

BECOMING DIGITAL ENTREPRENEURS: AFRICAN STUDENTS IN CHINA

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Abstract: Under the framework of the Forum of China-Africa Cooperation in the twenty-first century, a growing number of students from the South, especially those from African countries that enjoy strong ties with China, have enrolled themselves in Chinese universities. In China's higher education sector, their number had grown from 1,384 students in 1999 to 81,562 students in 2018. This study was based on in-depth interviews with 18 African university students that were triangulated with participant observations and a literature review. The participants were interviewed offline and online on social media platforms inside the Internet Firewall of China – such as Microblogs and WeChat – and Facebook from 2019 to 2020. This study aimed to understand how the participants discovered and explored new opportunities in digital entrepreneurship as university students in China. Although engagement in digital entrepreneurship can lead to empowerment and new forms of belongingness, however, new challenges and setbacks can emerge concurrently to disrupt their entrepreneurial trajectory. In terms of opportunities, the participants drew on educational, social and cultural capital to establish their start-ups, but their relative success was challenged by disruptions in the digital ecosystem and the “zero Covid-19” policy in China.

Keywords: African mobility, digital ecosystem, digital entrepreneurship, South-South exchange, student migration.

INTRODUCTION

China's growth has, among other things, led to the development of its higher educational institutions. Under the framework of the Forum of China-Africa Cooperation in the twenty-first century, a growing number of students from the South, especially those from African countries that have strong ties with China, have enrolled themselves in Chinese universities. In

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China's higher education sector, the African student population had grown from 1,384 students in 1999 to 81,562 students in 2018. This study aimed to examine how African university students in China discovered and explored new opportunities in digital entrepreneurship during their studies in the country. While an engagement in digital entrepreneurship can create new possibilities that lead to empowerment and new forms of belongingness, it can also be met with challenges and setbacks in one's entrepreneurial journey. In terms of opportunities, African students drew on educational, social and cultural capital to establish their start-ups. However, owing to a fragmentation of the Internet and an enduring "zero Covid-19" policy in China, their relative success was challenged by disruptions in the digital ecosystem.

RESEARCH QUESTION

Previous studies of African migrants in China have mainly addressed African traders or undocumented African migrants, particularly in the major trading cities of Guangzhou, Yiwu, Shanghai and Beijing (Bodomo 2010, 2012, 2020; Bodomo, Ma 2010, 2012; Castillo 2014, 2016, 2020a, 2020b; Castillo, Amoah 2020; Hall et al. 2014; Haugen 2012; Lan 2016; Li et al. 2008, 2009; Lin et al. 2015; Mathews 2019). They provide a broad overview of mobility, network accumulation, sociocultural integration in local urban communities and the well-being of African traders and undocumented migrants in Chinese society.

Other researchers have examined the African student community in China in terms of their decision-making as individuals, well-being, cultural adaptation, study experience and an asymmetry of power in educational cooperation between Africa with China at the state level (Burgess 2016; Ferdjani 2012; Haugen 2013; Ho 2016; Hodzi 2020; Li 2018; Nyamwana 2004).

Few studies have, however, investigated African student entrepreneurs who developed entrepreneurial activities at Chinese universities. Consequently, this study aimed to examine

how African students discovered and ventured into digital entrepreneurship during their studies in China, and after they had returned to their home countries.

THEORETICAL CONCEPTS

This study of African students who aspired to become entrepreneurs during their studies in China drew on the academic literature on digital entrepreneurship that is embedded in digital ecosystems – which provide connectedness and connectivity through digital platforms and social media – and the divisions and disruptions that can result when these systems are disrupted.

Digital entrepreneurship is sustained by a digital ecosystem

In this study, entrepreneurship is defined as “the process of designing, launching, and running a new business” (Hsieh, Wu 2019: 1) that aims to fill a niche in the market with “innovative products or services”. By this definition, small-scale businesses that are established for sheer subsistence purposes and are devoid of creative input are excluded from consideration. Digital entrepreneurship refers to a pursuit of opportunities that are based on the use of digital media and other information and communication technologies (ICTs). Consequently, digital entrepreneurs rely on the properties of digital media and information technology to pursue commercial opportunities (Davidson, Vaast 2010: 2).

