yeh et al (2021) included pricing, firm size, procurement strategies and the survival of the fittest principle.

As a subset of eCommerce, social commerce using social media platforms has also seen a marked increase in prevalence. In a study conducted by Ashraf et al (2021) the opportunities that social media presents to entrepreneurs were investigated. A case study of the Facebook social media platform was presented with findings that Facebook Marketplace, a peer-to-peer online community marketplace available on the platform provided a low-cost opportunity for launching a business online. However, the study observed a shortage of young entrepreneurs making use of these types of opportunities, possibly due to lack of exposure and accessibility that is typical of a country with a large digital divide (Ashraf et al., 2021).

2.1.2. The Digital Divide in South Africa

At a basic level, the digital divide is seen as the lack of material resources and existing inequalities in the accessibility to ICT infrastructure and facilities (Lembani et al., 2020). The COVID-19 pandemic was instrumental in making the vast digital divide between the Global North and the Global South apparent where the one of the most tangible lines that differentiated the countries in those regions in the management of the pandemic was technology. The only way to meaningfully reduce the digital divide depends on changes in the hierarchical relationship between the Global North and Global South so that technological transfer to the South from the North occurs more rapidly (Mammen et. al., 2023).

In South Africa, the digital divide amongst the population is clearly evident and dates back many decades. South Africa has one of the most unequal societies worldwide due to its geographic, social and economic differentiation as a result of the apartheid system (Gundu, 2020). The country as such remains divided into urban areas that exist alongside peri-urban informal settlements and under-developed rural areas that persistently do not have access to the basic services, education, and employment (Gundu, 2020).

According to the World Bank (2020) 33% of the total South Africa population currently still reside in rural areas with limited access to basic services, education and employment opportunities. The country has more Internet users than most other African countries while half of the population is still offline. Data unaffordability remains a major factor exacerbating the digital divide despite public calls for reviews. In

addition, the lack of Internet-enabled devices and digital literacy are identified as the main barriers to getting online and are closely associated poverty and inhibitors of internet use among small and informal businesses (Gillwald, 2018).

The digital divide thus is primarily about access to the digital economy, job markets, and financial opportunities. Disparities in digital access result in uneven economic opportunities, often disadvantaging low-income individuals and communities in accessing well-paying jobs, entrepreneurial opportunities, and other digital services. Studies indicate that economic inequalities significantly contribute to the digital divide, as lower-income households often lack access to high-speed internet, digital devices, and the skills required for digital literacy (Scheerder et al., 2017). Limited access to technology in economically disadvantaged areas restricts people from participating fully in a digital economy, thereby perpetuating income inequality.

Research has demonstrated that digital access is critical for employment, with job searches, remote work, and skills development which are largely dependent on internet accessibility (Graham et al., 2014). Areas with limited digital access often experience lower employment rates and economic growth, reinforcing the economic digital divide. On a macroeconomic scale, regions with better digital infrastructure tend to experience higher economic growth rates. According to a report by the World Bank (2020), nations with widespread digital access enjoy enhanced productivity, innovation, and GDP growth, while regions without such access lag behind.

In contrast, the educational perspective on the digital divide focuses on disparities in students' and teachers' access to digital resources, which affect educational outcomes, literacy, and long-term skill acquisition. A study by Warschauer (2004) highlights how students from low-income families often lack access to devices and high-speed internet, limiting their educational opportunities. In the era of remote learning this disparity has only widened as digital access determines students' ability to attend classes, complete assignments, and engage with learning resources.

The digital divide in education also encompasses digital literacy, which refers to the ability to effectively use technology for learning and problem-solving (Livingstone and Helsper, 2007). Students without regular access to digital tools often lack essential digital skills, putting them at a disadvantage in both academic and professional settings. Educational institutions in wealthier regions are more likely to have robust digital infrastructure and skilled staff to support digital learning, while schools in economically disadvantaged areas struggle to provide these resources (Gorski, 2003). This results in a systemic disparity

in educational quality and access to modern learning tools.

According to Lembani et al. (2020) resilient ICT infrastructure including non-interrupted access to the internet is only accessible to a small percentage (22%) of South Africans. By comparison, more developed countries such as the United Kingdom and the United States of America have 92% and 89% respectively of their population accessing robust ICT infrastructure (Lembani et al., 2020). This is despite South Africa being considered as one of the leaders in eCommerce development in sub-Saharan Africa as it is the home to successful marketplaces such as Takealot.com and Gumtree.com (Haji, 2021). Access to modern infrastructure and technology and internet skills is paramount to participate in an eCommerce economy. This is therefore challenging to many South Africans as it was estimated in Johannesburg, the largest city in South Africa, 7% of the population are illiterate and 3.4% of the population only have a primary school level education (Worku and Muchie, 2019).

The last decade has however seen exponential growth in the mobile industry in South Africa, with mobile phones becoming the most popular device used for communication (Gundu, 2020). Households in rural and disadvantaged areas tend to be dependent on their mobile devices as their sole means of online communication (Gundu, 2020; Kabanda, 2016). In 2021, South Africa's internet penetration through mobile devices reached a high of 71,2%, providing a substantial opportunity for the growth of the mobile commerce, or mCommerce market and in turn having the ability to provide a base for entrepreneurship activities in the country (Statista.com, 2022).

Therefore, within the context of entrepreneurship in developing economies, the definition of literacy needs to be extended to include digital and business skills.

2.2. Defining Entrepreneurship

According to current literature an entrepreneur is defined as an individual who is perceived as a risk-taker and is sufficiently innovative, proactive, and observant to identify opportunities to start up a business (Niu et al., 2020; Pramono, 2021; Shukla et al., 2021). Start-up businesses are positioned as facilitating the creation of both jobs and overall economic wealth, leading to GDP growth, and thus improving the standard of living in economies (Alyoubi et al., 2020).

Entrepreneurship is said to contribute to the socio-economic development of a country's economy and according to contemporary entrepreneurship literature is seen as an effective combatant of

unemployment (Ahmed et al., 2020; Pramono, 2021; Yeh et al., 2021). In this way, entrepreneurship is said to be effective in reducing poverty while encouraging both innovation and economic competitiveness and growth (Ahmed et al., 2020).

2.3. Issues with current definitions of entrepreneurship

It is key to note that current literature tends to define entrepreneurship according to neoliberal ideals focused on the success of the individual, which is a juxtaposition to many collectivist communities that exist in developing countries in the Global South (Iványi, 2023). Bromley et al. (2022) argue that entrepreneurship is only celebrated as a global cultural ideology since the neoliberal era and is a product of the intensified celebration of the individual as the source of progress.

Due to this, contemporary views of entrepreneurship are focused on a combination of skills and competencies based on the 'sacred status of individuals', most specifically their entrepreneurial vision and entrepreneurial leadership. However, this is very much disconnected from the more common entrepreneurial experience of failure and declining rates of new venture growth found in recent years (Bromley et al., 2022).

2.3.1. Entrepreneurship and Growth

While there is evidence of a link between inequality and entrepreneurship, there are mixed results on the actual relationship between the two. Countries with high levels of economic inequality tend to have high rates of entrepreneurial activity, and as inequality increases both necessity and opportunity-based entrepreneurship increase (Lippmann et al., 2005; Xavier-Oliveira et al., 2015). Therefore, a country such as South Africa with high levels of inequality should have higher levels of entrepreneurial activity but this is not necessarily the case.

Ragoubi and El Harbi (2018) propose from their empirical study an inverted U-shaped relationship between income inequality and entrepreneurship, meaning that as income inequality increases so does entrepreneurship, eventually reaching a maximum, and then begins to decrease, implying an optimum level of income inequality where entrepreneurial activity is at a maximum. As soon as this point is passed income inequality negates the impact of new venture creation as it increases socio-economic tensions which tend to have an adverse effect on the business environment (Ragoubi and El Harbi, 2018). This therefore implies

that entrepreneurship tends to be skewed by class-level and associated variables.

In this way it can be seen that typical political responses such as redistributive policies to high inequality may in fact lead to reduced incentives to invest which in turn have a negative impact on investment, business and economic growth (Sarkar et al., 2018). This implies a feedback loop between wealth inequality and entrepreneurship, which means that the presence of greater inequality leads to the lower ends of unequal distribution which are incapable of moving to self-employment and any movements thereof are due to necessity (Sarkar et al., 2018). The same arguably applies to educational growth and who benefits from this. However, a key question raised then is who actually benefits from these policies, whose interests are being served and why policies tend to lead to conditions which replicate inequality in a country with existing high levels of inequality such as South Africa.

2.3.2. Entrepreneurship in South Africa

2.3.2.1. Entrepreneurial skills and attributes

Jonker et al. (2009) highlighted six key attributes of entrepreneurs in South Africa, namely:

- Resourcefulness - including innovation, initiative, creativity, dedication, vision and optimism;
- organizational skills - including tolerance, communication, time management, planning, human relations and giving one's best;
- explorative – entrepreneurs have the need to explore new business ventures to achieve their desired state, and includes adventure and privacy;
- self-edification – given as a frame of mind that always seeks personal benefit in all human action, including being profit driven, taking calculated risks and aiming to always be successful;
- acquired skills – including education, teamwork and management skills; and
- drive – includes the use of opportunities, leadership, confidence, ambition, independence and knowledge.

Of the above, the most significant factor was identified as resourcefulness (Jonker et al., 2009). However, (Jonker et al., 2009) is a good example of the individualistic perspective of the entrepreneur currently prevalent in South Africa while disregarding the structural factor impact on the attributes required. Van

Scheers (2010) goes further by highlighting that the empowerment of African entrepreneurs can exert a powerful influence in their business interests in South Africa. This is attributed to four main factors, specifically the promotion of black business through effective policies in the country; countering increasing political insecurity of white capital; the breaking down of perceptions of white South Africans who use black companies as 'window-dressing'; and the existence of a robust economy, which includes an active equity market as well as a relatively well-organized financial sector (Van Scheers, 2010).

Despite these public policy in South Africa continues to be aimed at increasing entrepreneurship while decreasing inequality. But this may not be the most effective policy as studies find that inequality is related to an increase in entrepreneurial activity where inequality means that the wealthy have the resources to invest in entrepreneurial activities while poorer individuals are precluded from engaging in entrepreneurship (Michie and Padayachee, 2019). As South Africa is still plagued by high inequality, poverty, high unemployment, and other socio-economic challenges, public policy needs to therefore take into account both the positive and negative possible consequences of supporting the reduction of inequality in a culturally diverse context and focus on increasing entrepreneurial activity that does not create or perpetuate existing inequality (Michie and Padayachee, 2019).

2.3.2.2. Collectivist culture in South Africa

Entrepreneurship plays a significant but qualified role in an economy as it supports innovation, builds a country's global competitiveness, and plays a role in that country's global success. However, countries such as South Africa exist with a varied cultural context which needs to be taken into account by government policy (Urban, 2007).

According to Achim et al. (2021), culture represents an important predictor of the level of entrepreneurship, uncertainty avoidance, long-term orientation and indulgence and restraint being the most significant. The lower the UAI (Uncertainty Avoidance Index) level is the higher the level of entrepreneurship is as entrepreneurs tend to take business risks in the most uncertain environments. A more restrained culture tended to exhibit a higher incentive for work activities than leisure activities, which translates into higher levels of entrepreneurship. In addition, levels of economic development either stimulate or hamper the influence of cultural patterns on the entrepreneurial behaviour (Achim et al., 2021).

In this way the cultural context was found to influence high-income countries more than low-income

countries in relation to the incentives for entrepreneurship. In addition, high-income countries exhibit a higher influence of culture on the entrepreneurship level than the influence of institutional quality and business freedom, suggesting that social capital counts more than the formal factors on the path toward entrepreneurship for high-income countries. In contrast to this, the incentives for entrepreneurship mainly consisted of formal aspects such as the institutional quality and business freedom, to the detriment of cultural patterns for low-income countries (Achim et al., 2021).

Achim et al. (2021) also found that cultural dimensions influence the level of entrepreneurship, but the direction and the intensity of that influence was dependent on the economic development. Some cultural patterns such as individualism, femininity, low uncertainty avoidance, and short-term orientation or restraint tend to stimulate entrepreneurship in high-income countries but were erratic in low-income countries (Achim et al., 2021).

As such, policies need to promote an entrepreneurial culture and mindset with specific programs that focus on the interplay between individual entrepreneurs and environmental mechanisms. An integrated framework for entrepreneurship allowing for a relationship between culture, beliefs/cognitions/behaviours, and contextual factors rather than individual characteristics needs to be embedded. It is therefore beneficial to entrepreneurs, educators, and consultants alike that the understanding of the interplay of these factors that influence entrepreneurship is well understood (Urban, 2007).

In South Africa in particular the 'bottom of the pyramid' (BoP), referring to the poorest socio-economic group and the under-served in the country which accounts for more than thirty percent of the population, needs to be taken into account when assessing entrepreneurship potential in the country (Chipp et al., 2013). This population group is typified by collectivist thinking which centres greatly on the views, needs and goals of the in-group including social norms and societal and community duty rather than the self (Chipp et al., 2013).

Research conducted by Eaton and Louw (2000) using individualism-collectivism theory found that African-language speakers tended to produce more interdependent self-descriptions than English speakers. This finding points to the presence of a strong collectivist culture that persists amongst the majority of the South African population. Within a South African context economically better off consumers tend to still largely be white who value individualism more while poorer consumers tend to be black and to value collectivism

more (Burgess et al., 1994). Black women in particular have been positioned unfavourably both socially and economically in post-apartheid South Africa. South African as a labour market remains dominated by poor, low-income, rural, black women who are arguably further disempowered by current policies and the existing higher education approach to entrepreneurship and eCommerce (Mabilo and Gouws, 2018).

2.3.2.3. Gender equality in entrepreneurship

Over the last two decades, women in South Africa have been increasingly active in both government and policymaking. Women have also increasingly begun to impact on the South African economic sphere by successively managing small, medium and micro enterprises (SMMEs). The Labour Force Survey for 2005 revealed that women represent 52% of the South African population and black women are in fact the largest single self-employed segment of the population. Despite women entrepreneurs in South Africa playing a significant part in economic development their contribution has not been sufficiently nurtured and developed (Mandipaka, 2014). Private and public sector support for entrepreneurial activities by women remain lacking, which exposes them to high risks and poor outcomes (Kassim and Hendriks, 2002).

Most women entrepreneurs in South Africa play a significant role in both the social and economic well-being of their communities (Mandipaka, 2014). But a common issue faced by female entrepreneurs worldwide is maintaining balance between career and personal life responsibilities. However, the further development of information and communication technology (ICT) has enabled more female entrepreneurs to enter the market by being more able to maintain this balance while also upskilling their entrepreneurial capabilities (Shukla et al., 2021).

According to Alyoubi et al. (2020) eCommerce has been able to facilitate the inclusivity and growth of female entrepreneurship. Technology has provided the opportunity for women to start businesses from home and create unique work schedules that suit them due to a lack of geographical and time constraints (Alyoubi et al., 2020). Virtual workplaces also benefit women and other minorities by reducing discrimination and creating a safer environment for female entrepreneurs (Alyoubi et al., 2020; Shukla et al., 2021). According to Shukla et al. (2021) women with internet skills also tended to have higher intentions of becoming entrepreneurs.

An example of the role women have played in the growth of the global eCommerce market would be the emergence of a significant fashion eCommerce sector which is predominately run by female entrepreneurs (Alyoubi et al., 2020). However, in India, a country with a significant eCommerce footprint,

women make up only 14% of total entrepreneurs. This has been largely attributed to the cultural practices and beliefs in that country that prescribe a woman's responsibility to put family duties before a career (Shukla et al., 2021).

Shukla et al. (2021) found that the characteristics of female entrepreneurs are mainly still aligned to those of male entrepreneurs, including risk-taking capabilities, innovativeness, leadership and vision. But this tends to be a more "middle-class" conception of entrepreneurs, and the question arises of the appropriateness to the South African female context.

According to Bae et al. (2014) men tended to generally have higher entrepreneurial intentions than women. Bae et al. (2014) also found that men were more likely to pursuing male-dominated careers such as entrepreneurial careers. This could imply a smaller entrepreneurial barrier to entry for men than for women (Bae et al., 2014). Bae et al. (2014) went on further to consider that entrepreneurial education may be more likely to benefit women by enhancing their entrepreneurial skills and intentions than men. This again holds true in the South African context where women represent 52% of the South African population and black women in particular are the largest single self-employed segment of the population (International Finance Corporation, 2006).

2.3.3. The South African eCommerce Entrepreneurial context

South Africa's entrepreneurial ecosystems have thus far not experienced the same levels of support compared to global standards markets (Bowmaker-Falconer and Herrington, 2020; Louw and Nieuwenhuisen, 2020). The failure of more than 70% of SMMEs within the first 5 to 7 years in South Africa has been attributed to this lack of support (Bushe, 2019).

Regardless, the South African economic policy makers tend to look to entrepreneurs to solve many of the country's economic problems. This is due to a GDP growth that currently exceeds the population growth due to increases in production, but this is not necessarily associated with an increase in employment (Bushe, 2019). In fact, STATS SA (2022) indicates unemployment rates to be 34.5% in Q1 2022. In addition, there remains a shortage of digital skills in South Africa, and it has been recommended that education needs to start earlier in order to address latent entrepreneurial intent that can be developed to motivate entrepreneurial action (Tempest, 2020).

A strong correlation between entrepreneurial action and poverty reduction has also been found, making entrepreneurial development a key focus area in a country such as South Africa (Maziriri et al., 2019). However, the South African eCommerce entrepreneurial environment is still plagued by challenges such as labour issues, low margins, and poor government support (Goga et al., 2019). While the South African government has a significant role to play in education and exposure, privately owned institutions also drive this by providing opportunities and programs that encourage eCommerce entrepreneurial participation (Goga et al., 2019).

A special report by Tempest (2020) highlights significant challenges for eCommerce in South Africa. For example, South Africa scored a significantly low 10% in a postal efficiency survey, indicating that the South African postal infrastructure cannot support eCommerce entrepreneurs as a reliable delivery method. Cybercrime has also been identified as a significant problem where the lack of appropriate consumer awareness can make customers vulnerable to social engineering such as phishing fraud (Tempest, 2020).

Covid-19 related restrictions imposed during the global pandemic resulted in many businesses closing doors, worsening financial challenges predating the pandemic (Beharry-Ramraj and Tshabalala, 2021). Despite challenges, many entrepreneurs in South Africa used the restrictions as an opportunity to engage in the manufacture and sales of essential products and equipment such as masks and sanitation solutions. The situation also highlighted the role that eCommerce entrepreneurs can play despite strict regulation to exploit opportunities (Beharry-Ramraj and Tshabalala, 2021). In fact, the pandemic catalysed skills development and repositioned online businesses as effective time use since many entrepreneurs were not physically operational (Fubah and Moos, 2022).

A key point of contention though is the debate around the benefit derived from entrepreneurial courses and whether they have the ability to enhance students' strengths while overcoming personal limitations (Ahmed et al., 2020). Despite this a significant demand for entrepreneurial education persists. Many governments and academic institutions across the globe have answered the demand for entrepreneurial education by implementing curricula aimed mainly to develop the entrepreneurial mindsets of young adults and motivate them to start businesses (Ashraf et al., 2021; Dou et al., 2019). In China the importance of entrepreneurship learning was recognised early and as such entrepreneurial education has been prioritised nationally by initiating a strategy in 2014 that is designed to encourage entrepreneurship and innovation which in turn advances economic growth (Dou et al., 2019).

2.4. Entrepreneurial learning

Entrepreneurial learning by its very nature is an ongoing process and where entrepreneurs are able to transpose lessons from previous experiences, both their own and of others, into knowledge that aids future decision making (Politis, 2005). According to Politis (2005) a significant portion of entrepreneurial learning is currently done experientially and not taught through traditional education mediums such as courses or formal education. In fact, many current successful entrepreneurs attribute their commercial success to learnings from previous mistakes, something that not all entrepreneurs have the luxury to do (Khurana and Dutta, 2021).

Lattacher and Wdowiak (2020) build on this idea by expressing failure as inherent to the entrepreneurial phenomenon. This learning is also tied in with the recognition of business opportunities and the knowledge of how to exploit these. Entrepreneurial opportunity recognition is very much based on not only previously attained specialist knowledge of the problem but also possessing the cognitive abilities to understand and work on the opportunity. Prior start-up knowledge and experience, both practical and theoretical, can be beneficial to know how to operate with limited resources and time pressure (Politis, 2005).

By synthesising current literature on entrepreneurial learning Politis (2005) constructed a model that can be used as a basis to understand how entrepreneurial knowledge is attained.

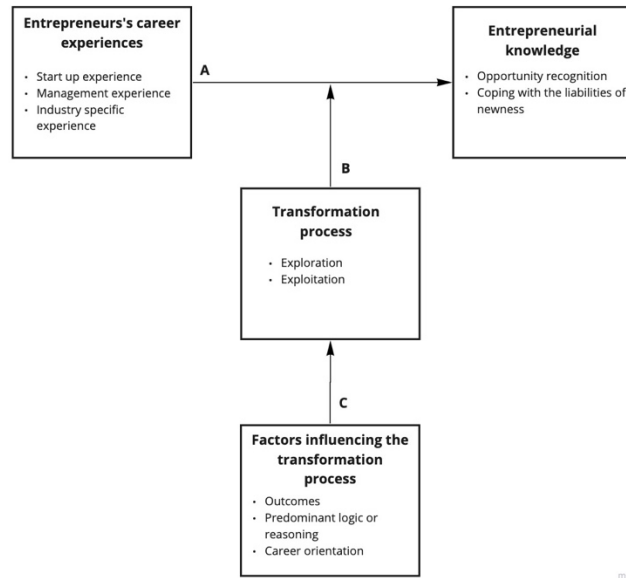


Figure 1 - A framework of entrepreneurial learning as an experimental process (Politis, 2005)

This model proposes that career experience, predominant reasoning, the outcome of previous events, and career orientation are all related to the development of entrepreneurial expertise (Politis, 2015).

