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DEVELOPMENT AND UPTAKE OF ENTERPRISE 2.0 IN SMEs: A THEORETICAL PERSPECTIVE

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ABSTRACT: *IT and new-networked business structures are removing the sources of friction, producing major dimensions of change that affect every firm and its operations (Tapscott, 2008). They have constantly thrown at us new buzz phrases; the thresholds of dramatic shift in ways firms organize, innovate, and create values. IT infrastructures have become democratized by the Internet; people no longer consume and convey information alone but also create and share contents with others on the Web, be it textual, aural, or visual. The use of Web, which extends to websites, B2B, B2C and e-business application, has made it imperative for organizations to conduct their business and e-business over the Internet. As new ITs such as Enterprise 2.0 emerge, organizations device new strategies and directions to utilize the web to reach out their customers and business partners. Organizations develop new and innovative ways of doing business and react positively to their customers. They often adapt and rely on enterprise systems as its accompanying budget cuts affect travels, marketing expenses, capital investments, and staffing levels (McKinnon, 2009). This theoretical paper builds on existing body of knowledge on Enterprise 2.0 to expand its understanding and applicability by SMEs.*

KEYWORDS: Development, Uptake of Enterprise 2.0, SMEs

INTRODUCTION

Enterprise systems are gaining ground form both researchers and practitioners because it has been proved to correlate with individual and organizational performance and productivity (Hwang, 2004). While researchers have been investigating the adoption and implementation of most commonly used Enterprise Systems (ES) such as Enterprise, Resource Planning (ERP), Supply Chain Management (SCM) and Customer Relationship Management(CRM)(e.g.Markovich and Fink, 2008; Ignatiadis and Nandhakumar, 2007; Ju Pau and Yur Jang, 2008), most studies have ignored investigating Enterprise 2.0 development and uptake within SMEs domain despite these systems in recent years have been targeted to Small and Medium Enterprises (SMEs) (Morabito et al, 2005) as a result of stiff competition, market saturation and little rate of substitution (Federici, 2009), leading to low cost and less complex local software. These studies have constantly failed to provide account of the impact Enterprise 2.0 has on SMEs during post adoption period, despite a number of scholars (e.g. cook, 2008; Newman and Thomas 2009) have

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argued, that Enterprise 2.0(E2.0) technologies are more beneficial to small businesses. This study focuses on this emerging trend.

As a relatively new and evolving technology, the underlying question *is how SMEs can understand this emerging trend , as well as to move this technology from early adopters to the point of mass adoption where regular usage of these technologies will quickly speed up the SMEs participation.* This work tends to guide both potential and actual adopters especially SMEs on conditions under which Enterprise 2.0 can be developed, uptake and yield a substantial competitive advantage. The purpose of this research therefore is to highlight these significant gaps. In this paper, development is operationalized as conditions that facilitate Enterprise 2.0 adoption; uptake is the diffusion or spread of E2.0.

Enterprise 2.0 Defined

Like most other new concepts, Enterprise 2.0 is besieged with definitional problems and dynamic scope of operation, especially with some scholars questioning its entry into online encyclopaedia. McAfee (2006) expanded Enterprise 2.0 to include Social Networking Software (SNS) like face-book and its applications in an enterprise. SNS permits users to build a network of friends, keeps these friends abreast with all the network is up to, and even posts questions to all friends in the network. Enterprise 2.0 has gained popularity, even more than Web 2.0, among many scholars for the huge opportunities it offers. Rangaswami (2006) note that "Enterprise 2.0 is more than just Web 2.0 for business. Enterpris computing is far more complex than personal computing. It includes legacy environments, innumerable vendors, mismatched data sources, stringent regulations and far flung users. While Web 2.0 can deliver genuine advantages for both business users and consumers, the real Enterprise 2.0 will encompass a far broader and more complex vision".