Digital entrepreneurship can take different forms and is not exclusively limited to online activities. In reality, it comprises a mix of digital and physical activities. “However, we view digital entrepreneurs as those who operate within the confines of existing platforms. In other words, they are performing activities that need digital engagement but may not in themselves be digital” (Sussan, Acs 2017: 66). This view is corroborated by several authors (Hull et al. 2007; Liao et al. 2013) who identified three forms of digital entrepreneurship as either mild,

moderate or extreme. While “mild digital entrepreneurs” are focussed on digital products, delivery or other major digital parts that constitute a business, “extreme digital entrepreneurs”, on the other hand, conduct their entire business model online (Kraus et al. 2018: 362).

Digital entrepreneurship does not originate from a vacuum. Instead, it develops and thrives in a multi-layered digital ecosystem (Kraus et al. 2019; Pype 2022) that constitutes the following elements: “institutional entrepreneurship, transaction costs, digital technology [and] online social capital” (Kraus et al. 2019: 371). This economic understanding of an “ecosystem” implies a network of stakeholders – both human and institutional – who are connected with one another, and the interaction between them is vital to the success of innovation and entrepreneurship. From a more technical perspective, it also “refers to the interacting relationship between hardware and software” (Pype 2022: 330). Consequently, a digital ecosystem is conceptualised as a network of connected stakeholders, and as a nexus between hardware with software that allows users to build connectedness and connectivity.

Connectedness and connectivity

As argued by the French philosopher Jean-Luc Nancy (1991), connectedness implies a sense of “being-in-common” rather than “being-in-person”, and it can be both physical and virtual. The singular beings who operate in different spatial and temporal spaces are interconnected through the process of “being-in-common”, which is made possible by the availability of social media and digital platforms whereby they are able to adjust and recalibrate their habitus. Connectivity refers to either technological connectivity or networks of communication that are created by digital technologies, and they can be articulated through different social media platforms to generate digital diasporas (Diminescu 2008; Diminescu et al. 2011; Diminescu, Benjamin 2014), virtual communities and virtual togetherness. Although social media has been criticised for its commodification of users’ desire to stay connected by turning them into

online addicts (van Dijck 2013; Hesselberth 2018), however, technological connectivity can also support human connectedness and deal with problems and challenges that are faced by African students in China in their daily and professional lives, including digital entrepreneurship. Technologies are connectors that link not only urban spaces with one another, but also with various potential actors – such as entrepreneurs, investors, brokers, sellers and customers – in trans-local or transnational networks (Pype 2021).

Opportunities and challenges

For entrepreneurs, global digital connections can uncover new opportunities (Sussan, Acs 2017). As long as individuals have access to connected devices such as computers, tablets and mobile phones, they can create and participate in a digital ecosystem. At the turn of the millennium, working-class ICTs that are related to internal migrants have been studied in China (Qiu 2009). From a European perspective, the use of ICTs and social media by migrants and refugees has drawn considerable attention from scholars, especially after the migration crisis that occurred in Europe in 2015 (Stremlau, Tsalapatanis 2022). It has been argued that transnational migration facilitates bottom-up electronic commerce while digital entrepreneurship, on the other hand, is facilitated by transnational migration (Steel 2017, 2021). Digital connectivity lowers the entry barriers for entrepreneurs and provides greater access to the global market space, especially for African and other entrepreneurs (Taura et al. 2019). Every study has discussed, in varying degrees, the opportunities, challenges and threats of digitalisation to daily life and, in particular, digital entrepreneurship.

Digital entrepreneurship is faced with many disruptors at different levels, one of which is the relatively new phenomenon of a fragmentation of the open Internet, which has led to a digital divide. Internet fragmentation can take different forms, such as technical, governmental and commercial (Drake et al. 2016). In this study, governmental fragmentation posed the biggest challenge and threat. Governmental fragmentation refers

to policies and measures that are aimed at limiting or preventing access to and certain uses of the Internet to communicate, create or distribute information. The Great Firewall in China is a representative example. Another cluster of challenges revolve around technical disruptors that involve platforms which play a central role, including social media, operating systems and payment platforms (de Reuver et al. 2018).

METHODOLOGY

For this study, in-depth interviews – both online and offline – were conducted with African students and triangulated with participant observations and a literature review. We focussed on the detailed structure and communication among African students in China in both online and offline social networks, as well as their usage of social networking sites in three areas as follows: *a)* inside the Internet Firewall of China – such as microblogs and WeChat – with local friends; *b)* outside the Internet Firewall of China – such as Facebook and Twitter – with friends and family back home; and *c)* sites that were not blocked by the Firewall, such as Facebook and LinkedIn.