2.4.1. Entrepreneurial education

Entrepreneurial education refers to formal training of entrepreneurial competencies to develop skills and cognitive abilities that aid individuals in starting new and innovative businesses. The purpose of entrepreneurial education is to provide students with the knowledge, capacity, skills, attitude, insights, and awareness required to create and sustain an entrepreneurial business (Letsoalo and Rankhumise, 2020; Maziriri et al., 2019). Entrepreneurial education focuses on developing the mindset, skill set, and practice necessary for starting new ventures. However, the outcomes of such education tend to be further reaching supporting the life skills necessary to live productive lives even if one does not start a business (Neck and Corbett, 2018).

A number of educational institutions globally have already developed systems and curricula to promote entrepreneurial competencies and intentions (Dou et al., 2019). Entrepreneurial education is thus seen as the learning of entrepreneurial skills and attitudes, while entrepreneurial intentions are one's desire to start or own a business (Bae et al., 2014). Research has demonstrated that entrepreneurial education has a significant and positive influence on the capabilities and confidence of aspiring entrepreneurs (Bae et al., 2014).

Beharry-Ramraj and Tshabalala (2021) argue that the 'potential for entrepreneurship' precedes entrepreneurship, and that the early enrolment of educational programs can foster such potential and create latent entrepreneurs. In their study, a sample group of students in entrepreneurial education were found to be positively motivated towards an entrepreneurial objective and nurturing entrepreneurial inclinations. The importance of peer learning was also highlighted in the study, where students tended to be encouraged by peers and drove them towards entrepreneurial intent and to take entrepreneurial action (Beharry-Ramraj and Tshabalala, 2021).

Entrepreneurial education has been proven to stimulate entrepreneurial intent (Eugine T. Maziriri and Chivandi, 2020; Eugene Tafadzwa Maziriri et al., 2019). However, whether the education and training ultimately lead to entrepreneurial action and increased activity is not well understood (Cheng et al., 2009). (Beharry-Ramraj and Tshabalala, 2021) suggest further longitudinal studies are required investigating the role of entrepreneurship education at tertiary level in relation to entrepreneurial action taken by implementing a business idea based on authentic value propositions.

(Neck and Corbett, 2018) propose a Scholarship of Teaching and Learning Entrepreneurship (SoTLE) framework that is based on need which uses research as a guide for their own teaching development. SoTLE argues that scholarship should expand to include research on teaching and learning entrepreneurship which includes new research designs. Most entrepreneurship educators tend to be professional educators and entrepreneurship researchers with a sociology, psychology, or management discipline as their base of training. The view of entrepreneurial education therefore is seen as needing to become more inclusive (Neck and Corbett, 2018).

2.4.2. eCommerce entrepreneurial curricula

As the prevalence of eCommerce increases so too does the demand for eCommerce skills. Due to this, institutes of higher learning are confronted with having to provide eCommerce courses, tracks within existing qualifications, and entire eCommerce qualifications. In response, many institutions globally launched initiatives to include eCommerce as a component of undergraduate and postgraduate level qualifications (Dean and Nasirin, 2002). However, as the eCommerce environment fast evolves with the inclusion of many entrepreneurial businesses due to Covid-19 restrictions, the need to develop and delivery eCommerce courses

aimed at entrepreneurs becomes key (Dean and Nasirin, 2002). This is particularly true in a South African context.

Conducting a practical eCommerce project has also been identified as a significant part of eCommerce curriculum. A study by Beránek (2015) found that it is valuable to have a component of eCommerce in entrepreneurial education to improve students' motivation to establish their online businesses. Beránek (2015) further investigated the impact of using eCommerce projects requiring students to create a business plan and build a prototype of an online business. It was found that a significant number of students went on to establish start-up online companies that had evolved directly from the project, pointing to a need to define curricula design principles for eCommerce entrepreneurs (Beránek, 2015).

2.5. Curriculum design for eCommerce entrepreneurs

Grundy (1987) in Gosper (2014) states that a curriculum is a way of organizing educational practices keeping three rationales in mind, namely product, practice, and praxis. Print (1993) in Gosper (2014) on the other hand looks at curriculum as experience, intention, and process. However, from a systems perspective of educational experience the curriculum plays a dual role of both shaping and being informed based on the learning experiences of students and the outcomes set and achieved (Gosper, 2014).

The foundation of curriculum design are design principles, which are theoretically informed, empirically derived heuristics that guide the development of contextually relevant educational interventions and therefore serve both an analytical function and a generative function (Cobb et al. 2003; McKenney and Reeves 2012). McKenney and Reeves (2012) note that design principles operate as mid-level theories that bridge the gap between broad educational theories and specific local applications. Similarly, Cobb et al. (2003) argue that such principles emerge from design-based research to inform both practice and theory across contexts. In postcolonial and socio-economically unequal settings such as South Africa, design principles must also address historical and cultural dimensions of marginalisation to ensure that curricula are not only skill-based but also critically reflective and empowering (Khoza & Biyela, 2020).

Toohey (1999) identified five prevalent approaches to curriculum design in most universities at the end of the 20th century, namely a traditional discipline-based approach, a performance- or systems- based approach, a cognitive approach, an experiential or personal relevance approach, and a socially

critical approach. According to Gosper (2014), it is key that curriculum design for the 21st century take into account an increasingly diverse student cohort and enable the expected graduate outcomes.

The challenge of formulations of curriculum such as the ones above are that they do not necessarily take account of or are not responsive to prevailing and changing contextual factors, nor do they provide a nuanced enough understanding of the ways in which disciplinary knowledge systems and knowledge of curriculum systems influence the development of curriculum.

2.6. eCommerce entrepreneurship curriculum design within a South African context

As eCommerce further evolves and the need to incorporate entrepreneurship becomes increasingly evident, the original Introduction to eCommerce curricula such as the one proposed by Ray (2002) needs to evolve with the changing market and environment. Feng (2018) identified a number of issue areas in current eCommerce introductory courses including the slow update of teaching content, a weak practice teaching link, simplistic teaching methods, and basic teaching evaluation methods that did not accurately reflect the practical learning of the student and attempted to address these reforms in a systematic manner.

But debates have raged not just systematically but on all levels of granularity around the role of higher education to empower and transform the lives of students based on the premise that higher education has historically excluded and in doing so disadvantaged certain groups. The transformative model investigates methods in which to use the curriculum to enhance the knowledge, ability, and skills of graduates with the goal of empowering students (Higgs, 2016).

In an attempt to bridge this gap, the concept of the hidden curriculum linking to critical realism is used, which is the incorporation of those aspects of classroom life that emerge through social ties and interactions in schools (Jackson, 1990). The hidden curriculum is that collection of implicit social, academic, and cultural touchpoints that are based on a societal context and are linked to the actual and real levels of critical realism (Bhaskar, 1978; Higgs, 2016). These aspects are fundamental in promoting or hindering student achievement and the addition of value to society (Matorevhu and Madzamba, 2022). Higgs (2016) highlights that education curriculum has frequently been the site of contestation and debate, and therefore asserts that the curriculum is required to reflect the cultural, social and political context in which it is located while ensuring that processes of understanding and complying with both the explicit and tacit rules of the society.

In this way the curriculum serves as a social practice concerned with the cultural and social conditions that underpin the construction of curriculum knowledge in line with the cultural, political, social, and historical contexts of education systems and the societies in which they operate (Higgs, 2016).

Higgs (2016) argues that the original definition of the hidden curriculum needs to be adapted to incorporate the context of postcolonial settings such as South Africa, where social and economic inequality is still rampant. The postcolonial South African curriculum in higher education still largely conforms to the legacy left by the inherited colonial education system which excludes indigenous African voices (Higgs, 2016). The hidden curriculum comes into the spotlight in developing an inclusive higher education curriculum for South African eCommerce entrepreneurs where South African education has seen a marked increase in transformation and decolonisation initiatives to ensure that higher education becomes more inclusive in the country during an uncertain economic climate that has become increasingly competitive globally (Case, 2015; Luckett and Shay, 2020).

This situation has been investigated in studies such as Shay (2013) where the need to review the generic curriculum development process is questioned, and a model such as Bernstein's semantic field of recontextualised knowledge is proposed that is said to address not only theoretical knowledge but professional and experiential knowledge as well within the South African social, political, and economic contexts as well. Additionally, unbundling, digitising, and marketizing need to also be taken into account as the curriculum is designed taking into account power and market contestations and inequalities amongst both internal and external stakeholders (Cliff et al., 2022; Muller et al., 2004).

This implies that curricula development in South African should keep Africa as the focus to ensure that the outputs are indigenous-grounded and orientated (Higgs, 2016). A problematic-based curriculum approach as the one defined by Zipin (2017) as an approach in which learners are required to work based on knowledge in relation to local real-life problems that matter to that society may also provide a more inclusive perspective to curriculum given the South African context. In this way curriculum development can play the role of being truly transformative rather than merely reformative (Zipin, 2017).

The most recent work within the field of curriculum transformation has been that of the Curriculum Change Working Group (CCWG) at the University of Cape Town, a body constituted post the 'Fees Must Fall' protests of 2015 in South Africa, that was black-led, inclusive, and broadly representative that comprised of academics

and students who were traditionally excluded from formal institutional structures and processes of curriculum oversight (UCT Curriculum Change Workgroup, 2018). The CCWG asserted that knowledge production in its current form tended to be potentially violent towards marginalised communities and thus needed to be increasingly mitigated by individuals and groups from marginalised communities. In addition, knowledge was understood to be both situational and relational, with questions rather than method driving knowledge production, and where transdisciplinarity encouragement was key (UCT Curriculum Change Workgroup, 2018).

Higgs (2016) proposes Mazrui (2004)'s seven pillars of wisdom to provide a basis for the development of a curriculum to integrate indigenous African epistemologies. These seven pillars speak to tolerance, the optimisation of economic well-being of the people, social justice, basic gender equality, ecological balance, interfaith dialogue and cooperation, and a relentless quest for greater wisdom. The incorporation of these seven pillars in curriculum development can go a long way to decolonise the existing education systems with its inherent inequalities and biases (Higgs, 2016).

The findings of the CCWG align with that of Higgs (2016) where design principles for a decolonised, inclusive curriculum are required to incorporate authentic engagement, leadership integrity, blending of formal and informal learning, reading with conscious intent, the addressing of institutional racism, ableism, sexism and heteronormativity, and addressing decoloniality in pedagogy and assessment with the intention to address the questions of “what is knowledge? who owns knowledge? and how is it produced?” (UCT Curriculum Change Workgroup, 2018:45).

Insofar then as colonial education contributed to this marginalisation and exclusion of indigenous African epistemologies and ways of knowing in higher education in Africa, curriculum planners in South African higher education need to counter this with focus on promoting the decolonisation of the South African higher education curriculum through:

- determining the extent to which the content of curricula in higher education in South Africa is informed by the wishes, thoughts and practices of local communities in that education which should be firmly anchored in the cultural;
- taking into account the intellectual environment of the community in which it is located examining critically the source of the knowledge that informs what is imposed on or prescribed in the curriculum for higher education in South Africa, and how the curriculum is implicated in the universalisation of

Western and European experience;

- interrogating the ways of knowing the curriculum in higher education in South Africa that are validated and promoted, and which ones are ignored and invalidated and why;
- addressing the intersectionality of knowledge and power and the contestation thereof. (Higgs, 2016b; UCT Curriculum Change Workgroup, 2018)

An effective eCommerce entrepreneurship education curriculum therefore needs to not only result in increased entrepreneurship activity within a country but also allow for inclusive access to knowledge (UCT Curriculum Change Workgroup, 2018). This is supported by the finding that the key role of eCommerce entrepreneurship education is to promote entrepreneurship by influencing attitudes, values and the general community culture (Mwasalwiba, 2010). As such there needs to be further emphasis on designing South African curricula and avoiding over reliance on Western (most often American) sources to design teaching that develops eCommerce entrepreneurial intention and efficacy (Kunene, 2020). To this end, Kunene (2020) proposes an interdisciplinary approach including management and entrepreneurship modules together with supply chain discipline modules and organizational communication modules which are normally included in traditional entrepreneurship education curricula (Kunene, 2020).

Kunene (2020) goes on to propose that entrepreneurial education needs to craft and improve knowledge and content that can be taught in classrooms while decolonising education for students. The curriculum design should provide opportunities that enable the learner to evolve and learn using knowledge as a building block of their professional future. This is particularly important with the advent of COVID-19 globally as businesses adopt more entrepreneurship practices for their survival (Kunene, 2020).

Current entrepreneurial education therefore comes up for critical consideration in the digital era that is marked by co-creation and the capturing of value under complex, ever changing, uncertain, ambiguous, seamless, and unpredictable conditions (Pitso, 2021). Co-creation of value in a knowledge-based society means including not only customers in knowledge creation and dissemination processes but also human-machine collaboration that incorporates human ingenuity and technology capabilities in a high paced digital age (Pitso, 2021).

While process is required as a base the demands of the future require a different approach to entrepreneurship education beyond business basics and entrepreneurship basics which incorporates social

justice and sustainability in its framework and makes profit-making a secondary purpose (Pitso, 2021).

This includes awareness of impact of the environment as well as ethical conduct in running the business and in leadership. This entrepreneurial mindset is supported within the co-creation of value which becomes socially constructed and thrives on collaborations and is enhanced with the advent of technologies such as artificial intelligence (Pitso, 2021).

Pitso (2021) recommends a scaffolded model of support based off the work by Vygotsky's "Zone of Proximal Development" (ZPD), which is given as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under supervisor guidance or in collaboration with more capable peers. This suggests a self-initiated support system where students and academic facilitators negotiate and decide on what types of support are required, periods of intervention and the nature of support required. This mode also lends itself well to interdisciplinary teaching and learning and may include business incubators, centres/institutes/hubs concerned with innovation and entrepreneurship, as well as other academic development areas (Pitso, 2021).

Another voice on knowledge creation and dissemination is Barnett (2009) who claims that knowledge, in this case specifically the process of coming to know and to form an understanding (be it theoretical or practical), has implications for the student's state of being. In other more formal terms, while both epistemology and ontology are interlinked, they are also irreducible to each other.

Barnett (2009) goes further to highlight the following principles for consideration in the development of any curriculum:

1. The curriculum needs to be sufficiently demanding so that a level 'resilience' may be formed;
2. The curriculum should offer contrasting insights and perspectives in order to develop an 'openness' of thinking in the student;
3. The curriculum requires an ongoing presence and commitment, even in the face of course regulations from the student so that 'self-discipline' is developed;
4. The curriculum must contain sufficient space and spaces in order to allow 'authenticity' and 'integrity' to unfold.

In line with this, Barnett (2009) states that the pedagogy should be aligned within the curriculum and allow:

1. students to meaningfully engage with each other to develop respect for others, generosity, and a

- preparedness to listen;
2. the explicit stating and implementation of the relevant standards so that carefulness and restraint is focused on;
 3. encourage the student to develop themselves moving forward and allow them to be open to new opportunities;
 4. develop enthusiasm in the student and develop an environment and spirit of willingness to learn;
 5. require students to share their own thoughts and opinions to build their courage, take a position, and stake a claim;
 6. require students to actively engage with each other and the content.

With the advent of democracy through the first democratic election in South Africa in 1994, the legislative barriers that previously prevented the black majority of South Africa's qualified school leavers access to higher education had been removed. However, from the very beginning of political transformation in the country, it became clear that social and legislative access alone were insufficient to ensure success. Epistemological access, as defined by Morrow (2009) as being the access that students gain in order to become participants in an academic practice with its requisite forms of knowledge and methods of inquiry was required. This is also commonly referred to as 'powerful knowledge' (Shay and Steyn, 2019).

Lockett and Shay (2020) posit that by reclaiming higher education as a public good, curricula can then be transformed to all students a fair opportunity of progress. In order to do so, Lockett and Shay (2020) invoke Fraser (2007)'s multi-dimensional conceptualisation of justice of 'parity of participation' to unpack higher education in light of transformation based on the principles of redistribution, recognition and representation.

Furthermore, Zipin (2017) also invokes Fraser (2007) stating that transformation of curriculum requires the incorporation of three fundamental components:

1. the redistribution of material and cultural resources required to build equality in the society;
2. the recognition of a society's cultural history and practices of the diverse groups that make it up and the embedded institutional formations to which they are subjected;
3. the participatory-democratic representation of the society's diverse groups in the processes that define and enact the basis of an equitable life.

Given the attempts by so many researchers to establish a theoretical framework for the investigation of curriculum development it becomes abundantly clear that any theory used needs to incorporate the aspects

of knowledge creation and dissemination and its intersection with power that is underpinned by that societies cultural history and developing in a supportive and co-creating environment. For example, the curriculum change framework developed by the CCWG used critical realism as a basis (UCT Curriculum Change Workgroup, 2018). Social realism builds off the basis of critical realism, however, given the influence of decolonisation in the context of developing a curriculum for eCommerce entrepreneurship in South Africa a postcolonial critical realism stance needs to be incorporated.

2.7. Summary of Chapter 2

Chapter 2 provides a comprehensive analysis of eCommerce and entrepreneurship with particular focus their potential as transformative forces for economic growth, poverty alleviation, and job creation, particularly in developing economies like South Africa. eCommerce has seen rapid evolution driving significantly by the global lockdowns of the COVID-19 pandemic and has proven to be a key driver of entrepreneurial opportunities but also faces critical challenges. These challenges include limited digital infrastructure, governance issues, and low levels of digital literacy which stand as barriers to the widespread adoption and success of eCommerce in developing economies.

A central theme identified from the literature reviewed is the role of the digital divide as an inhibitor to eCommerce entrepreneurship development. This is exacerbated by existing educational and economic inequalities. In South Africa particularly, historical socio-economic disparities rooted in apartheid continue to hinder equitable access to ICT infrastructure despite significant growth in mobile internet penetration. These disparities restrict rural and peri-urban populations from fully participating in the digital economy, perpetuating inequality.

While entrepreneurship is identified in literature as a powerful catalyst for economic development and job creation with the potential to address unemployment and enhance socio-economic conditions, the relationship between entrepreneurship and inequality remains a complex one as economic disparities can both stimulate and obstruct entrepreneurial activity, often simultaneously. It therefore becomes key to understand how South Africa's collectivist culture and post-apartheid inequalities shape entrepreneurial behaviour and outcomes. To promote inclusive entrepreneurship, especially among marginalised groups such as women, targeted policies and supportive ecosystems are critical.

Education is identified as a pivotal factor in fostering entrepreneurial skills and mindsets, particularly through tailored eCommerce-focused curricula. A transformative approach to curriculum development in South African higher education is called for using decolonised and inclusive educational frameworks that reflect the country's diverse cultural and socio-economic realities. Practical and interdisciplinary education is also essential for bridging the gap between traditional structures and the dynamic, technology-driven demands of the eCommerce industry.

Therefore, there is a need for systemic reforms to build resilient ICT infrastructure, enhance digital literacy, and foster entrepreneurial intent through education. In addition, policy initiatives must address systemic inequalities while promoting innovation, collaboration, and inclusivity across sectors. These measures were found to be critical to unlocking the full potential of eCommerce and entrepreneurship as tools for sustainable development and economic empowerment in South Africa and similar contexts.

Chapter 3 builds on the findings of the literature review by interrogating theoretical frameworks relevant to the study and using these to create a conceptual framework that then forms the basis for the investigation and data analysis that follows.

3. Chapter 3 – Theoretical Frameworks and Conceptual Framework

In the development of a conceptual framework to critically analyse curriculum development for eCommerce entrepreneurship in South Africa it became necessary to take into account not only the context and sociology of knowledge but also the humanist and social justice dimensions as well. As such the intersection of these dimensions was investigated and critically analysed. The theoretical frameworks used as a basis for this intersection were Social and Critical Realism theories, Morphogenetics theories, Post-coloniality theories, Pedagogic Discourse theory, Legitimation Code theory and Capabilities theory. Each of these frameworks as well as the intersections thereof were critically analysed in this chapter to formulate a conceptual framework that could be used to analyse the data gathered.

3.1. Social and Critical Realism

Social Realism and Critical Realism theories offer a philosophical basis for understanding the interplay between social structures and human agency (Bhaskar, 1978; Moore, 2013). These perspectives are crucial for examining how educational curricula are influenced by and can influence broader social dynamics.

3.1.1. Social Realism

Social Realism, and specifically in the context of education, posits that knowledge is socially constructed but possesses objective properties that make it possible to distinguish between more and less powerful forms of knowledge (Moore, 2013; Young, 2008). Applying this theory to education, the importance of structured, disciplinary knowledge in education can be argued, asserting that access to this knowledge is a matter of social justice. In the context of curriculum development Social Realism emphasises the need to provide students with access to what is considered ‘powerful knowledge’ that transcends their everyday experiences and equips them with the cognitive tools necessary for critical engagement with the world in which they exist (Moore, 2013; Young, 2008). This is especially true in post-colonial countries such as South Africa with a history of inequalities that persists impacting the distribution of powerful knowledge.

