

ADOPTION OF FEDERATED SOCIAL MEDIA NETWORKS: A PANACEA FOR ADMINISTRATIVE HEADS EFFECTIVE INFORMATION DISSEMINATION IN NIGERIA.

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ABSTRACT

Nigeria is a nation with thirty six (36) states, and all the state in Nigeria has an executive Governor that are saddled with the responsibilities of coordinating the state administrative system and general workflows. There are other administrative heads in charge of state ministries such as permanent secretaries, accountant general, commissioners and head of services or chief of staff who renders their services as a professional administrator in their various states, by directing the activities of subordinate staff in the coordination and management of various administrative activities for their state. This paper present a holistic overview of federated social media networks. The purpose of this paper was to literally examine adoption of federated social media networks as a panacea for administrative heads effective information dissemination in Nigeria. The objectives of the paper was to examine how adoption of federated social media networks is a panacea to administrative heads effective information dissemination. Dimensions of adoption of federated social media networks such as: Adoption of lens protocol, adoption of the fediverse and adoption of activitystreams and the measures of administrative heads effective information dissemination in Nigeria such as: New knowledge dissemination, product awareness creation and encouraged collaboration are all discussed in this paper. Explanatory research design is the method adopted in this paper and then adoption of soviet media theory of communication and social responsibility theory of communication, which holds that the government ministries and business organisation should undertake or controls the social media networks and communication to serve working classes and their interest and social responsibility theory emphasizes freedom of the social media networks and no censorship but at the same time the information content of the social media networks should be discussed in public panel and social media networks developers should accept any obligation from the public interference or professional self regulations or both and this when implemented enhances administrative heads effective information dissemination in Nigeria. Finally justification that adoption of federated social media networks is a panacea to administrative heads effective information dissemination in Nigeria was made. Thereafter, conclusions was drawn and recommendations made.

Key word: Federation, decentralized, social media networks, Federated social media networks, information, information dissemination, administrative heads.

INTRODUCTION

Nigeria is a state which became a British protectorate from the year 1901 till 1953 when an independence movement was moved by Chief Anthony Eromosele Enahoro CON a foremost anti-colonial and pro-democracy activists and this movement yielded a good result which made Nigeria to gain it independence in 1960 and became a republic in 1963. Ethnic strife soon led to military coups, and military groups ruled the nation from 1966 to 1979 and from 1983 to 1999. Nigeria was headed by different individuals such as Elizabeth II queen of Nigeria and queen of the United Kingdom and the other Commonwealth Nations from 1960 to 1963, Nnamdi Benjamin Azikiwe, GCFR PC served as the only indigenou governor-general of Nigeria from 1963 to 1966, the incumbent president Bola Tinubu is the nation's 16th head of state (Jackline & Adrianna, 2022). Olusegun Obasanjo and Muhammadu Buhari both served two non-consecutive periods as head of state, first as military heads of state and then later as civilians heads of state. The first executive president of Nigeria was Shehu Shagari, he was also the first president to be elected to the position.

The interim government of Ernest Shonekan who was deposed 83 days after taking office in 1993 is the shortest in Nigeria's history not including the tenure of Sir James Robertson who served 46 days as governor-general immediately after independence. Aguiyi-Ironsi served 194 days in the office, the shortest for a permanent head of state (Ejitu, et al 2020). Murtala Muhammed served 199 days in the position. Yakubu Gowon served the longest continuous period of almost nine years before being deposed while he was away from the country in 1975. Olusegun Obasanjo served the longest period for eleven years, two hundred and thirty days combined.

Five heads of state were deposed in a military coup (Nnamdi Azikiwe, Yakubu Gowon, Shehu Shagari, Muhammadu Buhari and Ernest Shonekan). Four heads of state died in office, two were assassinated during a military coup (Aguiyi-Ironsi and Murtala Muhammed) while two died of natural causes (Sani Abacha and Umaru Musa Yar'Adua). Three heads of state resigned, Olusegun Obasanjo and Abdulsalami Abubakar resigned after transition to democracy in 1979 and 1999 respectively, while Ibrahim Babangida was forced to resign after he annulled the 12 June 1993 presidential election in which SDP candidate MKO Abiola reportedly won. Olusegun Obasanjo was the first vice president (as Chief of Staff, Supreme Headquarters) to become head of state when Murtala Muhammed was killed during the 1976 Nigerian coup d'état attempt, while Goodluck Jonathan was the first democratic vice president to become head of state when Umaru Musa Yar'Adua died of illness on 5 May 2010.

Jackline, et al (2022) opine that when Nigeria attained independence from colonial rule in 1960, it was a federal state with three regions, which are the Eastern, Northern and Western regions and these were also provinces which served as a legacy of colonial rule and was later abolished in 1976. Ejitu, et al (2020) asserted that in 1963, a new region was created, bringing the total number of states to four. The new region was known as the Mid-Western Region and was created from the Western Region. While in 1967, the country's military regime replaced the four regions with 12 states. Between 1967 and 1970, the former Eastern Region attempted to secede from the rest of Nigeria, resulting in the infamous Biafran Civil War. In 1976 seven 7 additional states created bringing the total to 19, which include the Federal Capital Territory, created from Niger State. Then in 1987, two 2 more states (Akwa Ibom and Katsina) were created, bringing the total to 21 during General Ibrahim Babangida military regime. Still in his regime, General Ibrahim Babangida in 1988-1991 precisely on August 27, 1991 added another nine states which increased the total number of states created to thirty. In light of Cambridge University Press, (2014), they opine that in 1993 when General Sani Abacha came into power, the government was under immense pressure to create additional states. The reigning military regime, under recommendation from the National Constitutional Conference (NCC), decided to create six more states. This was done in October 1996, bringing the total number of states to the current 36 states.

