

Information Communication Technologies Deployment and Workers' Education in Private Organisations in Ibadan Metropolis: A path to fast-tracked industrialisation

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Abstract

Every worker has his/her potentials that can help to improve their performance and benefit their work organisation. These skills can be acquired through the use of Information and Communication Technologies (ICT). It is on this basis that this paper attempt to present a glimpse of ICTs, to be an extension of workers' education which are vital and indispensable in the process of transforming the state economy into an industrialised one. This study adopts descriptive survey design. 60 respondents were randomly selected in each of the three private organisations in Ibadan namely: Nigeria bottling company Ltd, Fan milk plc and Seven up bottling company. Questionnaire was the instrument used for data collection and the data collected were analysed descriptive and inferential statistical tools. The finding revealed that the workers are yet to be introduced to proper usage of ICTs to improve, enhance and modify their skills in various task, no access to Wi-fi internet, instruction is being disseminate verbally at work. Conclusively, ICTs usages have minimal impact on the workers performance as the potentials of ICT are not fully tapped by the workers. Although, investigation showed that workers are willing to acquire ICT skills. The study recommended that workers should be familiarised and trained in the use and tapping the potentials of ICTs, workers education organisers should upgrade and advance their curriculum to accommodate or centre on the use of Information and Communication Technology.

Keywords: *Workers' education, ICT deployment, Industrialisation*

Introduction

Prominent among the challenges facing developing countries like Nigeria today is that of preparing their citizens, societies and government agencies for globalisation and the information and communication revolution. Policy-makers, managements, educationists, non-governmental organisations, academics, and ordinary citizens are increasingly concerned with the need to make their societies competitive in the emerging trends in information economy (Milligan 2006). Nigeria likewise other developing countries are always on the toes of the developed nations where ideas, innovations and practices that can change the nation to better position are being emulated and among the practice is industrialising the nation's economy which has being on process for decades with little success (Meenakshi 2013). This can be linked to some barriers like poor access to information, unfavourable policy formulation, poor implementation of policies, inadequate ICT usage among others (OECD 2003). Literatures have shown that any society that pay more attention to its workers education by familiarising them to the use of ICT have the chance of rapid economic growth as this will impact positively on the Gross Domestic Product (GDP), (Pekkanen, 2012)

However, industrialisation of Oyo state and the entire nation may be cumbersome to achieve without ensuring that the workers or the working class citizens are properly expose to ICT most especially, the use of computer and internet facilities. The process of industrialisation goes beyond what a nation can tackle and succeed without sharing of ideas and knowledge from other developed countries of the world (Meenakshi 2013), hence, the need for integrating ICT skills acquisition into workers' education as well as its deployment to workplaces in Oyo state.

Literature

Globalization and innovations in technology have led to an increased use of ICTs in all sectors being public or private without exemption of the educational sector. This has shown that the need for ICTs in upgrading the workers knowledge and skills are widespread and are continually needed not only in Nigeria but world widely. It is generally believed that ICTs can empower workers, making significant contributions and achievements in industrialisation process of the country. The goal of this paper therefore, is to explore the link between workers' exposure to ICT and the industrialisation of Oyo state, Nigeria. No society can ride on any other means to actualise industrialisation except if the workers in both public and private establishments are given proper attention in terms of exposing them to the use of ICTs which can introduce and advance them in the new ways of doing things technologically in this global dispensation.

However, current research on the impacts of ICTs on workers achievement yields few conclusive statements, pros or con, about the use of ICTs in industrial organisations. Studies have shown that even in the most advanced work places in industrialized countries, ICTs are generally considered central to the skill acquisition processes (Meenakshi 2013). However, ICTs inculcation on the workers must be promoted. Standardized testing, for example, tends to measure the results of traditional working practices, rather than new knowledge and skills related to the use of ICTs. It is very obvious that more research needs to be conducted to understand the complex links between ICTs, work performance, and achievement. Again, many workers are reluctant to use ICTs, especially computers and the internet. Some of the reasons for this reluctant attitudes include poor software design, disbelief about the effectiveness of computers in improving learning outcomes, lack of administrative support, increased time and effort needed to learn the technology and how to use it for skills acquisition, and the fear of losing their authority in the work places as it becomes more worker-centred. In terms of using internet and other ICT as a resource for work preparation, most workers cannot interact, not to talk of being conversant with computer and other ICTs wares which are the only fast track a nation can follow to enhance a meaningful industrialisation.