3.1.2. Critical Realism

Critical Realism, as advanced by Bhaskar (1978), offers a philosophical approach that combines a realist ontology with a perspective on constructivist epistemology which posits that a real world exists

independently of our perception while our knowledge of this reality is socially and historically constructed. As highlighted previously critical realism distinguishes between the 'real', 'actual', and 'empirical' domains, asserting that reality exists independently of our knowledge of it and can only be understood through our socially mediated experiences (Bhaskar, 1978). According to Critical Realism theory reality can be stratified into the three different layers, namely the empirical referring to experiences; the actual that encompasses events; and the real incorporating structures and mechanisms. The Empirical layer consists of what we experience directly through our senses. In the context of education, this includes the observable outcomes of teaching and learning processes. The Actual layer encompasses events and actions including those that are not directly observable. For example, this could include the interactions between teachers and students that influence learning outcomes. The Real layer refers to the underlying structures and mechanisms that generate observable phenomena. In education these include institutional policies, socio-economic factors, and cultural norms, and greatly tie back to the hidden curriculum discussed in Chapter 2. Bhaskar argues that understanding these layers is essential for comprehending the complexities of the social world (Bhaskar, 1978).

Bhaskar's critical realism with its emphasis on the stratified nature of reality and the transformative potential of human agency offers a robust philosophical underpinning for guiding the development of a curriculum that seeks to empower students in post-colonial developing economies in the Global South. By acknowledging the deeper structures and mechanisms that shape in this case educational phenomena critical realism provides a basis for developing a curriculum that is both reflective and transformative, enabling students to critically engage with and alter their socio-economic realities (Bhaskar, 1978).

Bhaskar's stratified ontology further encourages researchers to look beyond surface level observations to uncover the deeper structures that shape practices and outcomes, in this case specifically educational practices and outcomes (Bhaskar, 1978). This approach is particularly relevant for curriculum development as it highlights the need to address underlying social and economic inequalities that affect educational access and success. This perspective is crucial for curriculum development as it underscores the importance of understanding the underlying structures and mechanisms that shape educational phenomena. It also highlights the transformative potential of education by advocating for a curriculum that not only reflects the reality but also empowers students to challenge and change it.

3.1.3. Integrating Social and Critical Realism

Incorporating both Social and Critical Realism into curriculum development involves recognising the objective structures of knowledge while also acknowledging the socio-cultural contexts in which this knowledge is situated (Bhaskar, 1978; Moore, 2013; Young, 2008).

Developing a curriculum through the lenses of Social Realism and Critical Realism would involve designing educational content that acknowledges the socio-economic context in which it is developed and aims to empower learners while simultaneously critically examining underlying structures that impact success (Bhaskar, 1978; Moore, 2013; Young, 2008). For an eCommerce entrepreneurship curriculum in South Africa, this means developing a curriculum that provides access to the essential principles and practices of eCommerce while also being critically aware of the local economic conditions, cultural values, and historical contexts that influence entrepreneurial activities in the region. Social realism would focus on creating an academically rigorous yet contextually relevant program incorporating fundamental eCommerce concepts together with case studies and examples specific to the South African market. To bridge the gap between theory and practice internships or collaborative projects that reflect the real-world challenges of operating in South Africa's unique economic landscape could be incorporated into the curriculum while still considering elements such as linguistic and cultural diversity by ensuring materials are available in multiple languages and are inclusive of different societal backgrounds.

The incorporation of Critical Realism allows for the development of the curriculum to not only teach practical skills but also challenge and analyse underlying socio-economic structures that affect entrepreneurial success. This would allow students to explore systemic issues affecting eCommerce and critically evaluate and challenge factors such as market trends, government policies, and social barriers. By adopting Social and Critical Realism in the development of an eCommerce entrepreneurship curriculum in South Africa would prepare students not only to thrive in the eCommerce space but also to contribute thoughtfully and effectively to transforming the business landscape in South Africa and empower entrepreneurs to harness the potential of technology and eCommerce capabilities while being aware of and addressing the structural challenges inherent to their environment.

3.2. Archer's Morphogenetic Approach

Archer's morphogenetic approach provides a framework for understanding the dynamic interplay between

structure and agency in social processes (Archer, 1996). Archer distinguishes between 'morphostasis', or the preservation of existing structures) and 'morphogenesis', referring to the transformation of structures), and emphasises the importance of agency in driving social change (Archer, 1996). This approach is relevant to curriculum development as it highlights the potential for education to be a transformative force that empowers individuals to challenge and change existing structures.

Archer builds on Bhaskar's ideas by introducing the morphogenetic sequence which explores the dynamic interaction between structure and agency over time (Archer, 1996; Bhaskar, 1978). The morphogenetic sequence is made up of:

- Structural Conditioning which are the social structures that provide the context within which individuals act. In education, this could include the curriculum, institutional policies, and broader socio-economic conditions.
- Social Interaction which looks at the individuals that interact within these social structures, both influencing and being influenced by them. This could include teacher-student interactions, peer influences, and family background.
- Structural Elaboration which defines, through their actions, individuals' ability to reinforce or transform existing structures. For example, innovative teaching practices can lead to changes in curriculum policies (Archer, 1996).

Archer's approach emphasises the importance of historical and cultural contexts in shaping social structures and individual actions. Archer's morphogenetic approach underscores the importance of considering the historical and cultural contexts in curriculum development. It suggests that developing an eCommerce entrepreneurship curriculum for South Africa requires an understanding of the socio-economic conditions and historical legacies that shape entrepreneurial opportunities and challenges (Archer, 1996).

Incorporating Archer's Morphogenetic Approach in developing a curriculum for eCommerce entrepreneurship in South Africa would involve a strategic design that accounts for the interplay between structure, culture, and agency over time, emphasising the understanding how social structures and cultural systems evolve and influence human behaviour while allowing human agency to shape and alter these structures (Archer, 1996). This could entail analysing the impact of structural and cultural conditioning and norms together with the role of interaction and human agency on the development of the curriculum in

order to bring about structural and cultural systemic changes over time.

Incorporating Archer's Morphogenetic Approach could lead to a curriculum that not only equips learners with practical eCommerce skills but also fosters a deeper understanding of the dynamic interaction between social structures, culture, and individual agency. Students would therefore be prepared not just to enter the field of eCommerce but to innovate within it, contributing to meaningful changes that can improve not only their individual business success but also the broader entrepreneurial ecosystem in South Africa.

3.3. Colonialism and Post-colonialism

Colonialism and Post-colonialism provide critical perspectives on how historical and ongoing power dynamics influence education systems. These theories highlight the legacies of colonial rule and their impact on contemporary educational practices and structures (Said, 1978). Colonialism refers to the historical process by which European powers dominated and exploited non-European territories, imposing their economic, political, and cultural systems. The impact of colonialism on education systems in colonised regions has been profound, often resulting in curricula that reflect the values and knowledge systems of the colonisers rather than those of the local populations. This legacy continues to influence contemporary education systems where Western, neo-liberal frameworks often dominate and are favoured, and in turn marginalise local knowledge and perspectives (Said, 1978).

Post-colonialism as a theoretical framework critiques the ongoing effects of colonialism in contemporary societies and seeks to decolonise knowledge and cultural production. Scholars such as Edward Said, Gayatri Spivak, and Homi Bhabha have highlighted how colonial power dynamics persist in various forms, including through education. Post-colonial theory advocates for the inclusion of marginalised voices and the recognition of diverse knowledge systems in the curriculum. It challenges the hegemony of Western epistemologies and calls for a more inclusive and equitable approach to knowledge production and dissemination (Bhabha, 1994; Said, 1978; Spivak, 2004).

3.3.1. Implications of colonialism and post-colonialism on Curriculum Development

Colonialism poses significant challenges to the construction of an inclusive and equitable curriculum. The imposition of Western knowledge systems often marginalises local knowledge and perpetuates a neo-colonial dynamic within education (Bhabha, 1994; Said, 1978). This is particularly evident in the field of

entrepreneurship education, where Western models of entrepreneurship, based on individualism and market-driven principles, may not align with the collective and community-oriented practices prevalent in many African societies. Applying post-colonial theory to the development of an eCommerce entrepreneurship curriculum for South Africa necessitates a critical examination of the content and pedagogical approaches in place to ensure they are not merely replicating Western models. Instead, the curriculum should be rooted in the local context, drawing on indigenous knowledge systems, addressing local economic realities, and promoting entrepreneurial practices that are sustainable and relevant to the South African context. This approach not only decolonises the curriculum but also empowers students by validating their cultural heritage and fostering a sense of agency and innovation (Bhabha, 1994).

Colonialism-imposed Western educational models and content often marginalise indigenous knowledge systems and cultural practices (Bhabha, 1994; Said, 1978). This legacy persists in many post-colonial contexts, where educational curricula continue to reflect Western, neo-liberal values. Colonial education systems prioritised Western knowledge and languages, often disregarding or devaluing local knowledge and languages. This has led to a continued dominance of Western epistemologies in post-colonial education systems. Indigenous knowledge systems, which are often contextually relevant and culturally significant, have been marginalised in favour of Western scientific and technical knowledge (Bhabha, 1994). The colonial legacy in education presents a fundamental challenge to the development of an eCommerce entrepreneurship curriculum that is relevant to the South African context. It necessitates a critical examination of whose knowledge is valued and whose interests are served by the curriculum.

Post-colonial theorists argue for the decolonisation of education which involves recognising and values local knowledge, experiences, and contexts. This perspective challenges the universality of Western educational models and calls for curricula that are more relevant and responsive to the needs of post-colonial societies (Bhabha, 1994). Decolonising education involves integrating local knowledge systems and cultural practices into the curriculum. This ensures that education is relevant to the local context and empowers learners to draw on their own cultural heritage (UCT Curriculum Change Workgroup, 2018). This definition is widened by Soudien (2021) who states that decolonising education in the Global South incorporates the rejection of the marginalisation of the African voice, the rejection of the positioning of Africa as a 'place to learn about and not from' and the rejection of the objectification of Africa as a site for Western scrutiny. Post-colonial critique also encourages a critical examination of the power dynamics that shape educational practices. This includes questioning whose interests are served by the curriculum and how it can be made more inclusive

and equitable (UCT Curriculum Change Workgroup, 2018). For an eCommerce entrepreneurship curriculum in South Africa this means developing content that is rooted in local realities, acknowledges historical injustices, and empowers learners to navigate and transform their socio-economic environments.

Decolonising the curriculum therefore involves a critical reassessment of the content, pedagogical approaches, and underlying assumptions that shape educational practices. It requires the inclusion of indigenous knowledge systems, the recognition of local entrepreneurial practices, and the development of pedagogies that are responsive to the cultural and socio-economic contexts of the learners (UCT Curriculum Change Workgroup, 2018). Positionality and reflexivity are crucial in the process of decolonising the curriculum. Educators and curriculum developers must be aware of their own positionalities and the power dynamics that influence their work. This involves reflecting on how their backgrounds, experiences, and perspectives shape their approach to curriculum development and being open to alternative viewpoints and knowledge systems. By embracing positionality and reflexivity educators can create a more inclusive and equitable curriculum that genuinely reflects the diversity and richness of the local context (UCT Curriculum Change Workgroup, 2018). In the context of an eCommerce entrepreneurship curriculum for South Africa, this means moving beyond Western models and incorporating practices that are relevant to the local context. These practices could include cooperative business models, social entrepreneurship, and sustainable development principles. With this incorporation students would also gain the analytical tools to navigate and transform these challenges, fostering innovative, socially responsible, and culturally attuned entrepreneurial practices and prepare them not only to succeed in the digital economy but to contribute to a more equitable and sustainable business environment.

3.4. Curriculum-as-Knowledge-Building Theories

Given the unequal distribution of powerful knowledge in post-colonial countries theories around the structure and transmission of knowledge need to also be incorporated to develop an inclusive curriculum. Bernstein (1996) and Maton (2016) provide such frameworks for understanding how knowledge is structured and transmitted within educational settings. Their theories offer insights into the development of curricula that balance practical and theoretical knowledge.

3.4.1. Bernstein's Theory of Pedagogic Discourse

Bernstein's theory of pedagogic discourse provides a framework for understanding how knowledge is transmitted and acquired within educational settings. Bernstein distinguishes between 'vertical' and 'horizontal' discourses, where vertical discourse refers to specialised, academic knowledge characterised by its systematicity and structure, and horizontal discourse pertains to everyday, contextual knowledge (Bernstein, 1996; Muller et al., 2004). Bernstein also introduces the concepts of 'classification' and 'framing' to analyse the boundaries between different types of knowledge and the control they have over the pedagogic process. Bernstein's work focuses on the rules and principles that govern the transmission and acquisition of knowledge. As discussed, Horizontal Discourse refers to everyday, context-bound knowledge. It is often segmented and specific to particular contexts. In the context of eCommerce, this could include practical skills such as digital marketing or financial management. Vertical Discourse refers to abstract, context-independent knowledge. It is hierarchical and can be generalised across different contexts (Bernstein, 1996; Muller et al., 2004). In eCommerce, this could include theoretical frameworks for understanding market dynamics or consumer behaviour.

Bernstein's theory emphasises the need for a balance between these discourses to ensure that learners can apply theoretical knowledge in practical contexts (Bernstein, 1996; Muller et al., 2004). This balance is crucial for developing an eCommerce entrepreneurship curriculum that equips learners with both the practical skills and theoretical understanding needed to succeed in the digital economy.

3.4.2. Maton's Legitimation Code Theory

Maton's Legitimation Code Theory (LCT) builds on Bernstein's work by providing tools to analyse the underlying principles that legitimise knowledge practices. LCT focuses on the 'codes' that underpin educational practices, distinguishing between epistemic relations (ER) and social relations (SR). ER refers to the principles governing what counts as legitimate knowledge, while SR pertains to the principles governing who can claim legitimate knowledge (Maton, 2014, 2016). This theory is particularly useful for examining the power dynamics within educational contexts and understanding how different forms of knowledge are valued and legitimised.

LCT distinguishes between different types of knowledge and knowers highlighting the importance of recognising diverse forms of expertise. This process is referred to as Specialisation (Maton, 2014). This is relevant for eCommerce education where both technical skills and entrepreneurial capabilities are needed.

Through Semantics LCT also examines the meanings and contexts associated with different types of knowledge. This includes understanding how abstract concepts can be applied in practical contexts. Maton's LCT provides a framework for developing a curriculum that values diverse forms of knowledge and expertise. It encourages the integration of practical and theoretical knowledge, ensuring that learners are well-equipped to navigate the complexities of the eCommerce sector (Maton, 2014, 2016).

3.4.3. Implications of Curriculum-as-Knowledge-Building Theories on Curriculum Development

In developing an eCommerce entrepreneurship curriculum for South Africa, Bernstein's and Maton's theories offer valuable insights into how knowledge should be structured and transmitted. A curriculum that prioritises vertical discourse ensures that students gain access to specialised, systematic knowledge of eCommerce principles and practices. At the same time incorporating horizontal discourse can help contextualise this knowledge, making it relevant to students' everyday experiences and the local economic environment (Bernstein, 1996; Maton, 2016; Muller et al., 2004). By analysing the legitimation codes educators can critically assess the curriculum to ensure it promotes equitable access to knowledge and recognises diverse epistemic and social relations. Bernstein's theory of pedagogic discourse and Maton's Legitimation Code Theory provide valuable tools for analysing and structuring educational knowledge. These theories help ensure that the curriculum provides access to powerful, systematic knowledge while also being responsive to the diverse contexts and needs of the learners (Bernstein, 1996; Maton, 2016; Muller et al., 2004).

Incorporating Bernstein's Theory of Pedagogic Discourse and Maton's Legitimation Code Theory (LCT) into developing a curriculum for eCommerce entrepreneurship in South Africa would ensure that the curriculum is not only rich in content but also considers how knowledge is structured, communicated, and legitimised. This combination would help in designing a curriculum that effectively balances content delivery, learning processes, and the broader socio-cultural dynamics influencing learning and knowledge dissemination (Bernstein, 1996).

Bernstein's theory being included in the development of the curriculum would provide structured yet adaptable learning pathways that maintain clear distinctions between different types of knowledge while allowing flexibility in advanced learning (Bernstein, 1996; Muller et al., 2004). The application of Maton's

LCT would ensure that the curriculum legitimises both theoretical and practical knowledge and highlights the importance of real-world relevance (Maton, 2014, 2016). This would lead to students would develop a well-rounded understanding of eCommerce through structured learning, balanced by exploratory and critical thinking components to be able to apply global business strategies to local realities, fostering adaptable and innovative eCommerce practices and empower students to navigate and influence the eCommerce field in South Africa, contributing to socio-economic growth and transformation.

3.5. Sen's Capabilities Theory

Sen's Capabilities Theory offers a human-centred approach to development, emphasising the importance of expanding individuals' capabilities to achieve their full potential (Sen, 1999). This theory provides a valuable framework for understanding the broader goals of education and curriculum development and is particularly relevant to curriculum development as it shifts the focus from economic outcomes to the holistic development of individuals. Sen's Capabilities Approach argues that development should focus on enhancing individuals' freedoms and capabilities, rather than merely economic growth. This approach prioritises the real opportunities available to people to pursue lives they value (Sen, 1999). An eCommerce entrepreneurship curriculum informed by Capabilities Theory would prioritise the development of a wide range of capabilities, including critical thinking, creativity, and social responsibility, enabling students to pursue entrepreneurial activities that are not only economically viable but also socially and ethically meaningful.

According to Sen (1999), education should aim to expand learners' capabilities, enabling them to achieve their personal and professional goals. This includes providing them with the skills, knowledge, and agency needed to succeed in the eCommerce sector. The ultimate goal of education is to promote the flourishing of human beings. This involves creating a learning environment that fosters creativity, critical thinking, and problem-solving skills (Sen, 1999). In the context of curriculum development Capabilities Theory advocates for an educational framework that empowers learners with the capabilities to pursue their entrepreneurial aspirations. This involves providing a supportive learning environment that fosters creativity, critical thinking, and problem-solving skills.

Incorporating Sen's Capabilities Approach into a curriculum for eCommerce entrepreneurship in South Africa would then emphasise enhancing the substantive freedoms and capabilities of individuals to achieve

their potential and shift the focus from merely imparting technical knowledge to fostering an environment where students can develop a range of skills, values, and opportunities that empower them to make meaningful choices and contribute to their personal and community development. In this way the curriculum would go beyond traditional education by nurturing students' abilities to make informed and meaningful choices about their entrepreneurial paths. This would foster not just technical proficiency but a well-rounded entrepreneurial readiness that values social impact, ethical practices, and adaptability and would empower students to use eCommerce not only as a tool for personal success but as a means to contribute to the development and economic inclusion of their communities (Sen, 1999).

3.6. Theoretical Synthesis and Implications for Curriculum Development

Synthesising Bernstein's Theory of Pedagogic Discourse, Maton's Legitimation Code Theory (LCT), Sen's Capabilities Approach, Social and Critical Realism, Archer's Morphogenetic Approach, with a focus on colonial and post-colonial legacies into a cohesive framework for developing a curriculum for eCommerce entrepreneurship in South Africa reveals three bodies of intersecting theory. These bodies encompass how knowledge is structured and transmitted, the power dynamics that influence educational access and legitimacy, and the positionality of learners within socio-economic structures (Archer, 1996; Bernstein, 1996; Maton, 2014; Sen, 1999).

Bernstein's Theory of Pedagogic Discourse and Maton's LCT provide insight into how knowledge is classified and framed within educational contexts where Bernstein's theory focuses on the boundaries between different types of knowledge and how they are communicated, while Maton's LCT emphasises how legitimacy and value are assigned to various forms of knowledge (Bernstein, 1996; Maton, 2016).

Critical Realism and Archer's Morphogenetic Approach highlight the importance of recognising the underlying social structures that influence knowledge dissemination over time and allow for reflexivity in learning which supports a curriculum design that adapts and responds to societal needs, empowering learners to engage with knowledge critically and actively (Archer, 1996; Bhaskar, 1978).

Sen's Capabilities Approach intersects with Archer's Morphogenetic Approach to emphasise the importance of agency and human development within the curriculum (Archer, 1996; Sen, 1999). While Sen's theory centres on building capabilities that enable learners to achieve their full potential and make informed

choices, Archer's approach focuses on how agency interacts with structures to produce change over time. The integration of colonial and post-colonial analysis adds an essential dimension to understanding empowerment in showcasing how historical legacies and power dynamics have shaped the opportunities and capabilities available to different groups. This perspective stresses the importance of creating a curriculum that acknowledges and addresses these inequalities, enabling learners to overcome systemic barriers (Archer, 1996; Sen, 1999).

Critical Realism and post-colonial theory together underscore the significance of positionality, and the power relations embedded in educational and economic structures and highlight how historical and structural inequities influence who has access to knowledge and how that knowledge is valued. Maton's LCT adds to this by exploring the basis on which knowledge is legitimised, whether through expertise, lived experiences, or social recognition which ties into Bernstein's framing of how control over learning is distributed, which can either reinforce or challenge existing power hierarchies. Social Realism contributes by acknowledging the social contexts that shape how knowledge is perceived and accessed, emphasising the need to ground eCommerce education in the realities of South Africa's socio-economic landscape (Bernstein, 1996; Bhaskar, 1978; Maton, 2016; Moore, 2013).

The combination of Bernstein, Maton, and Sen's theories underscores that knowledge is not only a set of skills and information but also carries social and cultural weight that impacts learners' ability to access and apply it (Bernstein, 1996; Maton, 2014, 2016; Sen, 1999). A curriculum built on these principles would then include not just technical eCommerce skills but also local and indigenous knowledge, making learning both globally relevant and locally grounded. This integration ensures that knowledge is contextualised, critically evaluated, and tailored to empower learners. A curriculum would thus be developed with varying semantic densities and framed to include content that moves from basic to complex while maintaining relevancy to the learners' socio-cultural environment.