Suleiman, et al (2016) stress that all the thirty six (36) states has executive Governor that are saddled with the responsibilities of coordinating the state administrative system and general workflows. Kanelechi and Tope (2013) stated that there are other administrative heads in charge of state ministries such as permanent secretaries, accountant general, commissioners and head of services or chief of staff who renders their services as a professional administrator in their various states, by directing the activities of subordinate staff in the coordination and management of various administrative activities for their state. While in an organisation operating within the state, there are administrative heads responsible for managing various operations at their facility (i.e. food service, physical plant, warehouse, accounting and finance, environmental health and fire safety, and medium scale integration MSI factories). According to Wale (2017), there are forty three (43) ministers and twenty three (23) administrative heads appointed by the president in form of director general, executive director, executive secretary and executive managers at the federal level to spearhead the day-to-day functions of different ministries. While in the light of John (2012), state

governors appoint commissioners as administrative heads who are to function as the overall heads of every ministries, followed by Permanent Secretaries to oversee the day-to-day activities of various ministries at the state level. Maureen (2011) opine that in all, administrative heads are employees who function as professional managers with the responsibility of directing the activities of subordinate employees in the coordination and management of different administrative activities for a nation, states, industries, organisations or enterprises. They are responsible for managing different operations at a facility (i.e. food service, physical plant, warehouse, accounting and finance, environmental health and fire safety, and MSI factories.) and works with general methods and procedures and exercises considerable independent judgment to select proper courses of action, and required to have knowledge of the policies, procedures, and regulations of administrative and departmental programs, and supervisory techniques, personnel policies, and procedures.

Information is the collection of facts gathered through various means of communication. Information can be considered as a critical tool for national, state, industrial or enterprise development. Information is necessary to carry out research processes to enhance the lives of administrative heads, subordinate employees in many nations. Information is the processed data on which decision is taken and subsequent actions are performed thereafter (Okechukwu, 2018). Information is the fact or element of the message that is sent from the top executive managers to the subordinate employees. The value and impact of information is determined by the way and manner of dissemination. The method or device, which is the means of information dissemination, is very essential to make or mar administrative head effectiveness in Nigeria. To disseminate, in the field of communication, is to broadcast a message to the public without direct feedback from the audience. Liah and Priti (2017) view information dissemination as the means by which facts are distributed to the public at large. They further stress that it is the means by which administrative heads at both federal and state level or at various organisation distribute information exploded within the last several decades.

Federated Social Media Networks (FSMN) is an internet social networking service that is decentralized and distributed across distinct service providers, such as the Fediverse or the IndieWeb. Gabriel, et al (2018) asserted that Fediverse consists of many independent, interoperable social media platforms that allow administrative heads in Nigeria to interact with each other across those platforms. Furthermore, in the absence of vendor lock-in, administrative heads in Nigeria can choose a platform with terms and data location matching their preferences. According to Richard (2011), in lately, effort to protect rights and liberties in the online world has focused rather heavily on social networking sites and their policies. The logic is borne out by the numbers, Facebook and Twitter combined claim hundreds of millions of worldwide online users, so advocating for stronger privacy and less censorship from these kinds of websites will mean a better Internet for lots of administrative heads and subordinate employees in Nigeria.

Animesh, et al (2014) asserted that the concept of federated social media networks is an alternative to the centralization of private data flow. Federated or decentralization is even one of the original traits of the Internet, and a common organization pattern in communication networks. Communication networks can be centralized or distributed. Centralized networks rely on a central node to mediate communication between all the other nodes. Federated or decentralized networks have multiple mediating nodes, while, in fully distributed networks, nodes can communicate directly in any pattern that is possible and/or necessary.

State of Problem

In light of Gabriel, et al (2018), the absence of a standard protocol for the federation of social networks hinders the development of interoperable applications in Nigeria, as it leads to the adoption of divergent technologies. This segmentation affects the network effect and does not help on the

emergence of a de facto standard. Victoria (2019) opine that the problem facing administrative heads effective information dissemination in Nigeria are lack of control of activities of fellow administrative heads and other subordinates employees online, power failure, high cost of internet access, poor internet connectivity, lack of technical knowhow, censorship, lack of awareness of trending social media networks and lack of authenticity of information. But in the light of Emma (2019), in a federated social media network administrative heads are faced with the problem of lack of central moderation, difficulty in finding and connecting with other administrative heads or subordinate employees, potential for technical issues, dependence on third-party services and limited feature sets and user experiences.

With the current high levels of competitiveness of the corporate work environment in the Nigeria society, administrative heads working various ministries both federal and State level, need excellent social media network adoption skills that will guarantee them effective information dissemination in their various ministries such as Lens Protocol adoption, Fediverse adoption and ActivityStreams adoption in order for them to drive their ministries to its desired future state. The main purpose of this paper was to literally examine how federated social media network serve as a means to administrative effective information dissemination in Nigeria. The objectives of the paper were to examine how:

1. Adoption of Lens Protocol influences administrative heads effective information dissemination in Nigeria.
2. Adoption of The Fediverse influences administrative heads effective information dissemination in Nigeria.
3. Adoption of ActivityStreams influences administrative heads effective information dissemination in Nigeria.