Information and Communication Technology (ICT) deployment

ICT deployment is the process of spreading out, sharing, distributing, implementing or putting information and communication technology into use or arranges it for action. Precisely, it is the disbursement of ICTs to the beneficiaries in readiness or preparation for its usage. Although, there are information all over at all times but the ability and capability to grab, process, retain and use information wisely for developmental purposes depends largely on the availability of the ICT gadgets, ability to use it and so on.

Information and Communication Technologies (ICTs) are referred to as the varied collection of technological gear and resources which can be used to communicate, generate, distribute, collect and administer information. According to UNESCO (2009) ICT is refers to all forms of technology that are use to transmit, store, create, display, share or exchange information by electronic means.

It is imperative for the government, labour unions, employers of labour, and other stake holders in industrial relation to revise and redesign the educational packages for the workers in line with the global standard which focuses more on the use of ICTs to enhance productivity in workplaces. The knowledge driven economy nowadays centred largely on how the potentials

of ICTs can best be tapped for development, however, it is not an overstatement to say that every human activities presently revolves around ICT and whoever that lacks the appropriate skills and knowledge of using these technologies cannot benefit from it (Tongia, 2004)

UNESCO has played a major role in spearheading the Education for All initiative (EFA) to harness the potential of ICT. The widely subscribed Dakar Framework for Action recognises that, ‘these technologies (ICTs) have great potential for skills and knowledge dissemination, effective learning and the development of more efficient work services’.

When looking at the integration of ICT to support the achievement of organisational objectives, it can be found that after almost a decade of using ICT to stimulate development, it is not yet fully integrated in development activities hence, awareness rising is still required.

ICT is about the new ways in which people can communicate, inquire, make decisions and solve problems. It is the processes, tools and techniques for: gathering and identifying information, classifying and organizing, summarizing and synthesizing, analyzing and evaluating and also speculating and predicting (Katz & Macklin 2006).

The fundamental changes and challenges in the nature of life and work in Africa or elsewhere are therefore taking place in the context of globalisation through the application of ICTs. Nigeria workers being in private or public organisations can be referred to as the intermediary or transmitting channel between the ICT and industrialisation. Workers should therefore, be exposed to the use of ICT gadgets like computer, internet, handset, televisions and so on, so that they will be able to interact and operate them to communicate and learn new ideas, skills, innovations, knowledge that can make industrialisation achievable quickly in Nigeria

In this context, employers and trade unions needs to play an important role in transformation to ICT education and its deployment to the working class, both at the public and private settings, which should focuses more on the issues of; connecting knowledge to life outside individual organisation, shifting from rote learning to constructing knowledge, providing a wide range of experiences for the overall development of the worker; and bringing flexibility into the system. The recent developments in ICT have changed the world outside the organisations and it is more eye-catching and interesting for a workers and their organisational setting.

ICT deployment challenges

Industrial organisations in Oyo state, Nigeria are facing numerous challenges on deployment of information and communication technology like all other renowned work organisations of

the world. However, deployment of ICT to workplaces in order to advance and familiarise the workers in their different areas of specialisation to the use of ICTs to learn new ideas, skills, innovation globally has some challenges and among these are: internet and broadband; policy and legal framework regulation; ICT infrastructures, capacity building, universal access; local content development; public private partnership; security system. Also, ICT electronics gadgets, cost of internet data, poor facilities, fear of change, computer illiteracy, fear of redundancy, cyber crime, electronic security, unstable power supply, adamant to training and retraining of workers among others (Tongia, 2004).

In spite of the fact that it is the government that supposed to control and regulate the internet distribution cost and tariff speed, the government agencies in charge are rather more interested in tax collection on it from the users without minding the value of services rendering to the users (Alturise, 2013). This is seriously affecting the spreading/distributions of ICT to the workplaces as mostly the private organisations are autonomous, managing their resources themselves. Hence, they cannot make ICT available in their workplaces not to talk of incorporating it in the workers' education programmes.