Power dynamics are central to the theories of Critical Realism, Post-colonialism, and LCT, emphasising that those who hold power to define what is legitimate knowledge shapes educational outcomes. Post-colonialism highlights how historical power imbalances affect contemporary educational opportunities and outcomes (Bhabha, 1994). A curriculum must consciously counteract historical inequalities by integrating diverse voices, promoting local entrepreneurial success stories, and enabling students from various backgrounds to contribute their unique perspectives. It must also teach students to recognise power

structures and develop the agency to navigate and potentially change them.

Positionality is where the theories of Social Realism, Archer's Morphogenetic Approach, and Sen's Capabilities Approach intersect. These theories collectively emphasise understanding how an individual's socio-economic background and social identity impact their learning experiences and potential entrepreneurial success. The curriculum must reflect an understanding of learners' positionality by providing flexible, inclusive learning paths and empowering them to use their unique backgrounds as strengths. Archer's reflexivity ensures that learners can critically assess their positions and take strategic actions, while Sen's theory supports building capabilities that allow them to transform their socio-economic realities (Archer, 1996; Moore, 2013; Sen, 1999).

The integration of Social and Critical Realism, Colonialism, Post-Colonialism, and the theories of Archer, Bhaskar, Bernstein, Maton, and Sen provides a robust theoretical foundation for the development of an inclusive curriculum. These perspectives offer valuable insights into the nature of knowledge, the dynamics of power and agency, and the importance of contextual relevance and inclusivity. Social and Critical Realism emphasise the need for a curriculum that reflects the social, economic, and cultural realities of South Africa. Colonialism and Post-colonialism challenge the dominance of Western educational models, advocating for the inclusion of indigenous knowledge systems and local contexts. In theory, this promotes a more inclusive and equitable curriculum. Bernstein and Maton's theories highlight the importance of balancing practical and theoretical knowledge. This equips learners with the skills to navigate and innovate within the eCommerce sector. Sen's Capabilities Theory underscores the importance of empowering learners with the capabilities to pursue their entrepreneurial aspirations. This involves providing a supportive learning environment that fosters creativity, critical thinking, and problem-solving skills. Incorporating these theoretical frameworks into curriculum development ensures that learners can relate to and apply their learning in meaningful ways (Archer, 1996; Bernstein, 1996; Bhabha, 1994; Bhaskar, 1978; Maton, 2016; Moore, 2013; Said, 1978; Sen, 1999). By drawing on these theories, a curriculum can be developed that is both theoretically sound and practically and socially relevant, equipping students with the knowledge and skills they need to succeed in the rapidly evolving field of eCommerce.

Pedagogical approaches play a crucial role in the effectiveness of the curriculum. Adopting learner-centred, participatory, and reflective pedagogies can enhance student engagement and facilitate the development of critical and creative thinking skills. Experiential learning, problem-based learning, and collaborative projects

can provide students with practical experience and foster a deeper understanding of eCommerce principles and practices. By incorporating diverse pedagogical approaches, the curriculum can cater to different learning styles and promote a more inclusive and effective learning environment.

In addition, assessment and evaluation are essential components of curriculum development. They provide feedback on student learning and help identify areas for improvement. In the context of an eCommerce entrepreneurship curriculum, assessment should go beyond traditional exams and include a variety of methods, such as project-based assessments, peer evaluations, and reflective journals. These methods can provide a more comprehensive and accurate measure of student learning and development. Moreover, ongoing evaluation of the curriculum itself is crucial to ensure its relevance and effectiveness in meeting the needs of the learners and the local context (Cain et al., 2018).

By synthesising these theories, a curriculum for eCommerce entrepreneurship in South Africa would be designed with a comprehensive understanding of how knowledge is structured and legitimised, how power and historical contexts shape learning, and how students' positionality influences their educational experiences and outcomes. Therefore, integrating these theoretical perspectives provides a comprehensive framework for developing an eCommerce entrepreneurship curriculum tailored to the South African context. Developing an eCommerce entrepreneurship curriculum for South Africa requires a deep understanding of the local context and the diverse needs of the learners. This involves incorporating local knowledge systems, recognising indigenous entrepreneurial practices, and addressing the specific socio-economic challenges faced by South African entrepreneurs. By ensuring contextual relevance and inclusivity, the curriculum can empower students to engage in entrepreneurial activities that are sustainable and beneficial to their communities.

3.7. Postcolonial Critical Realism

Increasingly critical realism has become a significant perspective in modern philosophy and social science, however it has not yet been established as an important approach in technology-based research. It is suggested that a key role for critical realism within the digital environment is to provide a consistent and coherent underpinning philosophy by seeking out substantial connections among phenomena rather than attempting to identify formal associations or regularities (Pather, 2005).

(Gorski, 2003; Gorski, 2013) compares natural life, governed by laws to social life which tends to be governed by meanings. Therefore, the aims and methods of the social sciences would differ immensely from those of the natural sciences. CR further differentiates between the 'intransitive' and 'transitive' characteristics of science, or the difference between the natural world as it is and our changing concept of it based on the growth of knowledge (Gorski, 2003; Gorski, 2013).

As highlighted, within a CR ontology reality is stratified into three levels. First is the empirical level, or the realm of events as we experience them mediated by the filter of human experience and interpretation where social ideas, meanings, decisions, and actions occur and can be causal. The second level is that of the actual, where there is no filter of human experience and events occur whether or not humans experience or interpret them, and the true occurrences of these events are often different from what is observed at the empirical level. The third and final level is that of the real where causal structures, or 'causal mechanisms,' exist where the inherent properties of an object or structure act as causal forces to produce. The primary goal of CR is to explain social events by drawing reference to these causal mechanisms and the effects they can have across all three levels (Bhaskar, 1978; Fletcher, 2017; Gorski, 2013).

Slemming (2019) built off CR and argued that in order to truly address agency, particularly within a higher education space, that social realism, which takes into consideration the processes of developing or extending knowledge about ourselves in relation to cultural and structural phenomena in society, is more relevant when it comes to explaining how or why changes occur or remain unchanged in specific socio-cultural settings. Zipin et al. (2015) found however that social realism alone was not sufficient to meet the substantive needs and aspirations of power-marginalised South African groups who sought better lives through schooling as the conceptions of what constitutes social-educational 'justice' were found to be too thin.

As a consequence, there was a need to incorporate the impact of colonialism in South Africa when investigating curriculum development in the context of higher education, as proposed in the CCWG framework (UCT Curriculum Change Workgroup, 2018). Decolonising the curriculum requires recognising historical biases, stereotypes and omissions and incorporating epistemological plurality for the inclusion of diverse epistemologies and knowledge systems. It also arises the need to encourage students to critically engage with the pedagogy and empowering marginalised voices, in particular in South Africa through addressing language and representation issues while incorporating global citizenship (UCT Curriculum

Change Workgroup, 2018).

Tinsley (2022) builds further on CR by proposing postcolonial critical realism (PCR) as an ontological framework which investigates the relationship between racialised, colonial discourses and the social world. In order to theorise the relationship between racialised, power-laden discourses and material reality, Tinsley (2022) derives five tenets of PCR, namely:

- colonial discourses underlie and interact with material structures;
- coloniality is global and made visible through differential events and experiences;
- subaltern lived experiences reveal the nature of reality at large;
- coloniality is power-laden, sticky, and often invisible;
- decolonisation must target all three domains of the social world and their interactions (Tinsley, 2022).

Tinsley (2022) argues that PCR offers insights for the decolonial project. For example, the apartheid-era dispossession and displacement of Black South Africans to ever smaller and less arable tracts of land was instrumental to the white consolidation of wealth and power. The failure to recognise both categories of space as expressions of the racial capitalist world system restricts the propositions of solutions to the present crisis (Tinsley, 2022). This then made PCR a natural framework choice for inclusion in investigating the development of an eCommerce entrepreneurship curriculum in South Africa given the social and cultural context in which eCommerce entrepreneurs exist within the country.

3.7.1. Synthesising PCR with other theories

PCR is a hybrid theoretical perspective that combines the critical examination of historical and present-day colonial legacies with CR's focus on underlying structures, mechanisms, and human agency. Integrating this perspective into the synthesis of the theories previously discussed would enhance the depth of analysis by emphasising the socio-historical roots of power dynamics, knowledge legitimacy, and positionality. PCR underscores that the way knowledge is structured and transmitted is influenced by colonial legacies that often prioritised certain types of knowledge over others. This aligns with Bernstein's Theory of Pedagogic Discourse and Maton's Legitimation Code Theory (LCT) by showing how these legacies affect which knowledge is deemed legitimate or valuable. The curriculum would integrate knowledge systems that acknowledge and validate local, indigenous, and non-Western practices. This would challenge traditional

hierarchical structures of knowledge, as proposed by Bernstein, and promote knowledge diversity in line with LCT's specialisation and semantic gravity (Bernstein, 1996; Maton, 2014; Tinsley, 2022).

PCR highlights how colonial histories have constructed persistent power structures that shape current socio-economic conditions and access to educational and entrepreneurial opportunities, which aligns with CR's focus on understanding deep, often unseen mechanisms that influence outcomes. Integrating this perspective with Sen's Capabilities Approach and Archer's Morphogenetic Approach emphasises how learners from marginalised backgrounds can be empowered to overcome structural limitations which pushes the curriculum to include content that teaches students to identify these power structures and develop strategies to challenge and change them (Archer, 1996; Sen, 1999; Tinsley, 2022).

Combined with Social Realism and Archer's Morphogenetic Approach, PCR offers a nuanced view of how learners' positionality (influenced by both present socio-economic status and historical context) affects their educational experiences and entrepreneurial potential. While Archer's Approach already emphasises agency and reflexivity, post-colonial critical realism deepens this by showing that the constraints learners face are not just socio-economic but are also rooted in historical legacies of colonialism. This synthesis highlights the need for a curriculum that not only teaches reflexivity but also equips students with the critical skills to analyse and act against the remnants of colonial power (Archer, 1996; Sen, 1999; Tinsley, 2022).

PCR also highlights that knowledge legitimacy is not neutral, but rather that it is shaped by power dynamics with colonial roots. This adds to LCT's exploration of who defines legitimate knowledge and connects with Bernstein's classification of knowledge types, advocating for broader inclusivity. This approach amplifies Critical Realism's focus on power structures by tracing their origins to colonial legacies. It intersects with Sen's Capabilities Approach to argue that the expansion of capabilities should actively confront these historical power imbalances. PCR further intersects with Archer's Morphogenetic Approach to show that real change involves not only recognising one's agency but also understanding and dismantling the historical legacies that constrain it. This helps students grasp the broader impact of their entrepreneurial efforts (Archer, 1996; Bernstein, 1996; Maton, 2014; Sen, 1999; Tinsley, 2022).

Incorporating PCR with Bernstein's Pedagogic Discourse, Maton's LCT, Sen's Capabilities Approach, Social and Critical Realism, and Archer's Morphogenetic Approach can lead to a deeply integrated curriculum. This synthesis addresses knowledge legitimacy, historical power imbalances, and learner positionality in a way

that empowers students to not only learn about eCommerce but also to challenge and reshape the socio-economic landscape of entrepreneurship in South Africa. The result would then be an educational framework that promotes transformative learning, resilience, and community-centred growth in the eCommerce sector (Archer, 1996; Bernstein, 1996; Bhaskar, 1978; Maton, 2014; Moore, 2013; Sen, 1999; Tinsley, 2022).

3.8. Summary of Chapter 3

The development of an eCommerce entrepreneurship curriculum for South Africa is a complex and multifaceted task that requires a deep understanding of various theoretical perspectives and a commitment to inclusivity and contextual relevance. Social and Critical Realism, Colonialism, and Post-Colonialism provide valuable insights into the nature of knowledge and the dynamics of power and agency, highlighting the need for a curriculum that is both theoretically sound and practically relevant. The theories of Archer, Bhaskar, Bernstein, Maton, and Sen offer additional tools and frameworks for analysing and structuring educational knowledge, ensuring that the curriculum promotes equitable access to powerful knowledge and the holistic development of individuals. Table 1 below shows the key components of each theory and its intersection in the overall framework derived.

Table 1 - Theory intersections with framework

Theory	Key Components	Intersection in Framework
Critical Realism	Stratified Reality, Transformative Agency	Understanding layered realities to empower learners
Social Realism	Structured Knowledge, Social Justice	Providing structured, justice-oriented disciplinary knowledge
Morphogenetic Approach	Structure and Agency Dynamics, Educational Transformation	Balancing societal structures and individual agency in education
Pedagogic Discourse	Knowledge Structuring, Equitable Knowledge Access	Ensuring equitable access to structured knowledge
Legitimation Code Theory	Contextual Responsiveness, Powerful Knowledge	Adapting powerful knowledge to diverse contexts
Capabilities Approach	Human Development, Expanding Capabilities	Focusing on individual capabilities for societal impact
Post-Colonial Theory	Cultural Hybridity, Decolonisation of Knowledge	Addressing decolonial and cultural inclusivity in education

By integrating these perspectives and adopting diverse pedagogical approaches, educators can develop a

curriculum that empowers students to succeed in the rapidly evolving field of eCommerce and contribute to the sustainable development of their communities. The theoretical perspectives of Social and Critical Realism, Colonialism, and Post-colonialism, along with the curriculum theories of Bernstein and Maton and Sen's Capabilities Theory, provide a robust foundation for developing an eCommerce entrepreneurship curriculum in South Africa.

While the theories drawn upon for this study are wide-ranging and provide contextual framing of the research and of the principles for curriculum design, they are not necessarily foregrounded in this particular piece of research. The overarching framing for the empirical research conducted is PCR, with other theories such as Maton, Bernstein and Sen providing important theoretical lenses from different knowledge perspectives through which current and future curriculum design research may be viewed for explanatory purposes or utilised for design purposes.

These perspectives also challenge the dominance of Western, neo-liberal frameworks and advocate for a curriculum that is contextually relevant, inclusive, and empowering. The layered ontology of PCR is then the main focal point of the theoretical framework used in this study, with the integration of the other theories mentioned allowing the outcomes to better address the unique challenges and opportunities within the South African context. This is envisaged to allow for the fostering of a generation of entrepreneurs equipped to drive sustainable and equitable development.

The next chapter proposed a research methodology that was used to further investigate the phenomena identified in literature with the goal of addressing the research question of the development of an appropriate eCommerce entrepreneurial curriculum within a South African context.

4. Chapter 4 - Research Design

This chapter describes the research methodology adopted for this study. It covers the research design, the research approach using the Saunders and Tosey (2012)'s research onion, details of the data generation and analysis as well as other considerations to address the main research problem around the development of design principles for a higher education curriculum for eCommerce entrepreneurs in South Africa.

To date a significant amount of digital-based research is still conducted using the positivistic research tradition. Two possible reasons for this are the fact that most technology-driven research has evolved from more technical subjects such as computer science which uses systems theory as a basis for the analysis and understanding of business systems. In addition, many of academics currently researching the impact of technology on society have backgrounds in technical subjects including engineering, physical sciences and mathematics (Pather, 2005).

However, as the world has evolved to become more technology-inclusive the need to incorporate more humanistic-based research approaches has increasingly arisen. This has led to a significant increase in the instances of interpretivist or interpretivism or qualitative research being used in technology-related research where the impact on business and society are concerned. Interpretivism does not suggest that it is perfectly objective, but through the use of methods such as triangulation large parts of inherent bias can be identified and controlled (Pather, 2005).

4.1. Research Philosophy

The research philosophy refers to the underpinning beliefs in a research study which provide a lens for which the theories in the study are investigated (Creswell, 2007). It is these beliefs that ultimately impact the outcomes of research and assists in aligning the views of the researcher with the intended audience of the research outcomes (Creswell, 2007). The philosophical lenses are given as ontology, epistemology, axiology and methodology view of the study, each of which is unpacked further in this chapter, and guides the actions conducted in the study (Creswell, 2007).

4.1.1. Research Ontology

The research ontology refers to the view of reality taken in the study (Creswell, 2007). This view is either nominal, where reporting is done through multiple realities, or realist, where reality can exist by itself independent of other views of reality (Creswell, 2007; Neuman, 2014). Ontology is concerned with what exists in the world and how human beings go about acquiring knowledge in the construction of reality (Moon and Blackman, 2014; Saunders and Tosey, 2012). In general, an ontology can be classified as either falling within objectivism or subjectivism (Saunders and Tosey, 2012).

In the case of objectivism the phenomenon in question is independent of the researcher and true meaning lies in the phenomenon itself, with the researcher striving to identify that meaning. In objectivism it is believed that only one true reality exists in which structures can change which then leads to the nature of the reality changing. In this case, independent and dependent causal relationships exist and as such knowledge can be measured, tested, and broken down into variables that can be used to observe the effect of these relationships (Moon and Blackman, 2014; Saunders and Tosey, 2012). This view aligns with the realist perspective of Bhaskar (1978), who asserts that reality, associated with the Real component of CR, exists independently of just knowledge of it but can only be understood through our socially mediated experiences. In this view, independent and dependent causal relationships exist and knowledge can be measured, tested, and broken down into variables that can be used to observe the effect of these relationships (Moon and Blackman, 2014; Saunders and Tosey, 2012).

Subjectivism on the other hand states that meaning exists within the subject where the subject imposes meaning on the object and in this way meaning tends to be socially constructed within the existence of multiple realities. Subjectivism therefore builds an understanding of how an object is constructed through social actors. This is an ongoing process where the social phenomena in question are in constantly revised through social interactions (Moon and Blackman, 2014; Saunders and Tosey, 2012). This view resonates with the interpretivist stance of Said (1978) and other post-colonial theorists who emphasise the importance of understanding the social and cultural contexts that shape our interpretations of reality.

However, while concepts like eCommerce and curriculum can exist independently, we can only know experience their reality through socially mediated experience. As such, 'measurement' exists as a proxy and social reality is layered. This implies that ontology is multiple layers of reality and reality is interpreted through structures and ways of being and power balances.

The goal of this study was to understand and interpret all factors and sources of skill and capability development, both hidden and evident, that can influence the development principles associated with an eCommerce entrepreneurial curriculum for higher education in South Africa. This investigation was carried out through reviews of the development of current related curricula relevant to eCommerce entrepreneurship within higher education together with semi-structured interviews with relevant stakeholders.

Qualitative research generates data in the form of words rather than that of quantitative that is based on the use of numerical analysis. The data was then interpreted through the lens of the theoretical frameworks identified, leading it to be more subjective in nature (DeCarlo, 2018). This required the gathering of data from diverse sources knowledgeable in the subject area and therefore cannot be simply observed or objectively measured (Creswell, 2007; DeCarlo, 2018).

4.1.2. Research Epistemology

The research epistemology refers to the knowledge of reality in a study including what is defined as knowledge and how these claims are justified (Creswell, 2007). The focus of epistemology is on how knowledge can be acquired or produced and how to establish the scope of its applicability (Moon and Blackman, 2014). The epistemology of a study can be positivist, social constructivist (or interpretivist) or critical in nature (Creswell, 2007).

A positivist epistemological stance views truth as objective and therefore measurable properties exist independently from the observer, thus value neutral. It includes knowability, and deductive logic based on well-researched theories (Creswell, 2007; DeCarlo, 2018). Positivism uses existing theory to generate hypotheses which are then tested statistically using quantifiable observations to further develop the theory. The outcome of positivist research is a generalisation which can be replicated due to the highly structured methodology followed by the researcher (Saunders and Tosey, 2012). The quality of a positivist study is based on its objectivity and unbiasedness, reliability tested by its repeatability, internal validity tested by the accuracy of findings and external validity tested by the ability to generalise the results (Oates et al., 2022).

An interpretivist research stance on the other hand is based on the belief that the realities of the world are subjective and are individually constructed and is based on the interpretation of individuals' own subjective

meanings and experiences (Creswell, 2007; DeCarlo, 2018). Interpretivism is part of a relativist ontology, where more than one truth could exist in any social context. According to Walsham (2014), interpretive philosophy-based research takes the position that knowledge of reality is socially construction by human actors. This means that the concept of reality may differ from person to person. Interpretivism works hand-in-hand with a subjectivism epistemology, based on the perspective of the researcher within the research.

Hence in contrast to positivism, interpretivism investigates a subject's world through their viewpoint. In this case a qualitative method of acquiring data to create contextual depth is adopted (Saunders and Tosey, 2012). The quality of an interpretivist study lies in its trustworthiness, confirmability of findings to be auditable, dependability of the research process in how well it has been documented, credibility of the research subjects and description of findings, and transferability of findings to different contexts (Oates et al., 2022).

Critical research strives to critique the status quo through its identification of power relations, conflicts, and contradictions, and in doing so create transformation through empowerment or emancipation and drives the way the research goes about interviewing participants and explores their belief systems and worldviews in order to interpret what has been said (Myers and Klein, 2011; Oates et al., 2022). Much like the interpretivist stance, critical research posits that reality is created and re-created by people however it also further postulates that reality has objective characteristics that can shape perceptions and perspectives of the world (Oates et al., 2022). Hence critical research builds off the interpretivist stance with the inclusion of the impact of structures of power and control that govern and validate specific worldviews (Oates et al., 2022). The quality of a critical study is based in its fairness, ontological authenticity, educational authenticity, catalytic authenticity, and tactical authenticity (Oates et al., 2022).

For this study, the researcher was immersed in the research itself in an attempt to critically analyse explain and understand the educational requirements of eCommerce entrepreneurs within the context of South Africa and the subjective meaning of eCommerce abilities (Bryman and Bell, 2017). A critical interpretivist approach therefore made the most sense as this occurs within a social context, as the dimensions to eCommerce entrepreneurial education within a South African context are not yet definitively understood.