Concept of Federated Social Media Networks

Federated social media network is a form of decentralized social media network in which multiple services are available for administrative heads and subordinate employees use in Nigeria, rather than a single central service that every administrative heads or subordinate employees must use, and gives administrative heads or subordinate employees more control and autonomy, as they can set up their own networks and determine their own terms and conditions for use, which is in contrast to traditional social networks, where content is monitored by a corporation. According to Alexandra (2013), federated, decentralized or distributed social media network is an internet social media networking service that is decentralized and distributed across distinct service providers (similar to email, but for social networks), such as the Fediverse or the IndieWeb. Michael, et al (2014) opine that recently, privacy in social networks has received significant media attention and that there are currently various attempts to create new distributed social networking infrastructures that provide administrative heads or subordinate employees similar functions as existing social networks. Social networking is sticky, administrative heads or subordinate employees cannot change their network on their own and still interact with their friends and too difficult for administrative heads or subordinate employees to host their own data server on them. Gabriel, et al (2018) federated social media networks as a set of interconnected servers that seamlessly provide a service or a set of interoperable implementations that follow a client-server mode which aims at integrating users by means of a decentralized structure, enabling the interoperability among multiple social networks in a transparent way. Gnanesh, et al (2022) assert that administrative heads working in any ministries in Nigeria both state and federal who deem it fit to adopt federated social media networks are free to interact as they please without censorship, since developers usually only provide guidance rules and leave the rest to them distribute to various groups of users. Federated or decentralized social media platforms prevent the unauthorized sale of administrative heads working in a ministry data,

which is one of the bones of contention of centralized social media. In addition, blockchain technology increases administrative heads privacy and data security through end-to-end encryption.

Mayank (2023) opine that adoption of federated social media network provide administrative heads with a more direct way to dissemination information with the potential clients in their various ministries of work, rather than relying on advertising algorithms to reach a target audience, administrative heads working various ministries both at state and federal level can use federated social media networks to connect directly with clients who are interested in their products or services in an ad-free environment. Federated social media networks provide administrative heads working in an organisation a chance for brands to be open and transparent with their audience. Since there's no need for them to pay-to-play (yet?), this gives administrative heads a chance to form a bond with their audience that is more on their terms. Federated or decentralized social media networks provide administrative heads with a more innovative and diverse environment for content creation. Administrative head can experiment with new types of content and disseminate information strategically, without worrying about the limitations and restrictions imposed by traditional social media networks. By this, we mean being a slave to algorithms and jumping from one bandwagon to another for more eyeballs on their content. Adoption of federated social media networks is dimensionalized in terms of adoption of Lens Protocol, adoption of the Fediverse and adoption of ActivityStreams.

Adoption of Lens Protocol

The key challenges with social media network is their centralization, which gives them control over user data. Lens Protocol is set to change how administrative heads use social media by giving them control over their content and connections. The project started in 2022 and is gaining traction because it was pioneered by the same teams that created the African American Vernacular English (AAVE) protocol. Temitope (2023) opine that Lens Protocol is an open-source and composable social graph based on Web3 and built on the Polygon blockchain, which aims to allow developers to launch social media networks and profiles based on Web3 and gives administrative heads control over their links with their ministries or organisation and helps them maintain ownership over whatever content they create. Lens Protocol tries to offer solutions to some of the pitfalls associated with WEb2, administrative heads need to consider some of these pitfalls to better comprehend how Lens Protocol works.

Laura (2023) assert that Lens protocol is an innovative project created by Stani Kulechov, the founder of AAVE, which defines itself as "a composable and decentralized social graph, ready for administrative heads to build on so they can focus on creating a great experience, not scaling users". Viewing it in a simpler terms, Lens protocol creates an intertwined network with interoperability across the decentralized social networks that are a part of its social graph. This fundamentally means that no matter which platform administrative heads are using, all the posts, creations, and messages, will reach administrative heads followers, subscribers, or viewers, simultaneously, across all the decentralized socials that are a part of the social graph. Currently, Lens protocol do not have any token yet. However, once released, it will have a token.

Hasso Plattner Institute of Design (2023) stated that while administrative heads are using different social networks in the social graph of lens protocol they are in a way "linking" all their decentralized socials. Hence the profile content created on one of the sites gets saved as an NTF, which includes not just the administrative heads information but also the followers and the accounts that they follow. This can then be carried on to a different network or application. Hence creating a user base over and over again stops being a task and a more personalized creator-clients relationship can be established. Lens protocol brings administrative heads closer to creators and lets administrative heads pay them for their work or directly hire them for a commissioned or personal project. Sasha

(2022) stress that when it comes down to what administrative heads see on their feed or an explore page for that matter on their classic social media sites, i.e., Instagram, Youtube, Twitter, etc, it is usually a result of an algorithm that satisfies the networks' or the ministries or organisation that owns its' goal, which can range from, user retainment to pushing paid advertisements and agendas. While all DESOs do let administrative heads choose their algorithm for their particular site, networks that come under Lens protocol's social graph can all be altered not just with an algorithm that would show administrative heads a feed of their choosing, but also customize, and personalize functions and user interface of the networks. Lens protocol does not store administrative heads data, unlike non-decentralized social media networks. Lens Protocol rides on Polygon's blockchain, and the reason for that, as they state, is Polygon's eco-friendly system, with higher security and low costs and carbon footprint.

Sasha (2022) opine that Lens Protocol is a blockchain based open source social graph created to reshape the future of social media concepts in the era of Web3 and decentralization. In this light, two core concepts make the Lens Protocol world unique: nonfungible tokens (NFTs) and modularity. Establishing users' profiles as NFTs is central to the protocol. With it, Lens Protocol's decentralized social network members are empowered to create, maintain and own their content and profiles represented through NFTs, while Polygon's low-fee layer 2 scaling solution stores all the data. According to Temitope (2023) such architecture helps to transfer full rights and complete ownership of content into the hands of administrative heads working in any ministries or organisation. Any content posted, whether a text, a picture, or even a change of avatars is available on-chain. Modularity as a system property refers to innovation, availability and connectivity, meaning that the Lens Protocol's social graph is open to all administrative heads who are willing and ready to propose and implement new features in their ministries or organisation.

