

Article

The Effect of Leadership Styles on the Growth of Fintech Start-Ups in Zambia

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Abstract: The purpose of this study is to determine the relationship between the leadership styles of leaders of financial technology (Fintech) start-ups and firm growth. A quantitative design employing a cross-sectional survey with the use of a Likert questionnaire was conducted on the leaders of top-performing Fintech firms in Zambia, as recognized by Tracxn in its May 2020 report. This study focuses on three leadership styles: transformational leadership, transactional leadership, and laissez-faire leadership. The most significant result is that transformational leadership is strongly associated with the growth of Fintech start-ups in Zambia, while transactional leadership plays a limited role. The association between laissez-faire leadership and firm growth is positive but weak. The research makes two main contributions to the literature in the field of Fintech. First, the findings can help researchers explain leadership styles that predict the growth of Fintech start-ups. Second, founders of Fintech firms will understand the most important leadership styles that can lead to the growth of start-ups. The limitations of this study relate to the sample size, the need to consider other leadership styles, and the use of qualitative and longitudinal designs that would provide more insights and validation.

Keywords: leadership styles; financial technology; Fintech; growth; start-up; entrepreneurship; Zambia



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1. Introduction

In recent years, there has been a growing interest in financial technology (Fintech) research [1–4]. Fintech is the adoption of new technology that seeks to improve and automate the delivery and provision of financial services in business [2,5]. Fintech firms that are emerging in economies have also disrupted the financial market space through their innovativeness and technological approaches to conducting business [1,2]. Exceptional business ideas have emerged with corresponding services and products, new business models, and new technology applications that have a significant impact on the financial markets and supply of financial services. These have attracted wide-spread attention because of their advantages: improving the efficiency of operations, reducing operating costs, disrupting the existing industry structures, blurring industry boundaries, facilitating strategic disintermediation, providing new gateways for entrepreneurship, and democratizing access to financial services. Ref. [6] stated that economies are now experiencing a surge of entrepreneurial revolution because the efforts and value being created by small and medium-scale businesses are being appreciated by countries and economies at large.

Some studies [7] suggest that a good proportion of business founders and leaders have unique entrepreneurial characteristics that distinguish them from the rest [6]. Such individuals are known to be risk-takers, have high self-esteem, and possess inherent intuition [7]. Entrepreneurial attitudes and behaviors of start-up leaders form the basis

for both short-term and long-term competitive success and advantage for companies of all types, and particularly start-up businesses [8]. However, as the start-up evolves into a fully-fledged business, the leader(s) of the business take charge of different responsibilities within the organization; hence, their attention moves from creativity and innovation to more administration and organization of the entity, which involves people management, organizational structures, culture, and philosophy, as well as financial management [8].

Existing studies on Fintech have focused on the specific technologies in practice [9], the antecedents of Fintech adoption and financial inclusion, and have relied mostly on the theory of planned behavior, there are hardly any studies on the leadership styles adopted by Fintech founders [8]. Ref. [6] noted that what may make Fintech start-ups grow and be transformed into successful firms over the long term are leadership styles. In the case of Zambia, there has been an increase in the number of Fintech start-ups attracting significant investments for their innovations and solutions to society. Despite the unprecedented growth trajectory the sector has seen, there remains a leadership skills gap or deficit, which needs to be filled because the sector is relatively new to both the global economy and the Zambian economy in particular [10]. Further, Ref. [11] established that start-up Fintechs lacked the much-needed mentorship to grow into successful firms. This could mean that most of them have the technical know-how but lack the leadership and management skills to propel their businesses into large firms that can compete with other larger firms. Effective leadership styles are important because they can positively influence micro, small, and medium-sized entities' (MSMEs) competitiveness in numerous ways, such as increased growth, profitability, motivated employees, and satisfied customers [12,13]. These scholars also established that there is a significant relationship between leadership style and employee performance outcomes, culminating in firm growth. This is because leadership has the potential to create and help sustain an enabling atmosphere for each employee to exploit their full potential through high levels of job satisfaction, resulting in higher job commitment based on internal and external customer satisfaction. It is therefore essential to assess the leadership styles of top-performing start-up Fintech institutions in Zambia and establish which among them influences firm growth. Furthermore, it is important to note that firm growth was used in this study because the ultimate goal of business is growth; growth itself encompasses many dimensions, which makes it a more holistic and robust measure of the effect of leadership on firm performance. Thus, the research question for this study is: *"what is the effect of leadership styles on the growth of Fintech start-ups in Zambia?"*

The setting of Zambia was chosen for this study because of the increase in digitalization, including Fintech, especially during the COVID-19 pandemic. The COVID-19 pandemic led to restrictions on movement across the globe, which resulted in an unprecedented slump in economic activity. On the African continent, COVID-19 has had adverse effects, whereby, firms began to adopt digital measures to enable them to survive beyond the COVID situation. As more businesses digitalize, those that are left out of the digital revolution will struggle to survive, let alone thrive. Research indicates that digitalization is key to sustainability and that technology adoption can enhance productivity, operational efficiency, innovation, and access to new markets [14]. Digital transformation, including Fintechs allows companies to optimize their operations, improve performance, efficiency, and competitiveness through the adoption of new management modes, new tools, and new methods of work, as well as new reflections and organizations. It offers new opportunities for companies by accelerating their growth and creating sustainable competitive advantages and security of operations [15]. Therefore, the Zambian setting provides an ideal context, as the decision to adopt Fintechs would largely be driven by leaders or founders of businesses.

Despite the rise in the adoption of Fintechs, no known studies have been done in Zambia. The perspectives from Zambia will advance our understanding of what leadership styles are influencing the growth of Fintech start-ups in Africa, which will enable us to recommend policies and practices that may lead to the growth of Fintech. This study makes contributions to the literature because the result will help business leaders of Fintechs align

with best practices in their delivery of leadership to yield the best-intended performance for their firms. This knowledge discovered by the study, when applied, could enhance the success of Fintechs and contribute to national development. Furthermore, since Fintech is a new phenomenon not only in Zambia but also in most developing countries, this study will provide adequate information on their growth and success stories.

