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INFLUENCE OF COMMUNICATION CHANNELS ON THE IMPLEMENTATION OF STRATEGY IN AGRICULTURAL BIOTECHNOLOGY ORGANIZATIONS IN KENYA

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ABSTRACT

The purpose of this study was to establish the influence of communication channels on strategy implementation in Agricultural Biotechnology Organizations in Kenya. The study was guided by the following objectives: to establish the influence of non-verbal communication on strategy implementation, ascertain the influence of verbal communication on strategy implementation, to establish the influence of written communication on strategy implementation, and to determine the influence of visual communication on strategy implementation in Agricultural Biotechnology organizations. A cross-sectional research design approach was employed to establish the influence of communication channels on strategy implementation in Agriculture Biotechnology Organizations in Kenya. To achieve the study objective the sampling frame included 28 Agricultural Biotechnology Organizations in Kenya. The sampling frame was obtained from several pertinent sources. The study utilized primary data collection methods. The primary data was collected through interviews with the questionnaires being the main data collection tool. The data was analyzed using both descriptive statistics and regression analysis depending on the objectives. Non-verbal communication had an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 3.8 and a standard deviation of 0.761. Verbal communication had an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 4.15 and a standard deviation of 1.137. Written communication had an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 4.02 and a standard deviation of 1.206. Visual communication had an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 4.12 and a standard deviation of 1.272. The four sub-variables of the independent variables that were studied; verbal, non-verbal, written, and visual communication explain 75.7% of strategy implementation in Agricultural Biotechnology organizations. From the regression model, with all the independent variables under study held constant, strategy implementation in Agricultural Biotechnology organizations would become 0.367. Verbal communication had the greatest influence on strategy implementation in Agricultural Biotechnology organizations at 85.4% compared to Non-verbal communication at 59.8%, Written Communication at 79.2%, and Visual Communication at 57%. Visual communication had a positive but not-so-significant relationship hence need to consider the influence of visual communication on strategy implementation in organizations. Additionally, consequent studies need to consider other factors that influence strategy implementation in Agricultural Biotechnology organizations as well.

Keywords: *Biotechnology, Communication, Communication Channels, Strategic Plan, Strategy, Strategy implementation.*

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INTRODUCTION

Globally, the concept and practice of implementing strategic plans has been embraced and across various sectors because of its perceived contribution to organizational effectiveness (Gamble et al., 2016). The global business environment has evolved since 1990. This change has brought companies new realities in the form of new business opportunities for growth and, at the same time has exposed them to new competitors. This has caused organizations to invest many resources in devising new effective strategies to take advantage of the new opportunities. The cardinal rule in the business world is that organizations are created to achieve the long-term and short-term objectives of their stakeholders.

According to Gamble et al. (2016), to achieve goals and objectives, most organizations use their strategic planning to select the right strategies and manage the internal environment. Today, organizations both public and private have taken seriously to the practice of implementing strategic plans to guide the performance of those organizations. Vaara and Lamberg (2016) noted that the framework for formulating and implementing strategies requires effective communication among participants in the formulation process. However, he observed that due to the misunderstanding of the factors that affect the implementation process, the adoption of strategic management often leads to incomplete implementations.

Strategy implementation in organizations is faced with numerous challenges as it involves all employees in the organization as opposed to formulation which in most cases involves senior management. (Gavurova, 2010) in her publication defines basic principles that could help to achieve effective implementation of the strategy of the company as communication of the strategy through the whole company, involving employees in the implementation of the strategy, assignment of responsibilities for strategic projects, adaption of the organizational structure and implementation of effective controls with a focus not only on control of the implementation of the strategy but also on the relevance of the strategy given the changing internal and external environment of the company. Strategy formulation and implementation starts with dialogue, and thus communication becomes a key factor in making it a success.

Communication has long been regarded as the lifeblood of organizations while strategy execution is seen as the key to successful and sustainable management of the institution. Communication is deeply connected with strategic consensus, while a clearly communicated strategy increases the level of strategy ownership among employees hence boosting its implementation.

According to Hwang & Ng, (2013), there are three types of communication channels namely; formal, informal, and unofficial which a business manager can use efficiently for the good of the business. Formal communication involves the flow of information on predefined and controlled channels. It follows a hierarchical top-down (leaders to subordinates) structure and chain of command. Informal channels are unstructured and not predefined, they are unofficial but are used by team members for social needs. Unofficial communication channels are also known as the organization`s grapevine, this is where rumors and gossip circulate. A manager needs to be aware of these channels and the type of information flowing in them. What the team is discussing on rumors and gossip may provide important information that may affect the implementation of the strategy within the organization.

Agriculture is crucial to economic growth accounting for 4% of global gross domestic product (GDP) and 25% in some least developing countries. Agricultural biotechnology solution is meant to greatly contribute to food security globally. The advancements are characterized by two phases which are the R&D phase and the post-R&D phase or commercialization phase which is still undeveloped. To enhance value and ensure sustainability amidst COVID-19 disruptions, the Ukraine war, the changing environment in terms of

climate changes, pests and diseases, and decreasing farming fields, Agriculture Biotechnology has played a key role. Biotechnology is an innovative, interdisciplinary field that impacts many different sectors, including agriculture, veterinary, medicine, pharmaceuticals, and fine chemicals production. It has emerged as one of the leading technologies for the transition towards a carbon-free society and for solving critical societal challenges comprising health protection, food and energy supply, and environmental protection.

In Kenya, agriculture is critical to the achievement of Vision 2030 (ROK, 2014) and one of the big four agenda of empowering the nation. It is the backbone of the Kenyan economy directly contributing 25% of the GDP annually, and another 25% indirectly (MOA, 2010). The sector accounts for 65% percent of Kenya's total exports and provides more than 70% of informal employment in rural areas (ROK, 2014)

Organizations in the Agriculture sector are being forced to develop new strategies to enable them to meet their objective which is the commercialization of agricultural biotechnology products. The implementation of these strategies is deemed as heavily dependent on communication which is the foundation for successful human interaction and strategy implementation in an organization regardless of the setting in which it occurs.

Statement of the Problem

Communication acts as a critical link between persons, ideas, and any relevant information required to ensure project success (PMI, 2013). Studies conducted on the performance of project teams established that "communication and contacts" cause 74% of the problems experienced in projects (Komi-Sirviö & Tihinen, 2005) as cited by (Muszynska, 2015).