Stephen and Christina (2021) opine that administrative heads working in any ministry or organisation in Nigeria who adopt Lens Protocol are set to enjoy a permissionless indepent network that creates a censorship-resistant environment that cannot be interrupted by any third party, including centralized authorities, that could remove or censor any content or ban any profile. Temitope (2023) assert that adoption of Lens Protocol allow administrative heads to own their content and data and can utilize them in any social media networks or DApp built on top of the protocol. Lens Protocol's PoS algorithm makes its blockchain energy-efficient and affordable, especially in comparison with the proof of work (PoW) algorithm that consumes large amounts of computational power. The following are few examples of hundreds of platforms developed on the Lens Protocol such as: Lenstube, Lenster, Fanstastic and Memester etc.

Adoption of The Fediverse

The fediverse is an ensemble of federated servers that are used for web publishing and file hosting, which, while independently hosted, can communicate with each other. On different servers, administrative heads can create so-called identities. If administrative heads make an ordinary phone call, their phone provider will connect to the phone provider of the person they're calling. Administrative heads don't need to be on the same provider. This works globally and seamlessly, because all the hundreds of phone providers in the globe talk to each other. From the user's point of view, it's as if all phones in the world are on the same network. Bob (2023) opine that the fediverse (or "Fedi") basically function the same way, but specifically for social media. The Fediverse is a collection of thousands of independent social media servers that talk to each other seamlessly. This means that the millions of users on these servers can interact with each other as if they were on the same social network. Bertel (2021) stress that administrative heads working in any ministry in Nigeria want to communicate over the internet as easily as they do in real life, with similar protections but, potentially, farther reach. In other words, administrative heads want to be able to chat with a group of other administrative heads, family members, club members, social group etc

who aren't physically in the same location, and still maintain physical control over who claims ownership of the conversation. In today's world, of course, a lot of companies have a lot to say about who owns the data administrative heads send back and forth over the world wide web. Most companies seem to feel they have the right to regulate the way administrative heads disseminate information online, how many employees or clients, do administrative heads message reaches, and so on. Open source, luckily, doesn't need to own administrative heads social life, and so appropriately it's open source developers who are delivering a social network that belongs, first and foremost, to administrative heads working in any ministries or organisation in Nigeria.

In the eye of Lucio, et al (2021), this seamless interaction on the Fediverse works between servers of both the same type and different types. Each server type presents interactions as if they happened on that server, so from the administrative heads point of view they don't see anything unusual about posts from other types of server. Bob (2023) opine that for example, someone on a Mastodon server (which is Twitter-like) can follow an account on a PeerTube server (which is YouTube-like). When the account on a PeerTube server publishes a product advert in form of video, the administrative heads following account from a Mastodon server will see the product advert in form video appear in their timeline as if it was just a normal Mastodon post with a video attached. If the administrative heads on the Mastodon server replies to the video post, the administrative heads on the PeerTube server will see that product advert appear as a comment below their video, as if it was someone on their own PeerTube server commenting. The process is so seamless, most administrative heads will probably never notice they are interacting with other servers and other types of server. Bertel (2021) assert that the "Fedivers" (a portmanteau of "federated" and "universe") is a collection of protocols, servers, and users, which together, form social networks that can interact with one another. Administrative heads can exchange short information, blog-style posts, product information, new knowledge information, music and videos over these networks. Content administrative heads post is federated, meaning that once one network is aware of administrative heads content, it can pass that content to another administrative heads working in another ministry network, which passes it to another, and so on. While in the interest of Lucio, et al (2021) most platforms are run by a single company or organisation, a single silo where administrative heads data is trapped. The only way to share with others administrative heads working in other ministries or organisation in Nigeria, is to have them join that service. Fediverse which is an example of federated social media network allows administrative heads of different ministries or organisation to inter-operate with one another without creating an account for each shared resource. Administrative heads for each ministry can block other administrative heads working in other ministry in case of egregious issues. Administrative heads can likewise block other administrative heads or entire ministry or organisation to improve their own information dissemination experience in their ministry or organisation. Lucio, et al (2021) and Bob (2023) pointed the following as an examples of the Fediverse such as: Microblogging: Mastodon, Pleroma, Misskey, Blogging: Write.as, Read.as, Video hosting: Peertube, Audio hosting: Funkwhale, Image hosting: Pixelfed, Link aggregator: Lemmy and Event planning: mobilizon, gettogether.community.

Adoption of Activity Streams

Activity Streams is an open format specification for activity stream protocols, which are used to syndicate activities taken in social web applications and services, similar to those in Facebook's, Instagram's, and Twitter's. The standard provides a general way to represent activities. In the light of Gartner, Inc. (2023), an activity stream is a publish-and-subscribe notification mechanism and information dissemination space typically found in social networking. It lists activities or events relevant to administrative heads, managers, executive directors, director generals etc, group, topic or everything in their ministries or organisation. Administrative heads or managers who subscribes to, or "follows" an entity (e.g., other administrative heads working in a ministry or organisation or business application objects) to track their related activities. For instance, new product application

may add status information, while a physical object connected to the Internet may report its state. Margaret (2015) stated that activity stream is a specific type of digital interface component that administrative heads or managers can use to display a list of recent activities in their ministries or organisation via the internet or online. With the development of social media, the activity stream has become a common way for administrative heads or business manager in Nigeria to present different type of aggregated information to their clients online. Techopedia, Inc. (2023) opine that the best example of an activity stream is a Facebook feed. In fact, the social media giant was instrumental in making the activity stream a universal component of the Web. In a Facebook feed or other activity stream, the administrative heads or business managers gets a compiled list, usually on a single scrolling page, of different activities performed by other administrative heads working in any ministry in Nigeria or generated by other business managers working in other organisation in Nigeria. Ido, et al (2020) asserted that now, the activity stream is common on all kinds of social media. Tools like the Stream Application Programming Interface (API) allow administrative heads working in any ministry in Nigeria to easily build activity streams into their new product advert and platforms. These resources make it easy to update the administrative heads according to what other administrative heads working in any ministry in Nigeria are doing on various platforms, or what is happening elsewhere on the Web.