4.1.3. Research Axiology

The research axiology is the value stance taken by the study and addresses how the values of the research are expressed (Creswell, 2007). It encompasses questions around the very nature and classification of values and what, how, and why objects hold value (Faucher, 2018). Axiological theories exist within differing philosophical and cultural perspectives and hence represent a diverse selection of opinions, conclusions, decisions, and methodological approaches (Kotlyarova et al., 2015). It is therefore an attempt to bring together and critically investigate a large number of existing and overlapping questions related to the essence of goodness, right conduct, value, and obligation.

As this research is subjectivist in nature data is interpreted through critical thinking based on its context. The research values are given through the understanding that evolves through the study informed by multiple realities that may exist (Creswell, 2007).

4.1.4. Research Methodology

This study critically investigated and explored an aspect of eCommerce in South Africa that thus far is not well defined namely design principles for curriculum development within the Global South eCommerce entrepreneurial higher education context. The research goal was to provide insight into entrepreneurial learning and capability requirements that would inform an eCommerce entrepreneurial curriculum for higher education in South Africa.

The research methodology is the specification of the process of research used in the study and was required to be aligned with the critical realism philosophical stances taken (Creswell, 2007). The research methodology can be classified as exploratory, descriptive or explanatory research (Neuman, 2014). Exploratory research is conducted where the subject matter is new and not well documented in academic literature (Bryman & Bell, 2017; Neuman, 2014). This is in contrast with descriptive research where the subject area is well known and is used to provide further depth of description described to define and clarify it, while explanatory research is where known concepts are researched to address their root causes (Neuman, 2014).

Therefore this study falls within the context of Exploratory Research as research as conducted where the researcher sought to understand an idea or phenomenon to lay the groundwork for future research and development (Bryman & Bell, 2017; Neuman, 2014).

There tend to be a number of benefits to exploratory research as it is somewhat flexible and can adjust as information comes to light; however, subjective findings require additional research to substantiate (Bryman & Bell, 2017; Neuman, 2014). But this research also fell within the critical research area, asking questions such as where do conventional conceptions of curriculum come from, whose interests are served by conventional curriculum, what are the assumptions of these curricula, who and what have been left out and how does educational history in this country inform the adequacy of current curriculum formulations amongst others. Therefore the most appropriate description of the research methodology adopted by this study would be one of critical exploration.

4.2. Theoretical considerations

As discussed in chapter 3, incorporating the theories from the likes of Archer (1996), Bhaskar (1978), Bernstein (1996), Bhabha (1994), Maton (2016), Said (1978), Sen (1999), Tinsley (2022) and Young (2008) further enriches the theoretical foundation of this study. Archer's morphogenetic approach emphasises the dynamic interplay between structure and agency in social processes, highlighting the potential for education to be a transformative force that empowers individuals to challenge and change existing structures (Archer, 1996). Bhaskar's critical realism, with its emphasis on the stratified nature of reality and the transformative potential of human agency, underscores the need for a curriculum that empowers students to critically engage with and alter their socio-economic realities (Bhaskar, 1978).

Bernstein's theory of pedagogic discourse and Maton's Legitimation Code Theory (LCT) provide tools for analysing and structuring educational knowledge, ensuring that the curriculum promotes equitable access to powerful knowledge while being responsive to diverse contexts (Bernstein, 1996; Maton, 2016). Bhabha's post-colonial theory, with its focus on the power dynamics and cultural hybridity, challenges the hegemony of Western epistemologies and calls for a more inclusive and equitable approach to knowledge production and dissemination (Bhabha, 1994). Said's critique of Orientalism and the legacy of colonialism further emphasises the importance of decolonising the curriculum and recognising diverse knowledge systems (Said, 1978). Sen's Capabilities Theory offers a human-centered approach to development, emphasising the expansion of individuals' capabilities to lead the kind of lives they value. This theory is particularly relevant to curriculum development, as it shifts the focus from economic outcomes to the holistic development of individuals, promoting entrepreneurial activities that are socially and ethically meaningful (Sen, 1999).

Young's Social Realism highlights the importance of structured, disciplinary knowledge in education, asserting that access to this knowledge is a matter of social justice (Moore, 2013; Young, 2008).

Given the above this study therefore adopts an intersection of these theoretical frameworks and approaches as the basis of its research, supported by the theories specified, as it has been found to adequately offer insights for the decolonial project within a critical realism space. As highlighted by Tinsley (2022), the failure to recognise both categories of space as expressions of the racial capitalist world system restricts the propositions of solutions to the present crisis, which is directly relevant to the investigation of the development of a curriculum for eCommerce entrepreneurs in South Africa.

The approach to any research is given as either inductive or deductive. An inductive approach is when research moves from vague ideas towards identifying theoretical relationships which can later be refined and elaborated more precisely (Neuman, 2014). On the other hand, a deductive approach is when research starts out with ideas (theory) and moves towards being evaluated so that it is confirmed and tested, and is testable (Neuman, 2014). As the curriculum development principles requirements for South African eCommerce entrepreneurs are currently not well documented in literature, an inductive approach was used. The reasoning for this approach is that the research aimed to identify potential design principles guided by the research and observations (Bryman and Bell, 2017).

Initial thoughts and ideas can be changed due to new literature and concepts that could come to light. The stance of the researcher can also change as themes become apparent. The research can also yield unexpected results. The research outcome should therefore be theoretical, drawn from observation, and structured to explain the attributes associated with entrepreneurial capabilities. Since the research was qualitative an inductive approach was well-suited (Bryman and Bell, 2017).

4.3. Research Approach

The approach to the study was to critically investigate the education requirements for eCommerce entrepreneurs through semi-structured interviews with eCommerce practitioners, and subject-matter experts in South Africa. Interviewees were selected by assessing their role in the development, teaching and reception of eCommerce entrepreneurship curricula in South Africa. This included academics that are currently engaged with teaching eCommerce at a tertiary level and independent and public sector

stakeholders in eCommerce education in South Africa. Bodies such as the eCommerce Forum South Africa (EFSA) and universities with current eCommerce curricula were approached and recommendations on individuals to interview were gathered. This allowed for an informed development of an eCommerce entrepreneurship curriculum for South African eCommerce entrepreneurs.

As specified, a qualitative approach for data gathering was used as a qualitative approach is aimed at understanding a specific phenomenon in a real-world setting (Golafshani, 2003). Semi-structured interviews were used as the main research instrument. The interviews followed a set of specific topics derived from literature and secondary data analysis. However, they did not need to be asked in a particular order, and questions were phrased to suit the interview environment. Interviewees framed and described their understanding of the topic, and conversations were allowed to be flexible (Bryman and Bell, 2017).

The strength of qualitative research lies in its ability in gather complex textual descriptions of how interviewees experience a specific research phenomenon. It also informs the humanistic side of the research problem (Mack and Woodsong, 2005). Further strengths of this approach include raising further issues and discourses in an open discussion and also assists in the understanding of assumptions made, underlying beliefs and attributions of value (Choy, 2014). However, qualitative research does tend to be time consuming in the conducting of the interviews required. In addition, there is a requirement for the researcher to be skilled in interview methods and ethics (Choy, 2014).

Based on the above, this research adopted semi-structured interviews as the data generation method. A semi-structured interview is a combination of a structured and unstructured interview. Moreover, a semi-structured interview uses questions that are predetermined in advance, and the interviewee seeks clarification or explores issues spontaneously. Interviews were done face-to-face or telephonically to have interaction between the researcher and the participants, with the interviewer's main role to guide the interview (Alsaawi, 2014; Luna-Reyes and Andersen, 2003). An interviewing process was therefore required to be created. This process included rules, instructions and implementation of interviews. The rules were guided by the ethical research standards as stipulated and signed-off by the University of Cape Town's Faculty of Humanities ethics committee.

Interviews took place both online and in-person so that geographical constraints did not limit the interviews. Online discussions were also acknowledged to be more comfortable for interviewees choosing

to do so due time and/or distance restrictions. As highlighted, a sample of South African eCommerce and entrepreneurship curriculum subject-matter experts were interviewed. Interviews were structured around the principles of the derived intersecting theoretical frameworks and approaches, interrogating eCommerce entrepreneurs' positionalities and capabilities and how they were attained and developed. The investigation was conducted within the context of aspect of inclusion and South Africa. As this research was exploratory, some questions were purely conversational and open-ended to avoid excluding themes or dimensions that had not yet been taken into account. Interviews were recorded and transcribed, and reflection notes were taken directly after discussions have concluded. Once the key skills and capabilities were identified and classified, these were used to critically analyse the design principles for eCommerce entrepreneurs in South Africa. Perspectives on the design principles for curriculum development were gathered based on the findings presented.

Data analysis was conducted through the use of the Nvivo analytics tool, ChatGPT 4.0, as well as MicroSoft Excel. As the requirements of the interviews were specific and informed by the theoretical lens developed, a purposeful sampling strategy was used. Purposeful sampling is a common method used in qualitative research to identify rich information from candidates who have experienced and are experts in the phenomena. The purposeful sampling technique is widely used when the criteria for key participants have been established. Purposive sampling in this study was applied while selecting the participants for this research. Purposeful sampling is a method regularly used in qualitative research as it allows for the identification of rich information from relevant interviewees who have experienced the phenomena. The purposeful sampling technique is most commonly made use of in situations where the criteria for key participants have already been established prior to the interviews being conducted (Palinkas et al., 2015).

The identification of the saturation point is critical for qualitative research to be deemed rigorous. In qualitative research, the saturation point is reached after interviewing the number of participants where responses begin to repeat (Hennink et al., 2017). This is in line with a standards specified by Hennink et al. (2017) who identified the term 'code saturation' where no additional problems or issues can be identified through further interviews. In addition, 'meaning saturation' was identified where no further meaningful insights can be gained from further interviews being conducted (Fusch and Ness, 2015; Hennink et al., 2017).

4.4. Data Generation and Analysis

Thematic analysis finds patterns and themes about experiences, thoughts, and behaviours across a data set. By doing so the data is interpreted with the goal to address the research question (Kiger and Varpio, 2020). Thematic analysis is used when analysing transcribed interviews to describe and explain the knowledge identified as well as how this knowledge were attained. Thematic analysis is given as the process of identifying, analysing and reporting patterns in qualitative data. Clarke and Braun (2017) state that thematic analysis allows researchers to observe and interpret overlapping meanings and experiences. A key advantage of thematic analysis is both the flexibility and accessibility that is (Clarke and Braun, 2017).

The analyses of the data gathered were conducted through the theoretical lens established during the data generation process which assisted in identifying emerging themes and patterns that may add value to the study (Clarke and Braun, 2017). The data was triangulated using all sources including interviews and secondary data analysis which provided a rich description of the important themes and patterns as well as to guide the development of a higher education curriculum for South African eCommerce entrepreneurs.

Analysis was conducted with nine interviewees (N=9) until a point of data saturation was reached. As previously highlighted, data saturation is the point at which collecting further data by increasing the sample size does not yield any more information to the study. At the point of data saturation the addition of further interviews does not reveal any findings that are novel or differ to the data already gathered. Therefore, data saturation is not identified at the point that new sources of data have been exhausted but rather is more concerned with the depth of data that has been collected and analysed (Fusch and Ness, 2015; Hennink et al., 2017). As interviews were conducted off the same base of questions (given in Appendix A), data saturation point could be established as the key themes were identified to meet the requirements of the study's research objectives.

4.5. Ethical Considerations

Interview participant confidentiality was ensured as the names of the institutions and the participants was disguised and any identifiable features were removed from the report. Final consent was obtained from all interview participants in writing and participants were notified of their freedom to withdraw from the study at any point prior to the submission of the thesis in line with the UCT Faculty of Humanities Ethics

Committee requirements. If participants chose to withdraw from the study all related data was destroyed immediately. The purpose of the research as well as the proposed data generation processes was formally communicated in writing. The opportunity for verbal clarification was carried out throughout the process. Data, inclusive of digital audio recordings, notes, documents and completed data generation instruments, was stored securely on a password protected laptop and backed up on OneDrive.

4.6. Summary of Chapter 4

This chapter provides a comprehensive overview of the research design, approach, and methodology employed in the study to explore the development of design principles for an eCommerce entrepreneurial curriculum in South Africa. Grounded in Saunders and Tosey (2012)'s research onion framework, the study integrated multiple layers of research philosophy, ontology, epistemology, axiology, and methodology to address its objectives.

The research adopted a critical interpretivist stance, emphasising the socially constructed nature of reality while acknowledging the influence of structures and power dynamics on educational practices. This philosophical grounding supported the study's goal of understanding entrepreneurial skills and capabilities from multiple perspectives, particularly within the context of South Africa's educational and socio-economic landscape.

A qualitative, exploratory approach was employed to provide in-depth insights into eCommerce entrepreneurship education. Semi-structured interviews with subject-matter experts and practitioners served as the primary data generation method, complemented by secondary data and thematic analysis. This methodological choice allowed for flexibility and adaptability in uncovering key themes, ensuring rich and nuanced findings. Purposeful sampling ensured that participants were well-suited to provide meaningful insights, while data saturation was achieved through iterative analysis, reinforcing the study's rigor.

The study employed an inductive reasoning process enabling the formulation of theoretical insights directly from observed phenomena. This aligned with the research's exploratory nature and the novelty of the subject in academic literature. Thematic analysis, aided by tools like Nvivo, ChatGpt 4.0 and MicroSoft Excel,

identified patterns and themes to construct a framework for inclusive curriculum development.

Ethical considerations were addressed, ensuring participant confidentiality, informed consent, and data security throughout the study. The research was characterised by its commitment to decolonial and inclusive practices, drawing upon theoretical frameworks such as Bhaskar (1978)'s critical realism, Young (2008)'s social realism, Archer (1996)'s morphogenetics approach, Tinsley (2022)'s post-colonial critical realism, Bhabha (1994)'s post-colonialism, Maton (2016)'s legitimisation code theory and (Sen, 1999)'s capabilities approach to enrich its analysis.

Chapter 4 established a robust, ethically sound, and theoretically informed methodology that underpinned the study. The integration of diverse theoretical and methodological perspectives strengthened its capacity to contribute meaningful insights into inclusive eCommerce entrepreneurship curriculum development. The next chapter provides an in-depth analysis of the data gathered through the semi-structured interviews conducted using the research methodology specified.

5. Chapter 5 – Data Analysis

5.1. Overview of data analysis

The previous chapter outlined the research methodology used in this study investigating the development of an inclusive curriculum for eCommerce entrepreneurship in South Africa. A qualitative approach was adopted, specifically with the aim to uncover themes aligned with the theoretical framework developed with an end goal of establishing the main design principles for the development of a curriculum for eCommerce entrepreneurship in South Africa.

The method specified by Clarke and Braun (2017) to conduct thematic analysis was used in this study to identify, analyse, and report on patterns or themes that arose from the data. Clarke and Braun (2017)'s method is a widely accepted approach to analyse qualitative data and is most commonly used in psychology and other social sciences. The method involves six phases:

1. Familiarisation with the data in question: Involves the reading and re-reading of the data to become intimately familiar with its content.
2. Generation of Initial Codes: Systematically coding interesting features of the data across the entire dataset, collating data relevant to each code.
3. Searching for Themes: Collating generated codes into potential themes and gathering all data relevant to each identified potential theme.
4. Reviewing of Themes: Checking if the themes identified work in relation to the coded extracts and the entire dataset, generating a thematic 'map' of the analysis.
5. Defining and Naming of Themes: Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells and generating clear definitions and names for each theme.
6. Producing the final report: The final opportunity for analysis, selecting vivid, compelling extract examples, relating the analysis back to the research question as well as literature, and producing a scholarly report of the analysis (Clarke and Braun, 2017).

As stated earlier, nine interviewees (N=9) were selected through a process of purposive sampling based on their role in the process of defining and/or developing an inclusive curriculum for eCommerce entrepreneurs in South Africa. In particular, participants were asked to share experiences with redesigning curricula, co-designing with them and aspects they believed are important by drawing on their experiences.

The investigation was conducted within the context of the aspect of inclusion and South Africa. As this research was both critical and exploratory some questions were purely conversational and open ended to avoid excluding themes or dimensions that had not yet been taken into account from the literature that was reviewed. However, all interviews were informed by the theoretical lens provided by the literature reviewed and documented in Chapter 3. As the interview questions were informed by the theories incorporated, they were also used to test ideas for curriculum design that emerged from the theory and were considered relevant to eCommerce. Interviews were recorded and transcribed and reflection notes were taken directly after discussions had concluded. Interviewees were guaranteed anonymity and therefore codes were used in lieu of names.

Table 2 below specifies the title and role of each of the nine interviewees in the eCommerce entrepreneurship curriculum development process:

Table 2 - Interviewee codes and roles

Interviewee Code	Interviewee role
AH	Curriculum developer for Services SETA responsible for development of eCommerce curricula for entrepreneurs
RH	Manager at Services SETA in charge of curricula for eCommerce and entrepreneurship
AL	Representative of the eCommerce Forum South Africa
GW	Academic responsible for the development of eCommerce curricula at a top tier university in South Africa
WA	Private service provider of eCommerce related courses in South Africa
HR	Member of the curriculum change workgroup at a top tier university in South Africa
JA	Academic responsible for the development of eCommerce curricula at a top tier university in South Africa
SA	Lecturer and researcher in eCommerce at a top tier university in South Africa
GA	Lecturer and researcher in eCommerce at a top tier university in South Africa

Data was loaded into the NVivo tool to assist with high-level classifications and thereafter analysed using Open.AI's ChatGPT 4.0 tool to interrogate the data with an aim to derive key themes and associated key

quotes linked to those themes. These were then critically analysed in conjunction with existing literature.

The next section begins with a summary of the key points derived from each interview. This is then followed by the key themes extracted from all the interviews conducted. Once the themes were identified, they were then linked back to the specific constructs of the theoretical framework.

5.2. Data Analysis

As part of the data analysis process semi-structured interviews ranging between forty-five minutes and an hour were conducted with each interviewee. The key points from each interview were identified and critically analysed in order to derive the main themes that emerged. A thematic analysis was then conducted.

5.2.1. Summary of interviews

5.2.1.1. AH Interview

AH is a former educator who now serves as an education consultant and was deeply involved in the development of the eCommerce entrepreneurial manager curriculum commissioned by Services SETA (Sector Education and Training Authority), the state authority responsible for education and training within the South African Services sector. AH's role encompassed facilitating the creation of the curriculum guided by quality standards and government bodies like the Quality Council for Trades and Occupations (QCTO), a South African government body overseeing qualifications development.

AH primarily played the role of a facilitator coordinating the involvement of subject matter experts and ensuring the curriculum met the needs of both start-up entrepreneurs and those working in the eCommerce sector in South Africa. This was done with the objective to bridge theoretical knowledge with practical eCommerce skills while catering to both aspiring entrepreneurs and as well as those seeking to enhance their managerial capacities within eCommerce entrepreneurship settings. AH believes that this curriculum is highly relevant to the current South African context citing the increasing popularity of online shopping and the potential for individuals to explore eCommerce as a business opportunity.

The curriculum developed by AH and his team covered a range of topics including the conceptualisation of

eCommerce, technological aspects, and managerial skills such as financial and personnel management. Services SETA as the representative of the industry provided guidance and support to ensure the developed curriculum became the best product for the industry and the country while remaining internationally compatible, allowing learners to apply their skills both within South Africa and abroad.

5.2.1.2. AL Interview

AL holds a senior leadership position in the EFSA which has a goal of increasing awareness, confidence and capability of the eCommerce industry in South Africa by helping all relevant eCommerce stakeholders to work cohesively with each other to enrich eCommerce overall in South Africa. AL sees their role as bringing to light the broader context of eCommerce education and its practical applications within South Africa and potentially beyond. The EFSA as a body assesses gaps in the current educational offerings regarding eCommerce and digital entrepreneurship and emphasises the need for a curriculum that not only imparts technical skills but also fosters a deeper understanding of the digital economy. AL on behalf of the EFSA advocates for educational reforms that encompass a broader view of eCommerce including its technological, economic, and entrepreneurial dimensions. AL sees eCommerce as a driving force in the future economy, most especially in business-to-business interactions. According to AL, traditional methods of business-like traveling salesmen are considered outdated and eCommerce is viewed as the way forward.

While AL believes there isn't a significant difference between entrepreneurs in different countries, he did emphasise the cultural influence on entrepreneurial inclinations. Cultural encouragement as seen in countries such as India and China play a crucial role in fostering entrepreneurship. However, AL explained challenges in implementing eCommerce education in South Africa citing resistance, lack of vision, and avoidance strategies among key stakeholders like SETA, Proudly South Africa, and the South African Department of Trade, Industry and Competition (DTIC). He acknowledged that COVID-19 increased awareness of eCommerce tools and pushed South Africans to explore online selling methods. AL also believes that social media played a significant role in helping individuals and businesses create markets for their products during lockdowns.

5.2.1.3. GW Interview

GW is a lecturer at a public institution of higher education who convenes a final year module of eCommerce in the institution's Commerce Faculty. He discussed his approach to restructuring the course, particularly

focusing on introducing a more holistic perspective with an emphasis on local and Africanised content. GW emphasised the need for a more comprehensive approach to teaching eCommerce beyond technical skills. He divided the course into four aspects, namely technical components, business models, organizational implementation, and socio-economic implications.