Enterprise 2.0 is a new trend in Enterprise Software, often referred to as a more sophisticated cousin of Web 2.0 by John F. Mancini; consumer brethren of Web 2.0 by Dan Keldsen; and as a social content or collaborative content by McCartney. It encompasses the use of Enterprise Content Management (ECM), Customer Relationship Management (CRM), and Enterprise Resource Planning (ERP) down to small companies that offer agile tools that solve smaller niche problems (Mark, 2009). Further, a knowledge management system involves not technology alone but also its management. Knowledge sharing network requires the need to develop mechanism that incorporates human resources and enterprise culture (Mason, Castlemen and Parker, 2008) of technology. Enterprise 2.0 is recognized as an important tool for collaboration, knowledge sharing and management culminating into enhanced productivity and building long lasting relationships with consumers.

The Association for Information and Image Management (AIIM) looked at it as a system of web-based technologies that provide rapid and agile collaboration, information sharing, emergence and integration capabilities in the extended enterprise. It contains software used by businesses to regulate their communication. Mark (2009) described it as the application of modern technologies and techniques to create powerful business process- specific Web applications, which encourage collaboration and communication using the Web browser. It describes the emergent social software platforms connecting departments/units/sections/divisions within an organization, or connecting

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an organization and its trading partners- suppliers, intermediaries, competitors, and customers. Cook (2008) described it as the synergy of a new set of technologies, development models, and delivery methods that are used to develop business software and deliver it to users. Enterprise 2.0 is "the use of emergent social software platforms within companies, or between companies and their partners or customers" (McAfee, 2006). For such software to function effectively it must contain search tools that allow users to search for other users, links that group content together, allow users to tag content as well as blogs and wikis and also allow people to subscribe (McAfee 2006).

Gupta and Carpenter (2008) specifically took these definitions in three factors. First is common participation of applications, which makes all employees to interact and access colleagues' engagements with information on the same platform instances, such as blogs, wikis, etc and contrasts the traditional applications like Microsoft Word, where everyone installs his own instance on his desktop. Second is social orientation. Enterprise 2.0 is built on visibility and openness of interactions; so barriers to information sharing/flow are reduced. Third is better signal(s) of information engagement. Through Connectbeam's Social Networking Business Intelligence (SNBI), enterprises effectively capture the implicit social networks that define information flow among employees and the social networks that form on an ad hoc basis. Against the backdrop of traditional e-mail documents, which are often downloaded into hard drive, Enterprise 2.0 provides richer mechanism of preventing information clutter

Characteristics of Enterprise 2.0

Enterprise 2.0 is not without its major characteristics. McAfee and Dion Hinchcliffe identified three major features of E2.0- social software, platform and emergent. Social Software as used here refers to computer communication tools that enable people to join, interact and/or collaborate through the Internet, where they established online communities. Some of the social software tools used for Enterprise 2.0 includes hypertext and unstructured search tools, wikis, RSS, collaborative planning software used for project planning and management, idea generation, mash-ups, and weblogs. Platforms are digital environments that permit overtime creativity, communications, secured information sharing, and collaboration between members of on-line communities (McAfee, 2006). Newman and Thomas (2009) noted that common social media sites such as MySpace, Face-book, Flickr and You-Tube permit people (e.g.; B2C, B2B, or staff) to share music, video, photos, and information about themselves. Social media sites attract viral marketing because the business spreads and grows through favourable word-of-mouth. Emergent entails that the software is optional, free, and flattens formal corporate hierarchies and lowers contribution barriers (Newman and Thomas 2009; van Fenema, Koppius, and van Baalen, 2007; Buhse and Stamer, 2008).

Enterprise 2.0 technologies bring people from different geographical locations or teams in different places for virtual meeting and bridge the problems of organizational hierarchies, physical barriers; communication policies and make knowledge available to everybody. It encourages inward innovation, facilitates the capturing of many tacit data and creates collaborative spirit due to its participatory and social nature. McAfee (2006) opined that mechanisms as links, tags, powerful search, and those that let the patterns and structure inherent in people's communications be visible overtime further support Enterprise 2.0 software as emergent. These features allow effective

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management of communication and multiple conversations with different people. They support both intra and inter- organization communication with lower cost than traditional communication such as telephone, fax (Zhang and Fjermestad 2008).

