



Digital Kenya: A Key Driver in Entrepreneurship Ecosystem in Higher Education

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ABSTRACT

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Higher education institutions must be an integral part of the ecosystem and work closely with all stakeholders to promote entrepreneurship. To create entrepreneurial endeavors that are mutually beneficial and self-sustaining, these systems necessitate a lot of connections among organizations, individuals, and operations. The university setting might be the best place to start to identify potential entrepreneurs who play crucial parts in establishing and maintaining strong entrepreneurship cultures within countries. One of the first stages in Kenya's new strategy for entrepreneurship growth was the inclusion of entrepreneurship instruction in all technical teacher education institutions in the country. Hence the Ministry of Renew search, Technical Training, and Technology implemented a new policy mandating all technical education participants to accomplish a course in entrepreneurship education. Despite the initiatives, the growth of the Higher Education Entrepreneurship Ecosystem has remained sluggish in the county. But with digital transformation in the country, it was expected this was to act as the key driver in Entrepreneurship Ecosystem in Higher Education. The paper aimed at examining how digital transformation is a key driver in Entrepreneurship Ecosystem in Higher Education in Kenya. The study was anchored on the Schumpeter theory of innovation, the theory of change, and the Institutional Theory. The paper used a desk review in-depth desktop review. The findings imply that we are trying to establish how digital transformation triggers the growth of entrepreneurship in higher education.

Keywords:

Entrepreneurship Ecosystem, Entrepreneurial Intention, Schumpeter Theory of Innovation, Theory of Change, Institutional theory, High Education, Entrepreneurial Learning, and Digital Transformation.

1.0 INTRODUCTION

According to Deshpande and Guthrie (2020), the phrase "entrepreneurial-university ecosystem" broadly refers to the notion that colleges can function as businesses to support local and global economic growth. Many nations have changed their higher education systems in recent decades, which has had an impact on the goals and structure of Universities and similar institutions. Universities and similar institutions are currently anticipated to generate entrepreneurship funding and act as drivers of local societal and economic growth, playing important roles in

entrepreneurial ecosystems. Creating incubators, scientific parks, and university spinouts, as well as investing equity in start-ups, are just a few examples of the wide spectrum of potential entrepreneurial activities that universities may engage in (Hayter *et al.*, 2018). As a result, there is frequent disagreement on what exactly makes up the entrepreneurial-university ecosystem as well as the best approaches to ensure that it functions well and thrives.

Higher education institutions (HEI) must be an integral part of the ecosystem and work closely with all stakeholders to promote entrepreneurship. To create entrepreneurial endeavors that really are identity and mutually reinforcing, these systems necessitate a lot of connections among organizations, individuals, and operations. The university setting might be the best place to start to identify potential entrepreneurs who play crucial parts in establishing and maintaining strong entrepreneurship cultures within countries. (Hemsley-Brown *et al.*, 2016).

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Isenberg (2011) each nation that seeks to compete and advance within the knowledge-based global economy must prioritize entrepreneurship. The Kenyan government recognized the potential of small enterprises to meet the nation's needs for job creation and economic growth by establishing an intergovernmental organization unit on small and medium-scale business development within the planning and social progress ministry.

Hughes and Lonie (2007) M PESA, a mobile money service introduced in 2000, is frequently mentioned in Kenya's history of tech entrepreneurship. The integration of Kenya's digital payments platform and identity system opens the door to utilizing digital technology in many ways to improve the provision of a range of services, possibilities, and opportunities to taxpayers, businesses, and investors. One of Nairobi's earliest tech hubs and co-working spaces, iHub opened its doors in 2010 and set the way for more hubs to follow, including Nailab, Nairobi Garage, and SwahiliBox in Nairobi and elsewhere.

Kenya was urged in a report created in collaboration with the United Nations Development Program (UNDP) and the International Labor Organization (I. L. O.) to build entrepreneurship teaching capabilities that might result in the creation of an environment for entrepreneurialism culture in the nation (Ndemo & Weiss, 2017). The nation's entrepreneurship initiatives were encouraged and supported during this time by the establishment of a new Ministry of Research, Technical Training, and Technology, which had this as one of its goals.

The inclusion of potential entrepreneurs in all specialized skills institutes across Kenya was one of the initial steps in the new direction of entrepreneurial development in that nation. The Ministry of Research, Technical Training, and Technology (MRTT&T) implemented a new rule that requires all technical and vocational learners should finish an entrepreneurial training course. This project lasted for four years. Most technical training institutions in Kenya now include departments dedicated to entrepreneurship education. Additionally, the Ministry of Research, Technical Training, and Technology encouraged each university to create an Entrepreneurship Center (SBC) whose objective was to "support the expansion of micro firms, or craft businesses in the service and manufacturing industries (Njoroge & Gatungu, 2013, Muathe, & Muraguri-Makau, 2020).