Online and offline participant observations were conducted to gain insights into the lives of the African students at two levels: *a)* intergroup interactions between them with local students, teachers and public officials in the areas of language, culture and religion; and *b)* intragroup interactions among themselves.

Data

The findings of this study formed part of a larger doctoral project that involved African university students in China. For this doctoral project, data were collected from African students at universities in three major cities in China: Beijing, Shanghai and Guangzhou. The sampling method that was used to collect data was respondent-driven, as the initial respondents were recruited from the African Foreign Students Associations in each

Tab. 1. *Entrepreneurial profiles of African students.*

N.	Country of residence	Educational level	Subject major	City of study	Entrepreneur type	Business/registration location
1	Kenya	Bachelor and Master	Medicine	Beijing	Online application, programming innovation	Wenzhou, Zhejiang Province
2	Ghana	Master	Computer science	Hangzhou	Online application, programming innovation	Wenzhou, Zhejiang Province
3	Cameroon	Doctoral	Communication	Beijing	Business consultant	Haidian Incubator, Beijing
4	Ghana	Master	Public affairs	Beijing	Business consultant	Haidian Incubator, Beijing
5	Kenya	Master	International trade	Beijing	Business consultant	Haidian Incubator, Beijing
6	Ethiopia	Master	International relations	Beijing	Business consultant	Beijing
7	Uganda	Bachelor and Master	Medicine	Beijing	Cultural curator, business consultant	Haidian Incubator, Beijing
8	Uganda	Doctoral	Arts and film	Beijing	Curator, cultural expo	Registered in Haikou, Hainan Province; worked in Beijing and Shanghai
9	Ivory Coast	Bachelor	Chinese language	Beijing	Fashion Design	WeChat
10	Burundi	Doctoral	Computer science and engineering	Beijing	Online African trading platform application on WeChat	Beijing
11	Cameroon and France	Master	International relations	Beijing	Art curator	Registered in France; worked online in Paris and Beijing
12	Sierra Leone and England	Master	Business administration	Beijing	Cultural curator, business consultant	Haidian Incubator, Beijing
13	Kenya	Doctoral	Communication	Shanghai	Business consultant	Registered in Nairobi; worked in Shanghai and Kenya
14	Angola	Master	Computer science	Guangzhou	Online application, programming innovation	Guangzhou
15	Nigeria	Bachelor	International relations	Beijing	Food catering	WeChat in Beijing
16	Guinea Bissau	Bachelor	International trade	Beijing	Student hair salon	WeChat in Beijing
17	Uganda	Master	International trade	Beijing	Cultural fashion design	WeChat
18	Uganda	Bachelor	International trade	Beijing	Afro dance class	Beijing, WeChat, Zoom



university, and their social networks were then used to identify subsequent participants. The respondent-driven sampling method of Heckathorn (1997, 2002) and Salganik and Heckathorn (2004) was used by this study to recruit respondents for a survey of hidden and minority groups.

A total of 130 in-depth interviews – 70 in Beijing and 30 each in Shanghai and Guangzhou – were conducted with students from 52 African countries during the academic year between 2018 to 2019. Between 2019 to 2020, social network data were collected through follow-up online interviews and digital ethnography of the interviewees. For this study, 18 of the 130 interviews were selected because they were related to digital entrepreneurship.

Among the 18 participants, 10 were men and 8 were women, and they represented digital entrepreneurs from African countries such as Angola, Burundi, Cameroon, Ethiopia, Ghana, Guinea Bissau, Kenya, Nigeria, Sierra Leone and Uganda (see table 1). Participants with temporary, informal entrepreneurship trials were from a lower middle income background. On the other hand, those who were registered as long-term, formal entrepreneurs had a higher middle income background. For this study, the participants' identities were anonymised.

BECOMING DIGITAL ENTREPRENEURS: BUILDING BLOCKS TOWARDS A DIGITAL ECOSYSTEM

Since the participants were the first international students to obtain an academic degree in China, initially, they did not intend to engage in digital entrepreneurship. Moreover, on their arrival, most of them experienced a physical and virtual shock that was caused by the Great Firewall in China. However, a few of them had been forewarned by their teachers of this phenomenon in their home countries. Throughout their studies in China, most of them overcame these obstacles with the support of students who were from other African countries.