Benefits of ICT

There are numerous benefits that could be deduced from ICT usage, it is however beneficial to both the workers in their various duty post and as well advantageous to the organisations. It is obvious that the use of ICT nowadays has become fundamental to the operation of organisations and society. It allows the person to decide on the particular information to work on, person becomes self-motivated, self directed and will be readily, quickly, efficiently responds to new ideas and innovations. It enables the transmission of important information of organisations to the stakeholders easy, vital information that can enhance and increase performance and productivity through the use of social networking, employee satisfaction can be achieved due to competition, dwindling resources, revitalising and reinventing the culture of organisations and how businesses are being operating. Fahmy, (2009) affirmed that employees who engage in ICT usage are more productive than those that did not. The employees enable show their skills and experiences, connecting with other people in different organisations, share knowledge and ideas that are more appropriate and relevant to workers development and organisational performance.

Workers' education

Workers' education is that form of adult education that has to do with improvement; upgrading and development of those that are already working without necessarily opt out of their job. Kester, Omoregie and Gbenro (2010), opines that workers' education is that sector of adult education which caters for adults in their capacity as workers and especially as members of workers' organisations. Its immediate aims are virtually to increase the ability of workers to assume more responsibilities in their own organisation... in their work places and in local and national decision-making bodies. Omolewa cited in Omole (1999), affirmed that workers' education itself varied. It embraces, for example, literacy education for adult workers'... There is also the in-service training, seminal, workshop training and the frequent Holidays programmes run by Universities. Furthermore, he identified other aspects of workers' education like industrial and technical education, an aspect of education which according to him is one which; demonstrates clearly, the need for workers to continue to update their knowledge, skill and training... that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge.

The International Confederation of Free Trade Unions (ICFTU) sees workers' education as an educational activities aimed at developing the personality and social efficiency of the workers engaged in the labour movements; with the exception of activities aimed at developing the workers' professional skill, activities undertaken by trade unions or under their control with the more precise aim of giving the workers a training which will enable them to serve their organisation and the country and to cope with problem confronting them as members of the Trade union movement at whatever level. However, the Education for All (EFA) has six major goals to achieve on or before 2015, among these, goals 3, 4 and 6 have specific implications for the workers' education in the country. There is the need to emphasise that most organisations in Nigeria presently attached importance on workers' education that would teach the workers how to be dutiful, more productive, obey instructions and cheerful in undertaking the task entrusted to them by their employer (s) without further question. Kester (2002:Pp 556) opines that: the educational system in most developing countries like Nigeria, does not yet address fully the needs of the working class; who have special education requirements due to the fact that the system have not fully developed to deal with them.

Workers' education of today has a particular critical role to play in Nigeria, as there are rapid changes in the society by providing adequate knowledge and information that the working class

people need in order to cope the changing institutional, structural and technological conditions of the world of work. Obviously, limited and old methods of training, educational attainment and exposure of the workers seem to restrict the nations' capacity to meet up with the industrialisation needs.

Hitherto, in the 19th century, as a result of the evolution of machinery which call for upgrading the workers, workers' education is seen as a mere technical utilitarian education where instruction is given to the working class in the principle of arts they practiced in establishments (Omolewa, 1981; Adedeji, 1982; Omole, 1987). Today, given the technological changes, challenges and the employment trends, no matter the perception nor orientation of an educational programme for the workers in Nigeria and other developing countries of the world, such programmes must be conceptualised and interactably connected with ICT especially computer and internet usage so that the struggle for the reduction of its illiteracy, poverty, misery, job insecurity, inferiority and uncertainty to the barest minimum. This is to bridge the existing educational gap created by the ever rapidly changing from agrarian to globalising industrialisation, as it will serve as a key dimension of strategies for viable industrialisation not only in Oyo state but also in other parts of the country.

Industrialisation

Industrialisation is the era of replacing hand tools by machine and other power technical tools; it also involves vast economic and social changes, for example, a tendency towards urbanisation, a growing body of wage earners, increment in technical and advance educations among others. It is a process that happens in a country when it starts to use machines to do work that was once being done manually by people. It changes the things that the people do as they knew it traditionally to the modern day practices, that is, doing things scientifically, it is the period of social and economic change that transforms a human group from an agrarian society into a modernised technological driven society and it cut across the globe irrespective of the social, economic and political adventure of a country.