In this environment, higher education institutions must teach entrepreneurialism, foster the development of competencies and skills, distribute knowledge and technology, and promote economic growth. They must also assist students in starting new businesses and provide them with the necessary set of skills to accomplish them throughout their life cycles (Carvalho *et al.*, 2010a).

Locally, the government of Kenya has worked to lessen or remove obstacles to the making and growth of original trades, sometimes in collaboration with other non-governmental organizations (NGOs) and businesses. These initiatives have

helped Kenya develop into a hub for innovation and entrepreneurship ecosystem, and a tsunami of international investment has engulfed the nation (Fuerlinger *et al.*, 2015). The creation of an ecosystem for entrepreneurship (EE) is the next step, and this ecosystem includes support organizations that take on various shapes and carry out various tasks.

Regionally, The concept of entrepreneurial universities and commerce has been debated during the last 20 years in South Africa's higher education system. However, the majority of entrepreneurship development and courses have been developed and placed in the business schools of universities. According to (Shambare, 2013), universities have had a quiet hand in developing courses that support entrepreneurial ecosystems.

Globally, Governments in high-income nations have sought a role for universities to promote regional economic growth more and more in the wake of the economic downturn brought on by the financial crisis in 2008 (Thompson, 2004). As a result, there is an expanding need for contemporary universities to serve as catalysts for both innovation and entrepreneurship to spur enhanced regional competitiveness and economic progress. Universities serve as the breeding grounds for this national capacity, which is sought after by governments all over the world (especially in high-income nations). In this view, universities are viewed as important agents of change in commercializing inventions and founding businesses because they operate at a crucial nexus of teaching, research, and knowledge transfer. In this environment, high institutions frequently behave entrepreneurially to support economic development, which is referred to as the "entrepreneurial-university ecosystem (Rothaermel *et al.*, 2007).

Higher education systems in the majority of countries face similar challenges, despite significantly varying social systems, economic situations, resource availability, contextual factors, and sociocultural context: sustaining a knowledge-based economy, integrating expert and general university education offers opportunities for professional growth, and giving the community a place where common sense, free thought, and self-esteem can grow and be maintained, and principles. This fact, which has involved the kindness of academics, governments, and politicians worldwide, becomes increasingly important during recessionary times. These initiatives have been promoted in particular because entrepreneurial universities serve as significant accelerators for regional, economic, and social growth (Mascarenhas *et al.*, 2019).

Carvalho *et al.* (2010) assert that an entrepreneurship and innovation university is a pure startup that aims to instantaneously carry out its objectives while providing a suitable environment for the educational system to discover, investigate, and utilize original and imaginative concepts that might be turned into startups. Teaching, research, and entrepreneurship are three tasks that the entrepreneurial university must concurrently fulfill because they would

otherwise conflict (Schulte-Althoff *et al.*, 2020). The basic purpose of a university has traditionally been to educate students, who then go on to find employment or start their businesses. Conducting research, which is important in the current understanding of society, has been its key goal which leads to both the publication of academic discoveries and the development of ideas for new businesses. Entrepreneurial endeavors now connect scientific discoveries to their social applications. University research seems to spread through many conduits, or knowledge spillover (Audretsch & Belitski, 2021). Based on it, new businesses are created through the commercialization of research outcomes from transdisciplinary research.

1.1 Statement of the problem

Kenya's economic development is being fueled by the digital economy, it is specifically driven by mobile phone usage increasing online activity, adoption of e-commerce, and use of digital services. Kenyans have quickly adopted mobile communications technologies and are now a global leader in the adoption of digital payments because they are not constrained by outdated infrastructure and are given early empowerment through forward-looking regulation and policy. To offer ICT training to innovators, the Ministry of ICT Innovation and Youth Affairs has also established constituency innovation centers and the Ajira initiative. These programs are designed to help business owners get free Wi-Fi in all 290 constituencies across the nation. This has increased the understanding of and use of online platforms for employment and business prospects (Irungu *et al.*, 2015).

Everywhere in the world, academics, professionals, and governments are appreciating and understanding the importance of high education in giving entrepreneurs the business skills and knowledge they need to plan, launch, and expand their business idea (Lazzeretti & Tavoletti, 2005). This is necessary so that investments in knowledge, abilities, and abilities can lead to better outcomes under the wealth creation philosophy. one's productive capacity and give one the tools one needs to interact in a more enterprising, creative, and flexible way with a moving job setting (Jack & Anderson, 1999). There are currently incubators and accelerators operating in the greater Nairobi area, each housing more than 30 start-ups. Kenyan start-ups like CarePay, Twiga Foods, Apollo Agriculture, Tulaa, and Farm Drive have shown how digitally anchored business models can produce scalable revenue and sustainable growth.

