

Challenges to the Advancement and use of Digital Currencies for Business Transactions in Cameroon: A PLETP Review of Emerging Literature

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Abstract: Across the world, economic digitalization including the use of digital currencies appears to be gaining grounds. However, in Cameroon, the situation of the use of digital currencies for business transactions has not been significantly documented. Therefore the purpose of this study was to examine the challenges to the advancement and use of digital currencies for business transactions in Cameroon. Using the desk review approach and examining 85 publications, a comprehensive review was conducted to uncover how PLETP variables are challenging the advancement and use of digital currencies for business transactions in Cameroon. Results indicate that the existing political, legal, economic, technological and psychosocial environmental issues today have fashioned barriers challenging the adoption and use of digital currencies for business transactions. Specifically, the inexistence of a guiding legal framework authorizing the use of

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digital currencies was the key challenges factor, justifying why only mobile money operated by MTN and Orange was highly utilised. The study recommends that to meet-up with globalisation, there is need for actors especially policy makers to start thinking on how to introduce legislation to govern the use of digital currencies especially crypto currencies as well as legislation that may promote the use of other digital currencies like mobile money backed by central bank currency.

Keywords: Digital Currencies, Business, PLETP Analysis

JEL M10, O31, G32, E51, F30

INTRODUCTION AND BACKGROUND

The financial industries' largest convergence point right now is digital currency. The rapid growth of the digital economy has made the introduction of digital currency an unstoppable trend due to the advancement of digitalization and technology across the world (Zhang, 2021). As argued by Foster (2021), changes in technology have often resulted in changes in the global monetary and payment systems, with currencies undergoing rapid changes due to financial technology driven evolutions in payment systems (Blackstard & Amars, 2020).

Digital currencies also referred to as virtual currencies are appearing as the future on the financial transactions ecosystem. The definition of digital currency remains varied and has seemingly been evolving with time. For example, the European Central Bank (2012) viewed virtual currency as unregulated money issued and controlled by its developers and not central banks. Further, the Financial Action Task Force, (2014) has a varied view point which see virtual currencies basically as a medium of exchange, a unit of account, and store of value. Also, Mullan, (2014), defines digital currency as privately issued electronic value that circulates through the Internet. It is interesting to note that the definition of digital currency by European Central Bank (2012) seems to be untenable today given the introduction of Central Banks Digital Currencies which is reported to be progressively gaining grounds today even in Africa (IMF 2022)

Generally, digital currencies can either be centralized or decentralised. Decentralised digital currencies are cryptocurrencies (for example Bitcoin and Ethereum) which are issued and controlled by its developers (Amanzholova & Teslya, 2018). Centralised digital currencies are virtual currencies that are controlled by central banks with a typical example being CBDC.

The 21st century marketplace has been more global when compared with other centuries. Apparently, this has resulted in digital disruptions in varied sectors notably retail business, and financial service industrial (Hou, Wang &

Luo, 2020). Evidently, the introduction of digital currencies has further resulted in financial disruptions especially in terms of speed at which transactions are completed, access, and convenience. For example, Seaman (2014) argues that Bitcoin transactions take between 10 to 30 minutes to be completed while bank transactions take longer periods, thus indicating that digital currency transactions are time saving to business operators.

Generally, building on the natural principle of man trying to minimise losses as much as possible, it may be argued that the advantages presented by digital currencies make it the currency of the future. For example, with Cryptocurrency sovereignty does not belong to any entity as the currency is not tied to any central bank (Amanzholova & Teslya, 2018), systems are more transparent as there are no back offices as is the case with traditional banking systems (Inamorato Dos Santos, Grech, & Camilleri 2017), While digital currencies offer some advantages their use introduce a series of disadvantages to its users. For example security breaches, privacy, and criminal activities ((IFC 2017; Pandya, Mittapalli, Gulla & Landau, 2019), have been reported especially with Cryptocurrency. Also, the rapid growth like with Cryptocurrencies with over 800 of them in the virtual space (Vlastelica, 2017), further complicates issues especially for first time users as they are not sure of which to consider.

In Africa (Cameroon inclusive), significant growth has been recorded in the use of digital currencies especially the centralised digital currency. For example the use of mobile money in Africa has witnessed a 20 percent growth from 2012 to 2021 with transactions amounting to over 698 billion US dollars in 2021 (GSMA, 2022, IMF 2022). Sadly, digital currency growth seems to have be biased infavour of centralized digital currencies and mobile money as the decentralized digital currencies have experience minimal growth with highest growth in transactions value of about 20 billion US dollars per month in 2021 suggesting an estimated annual transaction value of about 240 billion US dollars (IMF 2022) with leading user countries being Kenya, Nigeria, and South Africa. For sure, the use of digital currencies especially mobile money is anticipated to continue growing in Sub Saharan Africa because many inhabitants do not have access to bank accounts and thus mobile money is the visible way out to ease transactions (IMF, 2022).

As at October 2022, the situation of digital currency innovations in Sub Saharan Africa was reported to have registered significant changes with mobile money being the most popular. For example as highlighted by IMF (2022) mobile money transactions value was 698billion US dollars, 2 regional banks

and 12 central banks were considering adopting the use of digital currencies by introducing CBDCs (Central Banks Digital Currencies) and cyptocurrency traded recorded total transaction value of 20 billion US Dollars. These figures indicate the high potential of digital currency for business transaction in Africa.