GW highlighted that a South African eCommerce entrepreneur needs to be resilient, capable of working in resource-constrained environments, understand the socio-economic context, and is familiar with government regulations and policies. He emphasised that events of 2020, particularly the COVID-19 pandemic, served as an experimental phase for fast-tracking certain eCommerce practices, and believes that the shift towards online purchasing and remote work created opportunities for learning about new business models and habits. The socio-political events in the country like the #feesmustfall protests also played a role in shaping the curriculum as tension between the desire for curriculum innovation and the institutional constraints including bureaucracy and limited resources were amplified. GW expressed a sense of fatigue and challenges associated with continuous curriculum innovation including increasing size of classes, limited resources, and the lack of recognition for innovation that he believes contribute to the difficulties in sustaining ongoing changes. GW also observed a lack of an entrepreneurship mindset among students with many focused on securing a job rather than entrepreneurial thinking. He identified a need for interventions and resources dedicated to cultivating an entrepreneurial mindset.

While GW acknowledged his theoretical agency to make changes he felt immense practical limitations due to the lack of incentives and energy as well as his university's institutional priorities focused on preparing students for corporate jobs rather than entrepreneurship. GW emphasised the importance of embedding entrepreneurial spirit within students, suggesting that a cultural shift towards valuing entrepreneurship is needed, not just within the curriculum but also in broader societal contexts.

5.2.1.4. HR Interview

HR is a Professor and a former Deputy-Vice Chancellor of Teaching and Learning at a large public higher education institution and is a member of their institution's Curriculum Change Work Group. HR emphasised the importance of not having a fixed or predefined frame for South African entrepreneurship and suggested that the spirit of entrepreneurship should be used as a methodology for creation rather than reproduction. HR underscored the significance of building such a methodology used in entrepreneurship as not merely

about generating ideas but rather creating a solid methodology that aligns with the diverse perspectives and needs of the community.

HR expressed the need for collaboration across sectors to foster creation and innovation, highlighting the barriers faced by practitioners, most especially young professionals, in implementing innovative ideas due to outdated legislation and policies, absence of mechanisms for individuals to connect with others, share ideas, and receive support, and called for a change in the system to support entrepreneurial efforts.

HR discussed the potential for the Global South to provide leadership in changing international practices by engaging in dialogues that challenge global standards and showcasing alternative models can drive change. This could include models for micro-credentialing for skills development which allows individuals to learn specific skills without committing to extensive programs, informal learning through support communities, and using technology as a key enabler in bridge gaps, connecting isolated individuals, and providing access to learning resources.

5.2.1.5. JA Interview

JA is a Professor and the Dean of the Commerce Faculty at a South African institute of higher education who was previously involved in the creation of a curriculum for Digital Commerce. The curriculum developed at JA's institution was initiated based on senior level decisions by key individuals with a focus on digital commerce within the broader program in digital business. JA played a hands-on role in developing the curriculum, deciding the focus, content, and readings amongst others.

JA discussed the role of entrepreneurship in economic development and job creation, placing emphasis on the importance of technology and digital skills in entrepreneurship, especially in sectors like financial services, fintech, education, logistics, and retail. He further highlighted a need for better alignment between entrepreneurship and technology training as many entrepreneurs made use of technology without formal training. He also identified a gap between tech-savvy individuals and those with business skills, indicating a disconnect in the existing ecosystem, with entrepreneurs in South Africa facing unique challenges including a lower risk appetite due to fewer safety nets, a less mature business environment, and challenges related to infrastructure and logistics.

JA believes that institutions of higher education play a crucial role in supporting entrepreneurship through education, training, and facilitating connections to the broader entrepreneurial ecosystem through initiatives like entrepreneurship clinics, innovation centres, and tech incubation hubs. JA suggested that service learning should be a key pedagogy in entrepreneurship education involving students working on real-world projects with entrepreneurs, providing practical experience alongside theoretical coursework to create a more holistic approach, especially for digital entrepreneurship.

JA highlighted that while there's top-down support for innovation and entrepreneurship at the university level, challenges exist at the lower levels, including issues related to promotion criteria and workload policies. Champions at the grassroots level were identified as crucial for driving initiatives forward, as well as a need for ongoing coordination, integration of digital commerce courses, and a focus on creating a supportive environment for entrepreneurs.

5.2.1.6. RH Interview

RH is the manager responsible for the management and business services chamber within Services SETA with the duty to provide for skills development needs of the South African business industry and specifically in this case eCommerce. RH highlighted that the Services SETA's eCommerce entrepreneurship manager qualification arose from the identified needs of the industry, emphasising that it was developed for and by the industry. Industry engagement included employers, skills development providers, industry organizations, and academic institutions.

RH specified that the rationale behind the development of the qualification was changes in the socio-economic dynamics and global business practices as well as the emergence of eCommerce platforms that had significantly altered traditional business models. RH acknowledged the need for localisation and adaptation, asserting that the South African context, including target markets, education levels, and access to resources required specific considerations, with a recognition that South Africa is still in the process of adapting to eCommerce compared to more developed global markets. The qualification was seen as providing additional avenues for businesses, allowing them to reach markets through eCommerce platforms with an emphasis on how it could benefit SMMEs by enhancing their business models.

RH highlighted that in order to effectively develop an inclusive curriculum critical stakeholders including

skills development providers had to be involved. RH suggested the need for a perspective shift regarding the perception that South African entrepreneurs are predominantly white and male, arguing that there are a significant number of informal businesses operated by people of colour and women.

RH identified skills needs for SMMEs including digital skills, marketing skills, financial skills, communication skills, and governance skills, with targeted programs such as coaching and mentoring as effective ways to address these needs. However, RH highlighted existing challenges including the perception of eCommerce mainly associated with larger platforms such as Takealot.com and suggested future interventions involving continuous awareness, participation, and uptake efforts, with collaboration from industry partners, academic institutions, and other stakeholders. RH stated that organizations are viewed as currently prioritising business needs over skills development and that there is a need to change this mindset and hence emphasised the importance of skills development within the industry.

5.2.1.7. SA Interview

SA is an Associate Professor at an institution of higher education in South Africa with a teaching and research focus on eCommerce. SA emphasised the lack of technical knowledge among eCommerce entrepreneurs, especially in the early stages, with many aspiring entrepreneurs lacking the necessary technical skills to implement their ideas effectively. SA suggested that existing curricula do not adequately prepare students with the technical skills required in the real world, and students tended to merely replicate given projects without gaining the ability to think independently, particularly from a technical perspective.

SA mentioned that time constraints in curricula limit the scope of projects, with projects being heavily time and cost constrained, limiting students' exposure to real-world scenarios and challenges they might encounter as entrepreneurs, and that entrepreneurs needed more freedom and time to explore and face real technical challenges independently.

SA further highlighted the impact of socio-economic factors on entrepreneurship, with the COVID-19 pandemic exposing the digital disparity and stressed the need for curriculum adaptation to address these issues. SA believes that entrepreneurs from different regions face distinct challenges and the curriculum should be designed to equip them with skills that are relevant to their specific contexts.

SA also suggested that current South African entrepreneurs often come from high-income backgrounds where the 'side hustle' culture might be driven more by a desire to prove independence rather than out of necessity. Concerns were raised about the lack of support and opportunities for entrepreneurs from rural backgrounds, indicating a need for more inclusive curriculum development. SA argued further that current curricula do not adequately support entrepreneurs starting from scratch, especially those without pre-existing networks or support systems.

SA also stressed the need to incorporate money management and business skills into the curriculum. Entrepreneurs often struggled with managing finances and separating personal and business expenses. Therefore, it was highlighted that there is a need to relook at the curriculum and contextualise it for the African environment, addressing the perception that success is only achievable in certain regions on the continent.

SA emphasised the role of the government in providing infrastructure and policies that support entrepreneurship, with the lack of basic infrastructure in rural areas identified as a significant barrier for potential entrepreneurs. SA identified key stakeholders such as curriculum development bodies, academics, industry, and government, highlighting that current curricula were seen as influenced by the Global North and geared towards meeting industry requirements, potentially neglecting entrepreneurship development.

SA highlighted the role of academics in creating awareness of real-life scenarios and suggested initiatives such as exchange programs to expose students to different environments. Research was identified by SA as a powerful tool for academics to influence curriculum changes and address the challenges faced by entrepreneurs.

5.2.1.8. WA Interview

WA is a self-taught eCommerce specialist and the creator and owner of a private institution offering eCommerce related education and resources mainly to entrepreneurs. WA noted that South African entrepreneurs tend to be proactive and willing to take risks, with a hands-on, action-oriented approach to business. WA highlighted a shift in their training approach, consolidating various courses into a single membership which covered a broad range of eCommerce topics. The target market for this membership

spans from beginners to established brands, and WA tailored promotions and content to address the specific needs of different segments.

WA highlighted infrastructure challenges in South Africa such as access to good laptops, internet connections, and data. WA saw the solutions to these challenges evolving slowly but noted that they can be significant barriers to entry. However, WA also noted that COVID-19 had a substantial positive impact on the eCommerce industry, leading to an uptick in interest and participation.

WA advocated for more government support in the form of funding to uplift entrepreneurs in eCommerce with the belief that eCommerce offered a low-risk entry point into entrepreneurship and could be a catalyst for positive change in the country. WA believed that eCommerce should be supported more actively by the government considering its potential to create opportunities.

WA emphasised the importance of practical, hands-on learning in eCommerce, suggesting that real-world experience is crucial due to the rapidly changing nature of the industry. He contrasted this with textbook learning, stating that eCommerce cannot be effectively taught solely through traditional academic approaches.

WA stated that the target market for eCommerce courses was diverse, ranging from stay-at-home moms and university students to corporate workers and individuals nearing retirement, which reflected the broad appeal of eCommerce entrepreneurship. It also demonstrated that while there were no strict prerequisites, the importance of basic computer skills was essential for participants to benefit fully from the training.

However, WA acknowledged the privilege he had as a white South African male but suggested that eCommerce can be an option for anyone with entrepreneurial drive, regardless of their background. He further emphasised that the decision to enter eCommerce or pursue a corporate career should be an individual one, and people needed to assess their preferences for security, comfort, or a burning desire to create something for themselves.

5.2.1.9. GA Interview

GA is an eCommerce lecturer at a major South African institute of higher education with a focus on the

technological aspects of the eCommerce curriculum. GA pointed out the dominance of major eCommerce players like Takealot and Superbalist in South Africa and emphasised the need for a more inclusive eCommerce curriculum due to this market monopoly.

GA questioned the purpose of teaching eCommerce and entrepreneurship principles, debating whether the aim was for students to invest in their skills and generate income independently or to prepare them for traditional employment. He acknowledged the cultural shift where students engage in multiple businesses alongside their studies, indicating a changing perspective on employment and income generation. GA also suggested that current curricula underestimate the power of social media and that students might not be fully aware of the broader aspects of eCommerce beyond building a website.

GA stressed the importance of foundational technical issues such as security and infrastructure and proposed a curriculum that delves into digital strategy, including search engine optimisation, advertising, media buying, and social media management. GA discussed the importance of considering local values, norms, and infrastructure in curriculum development, arguing that the curriculum should align with the specific needs and context of South African communities.

GA identified stakeholders such as local entrepreneurs, social entrepreneurs, academia, small businesses, and government as crucial partners in the development of the curriculum and suggested that a South African entrepreneur needed to understand the local context, address specific needs, and navigate the complexity and competitiveness of the South African market. Based on this, GA outlined the components of their ideal eCommerce curriculum, including understanding the history of the Internet, infrastructure, monetisation, digital strategy, social media, community management, content creation, and critical analysis, emphasising the importance of teaching students to be problem solvers, encouraging critical thinking, and tailoring eCommerce solutions to address specific issues within South African communities.

GA sees his role as an academic to foster critical thinking skills, encouraging students to think beyond technology as a solution and emphasising the necessity of direct community engagement in eCommerce projects and highlighted the necessity of adapting education to the changing dynamics of the eCommerce landscape, considering local values and challenges in South Africa. In this light, he envisioned a curriculum that not only imparts technical skills but also instilled critical thinking and problem-solving abilities in students.

5.2.2. Thematic Analysis

Once the interviews with subject matter experts were completed the ChatGPT 4.0 tool together with NVivo and MicroSoft Excel were used to identify common themes that arose from the interviews. A thematic analysis was then conducted to understand each of the themes in the context of the theoretical frameworks used. The themes identified from the document were then linked to constructs within the developed conceptual framework grounded in postcolonial critical realism.

5.2.2.1. Theme 1: Roles and Agency in curriculum development

The first theme identified was around the importance of identifying the roles of key stakeholders and their associated competencies required in shaping that curriculum. The roles of interviewees varied based on the part they played in the curriculum development process. Each of these roles are seen to play significant but differing parts of the curriculum development process.

AH played a facilitation role to pull different subject matter experts together rather than actively being involved in the development of the content of the curriculum:

AH: "Look my role in the development of that curriculum...to manage the process in such a way that we get the maximum out of subject matter experts like yourselves in shaping...the curriculum so that my job role is just to being the facilitator."

Together with RH and AL, their roles are seen as significant as they saw themselves as representing the needs and requirements of industry and government stakeholders. RH, as a government official, saw their role as ensuring that industry needs are served through the curriculum and believe that industry is reliant on them to ensure that these needs are represented:

RH: "...we have got a duty to provide for skills development needs of the industry and in this case eCommerce. Management skills development provision for that industry or for that segment relies on us as a Chamber and we do provide for that."

As a representative of an industry body, AL also put the needs of industry first to ensure that students are equipped to meet the demands of the South African eCommerce business fraternity:

AL: "...at secondary school level there needs to be a broad course on the digital economy which says the

digital economy is the use of digital data and Internet in order to build eCommerce, blockchain, AI all these things. So, there's an understanding of the basic brickwork at the bottom of the house and then at university, I think there need to be full three- and four-year courses well, three-year courses, bachelor courses on the digital economy."

AH, AL and RH saw their roles as outside of the curriculum itself and rather saw themselves as advocates for the content that is incorporated into the curriculum. While AH saw themselves as merely a facilitator bringing together stakeholders from industry, academia and government to synthesise their expertise to extract industry best practices, RH saw themselves playing more of an advocacy role on behalf of government with a goal to ensure that the needs of their clients are met. Likewise, AH also saw themselves play an advocacy role ensuring that industry needs are taken into account in the curriculum.

Educators such as WA, SA, JA and GA on the other hand saw themselves play the role of content developers as subject matter experts in their respective fields but highlighted that their agency to inform the curriculum has become heavily dependent on the needs of industry and constrained by bureaucracy and lack of acknowledgment for their effort and time to think outside of the box. SA spoke to this agency of the educator in building the knowledge required for entrepreneurs prior to them entering industry:

SA: "...we don't want a situation whereby entrepreneurs should only be created after they go to university."

JA further emphasised this situation and stated that this needed to be expanded to the university as a whole and not just any individual faculty and highlighted the need for agency to pull the different requirements together to form a truly inclusive and representative curriculum:

JA: "So that's not in the faculty but it's part of the university and so I don't think this is all coordinated in the perfect way. I think we also still in the early phases where we need to sit down and sort of think how do all of these pieces kind of stick together?"

GA saw the role and agency of the educator rather very practically as linking between empowering students to think critically together with instilling both business and technical capability:

GA: "...my role as an academic is to teach critical thinking skills to address problems and then using technologies such as let's say an eCommerce platform to tailor make it to develop it that can in order to for it to actually address a problem within that immediate community."

As an independent education service provider WA also highlighted the role of the educator in pulling all the required components of the curriculum together:

WA: "So there's one membership that's called next level and it's quite everything that anybody could possibly need. It's like Netflix for eCommerce. And that's that."

The educators interviewed perceived their role as being the frontline developers of curriculum content but struggled with the contestation between meeting the needs of industry and their institutional demands with developing students based on the greater socio-economic and development needs of the country. This theme can therefore be linked to the interplay between individual agency (educators, curriculum developers) and structural factors (educational institutions, accreditation bodies). Bhaskar's critical realism emphasises the importance of understanding the stratified nature of reality and the transformative potential of human agency (Bhaskar, 1978). This aligned with the study's exploration of how educational structures and curricula can empower individuals to challenge and change existing socio-economic conditions.

In postcolonial critical realism the focus is on how structures enable or constrain agency (Tinsley, 2022). This also connects with Bhaskar's notions of agency and structure, highlighting how individuals (educators, developers) interact with systemic constraints and opportunities (Bhaskar, 1978). In addition, Archer's morphogenetic approach highlights the dynamic interplay between structure and agency in social processes. This perspective underscores the potential for education to be a transformative force and the benefits from Archer's focus on the interplay between agency and structure, analysing how educators and institutions navigate constraints to innovate in the curriculum (Archer, 1996). This theme thus highlights how individuals and institutions interact in the development of an eCommerce curriculum and speaks to the Actual level of critical realism.

5.2.2.2. Theme 2: Relevance and Sufficiency of the Curriculum

Theme 2 dealt with evaluating the curriculum's relevance to current local, regional and global market needs, its comprehensiveness, and its potential to equip students with the necessary skills and knowledge while still remaining globally relevant. The interviewees highlighted the need for the curriculum to be more rooted in needs of the environment in which it is taught and therefore needs to be greater contextualised based on these requirements. Interviewees also highlighted that much of existing curricula still relied

heavily on inputs from the Global North, and as such did not meet the needs of students in the Global South. In this exists a power struggle between academic standards bodies, many of which are based in the Global North, and the true needs of the student existing within the environment of the Global South. This can be seen from AH's assessment of the need to provide relevant skills that allowed learners to make a living as an eCommerce entrepreneur:

AH: "...there's going to be a lot of people that will seek the business opportunity provided by eCommerce in order to make a living."

Similarly, AL highlighted that while educational interventions have begun around at grassroots levels, there is still much work to be done to pull these through to higher education:

AL: "Schools are now doing computer programming. But I don't think you can stop with just looking at coding. I think you need to go beyond that. So, a good start. I know, for example in Kenya coding is now, I think, required for any student doing matric, or the equivalent of matric. But I don't think that really ends you up understanding about the fundamentals of the digital economy."

GA further highlighted the need to focus on local contexts as a basis of the curriculum:

GA: "I think that the context of the curriculum focuses on the local context of an organization focus on the local context of the actual country...but also, I think that the curriculum lacks the fact of how much money we should invest right? But that again goes back to the digital media strategy...I think that that the curriculum is missing many of those components. And then also trying to inform students that whole curriculum that focuses on where it all started right?"

GW further emphasised the need for local relevance and context in the curriculum to empower learners to solve real world problems, but also highlighted the issues around agency to make significant changes to the curriculum:

GW: "I feel like the curriculum could be improved. I would if I had Carte Blanche. In working on curriculum innovation there is many as I said I really like students to get on the ground really immerse themselves into really local issues and explore the complexity that comes with solving. That entrepreneurship that involves requires solving real problems, right?"

SA gave an example of the IS2020 international standard for Information Systems curriculum development being out of touch with local needs and the need for a curriculum tailored to local and regional

requirements as well:

SA: "The stakeholders the curriculum of information systems. (IS2020). So that body sits and comes up with this curriculum. And if you look at that body. I haven't looked at who where they come from. But definitely more than 50% of those people are not sitting in the Global South. So that's the first problem. It's once again it's the Global North to see if we meet their requirements. So, we have to meet them. Not necessarily. Us meeting our own needs. So, our curriculum definitely would be tailored if we want to have to be accredited, we'll be tailoring to meet their needs...I think that is important to contextualise what courses do they take this accounting business management to contextualise them to the African. Context because the values it is the values that make because you can start a business you can't be an entrepreneur but all the challenges if you don't if you don't have these business service skills, you're your entrepreneur. Everything will just go down. This is why you find many of them collapse. There's no differentiation between. This is a business, and this is something else."

This was further emphasised by WA who advocated for local case studies and on the job training:

WA: "I think there can always be more, but I think that, that this is not something that can be learned out of a textbook. Like the stuff that, like, I also speak to people who have like, they're in corporate and they've done a course and they all fired up to get into eCommerce and then I speak to them about like what they're doing and they are starting like the seven steps of something that they read in a textbook and it's like, well, that's not how this works."

A focus of this theme is the ability to balance industry and societal needs with policy requirements such as the South African Qualifications Authority (SAQA) and the Quality Council for Trades and Occupations (QCTO) in the development of the curriculum. This theme emphasises the critical realist perspective on how educational programs emerge from and interact with wider societal and economic systems and links to the Real level of critical realism, and speaks to Bhaskar's concept of emergence, where the curriculum's effectiveness emerges from the interplay of educational content, industry needs, and societal context (Bhaskar, 1978). Bhabha's postcolonial theory challenges the current dominance of Western epistemologies at play, advocating for a more inclusive and equitable approach to knowledge production, a message that also came out of the interviews conducted (Bhabha, 1994). But currently, the relevance and sufficiency of the curriculum is still seen to be tied to the curriculum's ability to meet market needs which needs to increasingly become an emergent property of various systemic relations, mainly between education, industry needs, and societal context.

5.2.2.3. Theme 3: Critical Digital, Business and ECommerce Skills

Theme 3 emphasised the need for a curriculum that covers digital and business strategies including search engine optimisation, media buying, and the use of social media in eCommerce specific to the South African business context. While rooted in technical and business skills development, key in this theme was identified also as the ability to critically assess skills requirements rather than merely accept the status quo.

Interviewees spoke to these contextualised critical skills being taught from an early stage in the education process and being as practical as possible by working with entrepreneurs in field to learn both the business and technical skills required. GA highlighted the need for critical analysis skills development as part of the curriculum:

GA: "So then at the end you don't teaching students in terms of so as part of that design what I believe should also be included is after the critical analysis is typically how to know your client right? How to understand your client right? So, after the critical analysis understand your client and then how do you position your digital strategy to fit that client? I think that's extremely important too, right?"