The entrepreneurship ecosystem is crucial to Kenya's socioeconomic growth. The importance of the Entrepreneurship ecosystem can be seen in terms of the development of an industrial base, employment generation, reduction of poverty, and economic growth (Sheriff & Muffatto, 2015). Despite the sector's important function, it nevertheless faces numerous difficulties that prevent over 90% of the entrepreneurship ecosystem from reaching its third birthday.

This essay examines a few of the difficulties high education institutions in Kenya confront in developing the essential Entrepreneurs environments required to foster growth, employment creation, and entrepreneurial culture in its students. It also provides possible answers to these issues. High education institutions struggle to fulfill this role because they frequently lack the best teaching strategies and environments, lack entrepreneurship-friendly curricula and programs, fail to inform students about entrepreneurship in the unofficial sector, and lack adequate role models in both the academic and business worlds. Therefore, it is obvious that high education institutions, which are now the weakest sector are necessary to create a robust enabling environment in Kenya training.

In a research author conducted in 2005 on the risks and investments involved Wambugu targeted the training in Nairobi, especially for the implementation of capacity building. wambugu (2005) also noted that the lack of growth in the majority of business firms is caused by poor educational levels. Although these studies are crucial to the research, there is a knowledge gap because they were conducted on other large corporations rather than the entrepreneurship ecosystem.

Based on the research mentioned above, and even though all of the efforts made by high education institutions. Kenya's economy is hugely affected by technology and social development, The goal of this research is to investigate how technological innovation in Kenya can be used to trigger entrepreneurship in higher institutes.

1.2 Objective of the study

The objective of this study was to examine the effect of digital transformation on the growth of the Entrepreneurship Ecosystem in Higher Education in Kenya.

2.0 LITERATURE REVIEW

This section focused on analyzing several pieces of literature associated with a Key Driver in *the* Entrepreneurship Ecosystem in Higher Education.

2.1 Theoretical Framework

2.1.1 Entrepreneurial Intention

Firm intention" is frequently used to describe the choice to launch a business (Christian *et al.*, 2015; Pittz, 2014). Entrepreneurial education is precisely the type of strategic activity that may be studied through the examination of human intentions since this effort requires extensive forethought (Barral *et al.*, 2018). Shirokova, Bogatyreva, *et al.*, 2016; Shirokova, Osiyevskyy, *et al.* (2016) are just a few of the numerous studies that have examined the variables that move a person's entrepreneurial plan to start a commercial. As previously said, one of these crucial things is entrepreneurship education (Kolvereid & Moen, 1997). These researchers observed that alumni from Norway who had a stronger entrepreneurial mindset were more likely to

launch new businesses and have stronger business purposes than other students.

This judgment was further supported by Turker and Selcuk (2009) who stressed the value of a high-education setting in fostering entrepreneurial training in Turkey. Other variables, such as perceived relationship support or structural and economic support, had a supporting role in their findings. Similar studies were also carried out in Asia, with an example size of 2,300 scholars enrolled in various forms of entrepreneurial training.

The majority of these respondents stated that they planned to launch their businesses after finishing their education. Based on a study conducted in Spain, it was shown that learners who participated in entrepreneurial training education programs had advanced levels of commercial skills and a stronger desire to work for themselves (Sánchez, 2013). While the total of entrepreneurial training plans is expanding, their effects are still relatively unclear, (Ankarcona & Holm, 2016; Horst, 2019; Wade & Padayachee, 2017). Numerous scholars have also emphasized the considerable dearth of information on the outcomes and efficacy of entrepreneurship training programs.

2.1.2 Schumpeter's Theory of Innovation

Hagedoorn (1996) discussed the importance of improvement in the performance of selected firms, noting that innovation produces wealth when old market systems are deconstructed by the launching of commodities and facilities onto the marketplace. The demise of existing businesses causes resources to be transferred from old to new firms, allowing new enterprises to thrive. Schumpeter recognizes that creativity or innovation is an important component in the field of specialty of an entrepreneurship ecosystem.

Entrepreneurs, according to Schumpeter, help to expand an economy by introducing new goods, services, production processes, markets, and new sources of raw materials; this is because entrepreneurs are creative, imaginative, and foresighted. According to Schumpeter, development is a process that is aided by actors in an economy and so is not automated. Entrepreneurs are the agents who help the growth process. Schumpeter identified creativity and knowledge as a stimulus for the entrepreneurship ecosystem (Policy, 2008, Muathe, 2010).

However, this theory has significant flaws, such as the fact that it ignores the reality that entrepreneurs take risks and that it only applies to large enterprises, even though the state of the economy compels small business owners to copy successful models rather than come up with original ideas. In this study, Schumpeter's theory of innovation is employed since it discusses the role of innovation in entrepreneurship to assist the work of potential entrepreneurs and improve their performance.