In Cameroon, the announcement in 2010 of the economic emergence vision by 2035 ushered in too much talk about economic digitalization. The use of digital currency notably through mobile money is reported to have experienced a steady growth in Cameroon (IMF, 2022). Thus, it may be argued that the use of digital currencies may contribute to foster the emergence vision of Cameroon. This paper focuses on the challenges to the advancement and use of digital currencies for business transactions in Cameroon. As at date, Cameroonian Super markets, and Supermarket chains, Community Markets as well as the conduct of government business do not seem to openly build significantly financial transactions on digital currencies in general. Further, there exists limited legislation related to the use of digital currencies in Cameroon. This has made the sector to be operated by actors the way they deem necessary. Given that little research has documented the situation of digital currencies in Cameroon, this paper thus attempts to capture basic issues surrounding the advancement and use of digital currencies in Cameroon employing the PLEPT (Political, Legal, Economic, Psycho-social and Technological) review analytical framework.

METHODOLOGY

The authors employed a secondary data review methodology in this study. Data sources utilised included searching for published materials in Research Gate, GoogleScholar, IMF sites, IFC sitesamong others. A data extraction guide was designed and used in the search and review process. The extraction guide was designed to capture the thematic areas of interest to the study namely: Technological Dimension, Legal dimension, Economic Dimension, Psycho-social dimension and Political dimensions. A total of 78articles were reviewed and retained. From the reviewed articles, we established a list of the retained articles in a tabular format capturing the author names and publication year, and focus of their study. Once all this was done, we then brought together the authors under the respective thematic areas of our study and then the analysis employing the thematic approachwas donemaking it possible for the authors to sufficiently handle the PLEPT issues as concerns the challenges to the advancement and use of digital currencies for business transaction in Cameroon.

RESULTS

Political Dimension

The political will in Cameroon seems to have developed interest in the digital economy as far back as 2010 with the announcement of the Economic emergence vision. As at 2015, there was significant evidence reported to indicate the growing political will to promote the advancement and use of digital currencies in Cameroon. For example, in 2015, the state of Cameroon contracted an Indian software company, Trestor, to introduce digital currency with positive feedbacks such as the digital financial transaction in banks, and other government services (IMF, 2022). Further, the General Delegation for National Security (DGSN) launched in 2021 the first digital platform for enrolling passports online, the passcam portal to facilitate the production of passports (Londa, 2021). Interesting, to push for the use of digital currencies in business transactions, the government ensured the use of the digital tax system in 2016 (LoRDA, 2022). Apparently, the introduction of the digital tax system pushed some business operators to adopt mobile money usage given that tax declarations and payment were only possible through online platforms.

There has always been a connection between the state, politics, trade, security and money, which does not ease the task of its regulation. Based on the 2011-2016 report of the Central Bank of Central African States (BEAC) of which Cameroon is part, digital currencies have been at the centre of the Cameroon's involvement in globalisation and trade (BEAC Report, 2016). On the strength of this report, 95% of electronic money transfers were done through mobile money (Cheka, 2018). In addition, BEAC has recognised that mobile money is a tool for financial inclusion, which is still clogged by some regulatory setbacks (Tolom and Tengeh, 2020).

As of March 21, 2023 BEAC was in the process of fine-tuning the political and legal framework on new rules governing digital currencies transactions 'which will include the fight against money laundering' This is especially because trade and globalisation, that are otherwise legitimate, provide a conduit for money laundering and the financing of terrorism (BEAC, 2023). This implies that to date, the absence of political and legal regulatory mechanism for a cryptocurrency as a type of digital currency is another drawback. Despite the high political will to get Cameroon become an emerging economy by 2035, there seems to be lack of practical political will to attain the result. For example, a policy framework for government data archiving and digital preservation is

not yet in place; the digital government platforms offered across agencies are not interconnected and interoperable; the state has not set up shared systems to offer digital platforms across agencies and does not have a partnership with the private sector for the managing or offering of such systems (Cheka, 2018). Further, Cameroon still lacks the regulatory instruments and institutional capacity to ensure that every Cameroonian is digitally connected (World Bank, 2022).

Legal Dimension

In Cameroon, the use of digital currencies is on the rise. This dramatic increase has been recognized by the national and regional authorities who intimated intentions to establish a legal framework governing transactions involving digital currencies. At the national level, Cameroon has taken some strides towards the incorporation of digital money systems. In 2015, the Government of Cameroon contracted with an Indian software company, Trestor, for trial of a digital currency, Trest. The results of this bitcoin-like currency were positive, but the high cost associated with the electricity usage necessary to process a cryptocurrency transaction hindered further testing of the currency within Cameroon¹. Also, Cameroon's Ministry of Telecommunications announced in early 2021 that it was working on a white paper on the regulation of cryptocurrencies and crypto-assets in Cameroon². This demonstrates a willingness to explore digital currency options within the country. This was obvious because recently Cameroon has placed a lot of emphasis on developing digital economy as evidenced by the Growth and Employment Strategy Paper as replaced by the National Development Strategy 30.