Effective strategy implementation among Agricultural Biotechnology organizations can be envisaged through widespread deployment and commercialization of products that hold solutions to challenges facing agricultural production today. On the other hand, Poor implementation of strategy leads to poor organizational performance which in return has a negative impact of organizational reputation or leads to loss of donor funding. An organization's operation environment requires a manager to constantly sell ideas, and methodologies to a group of actors from different cultures or professions within and without the organization (Zulch, 2014). It has been noted that supervisors generally spend 60% to 90% of their time communicating (Tyagi & Misra, 2012)

Agricultural Biotechnology organizations are currently of public interest because of the push for biotechnology solutions to curb climate change challenges and other biotic pressures on Agriculture not to mention controversies and misperceptions around Biotechnology products. Communication is therefore at the center of the clash between experts and non-experts to play a key role in harmonizing the two diverse thoughts.

The success of Biotech organizations in implementing their strategy which is to facilitate the development and commercialization of Biotech products depends on how successfully the organization communicates to its internal and external stakeholders' communication channels are the vehicles or mechanisms for the delivery of messages to these stakeholders.This being a contemporary space, the study therefore aims to contribute additional literature to fill the existing gap by conducting a study to determine the influence of communication channels on strategy implementation in Agricultural Biotechnology Organizations in Kenya.

The General Objective

The overall objective of this study was to establish the influence of communication channels on strategy implementation in Agricultural Biotechnology organizations. The Specific Objectives were;

- To establish the influence of non-verbal communication on strategy implementation in Agricultural Biotechnology organizations

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- To ascertain the influence of verbal communication on strategy implementation in Agricultural Biotechnology organizations
- To establish the influence of written communication on strategy implementation in Agricultural Biotechnology organizations
- To determine the influence of visual communication on strategy implementation in Agricultural Biotechnology organizations

LITERATURE REVIEW

Theoretical Review

Game Theory

Game theory is a branch of applied mathematics that addresses the problem of optimal behavior in games with 2 or more people. Game theory is an abstract model of decision-making; should not be confused with an explanation of decision-making in the social reality. The common point of all the imagined games within the theories is the idea of strategy. Game theory is an interdisciplinary approach to studying human behavior. The most involved disciplines in game theory are mathematics and economics, but also other social and behavioral sciences.

Game theory was created by mathematician John von Neumann. Shubik (1972) argues that the solution concepts resulting from game theory could be thought to us as a descriptive view or normative of multi-person decision-making. Game theory could also describe the analysis of rational behavior in situations where interdependence of outcomes is involved (Martin, 1991).

Game theory studies how decision-makers are making their decisions (Camerer, 2011). Game theory can be used to show how decisions are made in various areas, such as politics, economics, or sports. In the last two decades, game theory has been used by economists to analyze a wide variety of interactions and economics (Myerson, 2013). The organization industry's main interest is to analyze the competitive interactions between oligopolies and game theory helps us understand these interactions (McCain, 2014).

Coleman (2013) argues that a game includes players, strategies, profits, results, and equilibrium. All these elements define the rules of the game. The following definitions help us to better understand the theories of games: - Players are the decision-makers. In our examples, players shall be two or more oligopolies or a monopolist and a possible new entrant who is already on the market or about to enter. - The actions include all the possible decisions of a player. - Strategies are rules that tell every player what action to choose in each stage of the game. - Profits are expected profits for each player to get at the end of the game. - Equilibrium is the result of choosing the best strategy, a combination of strategies that each player could choose. Using game theory, the economists are seeing a picture with participants in the game, certain rules that define certain decisions (Colman, 2013).

The results of the game - what each participant receives - refer to his earnings and depend on what each player does. Each participant in the game has a strategy and he decides what strategy to apply. In games where each participant has the chance to make more than one decision (where there is more than one round), decisions may depend on what happens in the previous round. The game theory begins with the hypothesis that every participant in the game is rational and knows that his rival is also rational (Aumann, 2017). Each competitor is trying to maximize his gains. The theory tries, thus, to predict what each player shall do. The answer depends on the rules of the game and its earnings.

Group thinking Theory

Janis (1972) developed the groupthink theory based on the assessment of some of the worst decisions or —fiascos. These fiascos include the Bay of Pigs, the Pearl Harbor attack, the North Korea escalation, and the Vietnam escalation**.** Janis (1982) defined groupthink as —a mode of thinking people engage in when they are deeply involved in a cohesive in-group when the members striving for unanimity

override their motivation to realistically appraise alternative courses of action. Janis modeled groupthink as certain antecedent conditions, which lead to concurrence seeking (or groupthink tendency), which results in observable consequences, yielding a low probability of a successful outcome. He stated that groups bring out the worst as well as the best in terms of decision-making.

Janis indicated that there are three types of antecedent conditions: cohesion of the group, organizational structural faults, and situational factors. For organizational structural faults, Janis provided four examples: insulation of the group, lack of impartial leadership, lack of methodical procedure group norms, and homogeneity of group members. For situational factors, he indicated high stress from external threats and temporary low self-esteem induced by recent failures, excessive difficulties, or moral dilemmas. For observable consequences, Janis (1982) included two categories: symptoms of groupthink and symptoms of defective decision-making.

Identification of groupthink frequently only occurs after the occurrence of a problem or a fiasco. —The paradox of groupthink is that unanimous decisions may be seen to be a display of resoluteness, when, in fact, they result from defense avoidance on the part of the individual members of the decision group (Rose, 2011). Janis (1982) provided observable symptoms, allowing the identification of the risk of groupthink and the opportunity to prevent it.

The cohesion of the group considers how individuals feel about each other and if they honor and trust one another. If high cohesion exists, Groupthink occurs with respect and loyalty to the group being guaranteed (Heinemann & Farrell, 1994). Additionally, individuals are more likely to be reluctant to disagree and the sharing of information is scarce (Heinemann & Farrell, 1994, p. 73). Organizational structural faults form into four categories (Rose, 2011; Heinemann & Farrell, 1994): 1. The group becomes insulated from experts and information that could influence a member's course of action. 2. Lack of impartial leadership - a directive leader with a very specific course of action - is apparent. 3. Norms for methodical processing are absent. 4. Homogeneity of group members' social backgrounds prevents the group from cooperating.

There are several symptoms of Groupthink that contribute to negative decision-making in the workplace. The symptoms of negative Groupthink visible in teams of employees include: 1) an illusion of invulnerability, 2) belief in the group's inherent morality, 3) collective rationalization of facts, 4) stereotyping of non-group members or agencies, 5) self-censorship, 6) an illusion of unanimity, 7) direct pressure from members, 8) demands for conformity, 9) mind guards to keep away expert information, and 10) failure to develop contingency plans. (Rose, 2011; Heinemann & Farrell, 1994; Ahlfinger & Esser, 2001)

Effective leaders can ensure a positive effect from groupthink by providing: 1) an open climate of giving and accepting criticism, 2) impartial leadership, 3) open group discussion without injecting personal preferences, 4) multiple groups, 5) diversified groups representing the population of the company, 6) expert advice and consultation, 7) devil's advocates and alternatives to solutions, 8) open, honest, and direct communication, 9) long and short-term goals, and 10) designated roles for each group member (Rose, 2011; Heinemann & Farrell, 1994; Meyers, 2010).