2.1.3 Change Theory

Weiss industrialized the Theory of Change in the 1990s as a tool for modeling and assessing comprehensive society

projects at the Aspen Institute Roundtable on Community Change. A theory of change has its historical roots in the field of theory-driven evaluation, which gained popularity in the 1990s (Coryn et al., 2011). A common theory of change that is currently in vogue calls for creating incentives, different standards, and qualification criteria (together with concomitant continuing education) to entice and retain individuals in the education sector and supervisory roles (Dekker, 2004).

Recognizing the context in which the change endeavor will take place is the first step in creating a theory of change. Higher education is a complex system that experiences change and paying attention to different aspects of the system encourages change agents to think about variables that might affect how a change initiative turns out. Change theory can be extremely effective in guiding learning improvement approaches in the high education system and ultimately producing the specific and reliable, but only in the arms (and brains, and souls) of individuals who have a deep knowledge of the workings of how the components in issue function to achieve the desired consequences (Carl, 2020).

In addition to mobilizing its members to promote social change, movements can also contribute to the development of infrastructures that support the launch of new businesses. Such infrastructures include social networks that could bring together potential backers and entrepreneurs, new economic policies, and other strong players that could provide financial backing for original businesses and rules that would legalize and explain the borders of novel marketplaces. As social movement organizations grow, network relationships among their members frequently act as a channel for entrepreneurs to learn about resources and opportunities (Tolbert *et al.*, 2011). The theory of change was applied in this study because it related to the new ways of doing things brought about by digital transformation.

2.1.4 Institutional Theory

Institutional theory has typically focused on how different individuals and groups can more effectively protect their places and credibility by adhering to the laws and customs of the organizational structure. Institutional theory has been widely established in the literature that institutions in an entrepreneurial environment both restrain and support them. The institutional environment for new organizations defines and limits entrepreneurial prospects, which has an impact on circumstances, new business growth rate, and size (Bruton *et al.*, 2010).

Process in the system components of the surrounding factors that affect business growth include favorable investment incentives and capital accessibility. (Lüthje & Franke, 2002). Insufficient institutional development can make it difficult to launch new businesses, whereas an institutional environment that has been developed more can make it difficult to launch new businesses because of excessive regulation (Zampetakis & Moustakis, 2007).

According to Mason and Brown (2013), Institutional efforts to establish and sustain a setting that supports the enabling environment as well as cultural norms towards entrepreneurship are examples of institutional factors that have an impact on entrepreneurial activities. In particular, a society's norms and policies guiding the distribution of rewards directly affect the degree of innovation that emerges. In addition to innovating, institutional theory has established a framework for analyzing how innovators must seek respectability for their new businesses. The Building of moral and philosophical legitimacy is influenced by institutions, which is crucial for entrepreneurship enterprises to overcome obstacles (Meek *et al.*, 2010). This study will employ the institutional theory because is a key in the transformation of the institution of higher learning as a result of entrepreneurship and digital and it also clarifies how institutional conditions affect an entrepreneurship ecosystem's performance.

2.1.5 Methods of learning about Entrepreneurship and the Growth of Entrepreneurship skills

Entrepreneurial conduct is made possible by learning, which is a dynamic process (Shockley & Frank, 2011) defined entrepreneurial learning as the process by which individuals create new meaning while identifying and seizing chances and setting up and running businesses. It involves much more than merely picking up useful "information," as it also calls for action and an awareness of what has been done, what has worked, and what is possible. Learners' practical and commercial training will strengthen their entrepreneurship purpose (Vaicekauskaitė & Valackienė, 2018).

The study lends credence to the idea that experience and practical application should be the primary emphases of learning promotion in entrepreneurship education. With this approach, it is hoped that students would engage in genuine education, which will ultimately encourage students to take on more responsibility and perform more effectively as entrepreneurs. Because there is little data on how Entrepreneurship training has an impact on students' drive to launch their firms, it has come under heavy fire during the past ten years (Mamun *et al.*, 2017). However, this study topic has already been answered, and researchers are currently concentrating on how aspiring Business owners should study in college.

Future business owners should not be exposed to the conventional education and training environment, which often concentrates on several abstract notions for a specific discipline. Instead, they must become learning facilitators so that aspiring entrepreneurs can adopt a wholly different entrepreneurial mindset (Horst, 2019). General definitions of entrepreneurial abilities include those that enable individuals to create entrepreneurial projects that contribute to social cohesiveness and economic growth. They are made up of a combination of the abilities, information, and assets that set an entrepreneur apart from their rivals (Audretsch & Belitski, 2017).