At the regional level, amidst the COVID-19 Pandemic, the Bank of Central African States (BEAC) urged citizens of CEMAC to use digital currencies instead of physical cash to further social distancing efforts and to stop the spread of COVID-19³. BEAC also initiated studies on the issue of Central Bank Digital Currencies (CBDC) as alternatives to cryptocurrencies, and experts were committed for research on prospects and challenges of introducing the central bank digital currencies.⁴ Despite these efforts, the legal framework to support business transactions involving digital currencies is not yet fully developed. There has been hesitation and procrastination on the part of the legislators for several reasons.

There is a risk of digital currencies being used to launder money and fund terrorism. It can vividly be recalled that cryptocurrency has been embraced by

separatist movements in Cameroon. In 2018, separatists in Southern Cameroons, seeking international recognition for the purported “Federal Republic of Ambazonia”, established AmbaCoin, a separatist-backed cryptocurrency. According to a Quartz report, a group of anonymous Anglophone separatist scholars, technocrats, and developers established AmbaCoin. Reportedly, the group is seeking to tie AmbaCoin to a traditional fiat currency that would allow the region to stop relying on the CFA franc⁵.

The non-regulation of digital currencies in Cameroon is also explained by the fact Cameroon is a member of CEMAC and BEAC has the sole and exclusive privilege to define monetary policy and issue currency within CEMAC. There has been procrastination from the Central African Financial Market Supervisory Commission (COSUMAF) and other CEMAC member states on the adoption of a legal framework to regulate cryptocurrencies in Central Africa. It will be illogical, inconsistent and illegal for an individual member country to enact a law on digital currencies contrary to the community texts, even though Central Africa Republic (CAR) recently adopted a law on cryptocurrencies which was promulgated on April 22, 2022.⁶ The enforcement of the law met with a lot of obstacles and it was repealed in 2023.

At the regional level, attempts at the regulation of digital currencies failed because the introduction of central bank digital currencies (CBDCs) can disrupt the existing banking system if citizens decide to keep digital currencies in their wallets instead of keeping cash in banks. In that scenario, banks would not have enough cash to grant credit and offer other financial products (EloundouNdeme, 2021). As a result, the said banks could raise the interest rates they offer on savings accounts to encourage customers to keep their deposits with banks, and this will be bad for those who apply for loans. When the interest rates on savings increase, interest rates on loans follow the same suit.

There is also the risk of computer systems failing or falling prey to cyber-attacks. CBDCs lead to centralization, which could exacerbate the already widespread cyber vulnerabilities and extend the target ranges to include the central bank. Therefore, the central bank will need a military-grade computer security system to prevent those attacks from causing losses for citizens and compromise the trust they may have in the digital currency (EloundouNdeme, 2021).

Nevertheless, the absence of a general legal framework for digital currencies in Cameroon in particular and CEMAC in general doesn't mean the authorities

are absolutely indifferent to virtual currencies. A regulation was adopted by COBAC in 2005 to govern electronic money establishments⁷. In 2011, the CEMAC legislator adopted a regulation on the Electronic Money Policy, which established a framework for the exercise of the activity of issuing electronic money by certain institutions⁸. In doing so, the policy created conditions for exercising this sort of activity, instituted a regime for the issuance and conversion of electronic money, and provided the modalities of regulation to control and monitor this issuance. Under this regulation, the issuance of electronic money is subject to the authorization of the BEAC (Tchabo 2009). The Regulation creates a mechanism to file for authorization to issue electronic money (Kelese 2014). In 2018, CEMAC adopted a regulation relating to payment services⁹ which takes into consideration mobile money transactions (Kalieu 2020). It is based on these regulations that mobile money companies operate.

BEAC and the Central African Banking Commission (COBAC) ensure the regulation, control, and supervision of the activity related to electronic money issuance¹⁰. Specifically, BEAC is designated with the power to (1) establish the legal standards surrounding issuance and (2) set the technical standards necessary to guarantee the security, efficiency, and credibility of electronic money. On the other hand, COBAC is tasked with (1) establishing prudential standards for institutions to comply with respect to the liquidity of funds and the issuance of electronic money; (2) countering money laundering and the financing of terrorism via electronic money; (3) accounting for the traceability of electronic funds; and more.

It must be pointed out that digital currencies are not prohibited in Cameroon but only mobile money is regulated; cryptocurrencies are not regulated and do not constitute a legal tender in this country. The non-regulation of cryptocurrencies in Cameroon is obvious; Cameroon cannot enact a law regulating them because it will be inconsistent with CEMAC regulations since as per these regulations only BEAC has the exclusive privilege to define monetary policy and issue currency. Within the Central African states, the use of digital currency systems is on the rise (Moukouri&Mbanda, 2019). Despite this mounting move, the governing and legal framework to support these transactions is not yet fully developed. The Economic and Monetary Community of Central Africa (CEMAC) includes Cameroon, the Central African Republic, Chad, Equatorial Guinea, Gabon, and the Republic of the Congo (Congo). The Bank of the Central African States (BEAC) serves the CEMAC member-states. The purpose of the BEAC is to manage the monetary

policy, issue currency, manage the foreign reserves of the member states, and facilitate payments and settlement systems (Kalieu, 2002). With respect to crypto currency, the BEAC has not articulated a specific policy.