Open Systems Theory

This theory was developed by Hungarian biologist Ludwig Von Bertalanffy in 1928 (adopted by Amrule, 2013). The Open Systems theory was developed after World War II in reaction to the earlier theories of organizations such as the human relations perspective of Elton Mayo and the administrative theories of Henri Fayol. The foundation of Systems of theory is that all the components of an organization are interrelated, and that changing one variable might affect many others, or if one sub-system fails, the whole system is jeopardized. Organizations are viewed as open systems,

continually interacting with the environment, which is all firms operate within an environment. The environment influences the strategy implementation efforts of the organization.

The components that share feedback among each other can be looked as consisting of four aspects namely: inputs which comprise resources such as raw materials, money, technology, people; processes, such as planning, organizing, motivating, and controlling; outputs such as products and services and enhances systems productivity. This implies that when one component of the system is removed, the nature of the system is changed as well. Systems theory helps managers to look at the organization more broadly and recognize the interrelationships among various components of the organization and how they are related to each other.

The Open Systems Theory has significantly adjusted the way we understand organizations and the demands placed on its leadership and or managers. Contemporary studies of accountability movements, professionalization and instructional leadership all benefit from strong Open systems approach to understanding environmental demands and the resulting adaptation in policy and its implementation. Although we have variety in perspectives as provided by the Open Systems Theory; institutional theorist who see organizations as a means by which the social values and beliefs are embedded in organizational structure and expressed in organizational change, contingency theorist argue that organizations are organized in such ways best fit the environment in which they are embedded while resource dependency theorists see the organization as adapting to the environment as dictated by its resource providers, they share the perspective that an organization survival is dependent upon its relationship with the environment. Agriculture Biotechnology Organizations in Kenya operate under a very challenging environment that is sometimes surrounded by controversy and misperceptions around Biotechnology products and are not independent of these environmental factors.

Communication Accommodation Theory (CAT)

First conceived by communication professor Howard Giles in 1971, Communication Accommodation Theory (CAT) was mainly about speech, but then adapted to involve verbal and nonverbal communication (Hordila-Vatamanescu, 2010). Giles described developing the theoretical perspective in his graduate school days in the United Kingdom, and muses that he still is constantly noticing new ways people accommodate others, such as when his wife lost her voice for a few days, and others would whisper to her, thinking she was whispering for another reason (Gallois et al., 2016).

The theory is about convergence and divergence in accommodation and says that communicators are likely to accommodate the person they are speaking with by adopting their mode of communication. Soliz, Thorson, & Rittenour (2009) say accommodation is performed for seeking approval, inclusion, affiliation, or interpersonal goals," while non-accommodation serves to highlight differences between people.

Divergent communicators maintain their own way of communicating, and then the communication differs from the other communicator. There is also the concept of over accommodating, as Hordila-Vatamanescu (2010) says, and this means they exaggerate the accommodation. There are three types of over accommodation: "The first is sensory where people tend to over adapt to others who are perceived as limited in their abilities. The second is dependency, where the person who is talking, speaks to others as if they're in a lower status than them. Lastly, intergroup occurs when the speakers place listeners in cultural groups without acknowledging individual uniqueness" (Hordila-Vatamanescu, 2010).

Within CAT, however, it occurs, it's important to note that communication happens within a context, as always, and that there is always a negotiation of relationships within a conversation, including power

within a relationship when communicating. Based on these stereotypes of outgroup members, expectations may arise about people from the culture. Norms of accommodation may appear. When over-accommodating happens, it may make the communicator seem condescending, which hopefully, the person does not desire. However, when done well, "communication accommodation becomes a mutual feeling of identification between the source and the receiver" (Hordila-Vatamanescu, 2010). Communicators begin to feel more similarity and commonality, which begets affection, or likeability. When people from different cultures accommodate by moving to Texas and trying to act friendlier to others, people feel more commonality, even if the person from another state wasn't used to acting friendly to acquaintances

Conceptual Framework

A conceptual framework is used in research to outline possible courses of action or present a preferred approach to an idea or thought (Regoniel, 2015). The conceptual framework of this study is diagrammatically represented in figure 1 below where strategy implementation was conceptualized as being dependent on communication channels.

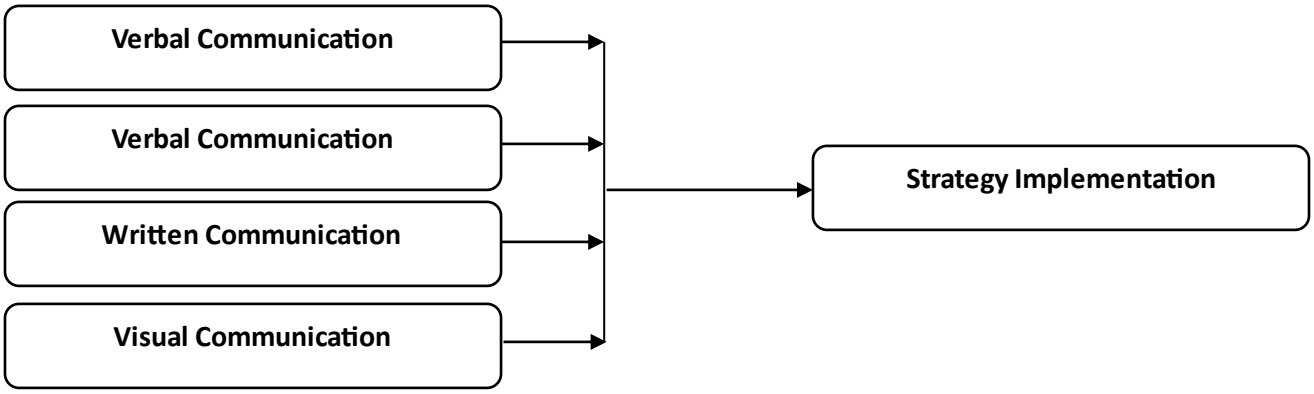

Figure 1: Conceptual Framework

Non-verbal communication

Non-verbal communication can be a very powerful tool in an organization to understand ourselves and others. Non-verbal communication embraces all body language communication and also includes clothing and adornment, environmental factors and even how we use time.

According to Kristiyanti (2012), non-verbal communication is body language, intonation of voice, attitudes and so on that allows someone to communicate without using words. Each time an interaction occurs non-verbal communication between two parties, without us realizing it will involve behavior (gesture), eye movements, changes in body posture, and facial expressions. Consciously or not, these behaviors and movements are complementary to the speaking situation. But from another angle, this has created an interaction of using non-verbal language.