The paper proceeds as follows: first, a review is undertaken of similar and relevant studies on Fintechs leading to the development of the hypotheses; second, the research design employed is highlighted; third, the presentation and discussions of the results of our empirical test are provided; and finally, the conclusions, limitations, and areas for future research are presented.

2. Literature Review

Fintech has been defined as “advances in technology that have the potential to transform the provision of financial services by stimulating the development of new business models, applications, processes and products” [16]. Fintech is also defined as the technology that has enabled innovation in financial services and could lead to new business models, applications, processes, or products with a material effect associated with the provision of financial services. Ref. [17] refers to Fintech as, “innovative applications of digital technology for financial services”. Ref. [18] links Fintech with innovations, information technology, and financial sector. Fintech firms are start-ups that utilize innovations that have brought disruption to the financial sector and business ecosystems by providing speedy delivery, flexibility, and customer satisfaction [19,20], thereby, providing an alternative to traditional banking services. Some of the products and services provided by Fintech firms include crowd funding, mobile payments, block chains, invoice trading, peer-to-peer (P2P) lending, and digital currency. Systematic literature reviews indicate that mobile payments have been widely studied [21,22].

The rise in digital technology adoption opens up new business potential for Fintech start-ups, thereby providing entrepreneurship and growth [19,23]. Business growth was noted, especially during the COVID-19 lockdown, with an increase in the use of digital technologies. Some of the outcomes from Fintech start-ups are growth in entrepreneurship, income, financial inclusion, innovation, improved cash flows, and firm growth [24].

Studies on Fintech come from a variety of disciplines and subject areas. Ref. [25], for instance, looked into how platforms’ Fintech levels affect word-of-mouth. Findings demonstrate that communications can be improved by raising the level of Fintech. Ref. [26] Zarifis and Cheng (2022), on the other hand, looked at the relationship between people’s faith in artificial intelligence (AI) and the adoption of Fintech and insurtech, or specialized technology used in insurance. They also provided a model that illustrates how psychological tendencies to trust, sociological factors that influence trust, trust in the financial or insurance organization, and trust in AI and related technologies all contribute to the formation of trust in Fintech and Insurance. Ref. [27] Gonçalves et al. (2023) investigated consumers’ reactions to AI (vs. humans). Results show that customer responses to AI (vs. human) credit choices vary depending on the type of credit. Due to perceived role congruity, rejection by an AI for personal loans results in a higher level of satisfaction than rejection by a credit analyst. The results also show that customers’ rejection sensitivity affects how they view the role and congruence of financial services.

Other focus areas studied so far include antecedents of adoption, regulations, concepts, history and evolution, and the impact of financial technologies in the financial sector, including the effect on profit and the economy [19,20]. Among the antecedents of Fintech adoptions, there is a need to understand the characteristics of founders. However, the push towards the upscaling of Fintech start-ups in the global economy requires not only a conducive business environment for firms but also enhanced entrepreneurial enthusiasm among small-scale businesses. For this trajectory to continue and not be a temporary phenomenon, start-ups must continue to outgrow themselves and constantly develop competencies that will help them survive and thrive. Thus, leadership has become one of

the driving forces that help to achieve the required transformation in making decisions for the required change, especially in the era of new digital technologies [28].

2.1. Leadership

Ref. [29] defines leadership as “the process of influencing others to agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives”. Leadership is generally viewed as a social influence process whereby a leader attempts to influence the activities of individuals and groups to meet set objectives. Ref. [30] noted that leaders with appropriate goal-achieving styles typically give instructions, spend time planning, emphasize deadlines, and provide explicit schedules of work activities. It is important to note the connection between entrepreneurship and leadership.

2.2. Leadership and Entrepreneurship

Literature indicates that several entrepreneurs have unique and distinct characteristics that differentiate them from the rest [31]. This distinctiveness among entrepreneurs is more apparent during the inception stage; enterprise leaders (entrepreneurs) are perceived as unique from the rest. They are endowed with an appetite for risk needed for goal accomplishment; they are intuitive, and have high self-esteem, which is reflected in their attitudes [32]. An assessment of the definitions of an entrepreneur indicates that most authors seem to suggest different perspectives. For example, an entrepreneur is defined as an innovator [33] and a risk-taker [34]. Some would say an entrepreneur should find a business [35]. Others have argued that entrepreneurs are more alert to opportunities [36]. While these definitions cover different perspectives, it can be argued that an entrepreneur has special characteristics that enable him/her to succeed. Ref. [37] mentioned the characteristics of a successful entrepreneur as being able to take risks, having knowledge and manufacturing know-how, innovativeness, and marketing skills. This distinctiveness among entrepreneurs is more apparent during the inception stage; enterprise leaders (entrepreneurs) are perceived as unique from the rest. They are endowed with an appetite for risk needed for goal accomplishment; they are intuitive, and have high self-esteem, which is reflected in their attitudes [32].

In addition, an entrepreneur runs a business or at least organizes factors of production, of which labor is part. This then entails that an “entrepreneur is a leader for the business” [38]. This leader, however, must be leading people (his workers) in the direction of profit-making. However, according to contemporary trait theory, this leader must possess certain traits to lead the business. These include openness to experience, conscientiousness, extraversion, and agreeableness. This, therefore, provides a connection between an entrepreneur and a leader. In particular, studies [39,40] have highlighted that openness (the disposition to be imaginative) and conscientiousness (seeking achievement) appear to be aligned with an entrepreneur’s characteristics of innovation, intellectual curiosity, and opportunity creation/recognition. A critical analysis of the leadership theories reveals similarities to the concept of entrepreneurship. It is for this reason that in the recent past, the term “entrepreneurial leadership” has been established to indicate that enterprises need leaders to succeed. To be precise, the concept of “entrepreneurial leadership” derives from a fusion of entrepreneurship and leadership and is associated with the notion that highly competitive circumstances require innovative leadership mindsets capable of implementing rapid change [41]. Business management entails managing people, which is somehow related to the concept of leadership. It is for this reason that [42] argues that the fusion of entrepreneurship and leadership, if applied, can enable an organization to take advantage of opportunities to gain a competitive advantage. It is from this view that a study focused on the effect of leadership on firm growth has been necessary.