According to the study carried out by Elnadi and Gheith (2021), the creation of an educational support system and these entrepreneurial competencies benefits students' desire to pursue their business ventures. Additionally, people who believe they possess more innovative people and talented individuals have a higher probability to have confidence in their ability to launch their businesses. A large and diverse range of extracurricular activities is usually used to accomplish the determined goal of developing innovative courses for the expansion of commercial abilities. Within the framework of the idea of "University-based entrepreneurship ecosystems. This ecosystem encompasses a variety of focus groups at different levels, including university students, academics, businesses like accelerators and incubators, and even the general public. This setting aims to offer the skills and equipment required to expand the inner environment for organizational innovation (Spigel, 2020).

2.2 Empirical Review

Empirical research has been done to comprehend the motivating forces that lead to the entrepreneurship ecosystem in high education. In general, there are three main types of entrepreneurship ecosystems. Formation of small enterprises, entrepreneurship based on academic research, or scalable firms (businesses implementing technology). Technology transfer, the environment, and the regulations that influence generation have received the majority of attention in the study of university entrepreneurial output.

Nicolaides (2011) suggested that Colleges and universities must have a big impact on this ecosystem, working with all other stakeholders to promote entrepreneurship. Such structures demand a great degree of collaboration across the institutions, people, and procedures to produce entrepreneurial initiatives that are mutually beneficial and self-sustaining. To identify future business owners in societies and to play important parts in creating and sustaining flourishing entrepreneurial ecosystems, the university setting may be the best place to start. Entrepreneurs and the communities they support might act as organizers and partners in helping the area's economy grow.

Higher educational goals are reflected in this energy that comes from university environments that support learning and foster discovery. University programs and curricula that do not support entrepreneurship education, a lack of knowledge about entrepreneurship events in the unorganized sector, and a lack of suitable part representations in both the academic community and the commercial world are all obstacles to universities fulfilling this role. Therefore, it is clear that universities are the crucial piece needed to create a thriving business ecosystem in South Africa (Wadee & Padayachee, 2017).

The primary goal of Africa's post-secondary education system still is to produce graduates who will look for employment. However, research carried out in South Africa state that between the ages of 15 and 24, there are still 50% of young South Africans without jobs. This is made worse by

a lack of qualified workers in high-demand fields, a decline in global competition, and an uneven infrastructure (Carvalho *et al.*, 2010b).

Finding a way to stop the impending catastrophe by offering the right preparation to encourage a transformation rate from the right preparation to skill application is of utmost importance for institutions of higher education. While universities of technology (UoTs) and technology, vocational, education, and training (TVET) institutions collaborate with industry to train diminutive focus is placed on business in the student's education. Additionally, the problem of unemployment and the failing economy cannot be resolved by entrepreneurship education alone (Itohan Oviawe, 2017).

In this regard, Ferrandiz *et al.* (2018) have made hints that the relationship between entrepreneurialism and sustainable growth is complex and involves numerous institutional entities in a variety of major, varied links and linkages. Because of this, fostering entrepreneurship requires the creation of an ecosystem in which institutions of higher education play a significant role in cooperation with other parties involved, such as public bodies and commercial partnerships, businesspersons, nonprofit groups, network operators, banking associations, accelerators, and others.

Achieving such an ecosystem, however, does not happen by accident; it calls for intensive communication and collaboration among important parties. For such an environment to be feasible and effective, it must be guaranteed that it will be self-sustaining, mutually beneficial, and comprise organizations, persons, and procedures that collaborate intending to foster entrepreneurial initiatives. Environmental factors have a significant influence on the policymaking process to launch business start-up companies, and their importance cannot be understated (Matt & Schaeffer, 2018).

The potential function(s) of intermediaries is/are an additional part of nurturing the entrepreneurial environment. As a result, network techniques have been demonstrated through the development of cross-boundary responsibilities for academics, institutions, industry, and communities Theodorakopoulos *et al.*, (2014) suggested ways to effectively transfer technology between academic institutions and rural enterprises in developing nations. Because of the interactions between academia and industry, this thought-provoking paper offers a model that a community might use to remove obstacles to technology transfer.

He discusses commerce and creativity in his piece from 1985, By stating that entrepreneurialism "Is not supernatural, it's not sorcery, but it had nothing to do with genetics," Drucker attempted to explain the concept." It is a chastisement. It can be learned, just like any discipline. Additionally, there are other stereotypes about entrepreneurs, including the notion that they are academic and social misfits (Elnadi & Gheith, 2021).