According to Khaled (2011), adoption of social media applications by administrative heads working in any ministry or business manager working in any organisation in Nigeria, enable them to share and interact behind the ministries or organisation's firewall. Currently, several enterprise social media platforms have introduced organisation or enterprise activity streams, which syndicate administrative heads or business managers activities across the ministries or organization's social media, that include Salesforce Chatter(.com), SAP StreamWork(.com), Yammer(.com), and SocialCast(.com). While in the interest of Simon, et al (2014), the emergence of activity streams within the organisation or ministries poses a great opportunity both for the administrative heads, subordinate employees, managers, director generals and executive directors (egocentric) and the government (sociocentric) perspective. For the administrative heads or managers, this unique medium of highly intensive interactive activities, concise in text and metadata, allows them to stay tuned with recent update and discover new developments related to areas of interest. On the governmental level, the stream exposes timely information dissemination at high pace from a wide variety of administrative heads or managers. As such, it can help increase awareness of new products, new knowledge and encourage collaboration and processes by exposing recent trends and opinions to administrative heads, executive directors, director generals, commissioners or the government or organisation owners.

Concepts of Administrative Heads Effective Information Dissemination in Nigeria

Administrative heads function as professional managers with responsibility for directing the activities of subordinate employees in the coordination and management of various administrative activities for nations ministries and organisation. Administrative heads work within general methods and procedures and exercises considerable independent judgment to select proper courses of action in the ministries or organisations in Nigeria. The role requires knowledge of the policies, procedures, and regulations of administrative and departmental programs, and supervisory techniques, personnel policies and procedures. In the opinion of Boushara (2020), reporting to the President and CEO, the administrative head is the first point of contact for all staff and guests. The administrative head is responsible for creating an engaging office environment and positive interactions with all visitors and staff. The administrative head works within community Link's policies and procedures to oversee the day to day administrative functions. The administrative head works actively, internally and externally with the out-source vendors to ensure that the nations finance, IT and human resources needs are met. The administrative head assists with preparation of the government ministries or organisational payroll and with personnel administration. While according to Adil (2018) administrative heads arrange and regulate the work by other individuals

with the goal that authoritative objectives can be refined, none administrative staff work specifically on a job or assignment and have nobody answering to them which is the feature differentiate administrative heads from other employees in the ministries or organisation yet the main aim of administration is making sure that the works and activities are completed in the best methods and as efficient as possible. Administrative heads effective information dissemination is measured in terms of new knowledge dissemination, product awareness creation and encouraged collaboration.

New Knowledge Dissemination

Knowledge is information that is organised, synthesized, or summarized to enhance comprehension, awareness, or understanding. To differentiate knowledge from information, knowledge is also known as actionable information. Therefore information needs to be disseminated in order to make it actionable. There are three types of knowledge, which are tacit (know how), implicit and explicit (know what) knowledge. Lawrence, et al (2015) opine that to disseminate information or knowledge means to distribute it so that it reaches the masses or organisations or ministries. Dissemination is generally seen as a measure through which the results are brought into the awareness of certain target groups. It is obvious that dissemination means to distribute or diffuse any information or knowledge to other party for their consumption. In knowledge management, knowledge dissemination process supports the knowledge sharing process. Knowledge in the form of topics can be discussed in knowledge sharing platforms and dissemination using dissemination tools (e.g web portal or website, smartphone app, E-book, social networks etc). Muriel and Olivier (2009) asserted that these tools will create awareness of knowledge to the target administrator or employees. This process will enhance the knowledge sharing processes. Administrative heads who are interested in the topics will be attracted to share their knowledge and visit the knowledge sharing platform. In the opinion of Law Insider Inc. (2023) new knowledge dissemination means disseminating information that is added to or modifies existing scientific theory or facts that are accepted among a group of researchers. JW Research (2017) assert that new knowledge dissemination is the dissemination of any knowledge relating to the system and/or the product, that will be developed and/or acquired and/or obtained by either one of the parties as of the time of his signing of this agreement and thereafter. While Muriel, et al (2009) opine that new knowledge dissemination is the distribution of recently acquired or currently being acquired information through observation, learning, thinking and experience. John (2012) conceptualize new knowledge dissemination as the process of disseminating information about a skill that administrative heads have full understand and can effectively communication with other administrative heads or employees and clients about such skill, its features, benefits, uses and support needed to develop such skill. According to John (2012), Milton classified knowledge dissemination into four ways by: Social networking, virtual teams, formal networks, Wikis, blogs and lessons databases.

Product Awareness Creation

Product awareness creation refers to the act of administrative heads familiarizing their ministry or organisation clients or customers with a particular product or service they produce newly. Product awareness creation seeks to familiarize the public with a newor revised ministry or organisation product and differentiate it from the available ones in the market. Social media has become an essential new tool in product awareness creation in Nigeria. Gargi and Ankur (2018) opine that product awareness creation is related to the functions of product identities in clients' memory and can be measured by how well the clients can identify the product under various conditions. Product awareness creation is also central to comprehending the clients purchase decision process. Strategic product awareness creation can be a predictor of product success in Nigeria markets. It is an essential measure of product strength or product equity and is also involved in clients satisfaction, product loyalty and the clients product relationships. In the light of Carol (2022) product wareness creation refers to the extent to which clients are able to recall or recognise a particular administrative heads organisation product in the market.