Zambia has witnessed an increase in the number of Financial Technology (Fintech) companies operating and actively facilitating payments. This has led to increased participation in the financial payments space, which is predominantly ideal for commercial

banks [11]. Zambia is therefore encouraging Fintech to develop financially more inclusive digital solutions [11]. Zambia has experienced steady growth in electronic money transfers in the past few years due to Fintech products and services. The products have contributed to national development through Fintech' impact on social and economic sectors such as e-commerce, agriculture, health, education, insurance, and the creation of jobs, especially through mobile money agent distribution networks that play a significant role in reaching the last mile [11].

2.3. Leadership Styles

There are various leadership theories expounded in the literature, including traits, behavioral, and situational. Some of the leadership styles that are used today, along with related leadership theories, are autocratic, democratic, laissez-faire, transformational, charismatic, and transactional. According to [43], leadership styles are the approaches or ways used to motivate followers to achieve the goals of the firm. As such, leadership is not a "one size fits all" phenomenon. Different situations will require varying approaches to leadership styles, especially in the case of entrepreneurs [32]. It is for this reason that [44] argued that leadership styles should be selected and adapted to fit the entrepreneurs' situations, workforce, and individual personalities. Furthermore, a leader should possess a thorough understanding of the different styles, as such knowledge increases the tools available to lead effectively. In other words, leadership style refers to the application of different leadership types in different situations to ensure the attainment of organizational objectives. Thus, the success of Fintech start-ups largely depends on the ability of the leadership to infuse a work culture through the use of new digital technologies for real-time synthesis of information [45]. For such opportunities to be well harnessed by start-ups in the Fintech space, organizational leadership styles may need to be developed to suit the business context.

Current literature reveals that despite the relevance of leadership styles such as transformational and transactional [46], the leadership style of a digital leader is rarely discussed [28,47]. This research, therefore, proposes that a study of the leadership styles of founders of Fintech start-ups will help policymakers and business leaders understand the antecedents of the growth of financial technology businesses. This study adopted the following leadership styles: transformational leadership, transactional leadership, and laissez-faire leadership, as they are considered to be modern leadership styles [48]. Furthermore, in terms of geographical location, there are more studies in Asia, North America, and Europe. In Africa, most studies are from East and West Africa [21,22,49]. For example, a study by [49] in Nigeria revealed that leadership style has a strong positive and significant influence on the firm performance of Fintech companies. Despite the emerging studies in the African context, the Southern African context is scarcely represented. Therefore, with the ever-evolving digital technologies and the highly competitive business world, which requires a different approach to doing business, it is important to consider the Zambian context, where there is hardly any literature on Fintech start-ups.

2.4. Firm Growth

Firm growth denotes a change or increase in size, number of employees, profit, revenue, and sale volume [50]. Firm growth is a significant indicator of company performance and business success and is at the core of entrepreneurship [51–53]. The nature of entrepreneurship includes firm expansion as a key component. Entrepreneurs who expand their businesses would generally be regarded as successful, and their businesses would probably contribute to economic growth [50]. Firm owners who are actively motivated by business aim to grow the firm, while subordinates who are well motivated and empowered propel a company's growth. It is therefore important to understand the leadership styles that induce or influence the growth of Fintech start-ups. Conversely, a lack of growth may drastically lower start-ups' chances of surviving [54].

2.5. Leadership Style and Firm Growth

Ref. [55] claimed that the leadership style applied has a positive or negative effect on growth. Any leadership style adopted has ethical inspiration for organizational growth and the community [55]. An analysis of the literature shows that there is a connection between leadership styles and business growth. This is further discussed in the section on hypothesis development.

2.6. Hypothesis Development

We argue that firm growth is affected by leadership styles. This is because a leadership style has the ability to influence workers to perform better to ensure the success or failure of the company. Each of the leadership styles and their relationship with firm growth are discussed in the paragraphs hereunder.

2.7. Transformational Leadership Style and Firm's Growth

By exploring the trait, behavioral, and contingency approaches to leadership, transformational leadership was conceptualized as one of the contemporary leadership theories [56]. According to [57], this theory was developed by Burns and later enhanced by [58] and others [59]. The major premise of transformational leadership theory is the leader's ability to motivate the follower to accomplish more than what the follower planned to accomplish. Burns postulated that transformational leaders inspire followers to accomplish more by concentrating on the follower's values and helping the follower align these values with the values of the organization. Transformational leadership encourages team members to be proactive and attain goals in a manner that exceeds expectations. Ref. [60] added that a transformational leader is a person who stimulates and inspires (transforms) followers to achieve extraordinary outcomes. To achieve that, this type of leader pays attention to the concerns and developmental needs of individual followers; they change followers' awareness of issues by helping them to look at old problems in a new way; and they can arouse, excite, and inspire followers to put out extra effort to achieve group goals [56]. Ref. [61] added that transformational leadership theory is all about leadership that creates positive change in the followers, whereby they take care of each other's interests and act in the interests of the group as a whole. Warrilow [61] identified five components of transformational leadership that are fundamental, i.e., inspirational motivation (IM), idealized influence attributed (IIa), idealized influence behavior (IIb), intellectual stimulation (IS), and individualized consideration (IC). IM is the extent to which leaders articulate their visions to inspire their followers with optimism about future prospects, goals, and outlook. Such leaders are also responsible for providing meaning and clarity to current tasks and responsibilities. II is the extent or degree to which a known leader behaves in an admirable way that exhibits conviction to positively influence his/her followers. This is achieved by setting a clear set of values and acting as a good role model. IS is the degree to which a leader challenges assumptions, stimulates, and encourages creativity in the followers—by providing guidelines for followers to assess how they can connect to their leaders, the organization, and each other and how they can innovatively overcome any obstacles in the path of their objectives. IC is the degree to which the leader attends to each individual follower's needs, acts as a mentor or coach, and gives respect to and appreciation of the individual's contribution to the team. This fulfills and enhances each individual team member's need for self-fulfillment and self-worth, and in so doing, inspires followers to further achievement and growth.