Dickson and Hargie (2003) suggest that we use nonverbal communication to: Replace verbal communication in situations where it may be impossible or inappropriate to talk, complement verbal communication, thereby enhancing the overall message, modify the spoken word, contradict, either intentionally or unintentionally, what is said, regulate conversation by helping to mark speech turns, express emotions and interpersonal attitudes, negotiate relationships in respect of, for instance, dominance, control and liking, convey personal and social identity through such features as dress and adornments, contextualize interaction by creating a particular social setting.

Draft & Lengel, (2005) further state that there are various types of non-verbal communication for instance facial expressions which are a result of one or more motions of muscles of the face. These face movements express the emotional state of the individual to observers. However, there are additional verbal cues that could convey much information since they also make it possible for the receiver to understand the feelings of the message sender. These could be when the message sender crosses his arms or legs, they can also be holding their hands in their pockets or akimbo as well as eye blinking or winking. If these non-verbal cues are observed, the audience could talk more about the emotional state of the message sender.

According to Rimmington, Dickens, and Pasquire, (2015), posture communicates primarily the social status of individuals and gives information about attitudes, emotions, degree of courtesy, warmth of the soul, etc. People's posture, regarding the relationship between them, is: - of inclusion/non-inclusion - a position that defines the space available for communication and limits access to the group. Congruent / non-congruent - communicates to what degree a person participates in what the interlocutor says or does. Intense involvement leads to a position similar to that of the listener, while non-congruent posture indicates divergence in attitude or status and implies a lack of any interaction. These are very important positions in the act of discussing an idea participants should consider. - of orientation - refers to the fact that two people can choose to sit face to face or next to each other to discuss the implementation of the strategy (Rimmington, Dickens and Pasquire, 2015). The first situation communicates a predisposition for conversation, as it is the case with the professors and students in a classroom, and the second - is neutrality.

Norazlina & Masittah (2012) state that facial behavior is particularly intentional as it is a conscious act, is a very visible part of communication, expresses feelings, speaks about attitude, state of mind, and mood which changes during interaction and is continuously monitored by the recipient. A major feature of interpersonal and group communication is eye contact; by looking or not looking at someone people can communicate their attitude toward the interlocutors. Through eye contact the flow of communication is regulated and communication effectiveness and audience's feedback are monitored. Becoming aware when the audience is listening or feeling bored, is feedback the addresser can use to change the subject or the way it was approached, stop the dissertation, or proceed. The feedback obtained from watching the students' nonverbal cues, of which facial expression detains a top position, will allow the professor to understand to what degree students are engaged and participate in the process (Ulmi, 2017).

Afiqah & Hashimah, (2016) explain that the direction, moment, and duration of an addresser's look are important clues, eloquent of his attitude, feelings, and emotional state (like, dislike, self-confidence, attention, respect, consideration, sincerity, etc.) towards the addressees whose feedback will influence the decision. Speakers who make the least eye contact, look to the side, and turn their body away are defensive, cold, immature, deceitful persons in the eyes of the listeners who find this frustrating and insulting, while those who settle longer eye contact and position their body and head squarely towards the audience are judged as friendly, mature, sincere, reliable and self-confident. A good public speaker must speak with his eyes, by sweeping the audience with his eyes and making brief eye contact with as many individuals in the audience as possible.

Verbal communication is facilitated mainly by body language and movement. Their banning by the teacher can obstruct verbal communication - blockages in communication or breaks are likely to occur, words come hard on the lips, the state of irritation increases, etc. From a psychological point of view body language supports verbal communication. In one commonly accepted taxonomic approach, Griffiths (2010), classified nonverbal cues into five functional types that apply

to didactic communication, too: Affect displays, Regulators, Illustrators, Emblems, and Adaptors.

Verbal Communication

Verbal forms of communication involve the transmission of information through word of mouth. Church (1996), states that language consists of sound and body language. In developed business settings, this type of communication is very important since the majority of speaking involves the interpersonal process. Interpersonal in the sense that communication is through spoken and unspoken messages where one's emotions are expressed.

Verbal communication is therefore a crucial aspect of human interactions as well as a prerequisite for any organization/ business success. Being fluent and self-confident especially when communicating with clients and customers as well as employees will positively impact to the organization's well-being (Prisca, 2014).

Norazlina & Masittah (2012) state that most often when we think of communication, we might imagine two or more people speaking to each other. This is the largest aspect of verbal communication: speaking and listening. The source uses words to code the information and speaks to the receiver, who then decodes the words for understanding and meaning. One example of interference in this channel is the choice of words. If the source uses words that are unfamiliar to the receiver, there is a chance they will miscommunicate the message or not communicate at all.

The formality of vocabulary choice is another aspect of the verbal channel. In situations with friends or close co-workers, for example, you may choose more casual words, in contrast to words you would choose for a presentation you are making to your supervisors. In the workplace the primary channel of communication is verbal, much of this communication being used to coordinate with others, problem-solve, and build collegiality (Ulmi, 2017).

Written Communication

Written communication is passing information by writing down what is to be communicated. Unlike verbal communication where one speaks through non-verbal communication which involves the use of body language to pass information, in written communication the messages have to be printed. Written communication is text-based. It includes letters, memos, and emails. Organizations use business communication which is mostly written especially when launching or promoting their (new) products and services offered while also helping the organization to manage the resources available (Rimmington, Dickens, and Pasquire, 2015).

Organization memos including office notices are types of business communication that management uses to communicate to its employees and customers. In addition, office emails can also be used to send information to individuals of several recipients while printed training manuals could be circulated to every employee whereby, they can go through them over and over again in contrast to the other forms of communication which are real-time. In addition, written communication can be accessed by many people for instance an office memo can be circulated to every department in an organization and every employee has access to the information that needs to be accessed. Secondly, when communicating about the organization's products and services, messages can be printed and transmitted through different information carriers and reach a mass of customers and clients which is easier than communicating face-to-face with each client or customer.

Barret (2002) refers to this form of communication as a "one to many" communication. Moreover, written communication can involve more than one person when constructing the message content (Barret, 2002). Therefore, before the information is complete for transmission, it may take a long to be processed which is a contrast to verbal communication which is face-to-face. Furthermore,

written communication is one of the best ways to convey facts rather than feelings.

Therefore, organizations should strive to use effective communication while communicating with their customers, stakeholders as well as amongst themselves in a move that creates trust and a sense of belonging. Organizational management with effective communication skills is in a position to move the organization forward through the power to persuade their business partners and other clients with confidence and clarity elements that make communication an essential part of the business environment (Okenimkpe, 2010).

Visual communication

Zulch, (2014) explains that visual communication is communication through visual aids and is described as the conveyance of ideas and information in forms that can be read or looked upon. Visual communication solely relies on vision and is primarily presented or expressed with two-dimensional images, it includes signs, typography, drawing, graphic design, illustration, color and electronic resources. It also explores the idea that a visual message accompanying text has a greater power to inform, educate, or persuade a person or audience. Visual communication is often used to introduce and pass new ideas or concepts. It can be used to explain complex information in a way that is easy to understand. Additionally, visual communication is great for getting people's attention. For example, a company might use a flashy logo or an attention-grabbing headline in an advertisement.