Disruption on arrival: digital divide and digital transnational mobility

The Chinese digital ecosystem, which was developed domestically after it was decoupled from its Western counterpart – but is still considered a dominant model – presents significant challenges for incoming African students. In their struggle to bridge the digital divide by connecting with both ecosystems, they must learn how to overcome the Great Firewall that excludes most Western platforms and social media. Over time, this digital divide can be bridged, to some extent, through their interactions with other African students. This was the case for Amy, an Ethiopian medical student at Shanghai Jiaotong University, who recounted her experience as follows:

I travelled together with my sister on the same flight from Addis Ababa – with a stopover in Beijing – to Shandong province, where we planned to study the Chinese language for a year to prepare for our medical studies in Shanghai. When we arrived at the airport, we were met by the university coordinator. It was almost 11.00 PM at night. When we tried to call our parents to inform them of our arrival in China, we discovered that our phone carrier was not allowed to make international calls. When we tried to connect to the wireless Internet in the airport to use Facebook and WhatsApp to send messages back home, we discovered that the Great Internet Firewall of China had blocked both applications. Consequently, our parents lost contact with us. Our mum was so worried for us that on the following day, she visited the Chinese embassy in our country to ask whether her daughters had arrived safely in China. It was not until four days later when we found out from our senior schoolmates that we could access Facebook and WhatsApp by using a Virtual Private Network (VPN). At the same time, the Chinese embassy sent an email to our university to enquire on our safety. The entire situation was such a hassle and we were caught totally unprepared (Amy, Ethiopia).

Amy's experience was a testimony to a common scenario that is encountered by African students upon their arrival in China: they lose contact with their families and are unprepared to handle the digital divide in China. In Chinese cyberspace, an Internet surveillance apparatus was established to block access to several Western social networking sites and search engines.

Consequently, African students must install a VPN on their devices in order to (re)gain access to the cyberspace that is shared by their families and friends in their countries of origin. Besides a cultural shock, African students must also adapt to the digital space in China. With a VPN, they can engage in transnational connectivity on a daily basis that bypass the digital borders of China and, in doing so, sustain cross-border virtual connectedness.

International student status, university's policy on entrepreneurship and student entrepreneurship competitions

With support from city governments, the work permit policy at the national and local provincial levels was developed and revised to support African students in China to launch their careers in the Chinese labour market after they graduate. The General Work Permit Policy allows foreign college graduates who have at least two years of work experience to settle in China. In metropolitan cities such as Beijing and Shanghai, and in economically developed provinces such as Guangdong, the local governments have created more job opportunities for highly educated and professional foreigners, as well as encouraged young entrepreneurs to establish their start-ups in China after their graduation.

Since January 2016, Beijing has issued Employment Work Permits to international students and Entrepreneurship Work Permits to those who have a master's degree but without previous work experience. Since July 2015, Shanghai has issued Employment Work Permits to foreign college graduates who have a bachelor's degree, no previous work experience and have found employment in the Shanghai Free Trade Region following their graduation, as well as Entrepreneurship Work Permits to foreign college graduates to support their efforts to launch their own start-ups. Finally, since July 2016, Guangdong Province has issued Employment Work Permits to foreign college graduates who have a bachelor's degree with no work experience, and after they had landed employment in the Guangdong Free Trade Region upon graduation. Most recently, since May

2019, the Free Trade Region in Hainan Province has issued Employment Work Permits and Entrepreneurship Work Permits to foreign graduates who have a master's degree from Chinese universities.

In some cases, with the consent of the university and endorsement by its international student office, an Entrepreneurship Work Permit is issued to students who are enrolled in master's and doctoral degree programmes after they had registered their start-up companies. Besides employment support and policy adjustments for African students, local incubators in various regions that are supported by either the provincial or city government have cooperated with Chinese technology companies to offer platforms and shared office spaces to them in order to compete and win seed funds to transform their entrepreneurial ideas into commercial ventures. On 11 November 2017, the first African Student Entrepreneurship competition, "Amanbo Cup", was held in Shenzhen, and it was jointly organised by the Center for African Studies of Peking University, the China-Africa International Business School of Zhejiang Normal University and the China-Africa Center for Sustainable Development (Li 2018). In subsequent years, similar entrepreneurship contests were held with the support of industrial incubators in various regions and Chinese technology companies.