Transformational leadership has the ability to positively contribute to the success or growth of the company [57]. In other words, attributes of transformational leadership styles such as encouraging team members to be proactive, attaining unexpected goals or goals exceeding expectations, and stimulating and inspiring followers to achieve extraordinary outcomes will positively affect firm growth. Transformational leadership significantly enhances the morale, performance, and motivation of employees through a variety of mechanisms and approaches. Such mechanisms include connecting the follower's sense of

identity and self to the project and the collective identity of the organization; being a role model for followers that inspires them and makes them interested; challenging followers to take greater ownership of their work; and understanding the strengths and weaknesses of followers so the leader can align followers with tasks that enhance their performance [62]. Thus, it was hypothesized that:

H1. *Transformational leadership has a positive effect on firm growth of Fintech startups in Zambia.*

2.8. Transactional Leadership Style and Firm's Growth

Transactional leadership focuses on exchanges that occur between the leader and his team. This leadership style focuses on helping followers attain their personal goals. Transactional leaders clarify team members' responsibilities, their performance targets, and the tasks that must be completed [56]. This type of leadership deals with maintaining the current situation and motivating people through contractual agreements [62]. With a transactional leadership style, leaders promote the compliance of their followers through both rewards and punishments. In contrast to transformational leadership, transactional leaders do not seek change; they merely keep the status quo. To achieve this, they pay attention to followers' work to find faults and deviations [56]. Transactional leaders use an exchange model, with rewards being given for good work or positive outcomes and punishment for poor work or negative outcomes.

Components of transactional leadership include contingent reward (CR), management-by-exception active (MbEA), and management-by-exception passive (MbEP). Contingent rewards (such as praise) are given when the set goals are accomplished on time, ahead of time, or to keep subordinates working at a good pace at different times throughout completion. Contingent punishments (such as suspensions) are given when performance quality or quantity falls below production standards or goals and tasks are not met at all. Within management-by-exception, there are active and passive routes. Active management-by-exception means that the leader continually looks at each subordinate's performance and makes changes to the subordinate's work to make corrections throughout the process. Passive management-by-exception leaders wait for issues to come up before fixing the problems. Ref. [63] argued that transactional leadership harmed organizational performance because it did not provide opportunities and freedom to employees. He recommended that organizations use a leadership style that enhances the capabilities and abilities of the people but also provides incentives for good work output. Thus, it was proposed that:

H2. *Transactional leadership has a positive effect on firm growth of Fintech startups in Zambia.*

2.9. Laissez-Faire Leadership Style and Firm's Growth

Laissez-faire leadership refers to a "hands-off, let things ride" approach to influencing individuals in the workplace [64]. According to [65], laissez-faire leadership is "the absence of leadership" and "the avoidance of intervention". As such, laissez-faire leaders tend to behave as if they are abdicating from the responsibilities and duties assigned to them [66]. Attributes of laissez-faire leadership such as avoidance of intervention, little guidance from leaders, people expected to solve their own problems, access to many resources and tools, constructive criticism from leaders, leaders taking charge only when necessary, and leaders taking responsibility for overall actions and decisions can lead to innovations and, consequently, firm growth in Fintech start-ups in Zambia. This approach may work better when dealing with highly competent and educated staff that require minimal supervision. This discussion led to the following hypothesis:

H3. *Laissez-Faire Leadership style has a positive effect on the firm growth of Fintech startups in Zambia.*

3. Methodology

3.1. Study Context: Zambia

The research context of this study in terms of geographic location was limited to Zambia. Like many other developing countries, Fintech is new in Zambia and emerged in 2007. This emergence pushed regulators to establish a regulatory and policy framework to accommodate them. Ref. [67] further noted that there were only twenty-five (25) Fintech institutions in Zambia by 2018, of which thirteen (13) were operating in the payments space. Most, if not all, of the Fintechs, are located in Lusaka, the capital of Zambia [10]. This could be because their services are highly demanded at the center of national business.

3.2. Sample and Data Collection

Fieldwork for this study took place in August 2020, and data was collected from the top 10 best-performing Fintech start-up firms in Zambia. Start-ups are firms that are younger than ten years of business from the incorporation date [68]. The study is limited to the 10 best-performing Fintechs as reported by an international rating firm called Tracxn in their 15 May 2020 report [69]. Tracxn is an international firm recognized as the research partner of choice for 850+ investors, corporations and government bodies across the globe. Tracxn listed the following Fintechs to be the best-performing firms in Zambia in May 2020: Zoono, Flex Payroll, Zynle Technologies, ZynlePay, ZamCrypto, Sympa, Onyx Connect Zambia Limited, Ekamo Wallet, Moti Solutions for Africa, and AlomoSystems. Examples of innovative products and services being offered by Fintechs in Zambia include digital loans, mobile money transfers across countries within the region and overseas, mobile insurance, betting, and digital banking. It is, however, important to note that in 2018, UNCDF found 25 firms identifying themselves as Fintechs in the country. Out of the twenty-five (25), thirteen (13) were operating in the payments space [67]. Respondents were subordinates (directors or managers) who report to the CEO or founder of the Fintech start-up.

3.3. Measures

The dependent variable for the study was firm growth. Following the work of [50,51,70], firm growth was measured using six items. Respondents were requested to state the extent to which they agreed on the existence of particular firm growth indicators such as growth in employee size, customer base/sales, revenue, assets, profitability, and working capital/turnover. Respondents chose on a scale of 1 to 5, with 1 representing 'strongly disagree', 2 for 'disagree', 3 for 'neutral', 4 for 'agree', and 5 for 'strongly agree' on indicators of firm growth.