Enterprise 2.0 software is simple, flexible and can be adjusted (Rangaswami, 2006); lightweight, not stringent to deploy or learn (Rangaswami, 2006; McAfee, 2008); and emergent (it is free-formed and displays mechanism for online real-time interaction); unstructured, self-organizing, egalitarian or indifferent to formal organizational identities; and accepts many types of data (McAfee, 2006). Further it changes management focus from coercion to co-operation, and ultimately to co-creation (Cook, 2008). Newman and Thomas (2009) noted that Enterprise 2.0 is very much an organic, viral movement because it does not follow the top-down organizational hierarchy. They further noted that some researchers and practitioners argued that Enterprise 2.0 was not formally installed; adoption originated from users (workers) down-up. Other research enquiries (e.g Cook, 2008) showed that it can originate by companies via one of the adoption strategies (bottom-up/informal or top-down/formal approach). Bottom-up approach happens when employees perceive an immediate usefulness of the technology and convince others around them to try it. Adoption here happens in a social organic and viral manner (Cook, 2008). By encouraging staff to have open conversations with each other regardless of level, information no longer has to pass down the organizational structure. On the other hand, top- down approach, though not too popular, happens when instructions are passed in a planned and organised manner down the organisational hierarchy.

McAfee (2006) and Buhse and Stamer, (2008) noted that existing horizontal and vertical organizational boundaries are never respected in Enterprise 2.0 rather ideas regardless of their source are displayed, thereby breaking Max Weber's bureaucratic philosophy of keeping knowledge and intentions of professionally informed secret. The motto for change to Enterprise 2.0 is the art of transparency and let go of control because all information can be accessed by all people real time and the usual organizational hierarchies are deliberately broken down to create room for successful operation of self-organization capable of ushering in long-term innovative power and creativity needed to boost competitive advantage (Newman and Thomas, 2009; Buhse and Stamer, 2008). Rather than installing a corporate-wide wiki, the pioneering employee sets it up for a small group. In fact, firms do not initiate blogging rather employees do independently and the firms finally realize it in a while. Enterprise 2.0 overturns previously encoded political bargain; the new architecture of participation reduces the control of middle managers over the flow of transactional information.

Enterprise 2.0 and SMEs

Enterprise Systems (ES) "are commercial software that enables the integration of transaction-oriented data and business processes throughout the organization and perhaps eventually throughout the entire intra-organizational supply chain" (Markus and Tanis, 2000). These commercial software packages integrate core business processes, which have the potential of integrating customers, suppliers, and business associates with in the entire intra- organization value chain (Bajwa, Garcia and Mooney 2004) in order to present a holistic view of the organization, which depends on a common platform(Markovich and Fink, 2008). It is also viewed as an Inter-Organizational Information Systems (IOIS), which facilitates and enhances communications,

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transactions, productivity, and building of competitive advantages directed to a common data base (Markovich and Fink, 2008; Robey et al 2002). It connotes internationalization of business operations through telecommunications/digital networks connecting the business and its partners (e.g.; suppliers, dealers, customers, etc.) in terms of information exchange and commercial transactions. These definitions imply that Enterprise Systems facilitates major business processes an new methods in communications, collaboration, connectedness, business transactions, market structure, education and work; along the value chain leading to common constituents as Web marketing, online selling, online procurement, e-communication as well as service and support. In addition, they imply strategic alliance since integrated significant digital data generated through database marketing and relationship marketing may be archived and utilized successfully and collectively by an organization and its strategic/trading partners to build competitive advantage globally (Porter and Millar, 1985; Bibas, 1994; Gray and Watson, 1998). As the core of most organisations business strategy, organisations are constantly relying on these technologies (Griffith and Nortncraft, 1996), and are spending significant amount of money to invest on IT in the belief that it save costs and improves organizational performance (Teoh and Pan, 2008).