Product awareness creation is a key consideration in clients behavior, advertising management, product management and strategy development. The administrative heads organisation clients ability to recognise or recall their product is central to purchasing decision making. Purchasing cannot proceed unless administrative heads or business managers organisational client is first aware of their product category and their product within that category. Product awareness creation does not necessarily mean that the ministry or organisation client must be able to recall a specific product name, but he or she must be able to recall sufficient distinguishing features for purchasing to proceed.

Maia (2017) opine that in the modern environments, a product is recognized as the most essential element of the marketing theory and practice. Product awareness creation plays a huge role in the product's commercial success in the Nigeria market. The use of product awareness creation helps administrative heads working in any ministry or organisation in Nigeria to draw their clients attention to their products and establish at the market. One of the most actual topics in the marketing's theory and practice is the matter of the products ruling. The key point in the product success is held by creating its positive image and ensuring its recognizability and awareness. Trademark image has great influence on decisions concerning the purchase of consumable products. The greater the popularity of a ministry or organisation product, the stronger the acceptance of the product by their clients. Gargi, et al (2018) stress that when a client is satisfied with the consuming and using of concrete product, little by little she/he becomes a loyal buyer. Thus, the achievement and maintenance of the positive results in production are in direct connection to the ministry or organisation constant and interminable hard work in this direction. Product awareness is a key indicator of a product market performance. Every year organisation invest substantial sums of money attempting to improve a products overall awareness levels. Many organisation regularly monitor product awareness levels, and if they fall below a predetermined threshold, the advertising and promotional effort is intensified until awareness returns to the desired level. Creating product awareness goals/objectives is a key decision in marketing planning and strategy development.

In the light of Christian (2022), the following are nine (9) ways to improve product awareness creation by administrative heads or business managers such as: Building a recognizable product, tell a product story, creating value beyond their product, creating shareable content, contributing to their community, offering a freebie, running social media contests, working with the social algorithms and running awareness ads. But in the opinion of Amanda (2019), product awareness can be improved through the use of native advertising, running Facebook and Instagram ads, running ads on Twitter, Partner with influencers to review their product awareness, partner with influencers to create content. While the interest of Megan (2023), there are 18 ways to improve administrative heads or managers product awareness in Nigeria which include: Referral programs, impressive guest content, infographics, freemium with credit, local partnerships, car wraps, freebies, social media contests, social focus, linkedIn publishing, prostory telling, unique personality, podcasts, PPC advertising, remarketing campaigns and paid social advertising.

Encourage Collaboration

For administrative heads or business managers to encourage collaboration amongst their ministries or organisation team members, they must lead by example, which simply means being respectful and open to new ideas, feedback, and opinions. This also means that administrative heads or business managers should take them constructively. Administrative heads or business managers should be transparent about processes and information and recognise that mistakes will be made. Jamie (2019) opine that no successful administrative heads or business managers works successfully without collaboration in their workplace. Collaboration in the workplace involves administrative heads or business managers working together to solve their ministry or business organisation problems across units, management levels and functions. Silfia, et al (2022) opine that collaboration

skills are needed in facing global challenges and help administrative heads or business managers solve general problems by performing various roles, positive interactions, and interdependence, which also teaches administrative heads or business managers to interact with colleagues, develop cognition and knowledge acquisition, improve their thinking and problem-solving skills, as well as performance. It also mobilizes and provides positive energy to other employees by facilitating their work and identifies the abilities of team members.

George and Nimrod (2017) assert that individualism, despite what the name might imply, does not mean acting and thinking alone, constructivists do see a role for collaboration, as interaction with others can stimulate restructuring of administrative heads working in a ministry or business managers working in an organisation in Nigeria understandings. This role for collaboration takes full bloom in social constructivism, which holds that learning takes place first in the inter-psychological (social) realm before being internalized in the intra-psychological realm. In the light of Linda (2012) collaboration occurs when administrative heads or business managers from different ministries or organisations (or unit within a specific organisation) produce a product together through joint effort, resources, and decision making, and share ownership of the final product or service, which is all about co-labor, joint effort and ownership. Michael (2015) and Indeed Editorial team (2022) opine that there are ten (10) steps in which administrative heads or business manager can adopt to improve their collaborative skills which is by: promoting discussion, staying organised, play team-building activities, assign roles, establish goals, create rules, set expectations, socialize outside the workplace, brainstorm together and compose a project mission statement. According to Aaron (2023), there are twelve (12) collaborative strategies that administrative heads or business managers can adopt in their various ministries or business organisation that can boost their success which include: Sharing the ministry or organisation mission and over again, communicating administrative heads or managers ministries or organisations expectation for collaboration, defining and communicating administrative heads or managers teams goals, highlighting their strengths, promoting a community working environment, fostering honest and open communication, encouraging creativity, sharing knowledge, insight and resources, leading by examples, getting out of the office, investing in collaborative tools and celebrating and rewarding successful teamwork.