In reality, however, some of the participants in this study did not tap on these support programmes. Instead, they established informal businesses on different social media platforms. These informal start-ups offered services to students in African food catering, hairdressing, fashion and jewellery.

Recreating a home and cultural hub through digital social platforms

Despite their diverse cultural differences, the connectedness that is felt among African students in China is based on their perception of shared interests, lifestyles and everyday experiences. They reinvent their daily rhythms and quotidian activities by revisiting their hometowns on social media platforms where ideas, news and trends are shared. The social network

applications that are used heavily by African students in China are WeChat, VPN, WhatsApp, Facebook, Instagram, Imo and Viber. Since social media allow individuals to connect with their friends and family from different localities (Komito 2011), they are able to keep abreast of the latest news in their home country, watch entertainment videos and listen to their country's music on Twitter, YouTube and Spotify. In doing so, their countries of origin and culture are brought closer to them. Through their sense of virtual connectedness, African students across multiple locations in China share a feeling of “being-in-common” with one another. Although they are dispersed across cities and universities throughout China, however, they foster physical and digital ties by reproducing a sense of belonging and generating a sense of home in the country with other Africans, as the following case mentioned by Hashim from Chad:

We created a WeChat group for my countrymen in China and in Beijing. I am also a member of the Peking University African Student Association. From time to time, we hold small meetings to celebrate our birthdays. Sometimes, when members in the group are faced with health emergencies or temporary financial difficulties, other members from across China will help to collect money for them. Even though we do not know every member in the group personally, however, our dealings with one another are based on trust. [...] We mostly use voice messages or type in Arabic or English in our group chat. At other times, we use Chinese in our status and posts (Harshim, Chad).

Information sharing is synchronised across geographical locations and time zones. They find commonalities in their cultural roots which are mediated through their mother tongue, such as Creio for Cape Verdians, Swahili for Tanzanians and Kenyans and Amharic for Ethiopians. Some students deliberately choose to post in four languages simultaneously – mother tongue, national language, English and Chinese – for different groups of friends.

Since African students crave foods that can remind them of their home culture – such as fufu (a starchy food that is based on cassava) and egusi soup (a spicy fish soup) – the subject of food often takes centre stage, which is exemplified by the following account:

[...] Every Monday, we order Nigerian food for dinner through WeChat from a Nigerian family kitchen in Beijing near our campus. It is prepared by a Nigerian student's family member, whom we got to know through our Nigerian WeChat group (Ken, Nigeria and the US).

Besides food, hairdressing is also an important subject in the daily lives of African students. Hair culture is an inalienable aspect of subjectivity, particularly for migrants. Migrants, especially Africans, use their bodies and hair as a canvas to articulate and shape their subjectivity. The body has become a space for creativity, and for some, it is also a site of contest and resistance (Dash 2006). Likewise, African students in China treat their hair as a form of self-expression and resistance. It is viewed as a form of resistance since they are cut off from Chinese hair salons due to financial barriers and a lack of practical knowledge by Chinese hairdressers on how to dress the curly locks of Africans.

CASE STUDIES OF DIGITAL ENTREPRENEURS

When they ventured into digital entrepreneurship, some African students created a new “home” by drawing on educational, social and cultural capital that involved a commodification of food, hairdressing and fashion based on what they perceived as “African-ness”. Their business models ranged from between a “mild” to an “extreme” form of digital entrepreneurship (Hull et al. 2007; Liao et al. 2013). In terms of their practical business strategies, most African students engaged in “mild digital entrepreneurship” in three ways: *a*) using digital social network platforms to explore and draw potential customers, communicate with existing clients and promote their start-ups in real life; *b*) using digital social media platforms to sell their material products – such as Afro fashion lines, food and artwork – and services, including Afro hairdressing, food catering and delivery; and *c*) using the digital platform to market and sell tickets – through a digital registration and payment system – to events such as African music concerts and art exhibitions.

A handful of African students, however, engaged in “extreme digital entrepreneurship” that included the following: *a*) selling their virtual products and services online, such as Afro dance classes, music and business consultancy services between Africa with China; and *b*) writing digital software and applications, such as a smartphone application for a multilingual food delivery service.