The evaluation of a good visual communication design is mainly based on measuring comprehension by the audience, not on personal aesthetic and/or artistic preference as there are no universally agreed-upon principles of beauty and ugliness. The term 'visual presentation' is used to refer to the actual presentation of information through a visible medium such as text or images.

According to Mark Knapp (apud Dinu, 2009) visual communication fulfils four functions: - asking for information; look, as means of achieving interaction, plays an important role in getting feedback; when the addressee listens with wide open eyes the addresser understands the amount of interest in the subject and further details are necessary; - giving permission to others to speak; in case of group communication the permission to speak can be granted to another both verbally but also by means of deictic look orientation; this most often happen in class when the teacher allows his students to speak or indicates who is to speak by means of eyes; - indicating the type of relation; the type of relations between the speaker and interlocutors is indicated by the orientation and the period of time the look lasts: superiors who try to dominate usually stare while addressing their subordinates while, on the contrary, in case they want to emphasize a disregarding attitude or disagreement with their inferiors' opinions they avoid looking the later when they speak; - compensating or reducing the physical distance; look can establish a visual proxemics between persons separated by distance.

Strategy Implementation

A strategy is a game plan that an organization adopts to gain a competitive advantage. With no strategy, decisions made could have a negative influence on future outcomes. Ansoff & amp; McDonel (1990) define strategy as to instrument that assists an organization to manage risks that it may encounter. Baker (2007) on the other hand referred to strategy as the outcome of the planning activity, a process that is organized to foresee the organization's future activities for the organization's missions to be realized. The people who drive strategy in organizations are seen to be visionaries, entrepreneurs, and innovators. They are those who take risks and try new ways of doing things. A well-formulated strategy must be implemented to realize success.

As Bantel (2001) argued, the implementation process is an essential stage in an organization since it determines the performance of the organization. Strategy implementation also involves turning the

formed strategy into an action to realize the strategic objectives put in place by the organization. In addition, when the formed strategy is translated into action, the organization is in a position to perform better and consequently have a competitive advantage over the other firms that haven't successfully implemented their strategies, (Beer & Eisenstat, 2010). Though organizations assign exceptional and significant organization development structures and tasks to their employees as well as provide information regarding how the roles and tasks can be connected to exploit competence and satisfy business customers, these business structures and tasks are not adequate in themselves to stimulate employees (Alexander, 2011).

However, if an organization puts in place a control system that could be used in strategy implementation, the control system provides organization managers with motivational incentives for their employees besides providing feedback regarding the performance of both employees and organization, (Beaudan, 2001). As stated earlier, even a well-formulated strategy is bound to fail if not appropriately executed, and for that reason, organizations should ensure that the strategy and organization's structure are stable, (that is, the resource allocation structure, incentive structure, process, and support structure). Many managers and employees in organizations encounter risks during strategy implementation; they include the formation of new power relationships as well as other groups both formal and informal whose characteristics may be unknown. The change in status and formation of new roles and tasks may create confrontations between the managers and the employees. Therefore, without a better strategy formulation mechanism, it is difficult for the management to come up with effective strategy implementation.

Currie (2009) hence argues that a business strategy will be difficult to succeed without an effective implementation mechanism. Based on Forman and Argenti (2005), organization structures are an essential part of strategy implementation. This is in line with Currie's (2009) study that found that when the strategy structure is properly aligned, innovative and successful implementation of strategies becomes successful. Therefore, during implantation, organization structures need to be aligned to allow room for strategy implementation. The alignment of organization structures should therefore be in a way that allows the strategy to be implemented to cover all the organization dimensions or operational levels to achieve effective strategy delivery. As also said earlier, the strategy control system should also be in place so that it can help measure and monitor the strategy implementation process.

Monitoring is important since it enables the organization managers to spot any deviations and come up with corrective measures on time. Additionally, the business strategy implementers' commitment and shared understanding are significant as they will lead to successful strategy implementation. Contrarily, commitment without shared commitment will bring about strategy implementation failure due to counter efforts that may arise. This will in turn affect the performance of the organization. Rapert & amp; Lynch (2006) clearly state that the management level should have a mutual understanding with the operational level so that overall strategy implementation can be effective. This implies that the middle management and top management have to consult one another during the strategy development stage since strategy management requires full support and commitment from both (Heracleous, 2000).

METHODOLOGY

This study adopted a cross-sectional survey research approach; one of the most commonly used forms of survey design. The objective of the survey was to obtain insight into the relationship between the selected variables and new ideas relating to the research problem from the respondents (Shields et al., 2013). The population of this study entailed managers and key staff at the management and operational levels of the 28 Agricultural Biotechnology organizations in Kenya as

respondents. This study used stratified random sampling to obtain the required sample size. Stratified random sampling was ideal since the respondents in each stratum had the same probability of participating in the study while at the same time keeping the size manageable (Kothari, 2004). Since the target population was sufficiently manageable, the census was conducted on all the top and middle-level management employees of the 28 Agricultural Biotechnology organizations in Kenya. The sampling frame consisted of middle and top-level management employees from a list of all 28 Agricultural Biotechnology Organizations in Kenya. The list was obtained from several sources such as the African Biosafety Network of Expertise (ABNE), the African Biotechnology Stakeholders Forum (ABSF), the National Biosafety Authority (NBA), and the National Council for Science and Technology (NCST). This ensured that the sample frame was current and relevant to the study objectives. The sample size of this study was therefore derived from the sample frame of all the management employees using Yamane's (1967) formula of sample size:

$n=N / [1+N(e)^2]$ Where: n is the sample size; N is the target population and e is the precision level (0.05) also known as (5%) (Glenn, 2012)

$n = N / (1 + N * e^2)$

$n = 354 / (1 + 354 \times 0.05^2)$

=188 respondents

The study entailed both primary and secondary data collection methods. The secondary data was obtained through literature review, online research, and desk studies e.g., review of planning documents such as strategic plans and other planning and governance manuals, to explore the effectiveness of implementation policies and to ensure consistency of data collection. The primary data was collected through interviews conducted by use of the questionnaire. The questionnaire being the primary data collection instrument contained both open-ended and closed questions carefully designed to provide adequate coverage for this research. A pilot study was conducted on 19 respondents chosen from the population which was not included in the final study. . This was to test content validity through a professional like the study supervisor and the reliability through the Cronbach alpha coefficient, of the instruments. This data analysis involved an analysis of the quantitative and qualitative data obtained and subjected to the Statistical Package for Social Sciences (SPSS) for accurate results that are descriptive in terms of frequencies and standard deviation. Thereafter, the analyzed data was tabulated concerning the data generated.

