

A generation of bricoleurs: digital entrepreneurship in Kenya

Digital
entrepreneurship
in Kenya

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Abstract

Purpose – The purpose of this study is to explore how the uptake of digital technologies influences youth entrepreneurship in Kenya.

Design/methodology/approach – This study utilizes 28 semi-structured interviews with entrepreneurs age 21–35 in Nairobi, Kenya. Interview transcripts were analyzed using open- and closed-coding.

Findings – Millennial entrepreneurs embrace change and challenges by harnessing mobile technologies and social media. In doing so, they are engaging in what French sociologist Lévi-Strauss called “bricolage,” or “making do with what’s at hand.”

Originality/value – This study explores a unique segment of entrepreneurs, Millennials in Kenya and identified the ways in which digital entrepreneurship represents a form of bricolage.

Keywords Youth entrepreneurship, Digital entrepreneurship, Technology adoption, Bricolage

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Introduction

Sometimes referred to as “Silicon Savannah,” Kenya is home to vast technological advancement and adoption of mobile technologies, perhaps most notably M-Pesa, the leading mobile payment provider (Mallonee, 2018). For example, in 2000 less than 1 per 100 individuals had access to a mobile phone. In 2018, that figure was over 96 (ITU, 2019). The greatest growth took place between 2006 and 2008, coinciding with the launch of M-Pesa in 2007.

At the same time, there are still immense challenges for young people, presenting justification for studying young people in Nairobi, Kenya’s capital and largest city. When a large share of the population consists of youth and children, a country experiences a youth bulge. Within Kenya, a staggering 80% of the population is under the age of 35 (Awati and Scott, 2016). As a result, even though Kenya is experiencing economic growth (World Bank, 2016), there are still exceedingly high unemployment rates, especially for young people (World Bank, 2015; Otuki, 2016). Youth in Kenya often migrate to urban areas, seeking new challenges and work (World Bank, 2016). In addition, youth tend to have a greater propensity for risk (United Nations Department of Economic and Social Affairs, 2005), often seen as a favorable attribute for entrepreneurs.

Albeit experiencing frustration, young people in Kenya seem to be pushing back. They are creating opportunities for themselves through entrepreneurship and freelancing. The completion of side-hustles or freelance projects is not like driving Uber for extra cash. The entrepreneurs interviewed for this study carefully select the opportunities they pursue to balance income generation and the promotion of their ventures. This study explores the creative and unconventional activities of 28 young people in Nairobi, Kenya.

The structure of the paper begins with an overview of relevant literature, including a review of youth entrepreneurship, digital entrepreneurship and bricolage. The methodology



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section outlines the use of semi-structured interviews for data collection. Moving forward, I present the study's findings, centered on key themes from the data. Then, connections to existing research are unpacked. The paper concludes with suggestions for future research, as well as the study's limitations.

Literature review

Youth entrepreneurship in emerging economies

Entrepreneurship is the lifeblood of modern capitalism and is often seen as a way to create new jobs (Bosma *et al.*, 2018). By combining new technologies and service innovations with business models to develop and deploy these new products and services, entrepreneurs unleash the economic potential of innovations. Not only do entrepreneurs identify and exploit opportunities through innovation, they also assume a great deal of risk, such that many entrepreneurs fail. Therefore, entrepreneurs must be able to confront the possibility of failure. In emerging markets, micro-enterprises, those with ten or fewer employees, represent an opportunity.

Studies of entrepreneurship in emerging economies have mostly focused on BRIC countries, largely ignoring the technological and economic changes in other developing countries (Kiss *et al.*, 2012). Almost by definition, BRIC countries, due to their larger size, higher growth rates and attractiveness as destinations for international capital, are not representative of the typical developing country. Therefore, research on a country like Kenya is more likely to represent the growth experience of developing countries in general. The dramatic growth in Internet access in Kenya and the entrepreneurial revolution sparked by mobile technologies in that country (Ndemo and Weis, 2016) have been largely ignored in the entrepreneurship literature: little research has actually explored these technological and entrepreneurial transformations. A subset of research focuses on policies to promote entrepreneurship and employment opportunities, in general (Sheriff and Muffatto, 2014; Minto-Coy and McNaughton, 2016). Entrepreneurship in Kenya has also been studied in the form of an active labor market program (ALMP), or an intervention directly aimed at producing income-generating activities for young people. Through a field experiment, individuals were given apprenticeship training and funds to start a business. The findings suggest that program participation was associated with higher household income (Goodman *et al.*, 2017). While these studies have largely used quantitative methods, such as the field experiment described above or surveys, some recent articles have also used qualitative methods: for instance, participant observation in business meetings (Thieme, 2015) or interviews with entrepreneurs (Kulb *et al.*, 2016; Martin and Novicevic, 2010; Lock and Lawton Smith, 2016). None of these studies focused on youth.