Food

Through its taste, texture, smell and colour, food conjures up images of one’s home. Consequently, through its consumption, food becomes a symbolic bridge with one’s own culture. Among African students, this form of nostalgia transcends national borders and local cultures, which is recounted below:

[...] The cuisine of my hometown brings me joy and helps me to overcome my homesickness. [...] I want to introduce and share my hometown cuisine with my friends who are from other places as well (Leila, Nigeria).

Leila, who was from Nigeria and read international trade for her bachelor’s degree, started a Nigerian food catering service on the WeChat social network platform with her sister, Priscila, who held a bachelor’s degree in Chinese language studies from Beijing. Every Monday evening, they prepared Nigerian dishes. After orders were placed through their WeChat accounts, the food was delivered to several campuses throughout the Haidian district of Beijing, where many universities are sited. Their start-up was inspired by a birthday party that Leila attended in her first year of study in China. At that time, she invited her church friends who were from Nigeria, Ghana, Kenya and Brazil to the party. The Nigerian cuisine that she and her colleague prepared for the birthday party was posted on her WeChat account, and it drew an unusually high number of “likes” and widespread attention from several online communities. The overwhelming positive response prompted her and

her colleague to venture into a mild form of digital entrepreneurship, namely, Nigerian food catering. They offered a typical Nigerian dish every week, such as egusi soup with fufu and ofada stew (a meat stew that was cooked with palm oil and red bell pepper). Their menu posts and online order platform targeted the Nigerian student community and other African, international and local students who were eager to try Nigerian cuisine.

While the previous example of online food catering represented a mild form of digital entrepreneurship, the creation of a digital food delivery application, however, presented an extreme example of digital entrepreneurship that is recounted below:

[...] My father graduated from Harvard Business School. He told me that there were plenty of opportunities in China, and a working knowledge of the Chinese language will be an essential capital for my future career development. Although my long-term goal is to become a doctor and treat patients in Kenya – which my mother is really happy about – however, I want to make use of my time as a student in China to continue my family business tradition of becoming an entrepreneur. [...] I met my co-founder, a computer science student from Ghana, at an event for young entrepreneurs that was organised by Alibaba in Hangzhou. [...] We created a multilingual digital food delivery application. [...] Subsequently, our team was included in the city's incubator scheme, which was supported by the local city and provincial governments. [...] Currently, there are two Chinese partners in our founding team with a total of 45 employees (Joshua, Kenya).

The above interview was conducted in the summer of 2019 at the Africa Week Entrepreneurship Competition – which was jointly organised by Beijing Haidian Overseas Student Pioneer Park – after Joshua and his team won the first prize. Joshua was an international student of medicine at a university in Beijing. In his leisure time, he furthered his interest in innovating digital technology. At the Alibaba Africa Youth Entrepreneurship Summit that was held in 2017, he met his future business partner, a Ghanaian student who was reading computer science in Zhejiang Province. In 2018, in the initial phase of their start-up,

their business proposal won a gold award with seed capital in an entrepreneurship competition that was held in Zhejiang Province. Shortly after, they registered their company, HAMS, in a municipal industry incubation base. To help foreigners in China overcome the language barrier, and to address a lack of information that is faced by them when they use similar Chinese online shopping and food delivery platforms, they developed a multilingual digital information application that was hosted on the Android platform. Their application provided food information and delivery services by local Chinese restaurants in Arabic, English, French and Swahili. It also targeted customers from the international community in different campuses and the commercial centres of Beijing, Wenzhou, Yiwu and Zhejiang Province, where a huge population of international students and traders from African and Arabic countries resided. As a “digital and globalised start-up company”, Joshua insisted that “the digital application not only provided a multilingual service for international customers, but I also outsourced my English secretary through an online platform in the Philippines in order to lower the cost of business management”.

Hairdressing

Yasmine was a female undergraduate from Guinea Bissau who majored in international trade. Since she was also an excellent hairdresser, she operated a hair parlour in her student dormitory on weekends. She charged a fifth of the price that was usually levied by formal hair salons that had expertise in styling Afro hairdos. Owing to a lack of training in dressing Afro hairdos in China, only a handful of hair salons offered hairdressing services for African customers while charging steep prices. In Yasmine’s own words:

[...] It takes between 3 to 4 hours to braid medium-long Afro hair, and between 5 to 6 hours to braid full-long Afro hair. With low maintenance, hair braids can usually last between 3 to 6 weeks. [...] It is tough to finish the hair braid by yourself, and an expert’s help is always needed [...] (Yasmine, Guinea Bissau).