Ajayi (2011) posit that Nigeria is far behind the Newly Industrializing Countries (NICs) of the South East Asia. Manufacturing in Nigeria has largely been dominated by a valorisation of raw materials and import-substitution type that are capital intensive rather than labour intensive. In addition, the absence of heavy industries and car manufacturing has militated against effective transfer of technology, hence, the heavy investment in manufacturing. There is the general low

level of inter-industry linkages-failure on the part of industries to utilize the products/by-products of other industries especially in the production process.

Tracing from history, Jegede (2000) says that the earliest attempt by the government to develop small scale enterprises in Nigeria was in 1946 when seasonal paper No. 24 of 1945 on a ten year development and welfare plan was designed. This plan was presented to the legislative council of the time on December 13, 1945, and approved by the council on February 7, 1947. This paper authorised the establishment of Nigerian Local Development Board whose functions are to:

- a. Promote and develop village craft and industrial development of Nigerian products
- b. Set up and operate experimental undertakings for the testing or processing of Nigeria products
- c. Approve other suitable projects by the government.

The board primarily was to encourage and develop small scale enterprises within the country, which of course will help them grow to better and more efficient firms that will yield prospects to their proprietors as well as the development of the economy. Small scale enterprise has attracted a lot of attention from Nigerians; the economists, management consultants, the government and so on, as almost all of them were interested in the transition of the country to an industrialised state.

Industrial policy is an important and powerful instrument for stimulating rapid economic growth and development. However, Nigeria has failed to make substantial and significant progress and advancement due to weak policies and poor implementation. From inception of the Nigeria independence, various governments have been trying a range of approaches centred on the order of those in power and their advisors. The outcome of these policies has been a huge and unpredictably, favouring “rent seeking” (Mike 2012). He further said policy failure can be in two different levels; the first is associated with formation of policies that fail to achieve optimisation, or recognise the real problems and their solution. It can also occur when the policy makers are influenced by vested benefits or internal and external pressures. Moreover, it associated with implementation; one main defect in industrial policy is the failure to recognise the relevant stakeholders and a policy that is not people centred and inclusive.

Problems militating against industrialisation

There are numerous problems that are militating against the process of industrialisation in developing countries including Oyo state, Nigeria. The failure of the programme today can be attributed to the following amongst others:

Lack of credit facilities for the investors; inadequate skilled manpower; production of sub standard goods; lack of infrastructural facilities to work with; over dependence on foreign machines and equipments; poor policy formulation and implementation; inadequate local raw materials; and political instability. However, if the government can have a rethink and address these problems, industrialisation cannot elude the society for long.

Benefits of industrialisation

It is quite obvious that industrialisation has become object of discussion not only in Nigeria, Africa alone but in the whole world; the reason for clamouring for it is because of the benefits that associated with it. These include; creating more job opportunities for the citizens, it improves the level of skilled manpower development, improve economic growth and stability, assist greatly in poverty reduction, stimulation of other sectors to mention but few.

In this context, employers and trade unions needs to play an important role in transformation to ICT education and its deployment to the working class, both at the public and private settings, which should focuses more on the issues of; connecting knowledge to life outside individual organisation, shifting from rote learning to constructing knowledge, providing a wide range of experiences for the overall development of the worker; and bringing flexibility into the system. However, deployment of ICT to workers has some challenges and among these are: Internet and broadband; policy and legal framework regulation; ICT infrastructures; capacity building; universal access; local content development; public private partnership, security system.

Industrialisation fast-tracking with ICT

ICTs are potential human capital developer and this makes it mandatory for everybody to acquire not only for oneself but also for organisational relevance and productivity. Since workers' education is aimed at upgrading knowledge and general development of workers at their various workplaces. This therefore cannot exclude effective acquisition and utilisation of ICT most especially as the society is transforming from agrarian to industrialisation era. With ICT in workers' education, Oyo state will be transformed and improve to an appreciable

and enviable level of industrialisation. Anecdotal evidences abound that ICT had contributed immensely to industrialisation process in advance countries. This presupposes that a study of this kind that is initiating the integration of ICT into workers' education and its deployment to workplaces can fast-track the needed industrialisation in Oyo State. ICTs usage can enhance competitiveness globally most especially for processed and manufactured goods by linking industrial activities with primary, local and international trade by using modern technologies that improves and enhances productivity.