Theoretical Framework

This work adopted the Soviet Media Theory of Communication and Social Responsibility Theory of Communication

Soviet Media Theory of Communication

Soviet media theory originate from Leninist principles which is based on the Carl Marx and Engel's ideology. It says that the government ministries and business organisation should undertake or controls the social media networks and communication to serve working classes and their interest. And that government ministries and business organisation have absolute power to control any social media network for the benefits of their clients. It quick against the private ownership of the social media platforms and other media. The theory believes that the social media network owned by the government ministries and business organisation or the ruling power should be responsible for providing positing thoughts to create a strong socialized society as well as providing information, education, entertainment, motivation and mobilization. It sees the whole aim of the social media networks to be educating the greater masses of working class or workers. And encourages the public to give feedback which would help to create interests towards the social media networks.

In the light of the authoritarian theory, the social media networks should be controlled and censored by the ministries in the nation but libertarian is fully free without any intervention of any authority or government, social responsibility theory stress freedom in one hand but on other hand they

controlled the social media by raising question and Soviet media theory, the whole control of the social media is under the political power in a nation.

Social Responsibility Theory of Communication

Muriel Faye Siebert (an American businesswoman and first woman to own a seat on the New York Stock Exchange), Jordan Bernt Peterson (a Canadian media personality and clinical psychologist) and Wilbur Lang Schramm (a scholar and authority on mass communications) in 1956 developed the social responsibility theory which encourages total freedom of the social media networks and no censorship, but communication should be regulated according to social responsibilities and external controls.

Social responsibility theory emphasizes freedom of the social media networks and no censorship but at the same time the information content of the social media networks should be discussed in public panel and social media networks developers should accept any obligation from the public interference or professional self regulations or both. It lies between both authoritarian theory and libertarian theory because it gives total social media networks freedom in one side and the external controls in other side. In social responsibility theory, the social media network is owned by government ministries or business organisation. It moves beyond the simple "Objective" reporting (facts reporting) to "Interpretative" reporting (investigative reporting). The overall news is complete facts and truthful but the commission of the freedom media stated that "No longer giving facts truthfully rather than give a necessary analyzed or interpretative report on facts with clear explanations".

Social responsibility theory help in creating professionalism in social media networks by setting up a high level of accuracy, truth, and information. The commission of media council also included some tasks based on social responsibility of social media, which include:

1. Formulating the code of conduct for the social media networks
2. Improving the standards of information dissemination
3. Safeguarding the interests of administrative heads information dissemination and their receivers
4. Criticize and make some penalty for violating the code of conduct

Social responsibility theory allows:

1. Every citizens to communicate or express their view about the social media networks
2. Society opinion, client action and professional ethics
3. Intensive invasion of recognized private rights and vital social interests
4. Private ownership of the social media networks may give rise to effective public service unless government has to take over to assure the public to provide effective social media service
5. The social media networks must take care of social responsibility and if they do not, government or other organization will do so.

JUSTIFYING THE ASSERTION THAT ADOPTION OF FEDERATED SOCIAL MEDIA NETWORKS IS A PANACEA FOR ADMINISTRATIVE HEADS EFFECTIVE INFORMATION DISSEMINATION IN NIGERIA.

This study seek to examine how adoption of federated social media networks in terms of adoption of lens protocol, adoption of the fediverse and activitystream is a panacea for administrative heads effective information dissemination in Nigeria. Administrative heads effective information dissemination was operationalized using new knowledge dissemination, product awareness creation and encouraged collaboration. These dimensions of the two study variables are laid out in the conceptual framework in figure 1. The findings from literature revealed a strong relationships between the dimension of adoption of federated social media networks and administrative heads

effective information dissemination in Nigeria. These will be discussed within the context of my research objectives.

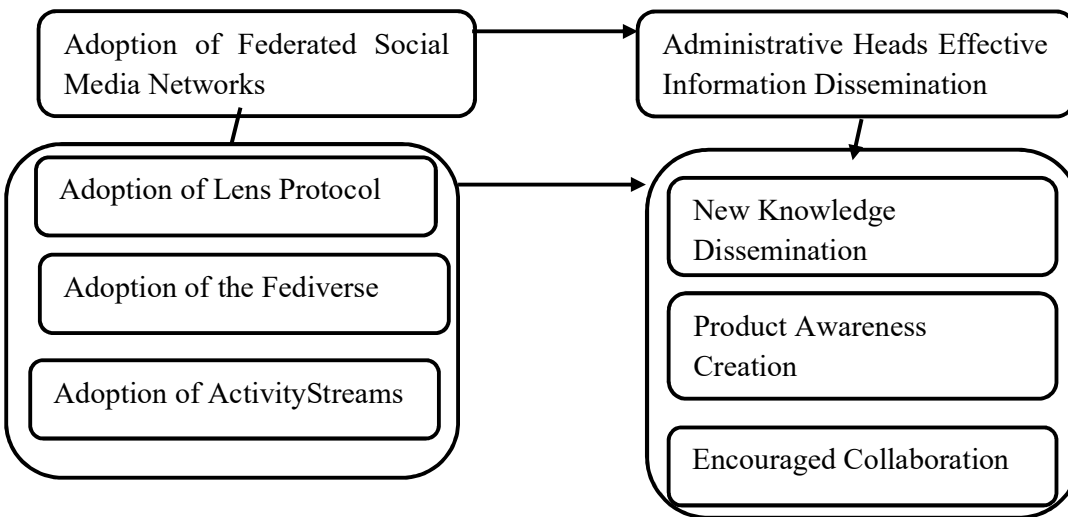


Figure 1: Conceptual framework of adoption of federated social media networks: A panacea for Administrative Heads Effective Information Dissemination in Nigeria.