Cameroon has adhered and surrounded full sovereignty of regulating monetary and currency to the CEMAC legislator. To this effect, Cameroonian law governing digital financial transaction is that of the Central African Monetary and Economic Union (CEMAC) which, in relation to electronic money, does not seem to be sufficiently visionary. Consequently, in spite of today's leading forms of money and the advantages and limitations of cryptocurrencies, current Cameroonian law regulates traditional and electronic money alone leaving out other digital financial services.

The question that begs for an answer is who control fiat money and virtual money?.Cheka (2018) posit that BEAC alone issues fiat money. Electronic money is issued by credit institutions which licensed to by BEAC (World Bank 2020). This is in line with section 2 2001 BEAC Regulation No. 01/11-CEMAC/UMAC/CM, generally known as the Electronic Money Policy, which established a framework for the exercise of the activity of issuing electronic money by certain institutions. This regulation mandate some conditions which must be fulfilled by institutions seeking to obtained licenses to operate electronic money transaction. It also institutes a regime for the issuance and conversion of electronic money, and provides the modalities of regulation to control and monitor this issuance.

The issuance of crypto currencies does not yet fall within the purview of BEAC and it would appear that the line that divides traditional money along with electronic money from crypto currencies can only get thinner (Cheka 2018b). The value attached by the consumer to the element of time and the gains that digital technology provides in this regard militate in favour of this position. This is even more so, considering the continuous advances in ITC and improvements in the level of the acceptability of crypto currencies especially in developing countries where Bitcoins have been tried (Cheka 2018). The legal framework for cryptocurrencies in Cameroon is not well established, which creates uncertainty and makes it difficult for individuals and businesses to use them with confidence (Fonjong *et al.*, 2020). One of the major challenges to the advancement and use of digital currencies in Cameroon is the lack of clear regulatory framework for cryptocurrencies. There is currently no specific legislation that addresses the use and regulation of cryptocurrencies in Cameroon (Babatunde, 2019).

Given that the purpose of the law is always to attribute responsibility to whosoever that is at fault. In principle, any person who fails in its duty should be accountable for any consequential damage. In banking regulation enforceable in Cameroon, this liability may be drawn from general principles of administrative responsibility (that is responsibility of administrative public authority) or extra contractual responsibility (Vandersanden&Dony 1997). Also, laws are always enacted to be applicable to human beings, time and space. Space here denotes to a geographical location. To this effect, laws enacted by Cameroonian parliament are to be applicable in Cameroonian territory in time and space.

It is argued that rules relating to the fixing of legal responsibility in the provision of financial services are predicated on philosophical notions such as time, space, and being, all of which have been altered by the digital age and globalization. Virtual and artificial beings have varied effects on the making of laws and their enforcement in Cameroon, just as duplicated virtual space and seemingly elastic time do. This article argues that the lack of a law specifically created to regulate the digital financial market presents the greatest obstacle or challenge in this area. Because of this, it is no longer necessary to address the questions of where, when, and to whom the crypto money may be used.

We understand that the concept of “space,” “time,” and “space” in the context of the digital age must be a nightmare for legislators. In the traditional legal system, laws are made for specific areas and then applied to specific individuals, who might be either corporeal or immaterial. Cyberspace lacks physical borders, making regulation difficult (Cheka 2018b). This complicates the traditional meaning of “space” in the modern day. The lack of a digital currency regulatory statute stands out as the most significant obstacle when considering the overall legal obstacles to the development and usage of digital currencies in Cameroon. There is a lack of appropriate legislation in Cameroon regarding the legal status of digital money at this time. As a result, digital money usage and trading are ungoverned.

Economic Dimension

Current emerging literature highlights two economic issues associated to the use of digital currencies for business transactions in Cameroon namely; Market defined in terms of population with access to digital tools needed for digital transactions, Market participation and monetary perspective observed from the inflation rate in the country. As highlighted by (Cheka, 2019), the

use of digital currencies for business transactions especially in developing and emerging economics is highly depended on the availability of computers and mobile phones. This implies that the more the number of users, the higher the potential for the adoption and advancement of digital currency use. Sadly, in Cameroon, ART (2018) upheld that the dissemination of mobile telephone has stagnated at about 69% of the population. Further, estimates suggest that there were 9.15 million internet users in Cameroon with about 17.5 million non-internet subscribers at the beginning of 2022 (63.5% of population remained offline) 4.3 million social media users (16% of total population), for a population estimated at around 27.57 million people in January 2022 (Dutta and Lanvin, 2020). Discarding the multi-SIM effect, the penetration rate in terms of unique internet subscribers was about 34% in 2021, which puts Cameroon in the lower bracket in the Central African region [NRI], (2022). This implies that the population which cannot be served through digital currencies is far greater than that which may be potentially served. Apparently, this places a great challenge to the use of digital currencies for business transactions in Cameroon. It is important to highlight that according to the Network Readiness Index [NRI], (2022), Cameroon is ranked 114th out of 131 economies as concerns digital currencies advancement and usage. This clearly suggests the low rate of usage of digital currencies for business transactions in Cameroon. When disaggregated, into sub pillars of NRI: Economy, Business, Future Technologies, content, governments and regulations, the Cameroon performance is as indicated on the table below:

Table 1: Position of Cameroon in NRI Scores

<i>Sub-pillar</i>	<i>Rank</i>	<i>Sub-pillar</i>	<i>Rank</i>
Economy	63	Trust	109
Business	86	Individuals	112
Future Technologies	87	Quality of life	116
Content	97	Inclusion	121
Government	103	SDG contribution	121
Regulation	107	Access	129

Source: NRI, 2022

Cameroon's economy, businesses, and emerging technology all point to the country as a promising place to use and invest in digital currencies (table 1). The economy's performance in the inclusion, SDG contributions, and access sub pillars must be improved in order to meet the difficulties of digital currency

development and adoption. This agrees with the results found by Alonso *et al.* (2020) and Fabris and Nikola (2019). Therefore, the adoption and use of digital currencies in any growing country relies heavily on accessibility and inclusivity.

In addition, there are still pockets in Cameroon where neither electricity nor the internet are available to residents (Bakehe *et al.*, 2017). Retail pricing for mobile phones and Internet access might be prohibitive for certain people, particularly those with little financial resources (Naguib, 2023). Despite the availability of several undersea cables, transnational connection is still uncompetitive. Although there has been some progress, Cameroon still lacks the necessary legislative tools and institutional competence to guarantee that every citizen has access to the internet. The government of Cameroon has granted the Cameroon Telecommunications Company (Camtel) a virtual monopoly on all domestic and international digital communication and major national terrestrial fiber networks. Cameroon placed 18th in Africa and 149th globally on the 2017 Information Communication Development Index (IDI) in terms of internet connection and access. The IDI score for Cameroon only indicated relative strengths, particularly with regards to mobile phone usage and access to the rest of the world. Cameroon scored a 42.8 out of a possible 100 on the Global System for Mobile Communication Association's (GSMA) mobile connectivity ranking, placing it at position 131 out of 163 nations. Kenya placed 116th, Gabon 120th, Nigeria 125th, Congo 132nd, and the Democratic Republic of the Congo 157th in Sub-Saharan Africa (ITU, 2017).

Banking and electronic payment systems provide significant hurdles for the digital currency application industry in Cameroon, as do the country's economic and political structures (Bakehe *et al.*, 2017). The availability of high-speed Internet continues to be a major barrier to their advancement. Very few interactive platforms go beyond only informing people about the provision of services (Rajan, 2021). However, government systems, such as those used for taxation services, have yet to include electronic payment. The local private sector is only getting started with digital technology, software, and hardware development, while government agencies have inadequate ICT capability and capabilities (ITU, 2017).

Mobile broadband services seem somewhat pricey when compared to the median household income using the market basket pricing technique. As of 2017, they cost around 2.6% of Cameroon's gross national income, which is on par with Nigeria (2.5%) and less than Kenya (4%), according to the country's

Ministry of Finance (MINFI, 2017). It's worth noting that a rise in the price of mobile broadband services would increase transaction costs for everyone from sole proprietors to multinational corporations doing business online.

Cameroon's lackluster progress in fostering digital entrepreneurship is another major roadblock to the widespread use of digital currency. The majority of Cameroon's digital businesses sell non-technical goods and services. When it comes to the export of digital products and the purchase of technology, Cameroon is still a relatively tiny participant on the world stage. The digital industry in Cameroon is small and growing more slowly than the overall economy. It is challenging for digital enterprises to function due to inadequate infrastructure and logistics. There is not a uniform set of laws and rules in place. The availability of capital is still a major hurdle for start-ups in the digital sector. Despite having one of the highest percentages of nascent entrepreneurial activity, Cameroon's economy scores poorly on measures of entrepreneurialism, innovation, and competitiveness. Total Early-stage Entrepreneurial Activity in Cameroon was 27.6%, according to the worldwide Entrepreneurship Monitor study (2016), which is much higher than the regional average of 17.6% and the worldwide average of 12.3%. When compared to other countries throughout the world in terms of entrepreneurial activity, innovative capacity, and overall competitiveness, Cameroon ranked poorly in 2018. In comparison to other African countries in the same area, such as Nigeria, Kenya, Ghana, and Senegal, it ranked very poorly across the board. According to a poll conducted entirely online, the vast majority of businesses are not engaged in high-value software or hardware creation, but rather operate as online marketplaces, IT service providers, or cyber cafés. Process or business model innovation are the exceptions when it comes to digital innovation. This creates an obstacle in the way of widespread adoption of cryptocurrency. There were 983 information and communication technology companies listed in the most recent company census (2016) (Institut National de la Statistique, 2018). While the number of ICT companies has grown since 2009, their relative importance to the economy has shrunk. Worryingly yet, business development services as a whole as a percentage of the economy have been on the decline (Vozniuk and Tytko, 2019). This is because the number of businesses providing these services has dropped precipitously, from 5,303 in 2009 to 1,337 in 2016.