Davie (2017) researched training programs in entrepreneurship for the growth of the entrepreneurship ecosystem, they suggested how it evaluates and develops itself, and University education might contribute to ensuring its essential function inside the environment. While universities have historically been significant and effective forces for driving worldwide invention and commercial growth, they now need to be willing to reject conventional thinking to make real progress. Universities may play many different roles in the expansion of entrepreneurial education. Governments ought to put their efforts into creating the institutional and legal foundations needed to support entrepreneurs' bottom-up initiatives. The crucial goal of entrepreneurship strategies ought to be to encourage the development of commercial principles, which would then help aspiring businesspeople see and seize opportunities. It is urgently necessary to realign the structure of training and policy with the necessities of the individuals they are meant to assist as our worldwide society's speed and diversity increase dramatically (Ferrandiz *et al.*, 2018).

The study in Kenya state that interventions in education and training have been utilized in various nations to influence the population's entrepreneurial culture; Developing knowledge, skills, and attitudes toward entrepreneurship is the goal of entrepreneurial education and training. Attitude, which is the individual's mental makeup and historical aspects, is the main determinant of entrepreneurial and innovative attitudes and behaviors. Most economies of entrepreneurial education and training achieve goals like inspiring their people to show a favorable attitude toward possessing a desire to start a business, be self-employed, spot attractive business prospects, and show management abilities for running successful enterprises.

Njoroge and Gatungu (2013) state the need for government policies on entrepreneurial orientation to ensure the integration of entrepreneurship into the official learning organization and provision of entrepreneurship through partnerships with the business division, the unofficial society, urbanized training courses, and apprentice training programs. A variety of government economic instruments and programs in Kenya have acknowledged the value of entrepreneurial training. One such initiative was the Jua Kali Voucher Support Program, which offered training courses to micro and small business owners from 1995 to 2001.

Education in business and entrepreneurship includes both formal and easygoing procedures for fostering commercial assertiveness as well as the information, assistance, and talents needed to thrive in a commercial society (Jones *et al.*, 2012). Higher education institutions are important, even if they may be far more extensive than academic entrepreneurship programs. The goal of university education is to transform students both personally and professionally. Graduate students are recognized as crucial members of the knowledge-based workforce in terms of government policy,

and human resources are a driver of the economy. (Sandhu *et al.*, 2012).

2.2.1 Digital Transformation

Adopting disruptive technology is key to the digital transformation's goal of boosting societal welfare, productivity, and wealth creation. A large number of national governments, international organizations, and the delivery of quality services world of digital transition (Abdellah *et al.*, 2022; Ebert & Duarte, 2018).

Fitzgerald *et al.*(2013) High annual growth and quick penetration are predicted for digital transformation. However, Challenges are preventing its expansion, and they include insufficient or overly diverse organizations or attitudes, a failure of a strategy for digital change and visibility of ROI (return on investment), as well as a belief that pre-existing businesses will be hurt. (the "innovator's dilemma").

Physical barriers include matters like a lack of awareness of how digitalization can benefit everybody in society, skill shortages in the labor market, insufficient facilities, regulation, and consumer protection, and challenging access to credit, particularly for small and medium businesses. Digital transformation has encouraged ongoing entrepreneurship and corporate dynamism, particularly in sectors that depend heavily on technology. These businesses have restructured themselves to function concurrently in 2 phases. While the standard mode continues to manage established businesses and operations, the disruptive mode looks for more chances to expand into new markets and introduce novel technology, processes, goods, or services. Disruption is currently being caused and driven by software technology because they create and advertise new technologies to meet customers' needs for future performance, market leaders are always one step ahead of their rivals. These businesses do not, however, wish to undermine their cash flow (Abdellah *et al.*, 2022).

Through digital transformation, new business models, industry collaboration, and technological advancement are being made possible. Some people are simply spinning their hamster wheels when the future arrives. Since everyone may learn from the past, we should exercise caution, as noted by technological guru Herman Kahn in a statement made many years ago. Understanding the future is crucial today (Brunetti *et al.*, 2020).

2.2.2 Entrepreneurship in Higher Institutions

It is important to develop psychologically based entrepreneurial skills. Education policies should be changed if society wants to see a rise in the number of entrepreneurs with academic backgrounds. According to (Moreland,2006) there are three categories of entrepreneurial education: education about, for, and in an enterprise. To "give students strategies that can be used in the real world," (Nylund & Cohen, 2017) contends that there should be a "transition from transmission models of teaching (learning 'about') to experiential learning (learning 'for')" in entrepreneurial education.

Ribble (2011) Students who own non-active firms can also conduct bench research on business ideas to subsequently reactivate their non-active business or start a new one. Active enterprises provide a learning environment in which to study entrepreneurship. Some students choose to plan out their firm in great detail over an extended time and only formally establish it once all the necessary components are in place. Even though the formal paperwork hasn't been completed, they have nevertheless had to make the necessary deals and expand the company's network, which means that they have effectively been learning "in business" even if it hasn't been formally recognized as such. University business schools and specialized entrepreneurship centers are now offering more entrepreneurship courses than ever before, with a wider variety of themes to choose from(Maritz *et al.*, 2021).