The study a employed the following **regression model**:

$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Y= Dependent Variable (implementation of strategy)

β0= Constant (value of Dependent Variable when all independent variables are zero)

β_1- $_4$= Regression Coefficient for each of the independent variable

X_1= Verbal Communication, X_2= Non-Verbal Communication, X_3= Written Communication, and X_4=Visual Communication. ε = Error term.

FINDINGS AND DISCUSSION

Validity was established by a logical link between questions and objectives (Kumar, 2005). Content validity was measured using the Content Validity Index (CVI). As observed by Waltz, Strickland, and Lenz (2010), at least two or three experts in the field of content being measured can assess item relevance, and only two or three experts. The Content Validity Index (CVI) was calculated using the formula proposed by Mason (2010). CVI = (Relevant Items/Total Items) after two experts rated survey items as relevant or not relevant to the content area asked to measure. The average CVI obtained is 0.802ss, indicating that the measures were effective in terms of content effectiveness. Mason (2010) states that a CVI greater than 0.7 is acceptable. Construct validity was assessed using the Kaiser-

Meyer-Olkin (KMO) test (Simon & Goes, 2016) and the factor analysis of the construct presented in the table below:

Table 1: Factorial Test Results for Construct Validity

		Bartlett's Test of Sphericity			
Variable	**KMO**	**Approx. Chi-Square**	**df**	**Sig.**	**Conclusion**
Non-Verbal Communication	0.869	98.14	15	0.010	Valid
Verbal Communication	0.624	34.62	19	0.005	Valid
Written Communication	0.686	50.48	15	0.001	Valid
Visual Communication	0.802	22.19	12	0.014	Valid
Strategy Implementation	0.720	71.53	20	0.000	Valid

Reliability is an assessment of the degree of consistency between multiple measurements of a variable (Hair, Black, Babin, & Anderson, 2010). Cronbach's Alpha reliability coefficient, α, was used for the internal reliability test. The coefficient normally ranges between 0 and 1 although actually, no lower limits exist. Any value of less than 0.7 was considered unreliable and any value closer to 1.0 was considered the best for reliability (Kiliç, 2016). The size of α was determined by both the number of items in the scale and the mean inter-item correlations. Cronbach's Alpha α, with a cut-off of 0.7 was used to measure reliability (Cronbach, 1951; Park & Park, 2013), and the results are presented below:

Table 2: Reliability Results

Variables	**Cronbach's Alpha**	**Number of Items**	**Conclusion**
Non-Verbal Communication	0.789	7	Reliable
Verbal Communication	0.731	10	Reliable
Written Communication	0.829	6	Reliable
Visual Communication	0.755	6	Reliable
Strategy Implementation	0.842	8	Reliable

The table above proved that the variable statements were highly reliable with Cronbach's Alpha for the results being 0.789, 0.731, 0.829, 0.755, and 0.842 for Non-Verbal Communication, Verbal Communication, Written Communication, Visual Communication, and Strategy Implementation. A basic requirement of at least 0.5 is recommended to ensure a valid questionnaire (Hutcheson & Sofroniou, 1999). This is done by use of the Kaiser-Meyer-Olkin (KMO) test which ranges from 0.0 to 1.0 (Simon & Goes, 2016). KMO values near to 0 indicate that partial correlations are large when compared to the sum of correlations. That is, the statements/questions are not framed to capture the theme of the variable/objective being assessed. All the variables in the table above showed KMO values of greater than 0.5 implying that the respective statements were valid for data collection. Likewise, the variables presented corresponding statistically significant values ($P<0.05$) confirming that the statements related to Non-Verbal Communication, Verbal Communication, Written Communication, Visual Communication, and Strategy Implementation are adequate and valid for data collection.

Response Rate

This study administered 188 questionnaires through a drop-and-pick later method. By the time of collection, only 128 respondents were available to return the duly signed questionnaires, representing a 68% response rate which was statistically acceptable for generalization (Mugenda and Mugenda, 2003).

Demographic Information

This section provides the study findings on the profile of the respondents. It includes the respondents' demographic characteristics such as age, gender, education level, management level, role within the departments, and the number of years they had worked in their organization.

Table 3: Demographic Information

	Description	Frequency	Valid Percentage	Cumulative Percentage
Gender	Male	87	68%	68
	Female	41	32%	100
Age (Years)	56 and above	10	8%	8
	46-55 Years	35	27%	35
	36-45 Years	31	24%	59
	26-35 Years	37	29%	88
	18-25 Years	15	12%	100
Educational Level	PhD	07	5%	5
	Masters	31	24%	29
	Bachelor	70	55%	84
	Diploma	12	9%	93
	Certificate	08	7%	100
Duration worked in the organization	Above 9 Years	20	16%	16
	6-9 Years	65	51%	67
	3-5 Years	31	24%	92
	Less than 3 Years	12	9%	100
Level of Management	Middle	58	45%	45
	Lower	70	55%	100
Functional Dept	Research	31	24%	24
	Finance	20	16%	40
	Ops & Logistics	67	52%	92
	Legal	10	8%	100

The responses received were from 128 respondents where 68% were male respondents and 32% were female respondents. This indicated that most of the workers in these companies, especially the staff in managerial positions are dominated by males. Out of these 128 respondents, more than 50% were above 35 years old, with 29% between 26-35 years and 12% of the respondents between 18-25 years old. Concerning the level of education of participants, the majority of the participants, 55% had a bachelor's degree, 24% had a master's level of education, partly 5% had PhDs, 9% had a diploma, while (7%) of the respondents had a college certificate. This shows that the organization's employees have the requisite skills and knowledge to handle their responsibilities. The study enquired about the respondents' working experience. Most of the respondents, 51%, had 6 – 10 years of experience while 24% of the participants had 3-5 years of working experience. Respondents who had 10 or more years of experience made up 16% of participants and the remaining 9% had less than 3 years of work experience. This shows that the employees had vast knowledge of their organizational culture. The management-level statistics of participants show that the vast majority (55%) were lower-level management employees and 44% of the respondents were middle-level management employees. This cadre was chosen since they are responsible for the communication of the organization's policies to the employees who implement them.

Descriptive Statistics

Descriptive Statistics are summary statistics that quantitively describe or summarize features from collected data. They include measures of central tendency such as mean and median and measures of variability such as variance and standard deviation.