The study includes leadership styles as independent variables. Leadership styles were measured using the Multifactor Leadership Questionnaire (MLQ-5x) by [71]. This instrument was used because it is the most widely used questionnaire as regards assessing transformational, transactional, and laissez-faire leadership styles. The MQL-5x is composed of five scales that measure transformational leadership, three scales that measure transactional leadership, and one scale that measures Laissez-faire leadership. The five scales representing transformational leadership are inspirational motivation (IM), idealized influence attributed (IIa), idealized influence behavior (IIb), intellectual stimulation (IS), and individualized consideration (IS), while the three scales representing transactional leadership are contingent reward (CR), management-by-exception active (MbEA), and management-by-exception passive (MbEP). All items in the scales are measured on a 5-point Likert scale, from 1 = not at all, 2 = once in a while, 3 = sometimes, 4 = fairly often, and 5 = frequently, if not always.

Scale Validation

Table 1 shows factor loadings and reliability tests for all variables. Six (6) items were deleted because the factor loadings were less than 0.70. The rest of the items in Table 1 had factor loadings of 0.70 or higher, the acceptable threshold, thereby indicating satisfactory levels of convergence and discriminant validity [72]. The scales had high reliability levels

(0.70 and higher), as shown by the Cronbach's alpha values in Table 1. Therefore, our factor analysis was appropriate.

Table 1. Factor Loadings and Reliability Tests.

	Firm Growth (FG)	Factor Loading	Cronbach's Alpha
FG1	The company's number of employees has significantly grown over the last five (5) years.	0.820	0.911
FG2	The company's revenue growth has been significant year on year for the last five years.	0.905	
FG3	The company's total assets have significantly increased year on year over the last five (5) years.	0.797	
FG4	The Company's working capital needs have been increasing significantly year on year for the last five (5) years.	0.981	
FG6	Over the last five (5) years the company has significantly its profits.	0.797	
	Inspirational Motivation (IM)		
IM2	My manager talks enthusiastically about what needs to be accomplished.	0.923	0.841
IM3	My manager articulates a compelling vision of the future.	0.888	
IM4	My manager expresses confidence that goals will be achieved.	0.855	
	Idealized Influence Attributed (IIa)		
IIa1	My manager instils pride in me for being associated with him/her.	0.725	0.758
IIa2	My manager goes beyond self-interest for the good of the group.	0.712	
IIa3	My manager acts in ways that build my respect.	0.924	
IIa4	My manager displays a sense of power and confidence.	0.723	
	Idealized Influence Behaviour (IIb)		
IIb1	My manager talks about his/her most important values and beliefs.	0.761	0.879
IIb2	My manager emphasizes the importance of having a collective sense of mission.	0.770	
IIb3	My manager specifies the importance of having a strong sense of purpose.	0.911	
	Intellectual Stimulation (IS)		
IS1	My manager re-examines critical assumptions to question whether they are appropriate.	0.974	0.899
IS2	My manager seeks differing perspectives when solving problems.	0.834	
IS3	My manager gets me to look at problems from many different angles.	0.936	
	Individualised Consideration (IC)		
IC1	My manager spends time teaching and coaching.	0.979	0.853
IC3	My manager helps me to develop my strengths.	0.813	
IC4	My manager considers me as having different needs, abilities and aspirations from others.	0.838	
	Contingent Reward (CR)		
CR1	My manager provides me with assistance in exchange for my efforts.	0.869	0.843
CR2	My manager discusses in specific terms who is responsible for achieving performance targets.	0.834	
CR3	My manager makes clear what one can expect to receive when performance goals are achieved.	0.870	
CR4	My manager expresses satisfaction when I meet expectations.	0.760	

Table 1. Cont.

	Firm Growth (FG)	Factor Loading	Cronbach's Alpha
	Management-by-Exception Active (MbEA)		
MbEA1	My manager focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	0.833	0.776
MbEA2	My manager concentrates his/her full attention on dealing with mistakes, complaints, and failures.	0.835	
MbEA3	My manager keeps track of all mistakes.	0.777	
MbEA4	My manager directs my attention toward failures to meet standards.	0.717	
	Management-by-Exception Passive (MbEP)	Factor Loading	Cronbach's Alpha
MbEP1	My manager fails to interfere until problems become serious.	0.792	0.797
MbEP2	My manager waits for things to go wrong before taking action.	0.887	
MbEP4	My manager demonstrates that problems must become chronic before taking action.	0.912	
	Laissez-Faire Leadership		
LF1	My manager avoids getting involved when important issues arise.	0.778	0.753
LF2	My manager is absent when needed.	0.836	
LF3	My manager delays responding to urgent questions.	0.882	
LF4	My manager avoids making decisions.	0.959	
	Deleted Items		
FG5	Over the last five (5) years the company has had significant growth in its customer base (increased sales).		
IM1	My manager talks optimistically about the future.		
IIB4	My manager considers the moral and ethical consequences of decisions.		
IS4	My manager suggests new ways of looking at how to complete assignments.		
IC2	My manager treats me as an individual rather than just as a member of a group.		
MbEP4	My manager shows that he/she is a firm believer in "If it isn't broken, don't fix it".		

Control variables were Education, Age—was coded in three categories: '1' young < 30; '2' middle-aged 31–40; '3' 41–50; and '4' old > 50. Gender—female respondents were coded '1'. While males were coded '0'.

3.4. Empirical Results and Discussion

This section presents the results of the research. Descriptive statistics are shown first, followed by hypothesis testing using correlation analysis.

Descriptive Statistics

Table 2 shows the minimum, maximum, means, and standard deviations for firm growth, each of the five dimensions of transformational leadership, three dimensions of transactional leadership, and one dimension of laissez-faire leadership. Statistical results show that the mean for firm growth is 3.74. Regarding transformational leadership dimensions, inspirational motivation has the highest mean (4.07), followed by intellectual stimulation (mean = 3.87), then idealized influence behavior (mean = 3.77) and idealized influence attributed (mean = 3.60), while individualized consideration has the lowest mean (mean = 3.45). The mean for laissez-faire leadership is 2.23.