Source: Gabriel, et al (2018) and Richard (2011)

With respect to my first research objective as to how adoption of lens protocol influences administrative heads effective information dissemination in Nigeria, in a research conducted by Liah, et al (2017), finding reveals that adoption of lens protocol is set to change how administrative heads use social media by giving them control over their information dissemination content and connections, and that adoption of lens protocol aims at allowing administrative heads or business managers to launch their social media networks and profiles based on Web3 and gives administrative heads control over their links with their ministries or organisation and helps them maintain ownership over whatever information content they disseminated on their social media platforms in Nigeria. In an empirical study conducted by Gabriel, et al (2018), finding reveals that while administrative heads are using different social networks in the social graph of lens protocol they are in a way "linking" all their decentralized socials. Hence the profile content created on one of the sites gets saved as an NTF, which includes not just the administrative heads information disseminated but also their ministries or organisational clients and the accounts that they follow. This can then be carried on to a different network or application.

My second research objective deals with how adoption of The fediverse influences administrative heads effective information dissemination in Nigeria, an empirical study conducted by Bob (2023) findings indicate that an ordinary phone call that administrative heads makes, their phone provider will connect to the phone provider of the client they're calling, which works globally and seamlessly, because all the hundreds of phone providers in the globe talk to each other. Adoption of the fediverse basically function the same way, but specifically for social media, which connect thousands of independent social media servers that talk to each other seamlessly and interact with each other as if they were on the same social network. In a study conducted by Bertel (2021) finding reveals that administrative heads working in any ministry in Nigeria want to communicate over the internet as easily as they do in real life, with similar protections, administrative heads want to be able to chat with a group of other administrative heads, family members, club members, social group etc who aren't physically in the same location, and still maintain physical control over who claims ownership of the conversation.

My third research objective has to do with how adoption of activity streams influences administrative heads effective information dissemination in Nigeria. In a study conducted by Margaret (2015) finding reveals that activity stream is a specific type of digital interface component that administrative heads or business managers can use to display a list of recent activities in their ministries or organisation via the internet or online, and with the development of social media, the activity stream has become a common way for administrative heads or business manager in Nigeria to present different type of aggregated information contents to their clients online. In an empirical study conducted by Ido, et al (2020) finding reveals that activity stream is common on all kinds of social media networks and tools like the stream application programming interface (API) allow administrative heads working in any ministry in Nigeria to easily build activity streams into their new product advert and platforms, which make it easy to update the administrative heads according to what other administrative heads working in any ministry in Nigeria are doing on various platforms, or what is happening elsewhere on the globe.

CONCLUSIONS AND RECOMMENDATIONS

Nigeria is a nation with thirty six (36) states, and all the state in Nigeria has an executive Governor that are saddled with the responsibilities of coordinating the state administrative system and general workflows. There are other administrative heads in charge of state ministries such as permanent secretaries, accountant general, commissioners and head of services or chief of staff who renders their services as a professional administrator in their various states, by directing the activities of subordinate staff in the coordination and management of various administrative activities for their state. While in an organisation operating within the state, there are administrative heads responsible for managing various operations at their facility (i.e. food service, physical plant, warehouse, accounting and finance, environmental health and fire safety, and medium scale integration MSI factories). Federated Social Media Networks (FSMN) is an internet social networking service that is decentralized and distributed across distinct service providers, such as the Fediverse or the IndieWeb, which consists of many independent, interoperable social media platforms that allow administrative heads in Nigeria to interact with each other across those platforms. This study outlined the dimensions of adoption of federated social media networks such as: Adoption of Lens Protocol, Adoption of the Fediverse and Adoption of ActivityStreams. And the measures of administrative heads effective information dissemination in Nigeria as New Knowledge Dissemination, Product Awareness Creation and Encouraged Collaboration. The concepts of adoption of federated social media networks and concepts of administrative heads effective information dissemination in Nigeria are all discussed in this paper. Soviet Media Theory of Communication and Social Responsibility Theory of Communication were adopted in this paper. Which holds that the government ministries and business organisation should undertake or controls the social media networks and communication to serve working classes and their interest and social responsibility theory emphasizes freedom of the social media networks and no censorship but at the same time the information content of the social media networks should be discussed in public panel and social media networks developers should accept any obligation from the public interference or professional self regulations or both and this when implemented enhances administrative heads effective information dissemination in Nigeria. It was concluded that adoption of federated social media networks such as: Adoption of Lens Protocol, Adoption of the Fediverse and Adoption of Activity Streams

influence administrative heads effective information dissemination in Nigeria in terms of New Knowledge Dissemination, Product Awareness Creation and Encouraged Collaboration.

Based on the findings and conclusions of the study, the following recommendations are appropriate.

1. Ministries at the federal and state levels in Nigeria should training and retrain their administrative heads in the use of lens protocol that will guarantee their effective information dissemination in nation.

2. Ministries at the federal and state levels in Nigeria should map out a policy that will ensure efficient adoption of the use of the fediverse and provide an enabling environment that is cost free for the use of this trending social media platforms which has been empirically proven to be capable of enhancing administrative heads working in various ministries in Nigeria effective information dissemination.
3. Ministries at the federal and state levels in Nigeria should encourage their administrative heads .in the acquisition of new and trending social media networks skills that will enhance their effective information dissemination.

There is no doubt that the aforementioned recommendations are pertinent to ministries both at the federal and state levels in Nigeria and organisations that wish to enhance their administrative heads effective information dissemination. Yet another important finding derived from this study is the theoretical assertion of the existence of a relationship between federated social media networks and administrative heads effective information dissemination in Nigeria. It serves as a forerunner to an empirical study that could explain the impact of each of the dimensions of adoption of federated social media networks on the measures of administrative of administrative heads effective information dissemination in Nigeria. This is because such a study would now be formalized enough to facilitate the generation of primary data from any ministry, business organisation, institution, sector or society to test clearly stated hypotheses. The results from such tests have the potential to contribute to theory building and validation.

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