Unfortunately, the biggest private cryptocurrencies are very volatile, which severely limits their use as a universal means of trade. Cyberattacks are a real possibility, and they may have a significant financial impact on private banks

since, in the midst of a confidence crisis, economic agents may rush to withdraw their funds. Users of a CBDC would deposit it in a central bank (creating a liability for state banks) and would either remain anonymous (like bank reserves) or would be identified by a name (like banknotes). Stability, sustainability, and technological functionality are all crucial aspects of digital community currency systems that contribute to their long-term viability. Consistent with the findings of Cameroon's Telecommunication Regulatory Agency (ART), which operates under the ministry of post and telecommunications, these services cannot be controlled since their value is constantly shifting in response to changes in consumer demand (Metzger *et al.*, 2022).

The high inflation rates being experience in Cameroon make it difficult for businesses to rely on digital currencies for business transactions (Ngwainmbi&Lambi, 2020). Moreover, the lack of financial literacy and digital skills among the population creates a barrier to the adoption of digital currencies. Digital currencies are vulnerable to security breaches and hacks, which can lead to the loss of funds. This is a concern for many people in Cameroon who are already struggling financially (Toundji *et al.*, 2021). This suggest that with lower inflation rates, Cameroonians may be interested in digital currencies.

Technological Infrastructure Dimension

The manner in which individuals and companies everywhere go about their everyday lives has been profoundly altered by the fast development of ICT in recent years. This has led to a shift away from traditional methods of making payments and toward the usage of virtual currencies in the digital technological convergence environment. To put it simply, digital money is any privately created electronic value that is traded online outside of traditional banking institutions (Mullan, 2014). This means that the components of digital money include both value transfer and online accounting infrastructures.

According to Stair and Reynolds (2018), in today's environment, information is of tangible worth, and businesses must use information systems to maintain a competitive edge. A system that enables instantaneous communication between individuals, online shopping from mobile devices, effective collaboration among geographically dispersed team members working on a single project, the management of billions of dollars by financial institutions, and the rapid tracking and distribution of goods by manufacturers and suppliers. Globalization of the economy and the widespread use of web-

based technologies for a broad range of commercial and other purposes have led to a meteoric rise in the number of internet users around the globe. As a result, more virtual currency is now circulating online, eliminating barriers based on location. This means that all parties involved in a transaction using digital currency must meet standards for its swiftness, ease of use, and safety.

Technological infrastructure put in place to support the conduct of business transactions using digital currencies vary across the various continents with the developed countries having the most sophisticated while the less developed ones are still lagging behind. Cameroon being among the less developed countries in the world is gradually introducing and using payments that involve digital currencies (Etuge, 2022). However, there are concerns regarding legitimate providers and security of this form of payments. Various types of technologies have been deployed to implement digital currencies over the years since but only the most popular and widely used will be dealt with in this research paper.

According to a recent survey (Akhtar *et al.*, 2019), blockchain is one of the most sought-after and commonly used technologies for introducing digital currencies. It originated with the advent of Bitcoin. Blockchain is a distributed ledger system in which each node keeps its own copy of the ledger and, following a synchronization and re-evaluation of the hash, any changes made to the ledger are immediately reflected in all the nodes. Digital currencies/ crypto-currencies use it because it has several properties well-suited to security and auditability, two of the most important concerns in the exchange of money.

Considering the above scenario, the Cameroon government is increasingly promoting national participation in the digital economy through formal efforts to improve the legislative and technological infrastructure to facilitate e-commerce (MINPOTEL, 2018). However, progress has been slow, and the challenges continue to attract the attention of the authorities. One key challenge identified in the literature has been low level of digital infrastructure (World Bank Group, 2020). At the infrastructural level, the main basis for the development and deployment of digital currency in Cameroon is twofold: Energy (electricity), Telecommunication and ICTs as well as the Technologies for implementing digital currencies.

Energy (electricity) is critical to ensure the effectiveness and completion of transactions in the digital era. This implies that there is the need for constant uninterrupted power supply (UPS) to be in place in order to ensure the availability of the required digital currency systems and the telecommunications and ICT infrastructure that they heavily rely on. However, this is not the

situation in Cameroon whereby there are constant power outages resulting from insufficient production of electric energy especially in the dry season. As such, these power outages would impact significantly on the deployment of digital currency infrastructure and its utilization (Diboma and Tatietsse, 2013).

Since the beginning of 2015, when the dry season began, Energy of Cameroon (ENEO), the concessionaire of Cameroon's public electricity service, has faced a daily peak shortfall in production of electric energy of 100 MW (Etoundi *et al.*, 2016). In light of the ongoing nationwide power outage, the Cameroonian government and electrical sector operator have implemented emergency steps to address the situation. The 60 MW thermal power plant at Ahala, close to Yaounde, has been brought back online as part of these efforts (Etoundi *et al.*, 2016). The plant, which is operated by the British firm Aggreko, is one of four initiatives under the government's emergency thermal program (ETP), which was initiated a few years ago but is still the only key ETP that has not been handed over to ENEO. In addition to getting the engines at the Ahala thermal center back up and running, ENEO also succeeded in convincing its largest customers to drastically cut their use in the evenings, when residential demand is at its highest (Etoundi *et al.*, 2016). The corporation has been compelled to resort to perpetual rationing of power distribution due to a persistent deficiency in electric energy output that is insufficient to satisfy home use and that of industry. Therefore, the government has taken other steps, such as constructing a number of power plants and hydroelectric dams, to reduce these power outages and assure the availability of energy resource in the nation and some in sub regional countries. But getting enough electricity to meet that demand is a major transportation issue. This is mostly because to the usage of wooden posts, many of which have fallen due to weathering or bushfires. Using long-lasting, locally-adapted technology is crucial for protecting the transportation network (Etoundi *et al.*, 2016). As a result, one may claim that Cameroon's low and unstable electricity supply hinders the development and usage of digital currencies for commercial operations.