Table 2. Descriptive statistics of firm growth, transformational, transactional, and laissez-faire leadership.

		N	Minimum	Maximum	Mean	SD
Firm growth		10	2.20	4.80	3.74	0.71
Transformational leadership dimensions	Inspirational motivation	10	3.00	5.00	4.07	0.60
	Idealized influence attributed	10	2.50	4.75	3.60	0.70
	Idealized influence behaviour	10	2.33	5.00	3.77	0.75
	Intellectual stimulation	10	2.00	5.00	3.87	0.85
	Individualized consideration	10	2.33	5.00	3.73	0.78
Transactional leadership dimensions	Contingent reward	10	2.25	4.75	3.45	0.86
	Management-by-exception active	10	1.50	4.00	2.75	0.79
	Management-by-exception passive	10	1.33	3.67	1.97	0.78
Laissez-faire leadership		10	1.00	4.50	2.23	0.73

Table 3 shows the minimum, maximum, means, and standard deviations for the 17 items representing transformational leadership, i.e., three items for inspirational motivation (IM), four items for idealized influence attributed (IIa), three items for idealized influence behavior (IIb), three items for intellectual stimulation (IS), and four items for individualized consideration (IS). Eleven (11) items represent transactional leadership, i.e., four items for contingent reward (CR), four items for active management-by-exception (AMbE), and free items for management-by-exception passive (MbEP). Laissez-faire leadership has four items. Regarding the inspirational motivation items, “My manager expresses confidence that goals will be achieved” and “My manager talks enthusiastically about what needs to be accomplished” had the highest means, 4.30 and 4.40, respectively (see Table 3). For the idealized influence attributed (IIa) items, “My manager acts in ways that build my respect” and “My manager displays a sense of power and confidence” had the highest means, 4.10 and 3.80, respectively. Concerning idealized influence behavior (IIb) items, both “My manager emphasizes the importance of having a collective sense of mission” and “My manager specifies the importance of having a strong sense of purpose” had a mean score of 3.80. For intellectual stimulation (IS) items, the highest mean scores were 4.10 for “My manager re-examines critical assumptions to question whether they are appropriate” and 4.10 for “My manager gets me to look at problems from many different angles” while mean scores for individualized consideration (IS) items were 3.90 for “My manager helps me to develop my strengths” and 3.70 for “My manager spends time teaching and coaching”.

Regarding the three dimensions representing the transactional leadership scale, contingent reward (CR) had two items with the highest mean scores of 3.60 and 3.40 for “My manager discusses in specific terms who is responsible for achieving performance targets” and “My manager provides me with assistance in exchange for my efforts,” respectively. For management-by-exception active (MbEA) items, both “My manager focuses attention on irregularities, mistakes, exceptions, and deviations from standards” and “My manager directs my attention toward failures to meet standards” had a mean score of 3.70. Concerning management-by-exception passive (MbEP) items, the highest means were 2.20 for “My manager fails to interfere until problems become serious” and 1.90 for “My manager waits for things to go wrong before taking action”, of course, these are on the lower end compared to other dimensions. Of the four items representing laissez-faire leadership, Fintech start-up leaders focus most on avoiding getting involved when important issues arise and avoiding making decisions, with mean values of 2.60 and 2.50, respectively. Regarding the firm growth factor, growth in the number of employees, increases in the company’s total assets, and increases in working capital had the highest means of 4.10, 3.80, and 3.70, respectively (see Table 4).

Table 3. Descriptive statistics of leadership items.

	Inspirational Motivation (IM)	N	Minimum	Maximum	Mean	SD
IM2	My manager talks enthusiastically about what needs to be accomplished.	10	3.00	5.00	4.00	0.67
IM3	My manager articulates a compelling vision of the future.	10	2.00	5.00	3.90	0.88
IM4	My manager expresses confidence that goals will be achieved.	10	4.00	5.00	4.30	0.48
	Idealized Influence Attributed (IIa)					
IIa1	My manager instils pride in me for being associated with him/her.	10	2.00	5.00	3.10	0.99
IIa2	My manager goes beyond self-interest for the good of the group.	10	2.00	5.00	3.56	0.78
IIa3	My manager acts in ways that builds my respect.	10	3.00	5.00	4.10	0.94
IIa4	My manager displays a sense of power and confidence.	10	2.00	5.00	3.80	0.92
	Idealized Influence Behaviour (IIb)					
IIb1	My manager talks about his/her most important values and beliefs.	10	3.00	5.00	3.70	0.67
IIb2	My manager emphasizes the importance of having a collective sense of mission.	10	2.00	5.00	3.80	0.92
IIb3	My manager specifies the importance of having a strong sense of purpose.	10	2.00	5.00	3.80	0.92
	Intellectual Stimulation (IS)					
IS1	My manager re-examines critical assumptions in order to question whether they are appropriate.	10	2.00	5.00	4.10	0.88
IS2	My manager seeks differing perspectives when solving problems.	10	2.00	5.00	3.50	0.97
IS3	My manager gets me to look at problems from many different angles.	10	2.00	5.00	4.00	0.94
	Individualised Consideration (IC)					
IC1	My manager spends time teaching and coaching.	10	2.00	5.00	3.70	0.95
IC3	My manager helps me to develop my strengths.	10	2.00	5.00	3.90	0.88
IC4	My manager considers me as having different needs, abilities and aspirations from others.	10	2.00	5.00	3.60	0.84
	Contingent Reward (CR)					
CR1	My manager provides me with assistance in exchange for my efforts.	10	2.00	4.00	3.40	0.84
CR2	My manager discusses in specific terms who is responsible for achieving performance targets.	10	2.00	5.00	3.60	0.97
CR3	My manager makes clear what one can expect to receive when performance goals are achieved.	10	1.00	5.00	3.20	1.32
CR4	My manager expresses satisfaction when I meet expectations.	10	2.00	5.00	3.60	0.97
	Management-by-Exception Active (MbEA)					
MbEA1	My manager focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	10	1.00	5.00	2.70	1.34
MbEA2	My manager concentrates his/her full attention on dealing with mistakes, complaints, and failures.	10	1.00	5.00	3.10	1.20
MbEA3	My manager keeps track of all mistakes.	10	2.00	4.00	2.50	0.71
MbEA4	My manager directs my attention toward failures to meet standards.	10	2.00	4.00	2.70	0.67
	Management-by-Exception Passive (MbEP)					
MbEP1	My manager fails to interfere until problems become serious.	10	1.00	4.00	2.20	1.03
MbEP2	My manager waits for things to go wrong before taking action.	10	1.00	4.00	1.90	0.88
MbEP4	My manager demonstrates that problems must become chronic before taking action.	10	1.00	3.00	1.80	0.63
	Laissez-Faire Leadership					
LF1	My manager avoids getting involved when important issues arise.	10	1.00	5.00	2.60	1.51
LF2	My manager is absent when needed.	10	1.00	3.00	1.80	0.79
LF3	My manager delays responding to urgent questions.	10	1.00	5.00	2.00	1.15
LF4	My manager avoids making decisions.	10	1.00	5.00	2.50	1.58