The acquisition of IT and telecommunication by SMEs globally is projected to exceed $1.1 trillion in 2008, while spending related to CRM software packages is doubled, reaching $2 billion in 2008 (Ramdani, Kawalek and Lorenzo, 2009). Gartner Research revealed that Enterprise 2.0(E2.0) would grow from $226 million in 2007 to more than $707 million by 2011 representing a compound annual growth rate of more than 41% (Brainard, 2007). Forester research predicted that organisations would adopt Enterprise 2.0 applications extensively in the near future with an expected earnings of $4.6 billion by 2013 with social networking, Really Simple Syndication (RSS) and mashups having the largest share (Sankar and Bouchard, 2009). Further results also indicate that out of 400 or more businesses surveyed by AIIM- a non –profit content management company, 44 percent of the respondents indicated that Enterprise 2.0 is very important and 27 percent believed that Enterprise 2.0 would have a tremendous impact in realizing business goals and success(communication new, 2008). In addition, further results by forester show that companies are adopting Enterprise Web 2.0 for;

Business Productivity	74 %
Competitive Pressure	64%
Specific Problem Solution	53%
Partner Recommendation	53%
Employee Request	45%
Bundled Service	25%

Source; Shuen, (2008)

The age of Enterprise 2.0 (E2.0) has evolved and the market is growing rapidly leading to rapid acquisition of software packages by large organizations, which has extended to SMEs (Bajwa, Garcia and Mooney 2004). Commercial software packages have emerged to overcome the ordeal of integration, communication and collaboration problems at all levels (Khoumbati, Themistocleous and Irani, 2006; Puschmann and Alt 2004). These commercial software packages which extended to enterprise resource planning (ERP), Supply chain management (SCM), customer relationship management (CRM), e-procurement (Ramdani, Kawalek and Lorenzo,

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2009), assist electronic business transactions or electronic commerce in whose effective business application such as order processing, engineering design, manufacturing management, marketing and funds transfer improves in parallel with advances in IT. It provides both large and small organisations with opportunities unexploited and plausible ways to compete with their counterparts (Gengatharen and Standing, 2005; Urwin, 2000; Raymond, 2001). A niche-oriented SME community with small target groups for instance, may be active internationally as a result of social software platforms, which today exploits the infrastructures of Web 2.0 technique and technologies to serve as a major source of global sales (Saban and Rau, 2005; Papazafeiropoulou, Pouloudl, and Doukidis, 2002). Although, 90 percent of midsized companies use IT/IS in one business task or the other, (Chuang, Nakatani and Zhou 2009), see enterprise systems as organization's must new and strategic computing platform (Hong and Kim 2002; Teoh and Pan, 2008), keen to adopting systems that will yield substantial competitive advantage, by complying with the characteristics and needs of large organisations (Federici, 2009). Most of these organizations constantly look upon these commercial software packages to stimulate knowledge sharing and development of networks, yet only few take a holistic view to understanding conditions that facilitate the application and use of these systems (Pan 2008; Mason, Castlemen and Parker, 2008), perhaps because they lack human, organisation and technological capabilities (Khoumbati, Themistocleous and Irani, 2006). Although, some organizations have integrated these commercial software packages especially Enterprise 2.0 (E2.0) through front –end component for customer relationship management (CRM) (Bajwa, Garcia and Mooney 2004) and use unstructured tacit knowledge captured from commercial software tools such as blogs, wikis and online communities. These commercial software packages are viewed as competitive tools for SMEs in today's fast changing competitive environment (Teoh and Pan, 2008).

Ample studies have suggested that huge resources are regularly wasted on ill planned and miss-management of IT (Pan 2008), leading to high failure rate (Hong and Kim 2002; Nelson 2005; Griffith and Nortncraft, 1996). While there is rapid adoption of internet among SMEs in UK, the adoption of commercial related technologies as the foundation for business communication, collaboration and transaction is slow. Metaxiotis (2009) reports that 1.9 million SMEs in UK are connected to the internet, which exceed 1.5 million set goal by government, however the use of internet-enabled technologies by SMEs is relatively low. One major problem confronting vendors and SMEs in adopting and implementing Enterprise 2.0 today is lack of its awareness and benefits (Esteves, 2009; Cook 2008) thus, making SMEs to be regarded as late majority and laggards in adopters' category based on the model developed by Rogers (Khoumbati, Themistocleous and Irani, 2006). These indicate that the development and uptake of Enterprise 2.0 though still in rapid progress need to be evaluated and engineered. The positive approach to support the Enterprise 2.0 usage among the early adopters and to encourage potential adopters is therefore a necessity.