Cameroon continues to face difficulties that make it difficult to utilize and embrace digital currencies, particularly in the telecoms and ICT related industry, which is often considered to be the fastest expanding sector in the world. To give just one example, Cameroon is not yet included in the Connectivity scorecard, a global ICT index that ranks countries based on their deployment of ICT infrastructure and on the extent to which governments, businesses, and consumers use connectivity technologies to enhance social

and economic prosperity (also known as “useful connectivity”) (Etoundi *et al.*, 2016).

Although progress has been recorded in the advancement of communication technology infrastructure as noted by Toussi (2019), the current state of the infrastructure may still be wanting (Dominguez-Torres and Foster 2011). Despite the fact that Cameroon is lagging behind it would appear that CAMTEL, MTN, Orange and Nexttel the companies providing telecommunications services in Cameroon are still at their infantry stages and this implies that their networks are unreliable, resource constrained and regularly unavailable (Etuge, 2022; Kom, 2022). This implies that there is the need to have robust Telecom and ICT systems in place in order for digital currency systems to function effectively since they rely on them to operate.

Blockchain is the most important technology for digital currency. The Bitcoin cryptocurrency inspired the creation of blockchain, a data management and decentralized transaction system (Mainelli and Milne, 2016). Given that Blockchain technology’s fundamental attributes provide security, anonymity, and data integrity without any third-party organization controlling the transactions, it creates fascinating research areas, especially from the perspective of technical challenges and limitations, which led to a huge increase in interest in the technology in 2008. To coordinate individual actions via the Internet without a central entity assuring that no one has tampered with the data without consent was fundamentally impossible prior to the invention of the blockchain. It would be impossible for a disparate group of people to agree that a certain event had taken place without first having a trusted third party vouch for the legitimacy of the transaction in question. This need highly reliable infrastructure in order to carry out these tasks efficiently.

Therefore, given the novelty of digital currencies in the Cameroonian financial sector, there may be immature difficulties in areas such as the resilience and scalability of the technological systems used to facilitate payments via virtual currencies and the stability of the Cameroonian governance models that protect the integrity and security of the centralized or decentralized underlying networks (Arias Acua and Sánchez Pullas, 2016). Given the current trend toward digital convergence, it would have to scramble to cope with the massive cyber and other operational resilience concerns that plague the whole banking industry. If Cameroon’s financial authorities don’t repair the country’s underdeveloped technical infrastructure, it might threaten the stability of the whole monetary and financial system (Etuge, 2022).

As Bitcoin and other digital currencies gain worldwide acceptability, more and more businesses, stores, and even telecom behemoths like MTN mobile money and Orange money are beginning to accept Bitcoin for purchases. A means through which the government of Cameroon is trying to introduce its population to cryptocurrencies, many of whom are still skeptical of its worth and use (Kom, 2016). However, despite the fact that several nations have adopted cryptocurrencies for online transactions, many individuals worry about the currency's unpredictable character. "There are scamming risks. Someone says he is selling cryptocurrency, do you know how it looks like? Do you know where it comes from? Who regulates it? Once you take that risk, you have you have no insurance, no one to blame, and nobody to go to". A worry which remains pertinent amongst Cameroonians (Kom, 2016). In this light, there is the need to address the concerns of the people and the various challenges that have been highlighted in order facilitate the effective deployment of digital currencies in Cameroon.

Psychosocial Dimension

The advancement and adoption of digital currencies in Cameroon face several psychosocial challenges that can limit their use. One challenge is the lack of awareness and understanding of digital currencies among Cameroonians (Fonkoua&Alobwede, 2021). Many people in Cameroon may not know about the benefits of digital currencies, which can limit their adoption. Additionally, trust is a crucial factor in the adoption of digital currencies, and some Cameroonians may not trust digital currencies due to security and privacy concerns (Ntui, Oben&Etame, 2021).

Moreover, cultural factors play a role in limiting the adoption and use of digital currencies in Cameroon. Cameroon is a diverse country with many different cultural beliefs and practices. Some cultural practices may conflict with the use of digital currencies, such as the belief in the importance of physical transactions (Mbailhol&Ngwira, 2021). Additionally, generational differences appears to be posing a challenge to adoption and use of digital currencies, with younger Cameroonians more open to using digital currencies than older generations (Fonkoua&Alobwede, 2021). For instance, some cultures in Cameroon place a high value on face-to-face interactions and the exchange of physical currency as a way of building trust and strengthening social bonds (NtuiOben&Etame, 2021).For sure, the older generation prefer traditional forms of payment due to their familiarity and trust in them, whereas

the younger generation are more willing to experiment with new forms of payment (Mbaihol&Ngwira, 2021). This creates a divide in adoption and use of digital currencies, with younger people being more likely to use them than older people. The introduction of digital currencies, which rely on electronic transactions and may not involve direct human interaction, may be perceived as impersonal and may not align with cultural norms and values.