To draw potential customers that included Africans and international students such as Russians, Yasmine posted photographs of completed Afro hairdos on the WeChat platform. She considered her mild form of digital entrepreneurship in dressing Afro hairdos as an ancillary source of income in her leisure time. Despite the makeshift nature of her hairdressing business in the student dormitory, she knew of other African student entrepreneurs who, like her, started out in the dormitory before they were hired by the high-end hair salons in the capital city after they graduated.

Fashion

A student from the Ivory Coast who majored in Chinese language studies in Beijing, Sara was a clothing designer with a personal fashion line. She applied traditional motifs to Afro fabric and incorporated shells from her hometown into her jewellery line. Her brand logo comprised a short-curling Afro hair portrait, which was shaped by lines formed from multiple shells that were imported from the Ivory Coast. She beamed with confidence and was convinced that her designs will be well received in China, “I would like to introduce my culture and art to Chinese customers”. She invited African and Chinese models to wear her designs and jewellery and posted their pictures in an online advertisement on her WeChat account. For every design, she produced a limited line of between five to 20 items. The start-up phase of her fashion line attracted young Chinese customers who were interested in African culture. Some of her iconic designs were also displayed at the Ivory Coast Embassy Booth at the African Union Embassies Expo that was held in Beijing in June 2019.

Another group of African student entrepreneurs in China – a Ugandan and two African-American students – have established a cultural fashion brand named “Black is Beautiful” (黑是美) that is available online through the Chinese social media platforms Taobao and WeChat. The brand aims to validate the presence of the African diaspora in China, and to showcase African aesthetics and expose Chinese consumers to them. At the

peak of the “Black Lives Matter” movement in the US in 2020, the brand held two rounds of online flash sales that featured black slogan T-shirts with the words “Black is Beautiful” (黑是美) that were printed in white in an effort to echo the movement and empower the African community in China.

African arts: dance, music and painting

Another area that the participants used to showcase “Africanism” was Afro dance and music. Josh, a student from Uganda, organised a weekly Afro dance class on the campus of his university in Beijing that drew local Chinese students and international students from Mongolia, Russia and Singapore. After a lockdown was imposed in China in the first six months of 2020 due to the outbreak of the coronavirus disease (Covid-19) pandemic, he offered the Afro dance class as a weekly livestream on the WeChat and Zoom platforms.

Other forms of digital entrepreneurship in the arts involved cultural curatorship companies that aim to connect African cultures, and artists in particular, with a Chinese audience. Little Africa is an online platform that provides a space for African artists throughout the world to exhibit their paintings and deepen cultural understanding. Among African student cultural curators, Kente & Silk promotes African music, films and modern art by hosting cultural expositions and fora, including the annual “African Week” when African art exhibitions and cultural workshops are held in China. The co-founders of Kente & Silk, who were from Sierra Leone and Uganda, explained their choice of the company’s name as follows: “Kente refers to a traditional cloth from the Ghanaian Ashanti Kingdom and silk is a traditional Chinese fabric, and both represent an Africa-China symbiosis”. Consequently, a lasting engagement in multicultural interactions by African students is nurtured and reinforced by digital entrepreneurship.

CHALLENGES OF DIGITAL ENTREPRENEURSHIP

Despite a digital ecosystem that offers support and a potential market for Africans who are zealous to explore and exploit opportunities as digital entrepreneurs, African students in China are faced with several challenges and obstacles when they embark on their entrepreneurial journey. These include a fragmentation of the Internet – more specifically, the challenges that relate to the Great Firewall of China – and uneven technological development between China with African countries. Another hurdle that was faced by some start-ups was a lack of physical contact and interaction between them with their customers during the Covid-19 pandemic in 2020, since only a limited number of activities can be organised online. Furthermore, the support programmes that were provided by Chinese stakeholders were only concentrated in larger cities.