The Framework of Enterprise 2.0

Buhse and Stamer (2008) identified different Enterprise 2.0 applications within a triangle called 3C's model that indicated a number of use cases- Information Management, Identity and Network Management, Communication Support at each peak. Observations show that applications often used in information management are wikis, group editors, social tagging. Identity and Network Management is often associated with social networking while communication support is linked

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with weblogs and instant messaging. While the model is useful in understanding where each application is often deployed, the model does not provide a holistic view of E2.0 technologies.

The Enterprise 2.0 Mix and Applications

Social software is significantly realizing the dreams of Enterprise 2.0; it plays four specific functions, which are often referred to as the 4Cs, Enterprise 2.0 mix or the social software mix. This model provides seemingly more holistic view of Enterprise 2.0 than Enterprise 2.0 triangle. The functions border on communication, co-operation, collaboration, and connection and their applications to business amplify knowledge sharing and building of competitive advantages. Cook (2008) noted that cooperation focuses on helping employees work to achieve a common goal however; the knowledge gained from such a process is not the goal. Collaboration focuses on the knowledge gained from designing and/or accomplishing a task. However, both the former and latter, have the objective of helping a group to achieve better results than when people work individually. He further asserted that formality is more essential in collaboration and connection than communication and corporation because work is carried out based on structures (see Figure 2.3). On the contrary, high level of interaction exists during collaboration and corporation than connection and communication because the focus is on group rather than individuals.

Organizations must consider the corporate culture before adopting different Enterprise 2.0 application. For instance, companies with a formal structure and embrace group interaction are likely to benefit more with Enterprise 2.0 applications that enable collaboration and those that adopt informal structure, culture and reward individual contributions are likely to adopt Enterprise 2.0 applications that support communication. The fact is that the 4C's approach (Enterprise 2.0 mix) can help organizations to decide what form of Enterprise 2.0 technology to adopt and under what condition, as well as supporting organizational change. For instance, an organization that decides to move from individual to collective problem solving approach guided by informal culture should focus on cooperative Enterprise 2.0 applications or software that require more interaction. Although this model is useful in deciding what application a firm is likely to adopts, Cook,(2008) argues that some overlaps exist between these categories.

Communication

People have an innate need to communicate and build community that is hard wired into the human brain; you can take a person away from the Stone Age but you cannot take the Stone Age off him (Nicholson, 1998). Implicit from Nicholson's notion is that one can hardly strike out dependency in human existence; communication is vital in human endeavor because often-continued existence depends on individuals and groups for effective relationship. Most human organizations, be it for-profit or non-for-profit, show exchange of information or communication as critical to determining their success or failure rates. For Web communication, the strength is that when one party sends message, it is displayed for all to see/share and the resulting on-line communities are not only personally satisfying but also an important force for business. It is often said that communication is a social process that creates and solves problems and whose platforms allow people to converse via SMS/texts, images, voice, video tapes or a combination of some or all. For instance, Symantec Organization invested in Web site containing several bulletin boards, whereupon dissatisfied customers e-mail, or post automatically, their problem(s) to the appropriate bulletin board and

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expect solution(s) from Symantec's technician or customer support representative. Among the platforms are discussion forums, blogs, instant messaging, social presence and virtual world.
Often the propensity to communicate freely is based on built relationships between the parties involved. In the modern business world, Internet offers a vast network of computer resources, self-organized to adopt communication standards, and to optimize the exchange of information as a result (Newman and Thomas, 2009). Self-organized as they used here indicates that no enforcement agency mandates conformity; for instance, most Websites adopt Hypertext Mark Up Language (HTML)/Hypertext Transfer Protocol (HTTP) as a means to format and transport information.