AL also saw the need for more relevant technical skills development from an early age to empower learners to partake in the digital economy:

AL: "I think at secondary school level there needs to be a broad course on the digital economy which says the digital economy is the use of digital data and Internet in order to build eCommerce, blockchain, AI all these things."

At the same time RH highlighted the need to ensure that learners remained globally competitive while being developed at a local and regional level:

RH: "So the influence has been coming more from other parts of the world thereby us having to adapt because remember we have got customers that buy in South Africa and around the globe so we've had to adjust in providing skills for that market because it then looked as in the future of what business would be."

JA spoke to service learning and also advocated for practical skills development to work hand-in-hand with course work:

JA: "...you're not just doing entrepreneurship on paper but through service learning. Students are actually

working with entrepreneurs in the city and learning about the different dimensions of sort of business development in that kind of a process. And in my sense that could be a great way for it to play out. So, the curriculum then is really framed around the real key sort of issues that entrepreneurs grapple with. And that the coursework almost runs alongside the service learning so that students are attending a few lectures... students learn to support entrepreneurs in the real world while under supervision and be guided by academics who would also lead them through a few lectures on some of the sort of core topics that they're working through with entrepreneurs.”

SA further emphasised the need for foundational and technical knowledge in the curriculum:

SA: “So definitely the technical aspect is important. Students needs to be, you know, tech savvy. That's it. It looks like from the research, that's the part that they struggle with. You might be entrepreneur, but you don't have the technical knowledge to kick start.”

The interviewees all emphasised the need for early interventions to build the specific skills and knowledge that cause successful eCommerce activities in South Africa which involves looking at the underlying mechanisms (e.g., digital literacy, market understanding) that enable such outcomes.

Maton's LCT offered tools for analysing and structuring educational knowledge, focusing on how different types of knowledge are legitimated within educational contexts. This theory can be applied to ensure that the curriculum promotes equitable access to powerful knowledge. This theme therefore aligns with Maton's LCT by examining the causal mechanisms inherent in the system and those that needed to be contested that lead to successful entrepreneurship, emphasising the need for critical digital literacy and strategic thinking within the South African context (Maton, 2016).

This theme also aligned with Archer's view on the transformative potential of education, emphasising the need for skills that not only equip students to drive eCommerce businesses but to also empower them to drive change (Archer, 1996). Young's Social Realism emphasises the importance of structured disciplinary knowledge in education, asserting that access to this knowledge is a matter of social justice (Young, 2008). This theme hence connects with Young's focus on equitable knowledge distribution, ensuring the curriculum provides students with access to powerful and transformative knowledge, and can be associated with causality, specifically the mechanisms that lead to successful eCommerce entrepreneurship and can fall within the Empirical domain of critical realism.

5.2.2.4. Theme 4: Adaptation to Socio-economic Realities

Theme 4 addressed the infrastructural and socio-economic challenges faced by potential eCommerce entrepreneurs, particularly in adapting to the South African context. It is also key to incorporate inclusivity from a race and gender perspective as well as socio-economic leadership development in the global south. This requires a break away from focusing on skills identified solely in the Global North that make up the curriculum and the inclusion of content that speaks to the Global South. The need for a curriculum that can provide a platform for students to discuss their ideas and get inspired by talks from local people in the space was also highlighted.

The theme highlighted that challenges faced by eCommerce entrepreneurs can be linked to the construct of contingency and context, essential in postcolonial critical realism for understanding how specific contexts (e.g., infrastructural issues, socio-economic conditions) create contingencies that entrepreneurs must navigate. This is shown by the comment from AL that learners are not being currently equipped by existing curricula with the right information to become successful eCommerce entrepreneurs:

AL: "...there were quite a few people in South Africa that were exposed to ecommerce and tried their hand at it but may not have had the right amounts of information the right amount of knowledge or skills."

SA spoke to the need to ensure that learners are not cocooned at university but rather to conscientize them of real-life scenarios on our continent:

SA: "I think the first thing is to conscientize our students of real-life scenarios on our continent. I think that's the first thing, because most of our students are cocooned at university. That this is how it is everywhere. So, the first thing is to take out that notion."

GA also highlighted the need for the curriculum to have a wider view of the context in which it exists:

GA: "So if many of the students might say but you know I cannot necessarily have a business in that environment or in that Community because of infrastructure issues right people don't necessarily have cell phones in that area or mobile let's say smartphones as an example."

This was reinforced by RH around ensuring that students are prepared for the environment in which they will be operating:

RH: "It's about the target markets that youth entrepreneurs would be engaging or would be selling these products or will be providing this platform to on a daily basis. The level of education of these markets. Their access to tools that enables them then to do eCommerce."

The interviewees discussed the need to develop a strategy that can be operationalised within the institutional context, and the importance of recognising the impact of institutional values on curriculum development. This aligns with Tinsley's postcolonial critical realist theory which emphasises the importance of understanding the historical and cultural contexts that shape educational practices and curricula and thus can be associated with the real domain of critical realism (Tinsley, 2022). This also again reflects Maton's concern with context, exploring how specific socio-economic conditions impact entrepreneurial success (Maton, 2016). By recognising and addressing the impact of institutional values, the curriculum can be more innovative and effective for learners in South Africa.

5.2.2.5. Theme 5: Broader Stakeholder Involvement and Expectations

Theme 5 highlighted the importance of involving a broad range of stakeholders, including government bodies, existing entrepreneurs, and educational institutions, in curriculum development. The interviewees discussed the impact of inherited norms and values on curriculum development and the need to understand the mindset of people in the current context. This emphasises the importance of critically analysing the power relationships derived from historical and cultural contexts that shape educational practices and curricula. By recognising and addressing the impact of inherited norms and values of stakeholders, the curriculum can become more inclusive and relevant to the needs of learners in South Africa.

In light of this, interviewees spoke to the need to develop critical thinkers who can incorporate existing stakeholder cultural norms and practices from a grassroots level up and incorporate this thinking into the way that they conduct business in their communities, both urban and rural. This is highlighted by GW's comment that critical thinking can only be developed through exposure to multiple perspectives through an inclusive curriculum:

GW: "Education at least is to create a student who is a thinker, a more critical. A thinker and someone who especially at the NQF level, that causes someone who engaged technology, and it will be commerce with anyone and its implementation with a lot more thought process."

GA highlighted the need for exposure to different stakeholders to understand what the existing norms and values are and be able to critically engage with these:

GA: "What about those existing cultural norms? Or Institutional values. Current processes that are in place that actually influence curriculum development. You know and think about keeping eCommerce entrepreneurship at the back of your mind about from a curriculum development perspective what are those existing sort of norms and processes. And institutional values. Do you think that actually influences the development of curriculum and specifically like this?"

HR built on this by looking at a shift away from silos of information to a more integrated way of working:

HR: "So it's shifting the practice, it's saying actually it's becoming far more integrated more inter-professional more of the things that we actually want. So that for me is where the curriculum interaction is."

JA stated that these interactions with stakeholders need to start at grassroots levels and allow for co-creation in the curriculum:

JA: "...it's very much at that much more grass roots top level where you've got different as you say stakeholders in that whole entrepreneurship space whether it's the incubation hubs the angel investor taps the sort of technical solution providers. It seems to me that these are the people getting together at that level and figuring out how to strengthen the whole entrepreneurship support organized support system...I think we've got an important role to play in terms of nudging policymakers in terms of actually making it really evident what the implications are for broader economic aspirations of a country, broader economic plans if they serious about supporting small businesses and small enterprise development and if they serious about entrepreneurship."

The involvement and expectations of various stakeholders can be tied to the dynamics of power and conflict. In a postcolonial critical realist framework, the curriculum development process is seen as a site of power relations, where different stakeholders (with varying degrees of power) have conflicting or converging expectations. Sen's Capabilities Approach emphasises the expansion of individuals' capabilities to lead the kind of lives they value (Sen, 1999). This human-centred approach is essential for designing a curriculum that prioritises holistic development over mere economic outcomes and ties into Sen's focus on empowerment, analysing how various stakeholders, including marginalised groups, can influence curriculum development and implementation.

This perspective is crucial in decolonising the curriculum and recognising diverse knowledge systems and resonates with Bhabha's ideas on power dynamics, exploring how existing power structures influence educational practices and the need for a more inclusive dialogue (Bhabha, 1994). This theme also connects with Young's focus on equitable knowledge distribution, ensuring the curriculum provides students with access to powerful and transformative knowledge (Young, 2008). Based on these insights, it is clear that this theme works on the Real level of postcolonial critical realism (Tinsley, 2022).

5.2.2.6. Theme 6: Cultural and Contextual Adaptation

Theme 6 addresses the necessity for the curriculum to be adaptable and relevant to the local South African context, addressing specific challenges and opportunities within the market. It recognises the influence of South Africa's varied cultural contexts and shows that an inclusive curriculum includes strategies for entrepreneurs to tailor their approaches based on local community needs.

The interviewees discussed the need for the curriculum to be grounded in the South African context while also having international relevance and emphasised the importance of understanding the historical and cultural contexts that shape educational practices and curricula. By considering both the local and global contexts, the curriculum can be more relevant and effective for learners in South Africa. AL highlighted the role that the Covid-19 lockdowns had on making more people aware of the power of eCommerce in a local context:

AL: "What COVID did above everything else was to make people in South Africa aware of the tools that were there in order to actually sell at a distance and sell online."

SA built on this idea by commenting on a need to contextualise the curriculum to an African environment:

SA: "I think we need to relook at it and parts of what needs to be re looked at it is. We at least we need to try to contextualise it to Africa."

GA posed the question of who the curriculum serves and whether it meets the requirements of the South African context:

GA: "For who? I don't know what I specifically mean by that is, if you're looking at the context, let's say community involvement as an example. The current issue issues of poverty that comes through issues of infrastructure that comes through issues of institutionalisation... So as eCommerce academics we really need

to think about this idea of what for who right does my solution. Fit the context of those communities and in many cases it will not. Right? So, I think community involvement is extremely important to address the issues of such as inequalities, right? That takes place in these communities.”

The interviewees stressed the importance of business and community involvement in addressing issues of inequity and creating a curriculum that is grounded in the local context. This reflects a postcolonial critical realist perspective that emphasises the importance of understanding the historical and cultural contexts that shape educational practices and curricula. This is also informed by Sen's emphasis on contextuality, ensuring the curriculum is tailored to the unique cultural and economic landscape of South Africa and reflects Bhabha's emphasis on cultural hybridity, ensuring the curriculum is responsive to local identities and global standards (Bhabha, 1994; Sen, 1999).

This theme is closely related to the constructs of identity and difference, focusing on how the curriculum must adapt to local cultures and contexts. It reflects a critical realist concern with understanding how identities (both individual and collective) and cultural differences shape and are shaped by educational practices and outcomes and speaks to the Real level of critical realism (Tinsley, 2022). By involving business and community in its development it is believed that the curriculum can be more relevant and effective for learners in South Africa.

5.3. Critical Analysis of Responses in the Context of the Themes Identified

A clear interplay of power, positionality, and influence in how the curriculum is conceptualised, designed, and assessed can be seen through the responses of the participants interviewed. The interviews highlighted critical gaps, unconscious biases, and systemic barriers that shape the eCommerce entrepreneurship curriculum in South Africa.

For example, respondents noted the pressure to align with bureaucratic guidelines such as QCTO, institutional pressures and SAQA standards while simultaneously delivering innovative solutions. This tension revealed how power dynamics can stifle creativity and adaptation in curricula tailored to localised needs. The lack of entrepreneurial voices in the curriculum design process, emphasising that practitioners at grassroots levels are often absent. This revealed a top-heavy structure where academic and bureaucratic priorities overshadow foundational innovation. It was particularly interesting to observe how government

institutions such as Services SETA exert broad influence but rely heavily on SMMEs and industry stakeholders to define the specifics of the curriculum. The approach of 'leave it to the experts' demonstrates a deference to specialised knowledge but also exposes a lack of deeper understanding and critical analysis, which risks institutionalising biases from industry without sufficient critique.

Participant responses also tended to emphasise what students need to do rather than the transformative potential of the curriculum itself. For example, many academic respondents highlighted technical skills such as digital strategy, and media buying, but overlooked the systemic barriers students face, such as digital divides or socio-economic inequities. In this way, the curriculum mirrors more global definitions of entrepreneurship, often framing success through a Global North lens, and therefore risks alienation of local entrepreneurs who operate within different cultural, technological, and economic constraints. In addition, interviewees underscored a systemic bias favouring of formal educational institutions over informal learning contexts, reflecting a missed opportunity to validate and integrate indigenous and informal knowledge systems into the curriculum.

The interviewees also revealed significant gaps in participation, particularly the absence of community voices and small-scale entrepreneurs in the development of curricula. Respondents suggested that public participation processes are largely symbolic, often failing to integrate meaningful grassroots input, and emphasised the distinction between social and traditional entrepreneurs, highlighting the need for curricula that cater to diverse motivations and contexts. Yet the current focus continues to lean heavily toward technical and managerial competencies as discussed, sidelining social innovation and inclusivity. This means that the goals of the curriculum are still heavily tied to employability and skills development.

The lens of Postcolonial Critical Realism as part of the conceptual framework developed calls for examining the unseen structural forces shaping the eCommerce ecosystem. Interviewees revealed that institutional inertia such as bureaucratic hesitancy and rigid standardisation based on international baselines together with systemic inequities such as access to technology operated at the "real" level to constrain true transformative potential, and frustrations with institutional apathy or avoidance thereof were articulated.

For the curriculum to drive transformation the findings of the data analysis suggest that power must shift from bureaucratic and institutional dominance to more inclusive, community-driven processes, with greater involvement of social entrepreneurs, rural communities, and marginalised voices in shaping educational

priorities. This speaks to a broader decolonisation agenda that challenges existing power hierarchies. Power permeates the curriculum development process, influencing who is heard, what is prioritised, and how success is defined. The interviewees emphasised the need to move beyond technical fixes to address structural inequities, foster inclusivity, and enable transformative outcomes, requiring not only rethinking the curriculum but also redistributing power to empower those most affected by systemic barriers. Chapter 6 builds on this concept by proposing possible design principles to be taken into account that could address the issues identified in the data analysis.

5.4. Summary of Chapter 5

Chapter 5 identified the major themes extracted from the interviews conducted with eCommerce entrepreneurship subject matter experts. These themes were then linked back to theories posed by the likes of Archer (1996), Bhaskar (1978), Maton (2016), Bhabha (1994), Young (2008) and Sen (1999), as well as constructs specified in postcolonial critical realism theory (Tinsley, 2022) to extract deeper insights from the data gathered. Table 3 summarises the themes identified and their linkage to constructs from the derived theoretical framework.

Table 3 - Themes and Constructs

Theme	Theoretical Constructs
Roles and Agency	Agency and Structure; Transformative Agency
Relevance and Sufficiency of the Curriculum	Emergence and Systemic Relations
Digital and ECommerce Skills	Causality and Mechanisms; Structured Knowledge
Adaptation to Socio-economic Realities	Contingency and Context; Social Justice
Broader Stakeholder Involvement and Expectations	Power and Conflict; Powerful Knowledge
Cultural and Contextual Adaptation	Identity and Difference; Contextual Responsiveness; Cultural Hybridity, Decolonisation of Knowledge

The next chapter focuses on extracting possible best practice design principles that can be implemented in the development of an eCommerce entrepreneurship in South Africa based on the themes identified and their related theoretical constructs.

6. Chapter 6 – Derived Design Principles

6.1. Introduction

The previous chapter identified and analysed the major themes that could be extracted from the interviews conducted with subject matter experts engaging with the main research question of developing an inclusive curriculum to support eCommerce entrepreneurs in South Africa. This chapter presents design principles that can be derived from the themes identified and analysed.

6.2. Design Principles

Through linking the identified themes from the thematic analysis conducted in relation to eCommerce entrepreneurship curriculum in South Africa using constructs derived from theory, we can derive several curriculum design principles.

These principles are aimed at addressing the challenges and opportunities of the development of an eCommerce curriculum within the context of postcolonial societies such as South Africa, leveraging the critical realist perspective to develop a curriculum that is both grounded in reality and cognisant of the postcolonial context.

6.2.1. Contextual Relevance and Adaptation

Based on the thematic analysis, a key design principle that arose was that of ensuring that the curriculum is adapted and relevant to the context in which it is implemented. In the case of the eCommerce entrepreneur, the curriculum must be deeply rooted in the local socio-economic, cultural, and historical context of South Africa.

It should recognise and address the postcolonial realities such as inequality, access to technology, and the digital divide, to make the curriculum relevant and accessible to a broader segment of society. Examples of this include unequal access to information and infrastructure leading to difficulties faced by entrepreneurs to access their target markets.

6.2.2. Critical Engagement with Technology and Infrastructure

Critical thinking about technology in the context in which it is used and not just its use is a principle that is identified and emphasised. This means that the curriculum should encourage students to critically assess the role of technology and infrastructure in perpetuating or overcoming postcolonial legacies, focusing on solutions that are sustainable and equitable.

This can take the form of critically assessing the most appropriate use of technology and infrastructure to accomplish the objectives of the curriculum. An example of this would be the leaning to social commerce via mobile in South Africa given the high rate of mobile penetration as well as the high use of social media platforms in the country implies that there is a lower potential for digital exclusion on these platforms (Datareportal, 2024).

6.2.3. Empowerment through Skills Development

Another principle that emerged is the need to prioritise the development of skills that empower students to become agents of change in their communities. This includes digital literacy, eCommerce management, and entrepreneurial skills, framed within a critical understanding of their potential impact on society.

South Africa is faced with a severe skills shortage, particularly amongst the unemployed. To date, little policy intervention has been successfully implemented to bridge this gap (Daniels, 2007). An eCommerce entrepreneurship curriculum that is accessible to different levels of learners in South Africa would go a long way to closing this gap. This can be accomplished through practical and experiential learning which emphasises real-world applications and hands-on experiences to bridge the gap between theory and practice with a particular focus on entrepreneurial skills that develops competencies that foster entrepreneurship and not just employment.

6.2.4. Stakeholder Collaboration and Inclusivity

Fostering an inclusive approach to curriculum development that involves a wide range of stakeholders, including marginalised communities, industry experts, and government bodies is a key principle. This collaborative approach ensures that the curriculum addresses real-world challenges and opportunities, promoting social justice and equity.

The results of this study have highlighted that it is imperative that stakeholders from industry, government and education need to work inclusively on an eCommerce entrepreneurship curriculum to ensure its success

in meeting the objectives. Collaborating with communities, industry, government, and educational institutions also ensures that the curriculum remains relevant and practical.

6.2.5. Culturally Sensitive Pedagogy

Adopt pedagogical approaches that are sensitive to cultural differences and histories, recognising and valuing the diverse backgrounds of students. This includes incorporating local case studies, promoting multilingualism, and respecting indigenous knowledge systems.

South African entrepreneurs have been identified as a vast group that is not homogenous. On one hand there are affluent entrepreneurs with financial and resource backing that are able to use these resources to address gaps identified in the market. On the other hand, are entrepreneurs that are existing at a subsistence level who operate in a different cultural context. It is key that any pedagogy address both ends of this spectrum in South Africa to allow for entrepreneurs to grow and close the existing gap of access to information and infrastructure. Therefore, an interdisciplinary approach which integrates social, technological, managerial, and financial aspects to provide a holistic understanding of eCommerce is required.

6.2.6. Sustainability and Social Entrepreneurship

Integrating principles of sustainability and social entrepreneurship into the curriculum can address environmental issues and social inequalities, encouraging students to develop eCommerce ventures that contribute to sustainable development and the well-being of their communities.

Inclusivity and accessibility are therefore imperative in designing a curriculum to be accessible to diverse socio-economic backgrounds considering regional and economic disparities. Making social entrepreneurship part of the curriculum ensures that previously disadvantaged groups are brought to the fore and create development and growth that is sustainable into the future. It also allows for adaptability to change, incorporating elements that address the evolving nature of eCommerce, most especially post-COVID-19 as awareness of the role that eCommerce plays in economic growth has increased significantly. Continuous improvement then positively impacts sustainability of growth through regular curriculum updates and feedback mechanisms to keep the curriculum current and effective.

6.2.7. Critical Realist Approach to Knowledge and Reality

Applying a critical realist perspective that acknowledges the complexity of social phenomena, and the existence of structural constraints is key in a South African context. Students must be taught to analyse the underlying mechanisms and structures that shape the eCommerce landscape, fostering a deep understanding of how to navigate and transform it.

Decolonial theory is highlighted in this principle as it becomes necessary to interrogate the structures that currently exist in the country and assess whether they meet the requirements of the masses. If not, they need to be broken down and re-built to address the needs of society.

6.2.8. Postcolonial Consciousness

Finally, by cultivating a postcolonial consciousness students are enabled to critically analyse the impacts of colonialism on contemporary South African society as well as the local, continental and global economy. This design principle encourages them to envision and enact decolonised forms of eCommerce that promote cultural diversity and equity.

Incorporating a postcolonial consciousness into curriculum development is about more than just adding content. Rather, it is about fundamentally rethinking the purpose of education, the nature of knowledge, and the way we engage with different cultures and histories. It is a commitment to creating an educational experience that is more just, equitable, and reflective of the complex, interconnected world that students inhabit and calls for the inclusion of diverse epistemologies and knowledge systems in the curriculum.

6.3. Summary of chapter 6

This chapter linked the identified and analysed themes from the thematic analysis conducted to eCommerce entrepreneurship curriculum in South Africa using constructs stemming from theory to derive several proposed curriculum design principles. Table 4 summarises the identified design principles for an inclusive South African eCommerce entrepreneurship curriculum.

