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# Workforce Analytics: Building Competencies for the New Change Era of the Covid-19 Pandemic in the Nigerian Hospitality Industry

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**Abstract:** This paper was designed as a phenomenological investigation into the role of workforce analytics in building competencies for the new change era of the COVID-19 pandemic in the Nigerian hospitality industry. Interviews were adopted as the data collection instrument and data was generated from five (5) 4-star hotels in the South-south of Nigeria with referents comprising human resource managers and supervisory staff of the hotels. The analysis was thematic – adopting the structured approach of the initial, axial and selective coding system. Findings from the analysis showed that while descriptive and diagnostic analytics were are affirmed to characterize the human resource management actions of the Hotels, predictive analytical actions were low. Nonetheless all three forms of workforce analytics are linked to the hotel's competencies such as teamwork, adaptability and role manifestation – emphasizing both task and interpersonal competencies. It was concluded that workforce analytics provides for learning and a structuring of the organizations human resources in ways that improve its adaptability, role flexibility and teamwork during the new change era of the COVID-19 pandemic.

**Keywords:** Workforce analytics, organizational competencies, descriptive analytics, diagnostic analytics, predictive analytics

## 1. Introduction

Change defines the contexts of organizations. While change forms may differ in line with the particular features and socio-demographic factors that define each context, the survival of organizations depends largely on their development of applicable competencies that aid the attainment of their goals (Buono and Kerber, 2010). Organizational competencies vary in line with their needs. Dias and Escoval(2014) argued that competencies should be dynamic and that way, enable the organization cope with the evolving or changing nature of its environment. Derwin(2016) posited that the development of organizational competencies stem from an understanding of the functional gaps and inadequacies of the organizations, and the purposeful effort or actions targeted at bridging such gaps and ensuring the organizations human resource content and features are enhanced in line with the demands of its market or context (Goh, Elliot &Quon, 2012; Kaufman, 2014).

Derwin(2016) researched on the role of organizational competencies in addressing the competitiveness and performance of firm. The author posited that the development of capabilities underlie the very core of the organizations behaviour, especially since it determines their ability to remain in business. Ateke and Kalu(2016) on the other hand pointed to the development of competencies as necessary in the competitiveness of service firms. Research has over time cemented organizational competencies as fundamental to firm success and sustained functionality. However, extant research on organizational competencies bothers notably on a competitive perspective – with emphasis placed more on technological capabilities and the development of skill sets that are up to date with changing roles and market expectations (Cania and Korsita, 2015; Diad and Musa, 2015; Obiora and Uboegbulam, 2018; Zeb-Obipi, 2017). Not much has addressed the development of competencies for sudden environmental based crisis, or pandemic related concerns such as that of the Ebola or the recent COVID-19 pandemic.

Studies on organizational competencies appear to agree on its link to the workforce of the organization (Davenport, 2013; Alimin, Raduan, Jegak & Haslmda, 2012; Pape, 2016). This follows Buono and Kerber (2010) assertion that to drive the competency goals of the organization, focus should be placed on the effective control and management of the organizations employees. According to Guenolw, Ferrar and Fenzig(2017), the emergence and fusion between human resource and technology is such that within the business context of today, offers more value in terms of efficiency and improved systemic actions (Kaur & Fink, 2017). Workforce analytics as such provides such a basis for an efficient and systematic coordination, planning and structuring of work forms, planning, forecasting and developing the human resource using technological parameters and processes that are reliable, consistent and most importantly comprehensive in its function (Levenson, 2010; Marler& Boudreau, 2017; Huselid, 2015). Yet still, little has been done addressing its role in the development or building of competencies aligned towards addressing change events linked to pandemics especially within African work systems.

This paper thus addressed the noted gaps in terms of identifying competency features specific for pandemic related change events – and identifying the role of workforce analytics in the building or development of such competencies. The paper contributes in the sense that not only does the focus shift from change in terms of technology and market competitiveness towards crisis related pandemics such as that manifested by the COVID-19, but an interpretivist social paradigm is applied in the identification of possible competencies imperative for engaging the organizations workforce enhancing its capabilities in ways that facilitate functions and operational features that promise robustness and flexibility during pandemic related events. As such, the objectives of the paper are to (a) discuss the concepts of workforce analytics and organizational competencies (b) identify key workforce analytical actions that could enhance the suitability of organizational competencies within the Nigerian hospitality industry, and (c) proffer recommendations in line with the observations and conclusions of the investigation.