Introduction to Entrepreneurship, Starting a New Business Consulting/Practicum/Experiential, Inspiration & Innovative thinking, and Managing a Small Business. According to the study, bachelor degrees are most common, with 25% of the institutions offering an entrepreneurialism major for university students, 48% of the institutions offering an undergrad degree minor for business or nonbusiness students, 41% of the institutions offering master's degree specializations, 25% of the institutions offering graduate children and adolescents, and 19% of the institutions offering entrepreneurial intention PhDs. Additionally, 36% provided possibilities for internships with nearby businesses, and 32% offered small company incubators (Joonas Renée Gravois, 2019). However, it is difficult to compare and evaluate these programs due to the variety of outcomes that can be expected from entrepreneurship education.

2.2.3 Digital Transformation and Entrepreneurship in Higher Education

The road map for long-term information technology of the professoriate will decide the effective planning for training globally. The world in which we live is moving quickly, and so are the things that we teach and how we teach them (Moore, 2005). How can we reform our educational systems to promote learner-first practices while yet keeping up with the escalating needs of the twenty-first century?

As a result of technological development and social e-trends toward digitalization, high education institutions all over the world have recently undergone quick and significant changes. The digital transformation necessitates extensive readjusting, like all other major transformations. The financial effects of the global economy - the educational system have sparked significant changes, particularly in universities, such as standardization, excellence, reorganization, use of technology, and experiential learning. These forces in the field of learning encourage group multinational learning. One possible approach to closing the enrollment gap is the delivery of education through digital means. This trend is referred to as digital entrepreneurship (Proksch *et al.*, 2021). The idea of openness has been around for a while in the innovation space. (Ribble, 2011) research on user innovation

and customer co-creation (Voelpel *et al.*, 2004). All show that a company can improve its innovation performance by being receptive to suggestions from users and customers. In a similar vein, research on open innovation has emphasized the flow of information and technology resources across organizational boundaries in the interest of innovation and entrepreneurship. In this section, we go into more detail on the reasons that are pushing higher education to stress the importance of business and mobility more. To prepare and educate individuals with the necessary understanding, to care about facts, and to make their commercial, personal, and governmental decisions, it is crucial that learning, and higher core curriculum, stay up with the new breakthroughs. This is true even though innovation contributes to a culture that is always learning new things (Cervenanská, 2013).

Up-to-date centuries have seen a revolution in the role of technology. The labor market has mostly moved to online platforms due to the increased use of marketing in businesses, and the number of employment openings in innovation, research, and digitalization has surged. (Beerepoot & Lambregts, 2015). This impact is also seen in employment, which calls for specialized knowledge of digital tools in a world where educational teaching becomes more entrepreneurial and recompenses close consideration of the demands of trades, supervisions, learners, and other participants, and where education is becoming more and more accessible and inexpensive (Guerrero *et al.*, 2014). Higher education must demonstrate influential quality and use learning analytics to address issues with student development, learner knowledge, and fulfillment, teaching quality and invention and established performance and ranking as a result of growing force for sustainability and monetary solidity as well as increased market competition on a global scale (Teixeira *et al.*, 2021).

However, this field differs greatly in scope and is perhaps still in its infancy, particularly when analyzing the key benefits of digitalization and its strategies for new from the perspective of universities of higher education. From the viewpoint of high education institutions, Plans for digitalization include objectives to (a) increase overall income, (b) approach can significantly, (c) generate wealth through new requirements, (d) build a firm's image, and (e) encourage creativity (Mohamed Hashim *et al.*, 2022). High education institutions must establish digital transformation management procedures to handle complicated transformation initiatives (Angelopoulos *et al.*, 2019). They must develop flexible, practical, adaptable, and digitalization techniques that enable the that being that integration of the whole institution's operations.

3.0 RESEARCH METHODOLOGY

Banasick (2019) stated that Research methodology is comprised of the researcher's methods for gathering, analyzing, and interpreting the study's findings. The researchers in The major driver in the university education

entrepreneurial ecosystem was thoroughly examined in the current study using desktop analysis of secondary data that had already been collected. (Dushime *et al.*, 2022) Keep in mind that secondary source is a systematic technique with technical and researchers in different that is flexible and may be utilized in some ways. Data were mostly gathered by the writers from peer-reviewed scholarly publications and research journals. Additionally, the Author looked into reports from the business and governmental sectors, as well as those from online trade publications and newspapers, publicly accessible national websites, books, published and unpublished technical studies, official blogs, and other relevant sources. The easily available, extensive, and trustworthy data are the primary justification for employing this research methodology. Thus, compiling it further aided the study's development of a knowledgeable conclusion. The writer was also able to locate previously completed research projects with the use of the accessible data, preventing duplication of effort and educating themselves on other procedures and approaches. Additionally, it is less costly and time-consuming. As a result, the writer can conclude with some degree of reliability and point out any shortcomings or potential topics for further study (Birnbbaum, 2004).