Table 4. Descriptive statistics of firm growth items.

	Firm Growth (FG)	N	Minimum	Maximum	Mean	SD
FG1	The company's number of employees has significantly grown over the last five (5) years.	10	2.00	5.00	4.10	0.88
FG2	The company's revenue growth has been significant year on year for the last five years.	10	2.00	5.00	3.50	0.97
FG3	The company's total assets have significantly increased year on year over the last five (5) years.	10	3.00	5.00	3.80	0.79
FG4	The Company's working capital needs have been increasing significantly year on year for the last five (5) years.		2.00	5.00	3.70	0.82
FG6	Over the last five (5) years the company has significantly developed new products and services.	10	2.00	4.00	3.60	0.70

3.5. Hypotheses Testing

The hypotheses were tested by a Pearson Correlation test, for the simple fact that the test is best suited for this study because of the sample size [73]. Table 5 shows that inspirational motivation (IM), idealized influence attributed (IIa), intellectual stimulation (IS), and individualized consideration (IC) are positively related (correlated) to firm growth ($r = 0.325$, $r = 0.383$, $r = 0.216$, $r = 0.467$, respectively). While idealized influence behavior (IIb) is negatively correlated with firm growth ($r = -0.528$). Thus, H1 is greatly supported because four (4) out of five (5) dimensions of transformational leadership are related to firm growth. H2 is marginally supported because, out of the three (3) dimensions representing transactional leadership, only one (1) contingent reward (CR) is positively related to firm growth ($r = 0.252$). On the other end, management-by-exception active (MbEA) and management-by-exception passive (MbEP) are negatively related to firm growth, $r = -0.299$ and $r = -0.038$, respectively. H3 is supported; there is a positive relationship between laissez-faire leadership and firm growth ($r = 0.225$).

Table 5. Correlations.

	1	2	3	4	5	6	7	8	9	10	11	12	13
(1) Firm Growth	1.000												
(2) Gender	0.288	1.000											
(3) Age	−0.252	0.657 *	1.000										
(4) Education	−0.337	0.325	0.122	1.000									
(5) Inspirational Motivation (IM)	0.325	−0.074	−0.258	0.022	1.000								
(6) Idealized Influence Attributed (IIa)	0.383	−0.143	−0.429	−0.049	0.868 **	1.000							
(7) Idealized Influence Behaviour (IIb)	−0.528	−0.364	0.146	−0.100	0.374 **	0.188	1.000						
(8) Intellectual Stimulation (IS)	0.216	−0.109	−0.326	0.256	0.067	0.102	−0.051	1.000					
(9) Individualized Consideration (IC)	0.467	0.325	0.144	0.021	0.077	0.276	−0.145	0.392	1.000				
(10) Contingent reward (CR)	0.253	0.358	0.393	0.227	0.421	0.325	0.081	−0.087	0.607	1.000			
(11) Management-by-Exception Active (MbEA)	−0.299 **	0.111	0.258	0.223	−0.333	−0.649	0.065	0.333	−0.383	−0.342	1.000		
(12) Management-by-Exception Passive (MbEB)	−0.038 *	−0.073	0.073	−0.325	−0.239	−0.433	−0.179	−0.717	−0.560	−0.116	0.129	1.000	
(13) Laissez-faire Leadership	0.225	0.513	0.330	0.161	−0.412	−0.478	−0.647	−0.280	0.137	0.296	0.179	0.540	1.000

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed). N = 10.

4. Discussion

This study set out to examine the relationship between leadership styles and the firm growth of Fintech start-ups in Zambia. Three hypotheses were developed and tested, namely H1, H2, and H3. Hypothesis (H1) argues that transformational leadership is positively related to the firm growth of Fintech start-ups in Zambia. The findings showed that transformational leadership is related to firm growth in Fintech start-ups in Zambia (IM, IIa, IS, and IC, $r = 0.325$, $r = 0.383$, $r = 0.216$, $r = 0.467$, respectively), while IIb is negatively correlated with firm growth ($r = -0.528$). The positive relationship between IM and firm growth indicates that leaders of Fintech start-ups clearly articulate the goals for the future, express confidence that goals will be achieved, talk about what needs to be done, and subordinates get motivated to act on the goals. Thus, this leads subordinates to contribute to firm growth [74].

Concerning IIa, because of the charisma, power, and confidence attributed to the leader, subordinates built trust and confidence in their leaders and worked hard to contribute to firm growth. IIb refers to having a strong sense of mission, purpose, values, and beliefs that steer subordinates to positively contribute to firm growth. The results indicate that IIb does not contribute to firm growth. IS emphasizes Fintech leaders review assumptions, look at problems they face differently, and generate solutions that help develop/build the businesses of Fintech start-ups. This leads to satisfying subordinates and customers, thereby having repeat business that results in firm growth. IC refers to a Fintech start-up leader considering individual needs, teaching and coaching them, and developing their abilities and strengths; hence, making them competent to achieve high performance and firm growth. In effect, it was concluded that this study confirms that transformational leadership triggers subordinates' motivation and develops them, thereby enabling subordinates to focus on achieving their goals for the future. These findings agree with [74], who found that a transformational style of leadership has a positive influence on organizational growth. In addition, the findings also corroborate those of [57], who argued that transformational leadership has the ability to positively contribute to the success or growth of the company.