Literature on communication shows that it flows formally (upward, downward, horizontal, or networked), and informally without prescribed or regulated formats. Most organizations always use the Intranet to support formal communication. A corporate Intranet can rarely be described as social software (Cook, 2008), which means informal communication is most relevant to the application of social software (McAfee, 2006; Newman and Thomas, 2009). Informal communication spontaneously exists because people want to share their ambitions, hopes, and joy; to blow off steam of anger and hostility; and to share and agree upon important opinions and attitudes that make them feel they belong. Informal communication permits sharing of knowledge, opinion, experiences, emotions amongst co-workers, superiors, and agreeing on vital opinions, attitudes and beliefs without any formal structure. One major challenge according to Cook, (2008) is how to integrate unstructured or tacit communication with the explicit communication that already exist in organizations.

Co-operation

Literally, co-operation is very significant for mutual co-existence, otherwise too many things may be assumed to exist in chaos. And so, it is ideally needed everywhere; at home, at office, at social gathering, and other human gatherings. Characteristically, co-operation requires honesty, brother-hood, sharing of opinions, less conflicts, and focus on common goals amongst the parties involved. Although sharing of message content with other people may be structured in an organization, a new dimension of co-operation at the instance of Enterprise 2.0 views co-operation as software that enables people to share in an unstructured manner. With this, co-operation is concerned with social software that encourages informal working where there are no pre-defined goals, where each contributor retains authority over his contributions, where information is shared as needed, and where the software takes on the job of assembling data in order to show the combined picture (Cook, 2008). Co-operative social software relies on what Robert Metcalfe refer to as network effects to deliver maximum values to the organization and the individual employee; as more employees use it, so it reflects on individual and overall value chains. Network effects are measured directly by one's own use of the software; and indirectly by others using the software in a manner, that benefits others.

Often co-operation and collaboration are confused with each other as if they are perhaps the same. Dillenbourg et al (1995) differentiated the two as shown below. For co-operation, there is division of labour and responsibility; no jointly defined goals; information shared as needed; individual contributors retain authority; short-term and informal workings; task split into independent sub-task; and co-ordination only when putting together partial results. And for collaboration,

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collaborative structure determines authority; risk and rewards are shared; long-term and shared commitment and goals; cognitive processes divided into intertwined layers; and mutual engagement of participants in a coordinated effort to solve a problem.

Collaboration

Recall, collaborative social software differs from cooperative social software because it involves the engagement of participants in a co-ordinated attempt to solve a problem, with shared commitment and goals. Collaborative software and collaborative social software have less defined distinction; all collaboration is social as it involves mutual engagement and relationship building. Merono-Cerdan, Soto-Acsta and Lopez- Nicolas (2008) classified collaborative tools into electronic communication systems (ECS) and teamwork system. The ECS aimed at facilitating information exchange, opinion and enables relationships to be established among workgroups, customers, institutions. They further sub-divided it into two (discussion forum and shared database), based on how often the system is used. The teamwork systems pre define work processes and integrate information, which is further classified into two- repositories and workflow. Shared database establishes updated information and keeps the organisations systems memory up to date. It reduces or prevents data being repeated while being modified by authorised persons within the team or organisation. Repositories are important documents gathered incorporating both unspoken and spoken knowledge in form of pictorial, textual and diagrammatic formats from project specialists. While these classifications provide the basis to understanding the functions of some of these applications, however, they do not provide a comprehensive view of Enterprise 2.0 applications.

Enterprise 2.0 Discovery Vision

The roles of the workforce have moved from performing just physical and repeatable task to jobs that require crucial thinking and decision-making. This makes employees knowledge workers. Knowledge workers are employees who discharge their duties mainly with information or develop and use knowledge in the organisation. While most economics have increasingly concentrated on knowledge management, knowledge based economies rely on the utilization of knowledge to produce economic benefits and rely on data distribution. Newman and Thomas (2009) assert that data is distributed when is discoverable and meant to be assimilated rather than locked away.