4.0 FINDINGS AND DISCUSSIONS

Higher education must demonstrate influential quality and use learning analytics to address issues with student development, learner knowledge, and fulfillment, teaching quality and invention and established performance and ranking as a result of a growing force for sustainability and monetary solidity as well as increased market competition on a global scale (Romero & Ventura, 2020). The road map for a long-term, digitalization of the university sector will decide the sustainable scope statement for training globally. As a result of technological development and social e-trends toward digitalization, high education institutions all over the world have recently undergone quick and significant changes. The digital transformation necessitates extensive readjusting, like all other major transformations. The influence of the worldwide economy on societal, intellectual, and pedagogical systems has sparked significant changes, particularly in standards, quality, independence, the use of technology, and immersive learning within higher teaching. University business schools and specialized entrepreneurship centers are now offering more entrepreneurship courses than ever before, with a wider variety of themes to choose from (Kuratko, 2003). It is important to develop psychologically based entrepreneurial skills. High Education policies should be changed if society wants to see a rise in the number of entrepreneurs with academic backgrounds. The findings imply that high education has a good influence on students' long-term business purposes. They specifically draw attention to the fact that developing personal skills through training helps their entrepreneurial initiative grow. Mentoring, on the other hand, calls for a more deliberate

approach and a higher level of specialization on the part of the mentors (Plumly *et al.*, 2006).

The elements of Entrepreneurship ecosystems, which include the entrepreneurial university, focused on student commencement activities, entrepreneurial activity ecosystems, and entrepreneurial training programs are all highly interconnected and mutually beneficial, though they must be applied in the context of individual universities. These contextual variations may be in line with universities' strategic goals, changes in student portfolio dynamics and the types/disciplines of start-ups, as well as technological advancements and budget allocation.

To assist entrepreneurship education and entrepreneurial processes, from an entrepreneurship ecosystem viewpoint, we realize the significance of diverse actors, dimensions, contexts, and high institutions (Maritz *et al.*, 2022). We also acknowledge the changes in student entrepreneurial mindsets that have occurred in recent years (Lynch & Corbett, 2021).

5.0 CONCLUSION

Adopting disruptive technology is key to the digital transformation's goal of boosting the entrepreneurship ecosystem, societal welfare, productivity, and wealth creation. A large number of national governments just like Kenyan Government, international organizations, and Proactive research have been produced by professional organizations to assist their lengthy goals. Such groups anticipate achieving the objectives by advocating for the implementation of strategies relating to digital transition. It is important to develop psychologically based entrepreneurial skills. Education in higher institutions policies should be changed if society wants to see a rise in the number of entrepreneurs with academic backgrounds. Kenya government to create an entrepreneurial ecosystem in Education in higher institutions, they should be in forefront position to be the driving forces behind social change and innovation. Academic entrepreneurship now comprises a variety of entrepreneurial activities, whether or not they result in the formation of new businesses, and is not extended just to the establishment of digital businesses by academics. This more comprehensive approach broadens the entrepreneurial ecosystems of important high institutions and vibrant areas by including a wide number of stakeholders. High education institutions play a crucial role in creating and sustaining a thriving ecosystem for entrepreneurs. A high education institution leaves a lasting impression on the future by acting as a partner and facilitator of those organizations engaged in promoting entrepreneurship and by doing so helping the economic development of its community and region. This type of environment, where discoveries are produced, learning is prioritized, and lives are changed, generates a collective energy that captures the very heart of the academic study. Presently, it appears that Kenya wants full school systems to create a strong enabling environment.

5.1 Policy Implications

One policy implication is that education policies should be changed if society wants to see a rise in the number of entrepreneurs with academic backgrounds and comparison to independent work and, possibly entrepreneurship requires separate laws, regulations, and "homes" in the government. A high education institution leaves a lasting impression on the future by acting as a partner and facilitator of those organizations engaged in promoting entrepreneurship and by doing so helping the economic development of its community and region. work provides a relevant experience that motivates a variety of social actors including entrepreneurs, public institutions, and managers of higher education programs and ecosystems. Hence the inclusion of practical learning experience geared toward the development of competencies like self-awareness, teamwork, interpersonal skills, and associated is advised for higher education institutions' entrepreneurial programs. Additionally, universities should recruit instructors with entrepreneurial expertise to support and mentor students as they pursue their business ventures.

5.2 Limitation and Future Research

In the current study, on digital Kenya: A key driver in entrepreneurship ecosystem in higher education was studied utilizing secondary data. Hence future research should therefore validate this study using primary data as well as quantitative methods.

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