Security wise, internal security in Oyo state like other parts of the country is under threat with various challenges, however, with numerous insecurity challenges, industrialisation will be far fetch, therefore ICT will improve the security system if it is fully engaged to facilitate and exposes any act of insecurity, it is only where workers have peace and rest of mind that their best can be derived; effective communication, discovering of hoodlums, security awareness, unethical work attitudes, transparency and accountability, improve social network, forgery and stealing, using inverter and solar technologies for power supply as against relying on generator and unstable power sources that cannot be guaranteed, among others will be achieved through effective ICTs usage as it speed up the process of industrialisation in the state.

It will also strength the linkages with other sectors both locally and internationally through interconnectivity of ICT which can fast-track the process of moving from agrarian to the use of computerised machineries in production which will makes the production fast, more quality, less stress at cheaper rate for people's consumption, with these industrialisation can be fast-tracked in Oyo state.

Statement of the Problem

Traditional educational practices no longer provide workers with all the necessary skills, ideas, knowledge and innovations to survive economically in today's work place. When ICT tools are widely used at all levels of industrial settings in developed countries, they are yet to take maximum advantage of ICT in developing countries like Nigeria. Ajayi (2008) noted that 'today's organisations were organized around yesterday's ideal, yesterday's needs, and yesterday's resources and they were not even doing very well yesterday not to talk of meeting the present or future needs. Literatures on the use of ICT, found that workers in both private and public settings lack skills and knowledge in the use of computer and software and the result is lack of confidence in utilizing ICT tools for communication.

Lack of effective ICT training remains one of the major obstacles for integrating instructions. Aramide (2004) study showed that there were not enough training opportunities for workers in the use of ICT in their work environment. Many times, management can just send worker for training without employing the “needs gap analysis” of who among them needs training, what type of training programme does he/she need; however, the duration for profitable training programme is usually long and workers may not be allowed.

In the recent past, the management of government agencies has sent many of its workers on ICT training, but the trainings these workers received seemed not to have impacted their use of these technologies. Hence the need for effective ICT training programmes for the workers both in public and private organisation so as to enhance meaningful industrialised economy.

Therefore, this study is designed to provide answers to the following questions:

- . Does ICTs being deployed to your workplace?
- . To what extent do workers have access to ICTs in your organisation?
- . Does ICTs usage have any influence on the job performance?
- . What are the barriers to ICT usage in your workplace?

Methodology

This study adopts descriptive survey research design. The numerical strength of the study population is one hundred and eighty respondents from three organisations in the private sector namely: Nigeria bottling company Ltd, Fan milk plc and Seven-up bottling company, all in Ibadan. Structured questionnaire was used to elicit information from the workers. 60 questionnaires were distributed in each of the selected organisations and in all, a total of 180 questionnaires were administered to the workers in the three selected organisations with the assistance of supervisors from among the workers in each of these organisations, out of which only 159 questionnaires representing 88.3% were retrieved from them, 11 copies representing 6.1% were not properly filled while only 10 representing 5.5% were not returned. The rest questionnaires were analysed using simple percentage.

Table 1: Population of study/Rate of return survey questionnaire

| S/N | Companies | No. of returned questionnaire | No. of unreturned/invalid questionnaire | Total no. of sampled respondents |
|--------------|--------------------------------|-------------------------------|---|----------------------------------|
| 1 | Coca-cola bottling company ltd | 51 | 09 | 60 |
| 2 | Fan milk Plc | 55 | 05 | 60 |
| 3 | Seven-Up bottling company | 53 | 07 | 60 |
| Total | | 159 | 21 | 180 |

The table 1 above showed the number of participants from each organisation, number of administered questionnaire, the returned questionnaire rate, invalid ones and the total questionnaire analysed with their percentages.

Table 2: Showing responses of workers on; does ICTs being deployed to your workplace?

| Responses | No. of respondents | (%) Percentage |
|-----------|--------------------|----------------|
| Yes | 14 | 8.8% |
| No | 145 | 91.1% |
| Total | 159 | 100% |

Table 2 showed the result of the responses on deployment of ICT into their workplaces, 8.8% confirmed that ICT has been deployed to the various organisations while 91.1% of the respondents have contrary opinion that there is no deployment of ICT for workers usage in their respective working places.