Table 4 - Summary of Design Principles

Design Principle	Related Theme/s	Summary
Contextual Relevance and Adaptation	Challenges in ECommerce Entrepreneurship; Cultural and Contextual Adaptation	Ensuring that the inclusive curriculum is adapted and relevant to the context in which it is implemented
Critical Engagement with Technology and Infrastructure	Digital and ECommerce Skills	Critically assess the role of technology and infrastructure in perpetuating or overcoming postcolonial legacies, focusing on solutions that are inclusive, sustainable and equitable.
Empowerment through Skills Development	Digital and ECommerce Skills	Empowering students to become agents of change in their communities.
Stakeholder Collaboration and Inclusivity	Stakeholder Involvement and Expectations	Fostering an inclusive approach to curriculum development that involves a wide range of stakeholders.
Culturally Sensitive Pedagogy	Cultural and Contextual Adaptation	Adoption of pedagogical approaches that are sensitive to cultural differences and histories, recognising and valuing the diverse backgrounds of students.
Sustainability and Social Entrepreneurship	Challenges in ECommerce Entrepreneurship	Integration of principles of sustainability and social entrepreneurship into the inclusive curriculum to address environmental issues and social inequalities
Critical Realist Approach to Knowledge and Reality	Relevance and Sufficiency of the Curriculum	Applying a critical realist perspective that acknowledges the complexity of social phenomena and the existence of structural constraints.
Postcolonial Consciousness	Cultural and Contextual Adaptation	Enabling students to critically analyse the impacts of colonialism on contemporary South African society as well as the local, continental and global economy.

7. Chapter 7 – Conclusion

This research study investigated the development of an inclusive curriculum for eCommerce entrepreneurship in South Africa. The focus of this study was guided by the main research question posed, namely ‘How can an inclusive curriculum be developed to support the development of eCommerce entrepreneurs in South Africa?’

Subject-matter experts related to eCommerce entrepreneurship or involved with curriculum development and eCommerce were interviewed to analyse understand the requirements for an inclusive eCommerce entrepreneurship curriculum in South Africa. A thematic analysis was conducted using a derived theoretical framework as a theoretical base of query. Based on the themes extracted, design principles for the development of an eCommerce entrepreneurship curriculum for South Africa was derived.

7.1. Analysis of Research Questions

The three research sub-questions posed in this study were:

1. What are the empirical elements that need to be addressed in a South African eCommerce entrepreneurship curriculum?
2. What are the actual elements that need to be addressed in a South African eCommerce entrepreneurship curriculum?
3. What are the real elements that need to be addressed in a South African eCommerce entrepreneurship curriculum?

Through the thematic analysis conducted in this study, each of the respective category of elements were identified and analysed.

7.1.1. Empirical Domain elements impacting South African eCommerce entrepreneurship curriculum

The theme of Critical Digital, Business and ECommerce Skills can be associated with causality, specifically the mechanisms that lead to successful eCommerce entrepreneurship and therefore fell within the Empirical domain of critical realism. These are the skills that are observed and experienced and hence need to be incorporated into the curriculum design but must incorporate a critical analysis undertone. The design principles derived from this theme within the Empirical domain were Critical Engagement with Technology and Infrastructure as well as Empowerment through Skills Development.

7.1.2. Actual Domain elements impacting South African eCommerce entrepreneurship curriculum

The main theme falling into the Actual domain was that of Role and Agency in Curriculum Development as it spoke to how individuals and institutions interact in the development of an eCommerce curriculum. The design principle of Stakeholder Collaboration and Inclusivity which fosters a truly inclusive approach to curriculum development that involves a wide range of stakeholders was derived from this theme within the Actual domain.

7.1.3. Real Domain elements impacting South African eCommerce entrepreneurship curriculum

Not surprisingly, the majority of the themes fell within the Real domain of critical realism. The theme of Relevance and Sufficiency of the Curriculum was the first identified that fell into the Real domain. This theme reflected a critical realist perspective on how educational programs emerge from and interact with wider societal and economic systems.

The theme of facing Adaptation to the Socio-economic Realities in South Africa also fell into the Real domain, and addresses challenges faced by eCommerce entrepreneurs that can be linked to the construct of contingency and context, essential in postcolonial critical realism for understanding how specific contexts such as infrastructural issues and socio-economic conditions create contingencies that entrepreneurs must navigate.

The involvement and expectations of various stakeholders is also associated with Broader Stakeholder Engagement and power and conflict, which is linked to the Real domain. In a postcolonial critical realist framework, the curriculum development process is seen as a site of power relations, where different stakeholders (with varying degrees of power) have conflicting or converging expectations.

The Cultural and Contextual Adaptation theme reflects a critical realist concern with understanding how identities, both individual and collective, and cultural differences shape and are shaped by educational practices and outcomes and also spoke to the Real domain of critical realism.

Based on the number of themes associated with the Real domain, a large number of the recommended design principles derived were also associated with this domain. These are Contextual Relevance and Adaptation which ensures that the curriculum is adapted and relevant to the context in which it is implemented, Culturally Sensitive Pedagogy which addresses the pedagogical approaches to ensure that they are sensitive to cultural differences and histories and recognising and valuing the diverse backgrounds of students, Sustainability and Social Entrepreneurship which looks at the integration of principles of sustainability and social entrepreneurship into the curriculum to address environmental issues and social inequalities, Critical Realist Approach to Knowledge and Reality which applies a critical realist perspective that acknowledges the complexity of social phenomena and the existence of structural constraints, and Postcolonial Consciousness which enables students to critically analyse the impacts of colonialism on contemporary South African society as well as the local, continental and global economy.

7.1.4. Summary of links between themes and design principles

Figure 2 below summarises the links between each of the themes identified with the design principles derived from these themes.

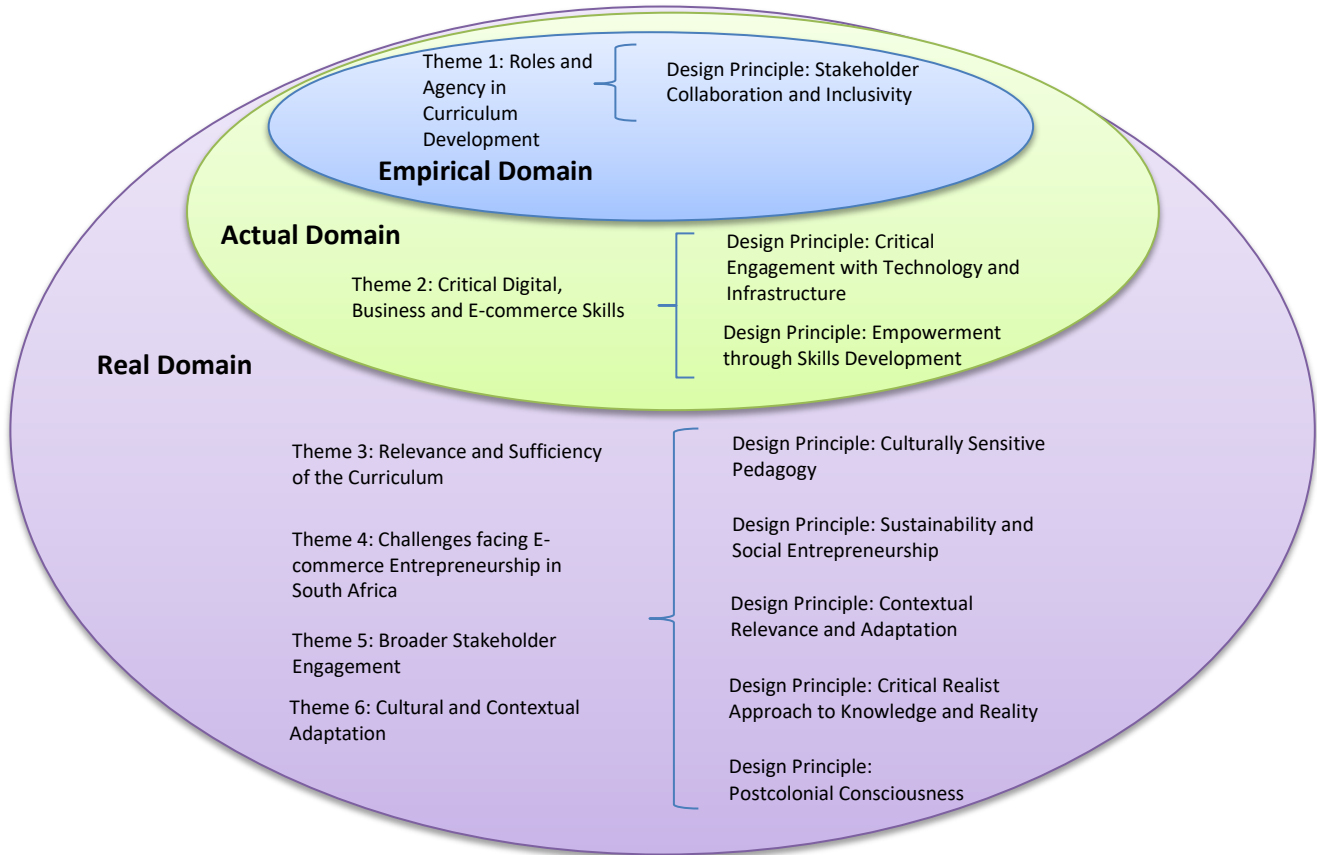


Figure 2 - Linking themes with design principles

By using the six themes identified, eight design principles across the empirical, actual and real domains were identified. Stakeholder relationship management is grounded in the empirical, while skills development and critical engagement with technology and infrastructure is founded in the actual domain. Issues relating to sustainability, decolonisation, power and conflict, context relevance and postcolonial consciousness then falls into the real domain. Based off this analysis, the design principles derived can be used to develop a truly inclusive curriculum that supports the development of eCommerce entrepreneurs in South Africa.

7.2. Practical Implications of the Study

This study aimed to critically identify factors that impact the development of a curriculum based on the skills and competencies required by eCommerce entrepreneurs within the context of conducting online business in South Africa. The literature reviewed combined with information gathered from interviewees illustrated that South Africa faces many challenges regarding the provision of inclusive technology-related education to the greater society in a postcolonial context.

The goal of these endeavours was to develop design principles that could inform development of a curriculum that not only allows entrepreneurs to fully comprehend the markets they operate in, but to also thrive within these markets and adjust to evolving circumstances. The design principles presented in this study can be used to guide curriculum development in South African Higher Education institutions, both in the public and private sectors.

Further to the development of an inclusive curriculum, it is hoped that the results of this study can highlight the importance of eCommerce entrepreneurship education to influence budget allocations to appropriate areas of development and economic development in both the short and long terms.

7.3. Limitations of the Study

The sample size of the study (N=9) suggests that the findings of the study cannot be overly generalised to a larger population. The study was conducted with participating subject matter experts within a South African curriculum development environment. It would be of value to extend this study to more eCommerce practitioners across South Africa that have successfully launched eCommerce business as well as those who have not been as successful.

Furthermore, the study was conducted solely amongst higher education educators. A next step would be to interrogate how these skills development principles can be implemented in a basic education environment. While this is an area that needs to be addressed quite importantly in South Africa, it will require a different take on how the design principles need to be implemented.

As decolonisation theory studies gain momentum across the Global South, so too does inclusive curriculum development. The next step to extend the findings of this study would be to conduct similar studies across other African countries as well as other areas in the global south. By doing so, learnings can be shared and the curriculum development process for eCommerce entrepreneurs further refined to ensure that it meets the requirements of the context in which it exists.

Finally, due to this study being qualitatively based, the findings were subject to the researcher's interpretation of the data, which is due to the very nature of conducting a thematic data analysis process. While several measures were taken to ensure the quality of the research findings such as strict selection

criteria, keen awareness of researcher bias and the use of triangulation. This study lays the foundation for further quantitative studies within curriculum development for eCommerce entrepreneurs in a South African and an African context, which could be further explanatory and confirming in nature.

7.4. Further Research Recommendations

The following recommendations are based on the findings of the study. These recommendations focus on possible future research initiatives and possible interventions which could aim to address the gaps existing in the curriculum development process in South Africa, particularly when marrying business and technology in a postcolonial context. This study is envisaged to be the springboard to motivate for further research into other levels of eCommerce development needs such as operational and strategic.

As such, it is recommended that this study be further extended to implement the design principles in the development of an eCommerce entrepreneurship curriculum within an institution to troubleshoot and fine tune the design principles with the aim to convert them into a best practice.

An alternative if not supplementary study would be to use the principles from this study to critically assess the development processes used to construct existing eCommerce entrepreneurship curricula with the aim to re-focus them based on the principles.

7.5. A Meta-Reflection

Reflecting on my position as the researcher and the roles and responses of interviewees in this study, it becomes evident that each of these positionalities profoundly shaped the research process and its outcomes, and that the dynamics of power, positionality, and systemic influences play a crucial role in shaping curriculum development in South Africa and perhaps the greater Global South. The process of examining the eCommerce entrepreneurship curriculum revealed layers of enrichment, biases, and systemic tensions that proved to be both illuminating and challenging.

Coming from a comparatively academically privileged and resource-accessible background I was able to occupy a vantage point that allowed for critical analysis of systemic inequalities and curriculum development in South Africa. Conversely, the interviewees, comprising subject-matter experts and industry participants, brought lived experiences, practical insights, and contextual understanding to the discourse.

As the researcher I was able to play the dual role of both an insider with expertise in the field as well as an outsider striving to mediate diverse stakeholder inputs. This position allowed a unique vantage point for critically engaging with curriculum design, particularly in identifying systemic inequalities and contextual challenges. The interviewees represented a wide spectrum of stakeholders, including government facilitators, technology educators, and industry experts, and hence their responses reflected an array of diverse priorities and institutional alignments revealing how power operates across these roles.

I believe that the study benefitted greatly from the dual perspectives of theory and praxis. Using a postcolonial critical realism-based framework incorporating different lenses from literature enabled a structured interrogation of societal, cultural, and economic factors affecting eCommerce entrepreneurship. Simultaneously the interviewees provided empirical richness by embedding lived realities into theoretical constructs, which bridged abstract ideas with on-the-ground realities, particularly in addressing challenges faced by marginalised entrepreneurs.

The responses from government officials illustrated the bureaucratic pressures of aligning the curriculum with their mandates, while critiques from practitioners highlighted the absence of grassroots entrepreneurship voices and possible disconnects between governmental initiatives and lived realities. I believe that this interplay between the critical framing of related issues and the participants' operational perspectives enriched the study, grounding it in both theory and practice.

However, this duality could have also introduced biases. A theoretical grounding can inadvertently prioritise certain epistemologies over others, potentially marginalising indigenous knowledge systems or localised entrepreneurial strategies. Additionally, the selection of interviewees, often skewed towards industry and academic experts, limited the representation of grassroots voices such as rural entrepreneurs or underrepresented demographics, a position that is all too common in curriculum development.

Regardless of this shortcoming, I feel that the study benefitted significantly from the triangulation of the gathered perspectives where government facilitators offered insights into systemic challenges, educators provide an academic lens, and industry experts brought practical, market-driven considerations. This mix can strengthen the curriculum's alignment with current economic realities, such as the growing relevance of digital entrepreneurship post-COVID. However, it also highlights an inherent tension: whose perspectives

dominate, and whose are sidelined?

For instance, the interviewees demonstrated that technical skills like digital strategy and infrastructure still dominate the discourse, overshadowing broader structural and cultural issues. The voices of marginalised entrepreneurs, particularly those from rural or underserved communities, are still notably absent, even though they represent key beneficiaries of such a curriculum. This reflects an unconscious bias toward institutional and urban-centric frameworks which risks perpetuating systemic exclusions.

In this way the study challenged conventional notions of curriculum development focused narrowly on employability and technical skills and reframed the question: Who truly benefits from the curriculum?. While traditionally skewed towards upper middle-class beneficiaries with access to digital infrastructure the research underscored the necessity of designing curricula that empowers marginalised groups. This shift demands recognising barriers like digital literacy gaps, systemic resource inequities, and cultural marginalisation.

Examining power dynamics also revealed the tension between intent and impact. While eCommerce curricula aim to democratise access to economic opportunities, they risk perpetuating systemic inequities if designed without critical contextual adaptation. I found my role as the researcher in navigating these dynamics, acknowledging unseen biases, leveraging triangulated data, and interrogating power structures, as therefore pivotal. A recurring challenge lies in identifying and addressing unseen dynamics including hidden curricula, implicit biases, and unspoken assumptions about entrepreneurship and education. Through triangulating interview insights, curriculum critiques, and socio-economic analyses the study uncovered disparities between what is expected such as equitable access and what truly manifests such as the perpetuation of elitism.

Looking at curriculum and its beneficiaries differently necessitates embedding local socio-economic and cultural realities into the curriculum design, addressing power imbalances in access to education and technology, and valuing diverse knowledge systems, from academic theories to grassroots innovations. While the South African government provides 'free rein' to subject matter experts, this autonomy is constrained by strict bureaucratic mandates, leaving little room for grassroots or localised adaptations. Respondents critiqued the lack of participatory processes noting how curricula are often designed without consulting small-scale entrepreneurs who could provide invaluable context.

By shifting the focus from merely technical competency to broader socio-cultural and systemic empowerment, the study calls for a transformative approach that redefines not only the "what" but also the "who" and "how" of eCommerce education. It also compels us to reflect on the duality of visibility and invisibility, and highlighted how much effort goes into making the curriculum relevant on paper, while critical elements such as grassroots participation or addressing systemic inequalities remain unseen. This speaks to the broader challenge of curriculum design of balancing technical relevance with structural transformation. By embracing a more inclusive, participatory, and decolonised approach the curriculum can serve not just as a tool for economic advancement but as a platform for systemic change. However, achieving this will require not just technical adjustments but also a fundamental redistribution of power within the education system.

8. Bibliography

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9. Appendix A – Research Instrument for semi-structured interviews

Interview Questions (Sections for analysis only and will not be shared with interviewees)

1. Interacting agents, structure and culture
 - a. What does the overall design of a curriculum for eCommerce entrepreneurs (if any) that you are familiar with look like?
 - b. What role do you play in the maintenance and/or changing of that curriculum?
 - c. What are the benefits and risks associated with the current curriculum?
 - d. What would the reaction to changes in the curriculum (if any are needed) be from the various stakeholders you interact with?

2. Empirical morphogenesis/morphostasis events
 - a. Describe the recent events that signal the need for an eCommerce entrepreneurship curriculum? in South Africa. What else has or has not changed?
 - b. What else has changed about South African socio-economics that warrants this need? E.g. economic needs, global competitiveness, poverty, advent of technology etc.

3. Actual morphogenesis/morphostasis events
 - a. Do you feel the current curriculum is sufficient for eCommerce entrepreneurs?
 - b. Are students satisfied with the current curriculum?

4. Actual conditioning events
 - a. What existing norms/processes influence the curriculum development?
 - b. How and why do existing institutional values/norms/processes influence the curriculum?

5. Morphogenetic/morphostatic structures, culture and agency and empirical interaction events
 - a. Who are the role players/stakeholders in the development of an eCommerce entrepreneurship curriculum?
 - b. Who gets to make the decisions in determining the curriculum? Whose decisions are most important/influential and why?
 - c. What does a South African entrepreneur look like to you?

6. Empirical conditioning events
 - a. What are the institutional factors that influence the eCommerce entrepreneurship curriculum in your space? E.g. socio-economic, educational, governmental
 - b. Has the environment/culture associated with the curriculum changed in any way since you have been involved?
 - c. What are the norms and values that impact the curriculum? How do they impact?

7. Actual interaction events
 - a. When you reflect on the possibilities of a new curriculum, does it meet the needs of the South Africa society?
 - b. How do you feel you can influence the development of such a curriculum?

10. Appendix B – Interviewee invitation and consent

01/10/2023

Dear colleague,

As per the requirements for completing a Master of Education degree at the University of Cape Town, a research study must be conducted.

The researcher, in this case Adheesh Budree, under the supervision of Prof. Alan Cliff, has chosen to conduct a study entitled “Towards a Higher Education curriculum for South African eCommerce entrepreneurs”. The objective of the research is to examine the factors impacting the development of a higher education curriculum for South African eCommerce entrepreneurs.

This research study is qualitative and entails interviewing individuals directly and/or indirectly affected by the development of a curriculum for South African eCommerce entrepreneurs. Interviews will be conducted online via MS Teams. The results of this analysis will be the drawing up of design principles associated with the development of a curriculum for South African eCommerce entrepreneurs.

Participation in this research is voluntary. All information is treated in a confidential manner and used exclusively for the purpose of this study. No individual names or personal details will be published as part of this study, and no participants will be requested to supply any identifiable information, ensuring anonymity of responses.

By agreeing to participate in this research you are subsequently giving consent for the researcher to analyse answers given in interviews undertaken. Participants may choose to withdraw from the research at any time for whatever reasons in accordance with ethical research requirements. The findings of this research will be compiled into a thesis and presented to the University of Cape Town for academic purposes.

This research has been approved by the University of Cape Town Humanities Faculty Ethics in Research Committee. Should you have any queries, please feel free to contact me on Adheesh.budree@uct.ac.za or +2784 445 4455 or my supervisor, alan.cliff@uct.ac.za.

Kind regards,

Adheesh Budree

Research Participant Consent Form

I, _____, consent to participate in the research entitled "Towards a Higher Education curriculum for South African eCommerce entrepreneurs" as follows:

- participate in a 45 to 60-minute interview for this study (yes/no)
- having the interview video and/or audio-recorded for transcription purposes (yes/no)

I am aware that participation is voluntary and that I may choose to withdraw from this study at any time, should I choose to do so.

Signature

Date