Table 4: Non-Verbal Communication

Statement	Mean (M)	Standard Deviation (SD)
What to be done is stated clearly when there is use of body language	4.2	0.431
Implementers understand what to do when instructed by seniors	4.5	0.823
Many times, whenever any member of staff communicates, there is a non-verbal cue to accompany the message	3.5	0.752
When I am presenting an organization's idea to clients and employees while neatly adorned helps me catch their attention and pass the message intended	4.4	0.621
Through eye contact the flow of communication is regulated and communication effectiveness and audience's feedback are monitored.	2.1	1.062
The direction, moment, and duration of a manager's look are important clues, eloquent of his attitude, feelings, and emotional state towards the junior whose feedback he will influence	4.7	0.877
Aggregate Score	**3.8**	**0.761**

From the table above, the respondents agreed that non-verbal communication has an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 3.8 and a standard deviation of 0.761. The majority of the respondents strongly agreed with the statements that what to be done is stated clearly when there is the use of body language, implementers understand what to do when instructed by seniors, when I am presenting an organization's idea to clients and employees while neatly adorned helps me catch their attention and pass the message intended, and that the direction, moment, and duration of a manager's look are important clues, eloquent of his attitude, feelings, and emotional state towards the junior whose feedback he will influence as indicated by a mean of 4.2, 4.5, 4.4 and 4.7 respectively and a standard deviation of 0.431, 0.823, 0.621 & 0.877 respectively. The respondents further agreed with the statement that many times, whenever any member of staff communicates, there is a non-verbal cue to accompany the message at a mean of 3.5 and a standard deviation of 0.752. There was a neutral agreement with the statement that through eye contact the flow of communication is regulated and communication effectiveness and audience feedback are monitored at a mean of 2.1 and a standard deviation of 1.062.

Table 5: Verbal Communication

Statement	Mean (M)	Standard Deviation (SD)
Most of the information I receive face-to-face from my manager is accurate	4.3	0.883
Implementers understand what is to be done, so there is no need for verbal communication	3.2	1.203
There is a good communication system for monitoring the implementation of the reception and comprehension of the message passed.	4.5	0.730
Communication within the organization is interactive where discussion over issues affecting implementation is discussed	4.1	0.972
Being fluent and self-confident, especially when communicating with clients and customers as well as fellow employees has motivated me to work even harder towards achieving the set objectives	3.9	0.699
Verbal communication ensures that information is relayed to the right audience improves team coordination and increases synergy and trust	4.9	1.361
Aggregate Score	**4.15**	**1.137**

The results in the table above show the respondents' agreement that verbal communication has an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 4.15 and a standard deviation of 1.137. Most of the respondents strongly agreed with the statements that there is a good communication system for monitoring the implementation of the reception and comprehension of the message passed and that verbal communication ensures that information is relayed to the right audience improves team coordination and increases synergy and trust at a mean score of 4.5 and 4.9 respectively each having a standard deviation of 0.730 and 1.361. The respondents also agreed that most of the information they receive face-to-face from their managers is detailed and accurate and communication within the organization is interactive where discussion over issues affecting implementation is discussed at a mean score and standard deviation of 4.3 & 4.1 and 0.833 & 0.972 respectively. There was disagreement by the respondents with the statement that implementers understand what is to be done, so there is no need for verbal communication being fluent and self-confident, especially when communicating with clients and customers as well as fellow employees has motivated me to work even harder towards achieving the set objectives with agreement at a mean score of 3.2 and 3.9 while the standard deviation of 1.203 and 0.699.

Table 6: Written Communication

Statement	Mean (M)	Standard Deviation
The information I get via company publications, reports, and newsletters is most important for strategy implementation	3.1	1.993
The formal communication along the organizational hierarchy is more important for strategy implementation	4.9	1.007
A good communication system for monitoring implementation and issuing feedback is in place	4.4	1.025
All articles or statements written are thoroughly vetted for content relevance before being communicated	3.4	0.897
Most of the information I receive via email is detailed and accurate.	3.7	1.228
This method, since it can be referred to in the future, reduces the chances of strategy misinterpretations	4.6	1.083
Aggregate Score	**4.02**	**1.206**

The table above presents the respondents' agreement that written communication has an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 4.02 and a standard deviation of 1.206. With a mean score of 4.9, 4.6 & 4.4 and a standard deviation of 1.007, 1.083, & 1.025 respectively, the majority of the respondents strongly agreed with the statements that formal communication along the organizational hierarchy is more important for strategy implementation and written communication, since it can be referred in future, reduces chances of strategy misinterpretations and a good communication system for monitoring implementation and issuing feedback is in place. The respondents also agreed with the statements that most of the information they receive via email is detailed and accurate and that all articles or statements written are thoroughly vetted for content relevance before being communicated at a mean score of 3.7 and 3.4 and a standard deviation of 1.228 and 0.897. The respondents also disagreed that the information they get via company publications, reports, and newsletters is most important for strategy implementation at a mean of 3.1 and a standard deviation of 1.993.

Table 7: Visual Communication

Statement	Mean (M)	Standard Deviation
The information I get during meetings is most important for strategy implementation	3.7	1.000
The visual message accompanying the text has a greater power to inform, educate, or persuade a person	4.3	1.103
There is less timeliness in response to information passed through visual communication or issues to be handled	4.7	1.822
Some signs are displayed to guide us on how to operate to realize the achievement of organizational goals.	4.0	1.034
The level of skills among employees ensures accurate interpretation of information relayed via visual aid	3.9	1.400
Aggregate Score	**4.12**	**1.272**

The presentation in the table above shows the respondent's agreement that visual communication has an influence on strategy implementation in Agricultural Biotechnology organizations with an aggregate mean score of 4.12 and a standard deviation of 1.272. The majority of the respondents were neutral with the statement that says there is less timeliness in response to information passed through visual communication or issues to be handled at a mean of 4.7 and a standard deviation of 1.322. With a mean score of 4.3, 4.0 & 3.9 and a standard deviation of 1.103, 1.034, & 1.400 respectively, respondents agreed with the statements that visual message accompanying text has a greater power to inform, educate, or persuade a person, some signs are displayed to guide us on how to operate to realize achievement of organizational goals and the level of skills among employees ensures accurate interpretation of information relayed via visual aid. Only a few respondents strongly agreed with the statements that the information they get during meetings is most important for strategy implementation at a mean score of 3.7 and a standard deviation of 1.000.