Casarez et al (2009) point out that all information must be exposed to common search or discovery. Enterprise 2.0 Discovery makes search effective on the intranet, as it would be on the internet. While information searchable on the internet is public information, which implies that it is available for any one that intent to search, information behind the firewall, are often protected. Employees need to find all corporate information assets from a single user interface in the same manner public contents are searchable on the internet using the primary discovering mechanism such as search, tag cloud, pivoting or lateral searches and link navigation or combination of these tools (Casarez et al 2009) with a level of protection or access control. The key to creating efficiencies around collaboration and knowledge sharing is Enterprise 2.0 discovery that indexes information about people and make them searchable. The ultimate vision of Enterprise 2.0 discoveries therefore is to ensure that holistic search is carried out within the corporate intranet about people and information asset (Newman and Thomas 2009; Casarez et al., 2009). This is critical to improving productivity

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Corporate Requirement for Efficient Development and Uptake of Enterprise 2.0

Enterprise 2.0 is a powerful information and communication technologies that do not take into account the centralized nature of the IT polices and control. Adoption of Enterprise 2.0 in organisations enables both the top management leaders and knowledge workers to communicate with each other using Enterprise 2.0 applications. Realizing the benefit of grassroots adoption is to an extent a highly effective strategy. As informal adoption increases, it is also vital that organisations plan for formal adoption and develop adequate guideline for usage. A company that develops high-level strategy, understands the extent of the scope of Enterprise 2.0 and identify areas of formal (top down) adoption is valuable. These help tactical decision makers to know areas needed for users to be educated regarding training, uptake and usage (Mark, 2009).

Organizations are required to manage their IT infrastructures in a way that is consistent with such areas as governance, risk management and compliance. If Enterprise 2.0 is to be adopted and use, these polices and procedures need to be applied. Governance is the process decision making regarding task and projects are implemented. It follows the formal decision making structure in the organisation. Risk management although have different connotations, in different context, however adequate management of risk incorporate all that aim at reducing organisations uncertainty at its minimal level. This is vital because improper risk exposes organisations to unacceptable level of risk. Compliance is defined as "the state of being in accordance with establish guidelines, specification and legislation (Newman and Thomas 2009, p 340).

While numbers of scholars have argued that, the governance of Enterprise 2.0 solution impedes innovation. Newman and Thomas (2009) pointed out that the governance brings order and sustainability rather than environment that constitutes disorder during informal information sharing and dissemination. Mark (2009) opines that adoption will not be successful if organisations fail to put the necessary infrastructure in place and scale them. Top management need to understand how their employees are carrying out their duties to help them develop strategies for effective grass root adoption. If Enterprise 2.0 is, rigidly structured, knowledge worker will ignore it. Although knowledge workers need to exercise freedom to use Enterprise 2.0 to meet their works need, Enterprise 2.0 without structure and security will not work (Newman and Thomas 2009), good Enterprise 2.0 governance requires a well establish guidelines.

While organisations are liable for the activities of their employees on the internet, Newman and Thomas (2009) assert that companies acknowledge risk when they officially introduce blogging and other Enterprise 2.0 application. The applicability of these technologies need to be monitored to alleviate the risks by ensuring that unauthorized contents are not posted both on the internet and intranet. Setting a policy for the type of information employees can disclose and the character they should imbibe is the first strategy to be considered.

Enterprise 2.0 makes assumption on how users within the organization do their work thus, allowing knowledge workers design Enterprise 2.0 technologies to meet their specific needs by creating a format that make it difficult for others to understand the information created. Enterprise 2.0 governance need to address the best practice for generating and structuring content in order to encourage the use and completeness. Organisations need to instigate their employees to have a say by given their own opinions and allowed to declare their skills, Newman and Thomas (200) opine