Of those that studied youth entrepreneurship, Sambo (2016) utilized a quantitative survey, which does not provide the same stories, perspectives and non-verbal information that qualitative methods can yield. Baskaran and Mehta (2016) used interviews to study perceptions of innovations among youth in four countries, including Kenya. Although they used a qualitative method, their overutilization of data reduction, in order to quantitatively present the data, resulted in the loss of individual perspectives in the form of quotes. Comparatively, Tufte (2017) conducted semi-structured interviews but only with young men, excluding women entirely. While Tufte (2017) makes a case for focusing on men in that study, this is a serious oversight in the literature, since women have a strong presence among entrepreneurs in Kenya. The Kenya National Bureau of Statistics (2016) reports that 31.4% of licensed micro, small and medium-sized enterprises (MSMEs) are solely owned by women, while 60.7% of unlicensed MSMEs are solely owned by women.

Although there is an expectation that young people will be digital natives, how they utilize digital technologies for entrepreneurship is largely unknown. The next section of this paper explores the concept of digital entrepreneurship broadly.

Digital entrepreneurship

Davidson and Vaast (2010) describe digital entrepreneurship as the opportunities made possible by the, “. . . Internet, World Wide Web, mobile technologies, and new media” (p. 1), which they believe are sociomaterial practices. Early work on digital entrepreneurship by Hull *et al.* (2007) explored the extent to which these technologies are being used by entrepreneurs. They developed a typology of digital entrepreneurship, separating digital entrepreneurship into three categories: mild, moderate and extreme and exploring various business activities, including marketing, sales and the product or service. Through this original framework, an entrepreneur’s endeavor does not need to exist solely online. Rather, they can engage in a variety of on- and offline activities. Technological advancements have made our understanding of what is possible through digital entrepreneurship even more complex. Nambisan (2017) explores digital entrepreneurship through three areas: digital artifacts, digital infrastructure and digital platforms. Digital artifacts include blockchain and digital storytelling, while digital platforms include cloud computing and social media, among others. Finally, digital infrastructure includes technologies like 3D printing and the Internet of things (IoT).

Building off the work of Nambisan (2017), Ratten (2018) highlights how digital technologies connect entrepreneurial farmers in Australia. In line with Nambisan (2017), the farmers interviewed by Ratten (2018) utilized digital platforms to, “decrease barriers to communication between farmers and consumers” (p. 106).

Due to vast ICT adoption in Kenya but limited financial resources for youth, Kenya is a prime area to study how entrepreneurs are starting online businesses or using the Internet and ICTs to aid in various activities, including marketing, sales and distribution, to name a few. Digital entrepreneurship in Kenya can exemplify the concept of bricolage or “making do with what’s at hand.”

Bricolage

Claude Lévi-Strauss is noted for conceptualizing the concept of bricolage. Lévi-Strauss introduced bricolage, “. . . to explain how a society borrows structural elements of other cultures. . . and recombines them to suit its purposes” (Davidsson *et al.*, 2017, p. 115). Those who engage in the process of bricolage are referred to as bricoleurs. Lévi-Strauss contrasts the bricoleur with the engineer. The bricoleur collects and saves elements because “they may always come in handy” (Lévi-Strauss, 1966, p. 18). This behavior is often studied within the context of entrepreneurship. Engaging in entrepreneurial bricolage is the process by which new firms “make do” with the resources they have (Baker and Nelson, 2005). Numerous scholars have tried to capture and measure the concept of entrepreneurial bricolage, either at the firm level or through the activities of individual entrepreneurs (Fisher 2012; Garud and Karnøe, 2003; Senyard *et al.*, 2009). Daniels (2010) explored bricolage among artisans in Kenya, but the study does not explore the role of information and communication technologies (ICTs) in entrepreneurship. Furthermore, Lévi-Strauss explains that bricoleurs are “adept at performing a large number of diverse tasks,” going on to say that a bricoleur is a “Jack of all trades” (Lévi-Strauss, 1966). An uncommon interpretation of engaging in bricolage is engaging in freelancing. In some contexts, this is also referred to as participating in the “gig economy.” Ilahiane (2011), in a study of Moroccan micro-entrepreneurs, references “bricolat,” which he suggests is supplemental income from odd jobs. Finally, entrepreneurs may engage in the process of network bricolage, defined as “dependence on pre-existing contact networks as the means at hand” (Baker *et al.*, 2003, p. 269). Therefore, rather than creating new contacts, those who engage in network bricolage rely on existing social networks as a way to connect to other contacts and resources. This paper explores two themes that emerged from interview data, which center on Millennials as bricoleurs and participants’ participation in network bricolage.