Hypothesis (H2) predicted that transactional leadership is positively related to the firm growth of Fintech start-ups in Zambia. Out of the three (3) scales representing transactional leadership, only contingent reward, CR was positively related to firm growth. The results suggest that transactional leadership is not a stronger predictor of firm growth in Fintech start-ups. The central theme of the CR scale of transactional leadership is a leader's focus on providing assistance and rewards to subordinates in exchange for the fulfillment of tasks. This means that subordinates in Fintech start-ups are fully supported by their leaders; hence, they put in efforts to achieve firm growth. MbEA and MbEP are not associated with firm growth. Perhaps leaders of Fintech start-ups do not focus on searching for mistakes, irregularities, and deviations from standards or rules, nor do they wait for problems to become chronic before taking action. These findings are inconsistent with [75]'s findings that transactional leadership style has a positive impact on innovation performance. Lastly, for Hypothesis (H3), it was predicted that laissez-faire leadership is positively related to the firm growth of Fintech start-ups in Zambia. Laissez-faire leadership is a passive approach to leadership. This suggests that leaders of such firms leave subordinates to implement programs alone and do not intervene as long as subordinates' efforts result in firm growth. This may also suggest that subordinates are competent in the use of technologies for them not to require micro-managing and close supervision. This leads to firm growth. It was observed that these findings are inconsistent with [76], who found that laissez-faire leadership styles had no positive influence on growth indicators.

5. Conclusions, Managerial and Policy Implications

This study set out to examine the relationship between leadership styles and the growth of Fintech firms in Zambia. We focused on three leadership styles: transformational leadership, transactional leadership, and laissez-faire leadership. Our research question

was, “What is the effect of leadership styles on firm growth in Fintech start-ups in Zambia?” The most significant answer to this question is that transformational leadership is strongly associated with the growth of Fintech startups in Zambia, while transactional leadership plays a limited role. The association between laissez-faire leadership and a firm’s growth is positive when dealing with competent staff. The implications of these findings are threefold. Firstly, for leaders and managers in Fintech firms, they should variably utilize the leadership approaches depending on the level of qualification and competence of the employees. However, generally, the transformative leadership approach creates an atmosphere in which employees become self-driven and inspired to be creative, innovative, and persistent to meet and exceed organizational targets. For policymakers, Fintech firms need policy and tax incentives and support to increase their capacity to migrate more individual and business customers from cash to electronic payments to accelerate digitalization. This could not only be in the form of tax rebates for importations of relevant state-of-the-art equipment but also in the form of facilitating relevant leadership training to enhance human capital for Fintech SME growth. Digitalization is beneficial at individual, firm, and national levels in many ways, including fighting climate change as physical contact-enabled transactions and commercial activity exacerbate greenhouse gas. For scholars, this study provides context-specific evidence that different leadership styles affect the growth of SMEs in the Fintech subsector too.

5.1. Contributions to Knowledge

This study adds to our knowledge in two different ways. First, there are very few studies on the leadership philosophies utilized by Fintech founders, and most studies on the antecedents of Fintech adoption and financial inclusion have relied heavily on the theory of planned behavior [8]. Leadership styles may help Fintech start-ups develop and become successful businesses over the long run [6]. Additionally, due to a lack of research in this area, this study has helped to close a knowledge gap by demonstrating how leadership styles can be used to understand how Fintech firms can thrive.

Secondly, in the case of Zambia, there has been an increase in the number of start-ups attracting significant investments for their innovations and solutions to society. Despite the unprecedented growth trajectory the sector has seen, there remains a leadership skills gap or deficit, which needs to be filled because the sector is relatively new to both the global economy and the Zambian economy in particular [10]. Further, UNCDF [67] established that start-up Fintechs lacked the much-needed mentorship to grow into successful firms [77]. This could mean that most of them have the technical know-how but lack the leadership and management skills to propel their businesses into large firms that can compete with other larger firms. Effective leadership styles are important because they can positively influence micro, small, and medium-sized entities’ (MSMEs) competitiveness in numerous ways, such as increased growth, profitability, motivated employees, and satisfied customers [12,13]. These scholars also establish that there is a significant relationship between leadership style and employee performance outcomes, culminating in firm growth. This study has helped to show that firms that have embraced transformational leadership styles and varied their use of transactional and laissez-faire leadership approaches are more likely to experience Fintech firm growth.

5.2. Limitations and Future Areas of Study

The study comes with limitations. First, our sample size of 10 firms was the only one available from a reliable database at the time of our study. Since Fintechs are evolving, this study can be replicated with larger sample sizes to further validate our findings. Second, the study focused on only three leadership styles associated with the multifactor leadership questionnaire (MLQ-5x) (i.e., transformational leadership, transactional leadership, and laissez-faire leadership). Given that leadership styles are continuously evolving, it is recommended that future studies can incorporate other styles, such as charismatic and more recent leadership styles that will have emerged at the time. Third, our study was

conducted in a cross-sectional manner as opposed to a more holistic longitudinal approach. This entails that the application of longitudinal methods would help discover more details on the subject compared to the cross-sectional approach. Furthermore, a qualitative study would also offer insights into the relationship between leadership style and firm growth. Finally, our study was confined to the Fintech space. This entails that the most effective leadership styles discovered here may only be effective when applied to Fintech start-ups and not in any other sector. Further, it is important to note that the study was confined to Zambia. Studies conducted in other developing countries may yield different results from those discovered in this enquiry. Despite the limitations, this study's contributions to the literature have implications for practice and policy linked to financial technologies. First, the findings can help researchers explain leadership styles that predict the growth of Fintech startups. Second, founders of Fintechs will understand the most important leadership styles that can lead to the growth of start-ups.

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