Strategy to bypass the Great Firewall: installation of multiple VPNs

Paulus was from Namibia and a student at the China University of Petroleum in Beijing. In an interview that was conducted at a fast-food restaurant near his campus, he flashed the screen of his mobile phone which displayed four VPN applications. The VPNs on his phone were always turned on as he relied mainly on Western social media tools to connect with his family and friends back home, and for his daily media and entertainment consumption. The Great Firewall is a highly sensitive apparatus as censorship is easily raised and tightened – especially during important events such as the National Congress that is held in March every year and the National Day week in October – to track public opinion in the digital space. Consequently, multiple VPNs offer more backup solutions when an older version becomes unstable or entirely obsolete after the Great Firewall is upgraded. Prior to his arrival in China, Paulus was made aware of this situation by his Chinese teacher in Namibia who advised him to install a VPN on his device. The remaining three VPN applications were installed after his arrival in China.

Loss of connectivity after Chinese mobile number expires

After the outbreak of the Covid-19 pandemic in February 2020, Marie from Congo enrolled in a master's degree programme in computer science in Beijing, returned to her hometown in Kinshasa and attended online courses for four months before she successfully defended her thesis online and graduated. Thereafter, she lived and worked in Kinshasa. In a follow-up online interview that was conducted with her in December 2020, she mentioned that WeChat was her main social media tool throughout her studies in China. However, she could no longer use it after her Chinese mobile number – which was linked to her WeChat account – lapsed in October that year. After it lapsed, she did not switch her Chinese mobile number to her Congo mobile number by using the same account that was maintained by the WeChat system. Consequently, she was forced to reconnect with her Chinese friends by requesting them to reach her on her non-Chinese social media accounts, which were hosted on WhatsApp and Facebook.

Business deals are reached based on physical proximity and trust

In 2020, the outbreak of the Covid-19 pandemic significantly affected Sara's online fashion start-up in China. After she returned to the Ivory Coast in February 2020, she continued her studies online and struggled to graduate. The operations of her fashion start-up were disrupted, and it was suspended owing to her lack of personal connections in China who could help to produce and retail her clothing and jewellery lines locally. In order to source for suitable producers and sellers, one must engage in direct, face-to-face discussions and negotiations with prospective suppliers and sales agents. Ultimately, business deals are often closed after commercial negotiations are concluded on the basis of physical proximity and interpersonal trust. For Sara, it was just not a feasible option for her to manufacture her products in the Ivory Coast and export them to China for sale.

Lack of access to information and resources on local entrepreneurship

In China, resources and information on entrepreneurship and industrial incubation bases are primarily concentrated in highly developed metropolitan cities – such as Beijing, Guangzhou and Shanghai – and regions, such as Jiangsu Province and Zhejiang Province. Owing to a lack of a nationwide system that can offer information on local entrepreneurship to international students, it is not easy for African students from less developed provinces in China to access essential and timely information on the subject. Consequently, many African students are not well informed on how and where they can launch their entrepreneurial journey.

CONCLUSION

This study has filled a gap in the literature by addressing the subject of digital entrepreneurship in the African student population in China. It also examined how African students used connectedness and connectivity to develop their entrepreneurial practices despite disruptions in the digital ecosystem in China and beyond.

During their studies in China, African students discover opportunities in digital entrepreneurship. Since they have an open mind and good connections with international student communities in universities across China, they often succeed in overcoming the digital divide shortly after their arrival in the country. African peer groups play a central role in the physical and online exchange of ideas, knowledge and skills. As African students engage in efforts to construct a “home” in China, they often do so in areas such as fashion, food and hairdressing, which led some of them to discover the commercial potential that can be offered by their products or services. They also benefitted from work visas and seed money that is awarded as prizes for winning in start-up contests to launch their entrepreneurial journey. By using virtual and physical social networks, they target a diverse group of customers, including other Afri-

can students, local and international students and Chinese residents. Consequently, they uncovered a multi-layered digital ecosystem that encourages them to consider digital entrepreneurship.

Not every student, however, succeeds as an entrepreneur. Although the digital ecosystem supports entrepreneurship, however, it presents diverse challenges that includes a growing fragmentation of the Internet, such as the Great Firewall of China. Support programmes for young African digital entrepreneurs are also distributed unevenly across China, since only students from first-tier cities have easy access to them. Finally, physical presence and proximity are important factors that can contribute to success by digital entrepreneurs. Both factors were adversely affected by the Covid-19 pandemic after many African students returned to their home countries, cutting them off from any contact with prospective suppliers and customers. In conclusion, although the African students in this study had succeeded in becoming digital entrepreneurs, however, other conditions and skills were needed by them in order to sustain their start-ups, which are beyond the scope of this study.

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