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that Enterprise 2.0 is more about people than technology, which will not yield any substantial competitive advantage if people are not involve. Human resources as well as method of discovery and contribution to encourage participation need to be in place. The relationship people do have with others in the organisation to get their work done do not often align with the organisational hierarchy, Enterprise 2.0 tools according to Newman and Thomas are been used to create informal relationships, collaborate, seek guidance and socialize enabling unquantifiable entity measurable. Most organisations have position Enterprise 2.0 as a critical success factor to achieving business goals and objectives but only few organizations have a clear understanding of enterprise 2.0. Culture has been identified as a major factor that facilitates E2.0 uptake and development. The enterprise culture involves creating an atmosphere necessary for knowledge sharing which facilitates the coalition of most businesses and enable them to exploit business opportunities for value creation and relationship purposes. For such knowledge-sharing network to be established, businesses need to develop mechanism that incorporates human resources into the enterprise culture (Mason, Castlemen and Parker, 2008). A survey conducted by AIIM- an enterprise content management association from 441 end users show that organisations with efficient knowledge management accepted that culture was the must influencing factor in developing and adopting E2.0 and drives value.

Casarez et al (2009) sum up this by emphasising that effective adoption and use of Enterprise 2.0 technologies centres on addressing three converging trend; technological, cultural and regulatory.
Technological: The proliferation of technology facilities exchange of ideas and knowledge among persons and group. Examples include blogs, wikis, mashups, social networks, social multimedia capabilities, composite application. These technologies or applications reduce barriers to entry.
Cultural: The emergence of Enterprise web 2.0 promotes effectively and with force, the demand of human rights as people (workforce) freely participate and share ideas from both top management and at operational level. In short it promote hyper-individualized and perspective –based participation
Regulatory: This include legal status, business regimes, and best practice that require the persistence of most of the data/information to be stored in a manner auditable whether for risk management, or compliance or for the purpose of proving better means of richer information allowing information to be store longer than before.

Opportunities and Threats of Enterprise 2.0

McAfee (2006) opined that two major potential challenges remain even if top management and IT department put everything in place before adopting Enterprise 2.0. He emphasised that "full of activity" knowledge workers will find it difficult to use these new evolving technologies despite education and training because majority of internet users do not use wikis and blogs thus the platforms for successful usage is restricted. Secondly, knowledge workers might utilize Enterprise 2.0 technologies as planned, within the organisation; however, the usage might lead to inadvertent outcome because the intranet is not a platform for deliberation or discussion where knowledge is shared.

Marfleet (2008) notes that organisations adopted command and control approach and deploying IT restricts knowledge workers access to some technologies often used at home. Enterprise 2.0

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technologies hinder management ability to exert top- down control and ensures that both vertical and horizontal boundaries are flattened.

On the contrary, these technologies can be controlled, shutdown and influenced by powerful people with in organization on like the internet that no one has the power to influence. The strategic implication of this is that top management have major role of stimulating uptake and usage and avoid intervening often (McAfee, 2006). In addition, the practice of knowledge workers and its output is more visible were a company adopts and use Enterprise 2.0 technologies

CONCLUSION

The strategic implication Enterprise 2.0, according to Newman and Thomas (2009) principally revolves on the organizations trusting the workforce and realizing that the long run benefits of loosening governance over information outweighs the risks. In addition, following Thorndike's law of effects, organizations must recognize the efforts of knowledge workers towards their intellectual properties and reward them accordingly to bring such pleasurable behavior under control. While McAfee has been lauded, Cook (2008) criticized the converging trends (simple, freeform, platform, emergent, order from chaos) suggested by him as falling short of making Enterprise 2.0 a reality rather the trend is still technological. However, Cook argues that social/commercial software movement entails the integration of multiple trends that triggers changes in behaviour and that technology is just one element in business, economic or society.. Enterprise 2.0 is more about people than technological issues, which will fail if people do not participate (Newman and Thomas; Buhse and Stamer 2008). While large establishments have tried to co-opt Enterprise 2.0 with different level of success, Hinchcliff (2007) points out that the meaning of Enterprise 2.0 (social application, optional to use, free form, unnecessary structure, high egalitarian and support many form of data) has remained the same**.**

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