Methodology

Semi-structured interviews with 28 entrepreneurs were conducted in Nairobi, Kenya, in 2018. Participants were recruited through purposive, criterion sampling, as well as with the help of informants. That is, participants had to meet three key criteria: be between the ages of 18 and 35, self-identify as an entrepreneur and live or work in Nairobi County, Kenya. Interviews were conducted in English. Once initial participants were identified, snowball sampling was utilized to grow the sample. This process continued until saturation was reached. Therefore, this study utilized criterion sampling, in order to establish inclusive and exclusive criteria for the study and snowball sampling to increase the sample size. In general, individuals were receptive to participating in the study. A few individuals who chose not to participate implied that they were too busy with business operations.

Almost all interviews were conducted in person at either the entrepreneur's place of business or a public coffee shop. Two interviews were conducted over the phone due to severe weather. The interview protocol consists of 15 main questions, many of which have sub-questions and additional areas to probe. The questions were directed to explore their backgrounds, technology usage and entrepreneurial endeavors. Before and after the formal interview, there was light chatter, and observational notes were taken, which resulted in rich field data. Participants consented to have the interviews recorded, and the formal interviews typically ranged in length from 30 min to one hour, which corresponds to the length of the audio files. The length of an interview is a direct result of how much detail participants were willing to provide. Some participants, especially young males, were less forthcoming during the discussion. Participants were notified that they could skip any question they did not want to answer and could stop the interview at any time.

The audio recordings were transcribed, and the transcriptions were analyzed using qualitative data coding and thematic analysis. There are three main types of coding schema: schema developed deductively from the literature, schema developed through an inductive interpretation of data and schema using a combination of both inductive and deductive coding (Creswell, 2014). This study utilized the latter. In other words, open and closed-coding were used to answer the research question and explore the data.

A brief overview of the participants is presented in Table 1. Names have been changed to protect their anonymity. Participants ranged in age from 21 to 35, which at the time of data collection closely aligned to the Millennial generation. There is an equal representation of men and women in the study. Within the sample 50% ($n = 14$) have earned at least a bachelor's degree, while a few participants have received educational training beyond this. Although self-identifying as entrepreneurs, participants complete a variety of work on top of running businesses or organizations. Participant businesses and freelance work range from baking to video production and from health care to brick and mortar shops. Among those who were able to answer and felt comfortable answering, the average amount invested in the business or organization was approximately \$1500 USD. Participants were either categorized as pre-launch, meaning their businesses or organizations have not yet launched, or nascent, meaning they have launched and are still operational. Unfortunately, only one participant is in the pre-launch stage, which is a limitation of the sample, as comparisons cannot be made between those in the nascent and pre-launch stage. This is likely due to the fact that those in the pre-launch stage have less visibility than those who have existing businesses.

This paper extracts data from a larger study. As a result, one paper has been published from the fieldwork outlined above (Grzeslo, 2019). The previously published paper focused on the adoption of mobile payments, while this paper focuses on entrepreneurial behavior more specifically. The themes presented in this paper have not been published elsewhere.