Table 3: Showing responses of workers on; to what extent do workers have access to ICTs usage in your organisation?

| Responses | No. of respondents | % Percentage |
|-----------|--------------------|--------------|
| Yes | 10 | 6.2% |
| No | 149 | 93.7% |
| Total | 159 | 100% |

Responses from the table 3 above revealed that only 6.2% confirmed their accessibility to ICT in their various places of work and the rest 93.7% respondents confirmed that they do not have access to the use of ICT in their organisations.

Table 4: Showing responses of workers on; does ICTs usage have influence on the job performance?

| Responses | No. of respondents | % Percentage |
|-----------|--------------------|--------------|
| Yes | 16 | 10.0% |
| No | 143 | 89.9% |
| Total | 159 | 100% |

Table 4 shows that only 10.0% of the respondents said that use of ICT has significant influence on their job performance while the rest 89.9% were of the opinion that there is no influence of ICT on their job performance at all.

Table 5: Showing responses of workers on; are there barriers to ICT usage in your workplace?

| Responses | No. of respondents | % Percentage |
|-----------|--------------------|--------------|
| Yes | 08 | 5.1% |
| No | 151 | 94.9% |
| Total | 159 | 100% |

The result in the table 5 above revealed that only 5.1% agreed that there are no barriers to ICT usage in their various organisations while 94.9% respondents confirmed that there are several barriers militating against ICT usage in their workplaces.

Discussion of findings

The findings revealed that ICTs have not been deployed to these organisations for workers to use except the secretaries and hierarchies in these companies, however, where there is no effective equipment for workers most especially, the production cadre to advance their knowledge/ skills; it will hinder the process of translating to industrialisation era. There are no ICT gadgets especially computer, internet and Wi-Fi deployment to these organisations for workers to be trained with. However, upgrading on new information and technical skills are being disseminating in the form of instructions which are only being deliver in orthodox method.

It was also discovered that workers did not have access to these ICT gadgets and wi-fi in their various work places but only trying to familiarise themselves with its usage, (acquiring ICTs skills through try and error method) with their individual Blackberry and Android handsets which is not applicable and accessible to all the workers. The findings also showed that ICTs usage have little or no impact on their individual performance since they have not acquired its potentials like discovering new skills, knowledge and practices that can improve performance and make them more relevant in the realm of work. The cost implication of both the said individually owned gadget, data subscription, unstable electric power supply, time among others also make it difficult for the workers to equip themselves despite the workers effort to advance on their job performance.

From this finding, the workers are yet to be trained in the use of ICTs to learn new knowledge, ideas, innovations and practices about their work. Hence, old practices are still in use which is less corresponding, relevant and not enough to compete with others in the advanced world thereby complicating the process of industrialisation.

Conclusion and Recommendations

Since the beginning of industrialisation process of the Nigeria economy, there has not been viable evidence of total realisation of the importance of industrialisation in the country till today. However, in tandem with the increasing challenges of industrialisation and the need to address these challenges in Oyo state and Nigeria generally, the use of ICTs to enhance industrialisation has been recommended as an appropriate means, which can be guaranteed only if it is introduced and inculcated into the workers in their various workplaces.

This is with the intention of promoting active citizenship and the necessary workplace knowledge, ideas, skills, values and attitudes for building capacities for better livelihood among the workers for meaningful development and productivity.

Traditional means of production practicing in Agrarian era is vast becoming outdated and stressful with less production and of sub-standard quality that cannot withstand the taste of time is urgently need to transform the economy plus individual workers to the modern day development in accordance with industrialisation principle and this can be resuscitated by integrating and articulating ICTs into the workers' education since they (the workers) were the most needed in the process of transformation.

ICTs should therefore be seen among workers and organisers of workers' education as an expanded curricula of worker's education due to restrictive coverage of general education for

the working class and perhaps, not only for the workers alone, but should be extended to every individual citizens. It should be offered as remedy for practically every thinkable problem relating to information dissemination within Oyo state, Nigeria and beyond to other developing countries. Suffice it to say that a well-designed networking programmes among like-minded civil society groups, employers of labour, government agencies, policy makers and implementers.

It is obvious that if the appropriate ICT skills relevant to various professions and workplaces are inculcated into the workers in their various field or workplaces, it will lead to rapid industrialisation and economic development in Oyo state.

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