Perception of legitimacy is another psychosocial challenge that hinders the advancement and use of digital currencies in Cameroon. Many people in Cameroon do not perceive digital currencies as legitimate forms of payment, and are skeptical about their security and reliability (Mbaihol&Ngwira, 2021). This skepticism may stem from a lack of understanding and awareness about digital currencies and their potential benefits. Moreover, there have been cases of fraudulent activities involving digital currencies, such as hacking and scamming, which have contributed to the perception of illegitimacy (Fonkoua&Alobwede, 2021). As a result, many people in Cameroon are hesitant to adopt digital currencies as a means of payment, preferring traditional forms of payment that they perceive as more legitimate and secure.

Moreover, the lack of financial literacy is also a challenge to the adoption of digital currencies in Cameroon. The usage of digital currencies requires a basic understanding of financial concepts such as blockchain technology, digital wallets, and cryptocurrency exchanges. Many Cameroonians lack the financial literacy required to use digital currencies effectively, which thus limits their adoption (NtuiOben&Etame, 2021). Financial literacy is essential for individuals to manage their digital wallets effectively and securely. A lack of financial literacy can result in poor management of digital wallets, leading to loss of funds and security breaches (Ngu, 2021). As a result, many people in Cameroon may be hesitant to adopt digital currencies due to a lack of confidence in their ability to manage digital wallets effectively.

Economic instability is another psychosocial challenge that can discourage people from using digital currencies. Cameroon's economy is characterized by high inflation, which can discourage people from using digital currencies. Many people may perceive digital currencies as risky investments, and therefore avoid using them (Fonkoua&Alobwede, 2021). Economic instability is a significant psychosocial challenge that hinders the advancement and use of digital currencies in Cameroon. The country's economic instability has resulted in a lack of trust in financial systems, including digital currencies (Mbipom, 2021). Many Cameroonians are hesitant to invest in digital currencies due to the fear of losing their funds in an unstable economic environment.

Security concerns are a significant challenge for digital currency users in Cameroon. The lack of reliable and secure platforms for buying, selling, and storing digital currencies can discourage adoption and limit the growth of the market (Mbaihol&Ngwira, 2021). The lack of regulation and oversight in the digital currency market has led to the proliferation of fraudulent digital currency schemes, further eroding public trust in digital currencies (Mbipom, 2021). Many Cameroonians are not familiar with the regulatory framework for digital currencies, which leads to skepticism and distrust in the sector.

CONCLUSION

The study has uncovered from literature that PLETP variables are challenging the advancement and use of digital currencies for business transactions in Cameroon. Results indicate that the existing political, legal, economic, technological and psychosocial environmental issues today have fashioned barriers challenging the adoption and use of digital currencies for business transactions. The study recommends that to meet up with globalization, there is need for actors especially policy makers to start thinking on how to introduce legislation to govern the use of digital currencies especially crypto currencies as well as legislation that may promote the use of other digital currencies like mobile money backed by central bank currency for business transactions in Cameroon. The authors recommend future research notably an empirical study may be conducted to get the perceptions of business operators on what may be done to enhance the use of digital currencies for business transactions in Cameroon.

ETHICAL STATEMENT

The Ethical Statement on Challenges to the Advancement and Use of Digital Currencies for Business Transactions in Cameroon highlights the importance of addressing the ethical challenges associated with the use of digital currencies in business transactions. In this review, we examined the extent to which the study promotes compliance with ethical principles and identify areas for improvement. The Ethical Study emphasized the need for transparency in the use of digital currencies, which is a key ethical principle in business transactions. Transparency is essential in ensuring that businesses and individuals understand the risks and benefits associated with digital currencies and could make informed decisions. The study encourages businesses to disclose all relevant information about their use of digital currencies, including the risks associated

with their use, the security measures in place to protect users' data, and the procedures for handling complaints and disputes. The study also highlighted the importance of protecting users' privacy and data security. The study does not address the issue of taxation and digital currencies. As digital currencies become more widely used, it is essential that businesses understand their tax obligations and the implications of using digital currencies for tax purposes. The study does not address the issue of environmental sustainability. The use of digital currencies has significant environmental implications, including energy consumption and carbon emissions. However, there are areas where the study could be improved, including providing clearer guidelines for businesses, addressing taxation and environmental sustainability issues, and promoting innovation in the field. By addressing these areas of concern, Cameroon can ensure that the use of digital currencies for business transactions is ethical, sustainable, and benefits all members of society.

Data Availability Statements

The data of the articles reviewed is available with the authors and can readily be made available to third parties should there be need.

Conflict of Interest

Authors declare no conflict of interest

Ethical Declaration

The paper is not under consideration in another outlet.

Competing Interests

The Authors declare non-financial interests that are directly or indirectly related to the work submitted for publication

Notes

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