Name	Age	Gender	Education	Industry	Stage
Chris	32	Male	Secondary + VT	Barber Shop	Nascent
John	27	Male	Bachelors	Construction Nascent	Nascent
Akeyo	29	Female	Secondary + Certificate	Beauty Supply Shop	Nascent
Victor	23	Male	Secondary + VT	Nail Salon	Nascent
Sarah	24	Female	Bachelors	Women's Fashion Shop	Nascent
Samuel	24	Male	Secondary	Men's Fashion Shop	Nascent
Anne	24	Female	Secondary	Women's/Kids Fashion Shop	Nascent
Wangari	35	Female	Secondary + VT	Men's Fashion Shop	Nascent
Simon	33	Male	Secondary	DVD Shop	Nascent
Adam	29	Male	Bachelors	Computer Repair Shop	Nascent
Stephen	34	Male	Bachelors	Computer Sales & Repair Shop	Nascent
Denis	34	Male	Bachelors	Tourism	Nascent
Hannah	26	Female	Bachelors	Shoes (online sales)	Nascent
Peter	27	Male	Secondary	Graphic Design	Nascent
Mary	33	Female	Bachelors	Computer Shop	Nascent
Eidi	26	Female	Bachelors	Media Production	Nascent
Isla	26	Female	Bachelors	Bakery (home business)	Nascent
Daniel	29	Male	Bachelors + Certificates	Business Solutions	Nascent
Bernard	26	Male	Masters	Business Consulting	Nascent
Ruth	28	Female	Masters	Soccer Academy	Nascent
Jane	24	Female	Bachelors	Fashion Magazine	Nascent
David	28	Male	Secondary	Web Design	Nascent
Faith	27	Female	Bachelors	Fashion Designer	Pre-launch
Joseph	30	Male	Certificate	Health Blog	Nascent
Michael	21	Male	Bachelors Student	Software	Nascent
Caroline	31	Female	Bachelors	Health Clinic	Nascent
Mercy	34	Female	Some college	Custom Blankets	Nascent
Maureen	27	Female	Bachelors	Hybrid (non-profit/social enterprise)	Nascent

Table 1.
Participant
descriptions

Results

Using thematic analysis, themes emerged from the data. In the following sections, two key themes will be discussed, using quotes from entrepreneurs as evidence. In the discussion section, the themes will be unpacked, and the theoretical framework will be applied to the context.

Millennial entrepreneurs as “bricoleurs”

Although the findings of this study cannot suggest a trend in entrepreneurship in Nairobi, a strong theme centered on “hustling” emerged from 28 interviews with young entrepreneurs. Hustling is what one does when she does not have a full-time, salaried position. Because of the informal nature of work and the lack of established or registered businesses, there is a thin line between entrepreneurship and what would otherwise be referred to as hustling, freelance labor or gig work. Hustling and much of entrepreneurship, in general in Kenya, exists in the informal sector. For most of the participants, this hustle is a deliberate choice. A survey conducted by researchers at the Aga Khan University found that 50% of Kenyans, age 18 to 35, believe that as long as one does not end up in jail, it does not matter how she earns money (Awati and Scott, 2016). Ruth, a 28-year-old woman who started a soccer academy states, “It’s about time that we stop thinking that people must have a white-collar job.” Ruth manages this academy while also planning parties and working as a consultant. Hustling represents freedom and the ability to create opportunities for oneself, not unlike entrepreneurship. This motivation to use whatever skills and resources one has to create opportunities is in line with the concept of bricolage. Although a high youth unemployment rate in Kenya is an undeniable fact, some participants explain that they obtained jobs only to quit to pursue other opportunities. John explains why he prefers hustling over having a full-time position.

Sometimes with being employed you can get fired or, things just happen you never know, but when you are into business, it's all up to you.

John owns a successful construction company but also engages in other side-ventures. Furthermore, Adam, a 29-year-old man who operates a computer repair shop, explains that having a job is not the right fit for him because he prefers to be his own boss. This is further explained by Sarah, a 24-year-old female shop owner.

"There are so many issues with employment and all these things, and I feel like so many of my friends are becoming creative, and the job opportunities they are so diverse right now." She goes on to say, "...the long-term goal is to have a platform where we can just address so many issues because we want to start with YouTube. We want to have a YouTube channel and all those things."

Sarah uses both brick and mortar and digital spaces for both financial and social progress. Bernard is a 26-year-old man with a master's degree in finance. He currently owns a company that consults SMEs. When asked how he reaches clients, he states, "People, especially in Africa, people will not go on Google to say, 'I want a consultant.' No, I want a guy that you have known, you are my friend, so if you tell me this guy is good I will go for him." The topic of trust in clients and resources was present across interviews. This issue speaks directly to the next theme of "network bricolage."

Network bricolage: trust in online and offline contacts

ICTs and mobile applications increase trust and facilitate network bricolage. The main focus of the fieldwork that led to this study was an exploration of the use of M-Pesa, Kenya's leading mobile payment provider. While the use of M-Pesa is so common that some were surprised to even talk about it, what was illuminating is the trust that it can maintain in uncertain transactions between micro-entrepreneurs and their customers. Some explain how friends and contacts help promote their businesses. Others, like Samuel, a 24-year-old who sells shoes, go as far as to say, "My customers are like a community." When trust is lacking, technology steps in and eliminates some risk. With M-Pesa, payments can be made without worrying about carrying large sums of cash. There are fewer variables for entrepreneurs and freelancers to worry about.