Table 8: Strategy Implementation

Statement	Mean (M)	Standard Deviation
Employees understand any new responsibilities, tasks, and duties that need to be performed by them to implement strategy	4.6	1.096
Information communicated during the implementation of strategies improves customer experience, ensures customer satisfaction, and builds a strong and long-lasting relationship	4.3	0.895
Revenue and profitability have increased upon the implementation of the set-out strategies by our organization	4.0	1.321
We have been provided with the necessary tools and equipment to perform our tasks in the implementation of strategies.	3.9	1.225
The different forms of communication influence strategic plan implementation	3.7	1.073
Communicated information is kept for reference to check any possibility of digressing from the strategic goals/plans set.	4.2	0.639
Aggregate Score	**4.12**	**1.042**

From the analysis in the table above, the respondents agreed that strategy implementation in Agricultural Biotechnology organizations is influenced by communication channels at an aggregate mean score of 4.12 and a standard deviation of 1.042. The majority of the respondents, at a mean score of 4.6 and a standard deviation of 1.096 neither agreed with the statement that employees understand any new responsibilities, tasks, and duties that need to be performed by them to implement strategy. Equally, at a mean score of 4.3, 4.2, and 4.0 and a standard deviation of 0.893, 0.639 & 1.321 respectively, the respondents agreed that information communicated during the implementation of strategies improves customer experience, ensures customer satisfaction, and builds strong and long-lasting relationship, communicated information are kept for reference to check any possibility of digressing from the strategic goals/plans set and revenue and profitability have increases upon the implementation of the set-out strategies by our organization. This tabular analysis above still indicated that the respondents at a mean score of 3.9 and 3.7 and a standard deviation of 1.225 and 1.073 strongly agree with the statement that they have been provided with the necessary tools and equipment to perform our tasks in the implementation of strategies and that the different forms of communication influence strategic plan implementation.

Inferential Analysis

Regression Model

A regression model is a statistical technique that investigates the relationship between two or more variables. It is used to estimate one variable based on the others. The model is able to show whether changes observed in the dependent variable are associated with changes in one or more of the explanatory variables.

Table 7. Regression Model

					Change statistics				
Model	R	R Square	Adjusted R Square	The Std error of the estimate	R Square change	F change	df1	df2	Sig. F change
1	.613[a]	.778	.757	.880	.778	18.095	4	124	.000

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The four sub-variables of the independent variables that were studied; verbal, non-verbal, written, and visual communication explain 75.7% of strategy implementation in Agricultural Biotechnology organizations represented by the adjusted R square. Hence, this means that other factors not included in this study contribute to 24.3% of strategy implementation in Agricultural Biotechnology organizations.

Analysis of Variance

Table 8: ANOVA

Model		Sum of Squares	df	Mean Squares	F	Sig.
1	Regression	54.864	4	12.938	18.095	.000[a]
	Residual	92.215	124	.745		
	Total	147.079	128			

From the table above, the value 0.000[a] shows a significance level of less than 0.05, showing a statistical significance of the model on how verbal communication, non-verbal communication, written communication, and visual communication influence strategy implementation in Agricultural Biotechnology organizations. 18.095 which is the value of F-calculated at 5% significance level is much greater than f-calculate of 12.938, indicating the significance of the model.

Regression Coefficient

Regression Coefficients are estimates of some unknown parameters to describe the relationship between a predictor variable and the corresponding response. They are used to predict the value of an unknown variable using a known variable.

Table 9: Coefficient Model

Model		Unstandardized Coefficient		Standardized Coefficient	t	Sig.
1		B	Std. error	Beta		
	(Constant)	.367	.402		.952	.001
	Verbal communication	.854	.196	4.127	3.905	.000
	Non-verbal communication	.598	.100	1.802	6.648	.000
	Written communication	.792	.089	2.509	1.994	.001
	Visual communication	.510	.117	1.775	1.720	.000

a. Dependent Variable: strategy implementation

Multiple Regression Model:

$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Substituted, we have: $Y = 0.367 + 0.854\ X_1 + 0.598\ X_2 + 0.792\ X_3 + 0.510\ X_4 + e$

From the regression model presented above, with all the independent variables under study held constant, strategy implementation in Agricultural Biotechnology organizations would become 0.367. Verbal communication had the greatest influence on strategy implementation in Agricultural Biotechnology organizations at 85.4% compared to Non-verbal communication at 59.8%, Written Communication at 79.2%, and Visual Communication at 51%. These findings showed that Verbal communication had a positive and significant influence on strategy implementation as indicated by t-values ($t = 3.905$, $p < 0.05$. The findings also established that non-verbal communication had a positive and significant effect on strategy

implementation as shown by t-values ($t = 6.648$, $p < 0.05$). The findings further established that Written Communication had a positive and significant effect on strategy implementation as presented by t-values ($t = 1.994$, $p < 0.05$). The findings finally established that Visual Communication had a positive and non-significant influence on strategy implementation as indicated by t-values ($t = 1.720$, $p < 0.05$). It is worth noting from the study findings that verbal communication was the most preferred mode of communication in the organizations as the employees preferred face-to-face communication which provides instant replies whenever an issue seemed not to be clear when implementing the strategies. This was followed by written communication which was also preferred due to its evidential base but not as much as visual communication. At 51%, visual communication had a positive relationship but not much influence on strategy implementation as the other study variables

CONCLUSION AND RECOMMENDATION

The first specific objective of this study sought to examine the influence of non-verbal communication on strategy implementation in Agricultural Biotechnology organizations. The results indicated that an increase in the Non-Verbal Communication variable of the communication channel causes an improvement in strategy implementation. Regression analysis showed that non-verbal communication has a positive and significant relationship with strategy implementation.

The second specific objective of this study sought to examine the influence of verbal communication on strategy implementation in Agricultural Biotechnology organizations. The results indicated that an increase in the Verbal Communication variable of the communication channel causes an improvement in strategy implementation. Regression analysis showed that verbal communication has a positive and significant relationship with strategy implementation.

The third specific objective of this study sought to examine the influence of written communication on strategy implementation in Agricultural Biotechnology organizations. The results indicated that an increase in the written Communication variable of the communication channel causes an improvement in strategy implementation. Regression analysis showed that written communication has a positive and significant relationship with strategy implementation.

The fourth specific objective of this study sought to examine the influence of visual communication on strategy implementation in Agricultural Biotechnology organizations. The results indicated that an increase in the visual communication variable of the communication channel causes an improvement in strategy implementation. Regression analysis showed that visual communication has a positive and not-so-significant relationship with strategy implementation.

Both the descriptive and inferential findings in this study show that all sub-variables of communication channels influence strategy implementation in Agricultural Biotechnology organizations. The study reveals that when these organizations apply appropriate communication channels, chances are that there will be a full implementation of strategies by the subordinates. Inferential statistics showed that all four communication channels of the study jointly had a positive and significant effect on strategy implementation in the organizations under study.

The results of the study indicate that all the communication channels together influence strategy implementation positively. However, visual communication has a positive but not-so-significant relationship with strategy implementation. This means that appropriate strategies in organizations need to be crafted by the industrial players to ensure that all communication channels are proactively used to increase the implementation of strategies hence competitive advantage.

Area of Further Studies

This study sought to establish the influence of communication channels on strategy implementation in Agricultural Biotechnology organizations. However, visual communication had a positive but not-so-significant relationship with strategy implementation. Therefore, the consequent studies need to consider the influence of visual communication on strategy implementation in organizations.

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