Trust is further established in online social networks. Individuals were asked about their social media use, more broadly, for both personal and professional reasons. Participants describe using social media, specifically WhatsApp and Facebook, on their mobile phones primarily in order to connect and share information with potential customers. Not all members of these groups are close friends but rather friends of friends and so on. Hanna is a 26-year-old woman with a bachelor's degree. She sells shoes online. She states,

...at first, I started with my friends at work, my friends and my contacts. Then, I opened a WhatsApp group.

She uses the WhatsApp group as a way to share her latest inventory with a network of potential customers. Isla, who taught herself to bake professionally using YouTube, also uses social media for the same purpose. She explained how mobile applications, namely Facebook and M-Pesa, allow her to interact with customers whom she has never met. In this context, having large networks of weak ties is helpful to entrepreneurs, especially those who own small shops but also those who are seeking out side-hustles. Within these WhatsApp and Facebook groups, conversations are not limited to the products and services being sold. Often, subconversations emerge. More importantly, entrepreneurs meet individuals in an online space that they may not have met in person. Also, some report being inspired to pursue entrepreneurship by Internet celebrities or receiving help from individuals in discussion forums, as these are the resources and contacts "at hand." Finally, participants like Sarah and

Eidi explain how they use social media not only as a business or network opportunity but also to promote social change. Eidi is a 26-year-old woman with a bachelor's degree. She has a fashion blog and podcast and completes freelance production work on the side. In addition, she wants to do more with her talents.

So I feel like we should have also a channel that shapes our minds and you know, gives hope to someone that's growing up, and it's not all that bad, you get something good.

In this sense, we see a variety of activities completed for a plethora of purposes.

Discussion

Digital entrepreneurship

What does digital entrepreneurship look like for micro-entrepreneurs in Kenya? Hull *et al.*'s (2007) typology can be used to show the prevalence of moderate digital entrepreneurship among those interviewed for the study. Two areas are especially important: marketing and stakeholder management. Individuals discuss using social media to connect with customers, for example, marketing through WhatsApp and Facebook. In addition, they use existing technologies to maintain relationships. Entrepreneurs assume some risk when starting new ventures. Digital platforms seem to alleviate some risk by increasing accountability and creating ways to exchange payments, such as through M-Pesa.

Bricolage

Based on the experiences of the 28 entrepreneurs interviewed for this study, self-employment is not described as inferior to wage employment. The participants often described their parents as having an old school mentality and wanting their educated children to have a prestigious career. Therefore, if older adults were interviewed, perhaps they would have differing opinions on the nature of self-employment. It is clear that their experiences as entrepreneurs and hustlers are in line with Lévi-Strauss's definition of bricoleurs (Lévi-Strauss, 1966). Like bricoleurs, Kenyan entrepreneurs can complete a variety of tasks, which is essential for young people with limited resources. Ciambotti and Pedrini (2019) suggest that limited resources can be an opportunity for social enterprises in Kenya. This is also in line with the work conducted by Ilahiane (2011) in which the author found that bricolage is parallel to freelancing or rather participation in the gig economy. Many of those who participated in this study did not limit themselves to one area of work. Rather they were as Lévi-Strauss would put it a "Jack of all trades" (Lévi-Strauss, 1966, p. 17).

Moreover, we see evidence of social motivations, where young entrepreneurs are not only trying to build businesses to create opportunities for themselves; they are also trying to create opportunities for their communities. Exploring social entrepreneurship was not the goal of this study, but several participants explained how they are using digital technologies to promote change. Influenced by Hayek (1945), Zahra *et al.* (2009) explain that social bricoleurs can work with limited resources and address, "local social needs" (p. 523).

Future research suggestions

Future research should explore this topic using a variety of research methods. Using an ethnographic approach would allow researchers to explore individual entrepreneurs and their businesses on a deeper level. Next, this study can be used as a foundation for subsequent quantitative studies. A report by the World Bank suggests that Kenya is one of the top 25 countries for online workers (World Bank, 2019). This research only focuses on one geographic area. Future research should extend this area of inquiry to other cases and

contexts. Research should further explore Millennials' participation in online work and digital side-hustles, as a way of connecting to opportunities both in and outside of Kenya.

Conclusion

This study explored digital entrepreneurship among youth in Kenya. By using “what’s at hand,” entrepreneurs are using limited resources to create opportunities and form communities. This research adds to this knowledge base by applying the study of bricolage to digital entrepreneurship in Kenya, a country where ICT adoption is vast.

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