# 2. REVIEW OF RELATED LITERATURE

# 2.1. Workforce Analytics

Workforce analytics describes various data management and processing tools, integrated in such a way that allows for the comprehensive control, assessment and coordination of the organizations human resource (Zachary, 2015; Van der Toght & Rasmussen, 2017). Workforce analytics according to Schiemann, Seibert and Blankenship (2018), comprises the various processes through which the human resource of the organization is effectively and efficiently monitored and directed towards the goals of the organization. Kaur and Fink (2017) argued that the growing differentials between the context of the organization, and the content of the organization can be troublesome, especially when organizations have a poor level of interaction with such a context.

Workforce analytics enables data applications and operations on human resource features that not only identify its gaps and deficiencies but also proffer necessary focus points for the development of useful and suitable capabilities. Larson and Change (2016) posited that while the application and use of workforce analytics within most organizations today appear to highlight more on managerial control and monitoring, the use of data related applications such as workforce analytics extend far more than that, and offer more advantages and opportunities to organizations.

Workforce analytics enable the linking of organizational content and capacities with the challenges and demands of the environment. Jiang et al (2012) described it as a dynamic tool which addressed not only the existing functions and capabilities of the organization, but also examined how such capabilities are relevant to the organizations goals and equate to its market expectations. Gandomi and Murtaza(2015) observed that one major debate concerned with workforce analytics is that it appears to bother primarily on what is evident – describing and prescribing and in that way lacking in proactiveness; but as Goh et al (2012) pointed out, learning which is a primary concern of workforce analytics is not situated within a particular time zone, industry or region, but rather identifies best practices, advances appropriate tools and behaviour based on context and also predicts outcomes based on trends and an understanding of the market or context of the organization – thus, learning within workforce analytics is such that provides for the concerns of the uniqueness of the context as

well as the possibilities of change within that context. Huselid(2015) identified three forms of workforce analytics - (a) the descriptive analytics (b) the diagnostic analytics, and (c) the predictive analytics.

**Descriptive Workforce Analytics:** This dimension of workforce analytics relates to the assessment of the existing characteristics of the human resource of the organization. It describes the number, demographic features, qualifications, skills, experiences etc and by that provides the organization with an overview of its functional capacity or capabilities (Huselid, 2015). It deals primarily with historical data, building summaries and aggregates from what is available to the organization – thus, it is internally oriented as it enhances knowledgeability of the quality and quantity of the organizations human resource. Huselid(2015) posited that the descriptive workforce analytics is the most basic form of analytics on the organizations human resource – providing data on the distributions and characteristics of its workforce. However, this is important for the development of further analysis as it offers a position on what is available – thus offering specificity as it relates to the organization (Pape, 2016).

**Diagnostic Workforce Analytics:** The diagnostic workforce analytics goes a step further than just describing the features and attributes of the organizations workforce. It specifically identifies the gaps and deficiencies of the workforce in line with emerging or existing practices and features within the context of the organization (Huselid, 2015). The diagnostic analysis of the workforce is one which could be described as corrective in that it focuses on identifying the lapses in the organizations human resource, based on its assessment of the context – thus, it is a more integrated approach in the sense that it captures both internal and external aspects of the organization (Huselid, 2015). Diagnostic workforce analytics thus provides a bridging of the organizations capabilities or features with the expectations or demands of its market and environment.

**Predictive Workforce Analysis:** This dimension of workforce analysis relates to the data applications channelled towards forecasting and building models which are more strategic in nature and which are intended to identify possible change events, market preferences and shifts in competition based on trends and other unforeseen factors (Huselid, 2015; Kaufman, 2014). Predictive workforce analytics bothers on structuring the human resource of the organization, and equipping it in such a way that allows for change-readiness and the matching of functionality with planned or unplanned developments in the environment of the organization. Huselid(2015) observed that while the aspect of competition and technology have dominated the focus of predictive analysis, change may also reflect sudden crisis events such as fire outbreak, riots, or as observed, a pandemic (Huselid, 2015). Predictive workforce analysis is proactive and readies workers for such unpredictability through actions that aim at conditioning the workers for possible changes to its environment.

#### 2.2. Organizational Competencies in a Change Era

The era of change is such that involves the emergence of new or recent factors or realities, which offer new (positive or negative) experiences to organizations within a particular context (Buono& Kerber, 2010). The COVID-19 pandemic, falls within this category given its impact on the functionality of systems and relationships particularly within the context of the Nigerian hospitality industry (WTTC, 2020; UNWTO, 2020). Agba, Ocheni and Agba (2020) argued that although the periods of lockdowns, curfews and strict controls over social and business activities have eased off, the realities of most hotels in Nigeria have not been the same.

Change in this sense manifested and continues to manifest in the form of a social constrains, increased health concerns and a heightened awareness of implications concerned the spread of the COVID-19 (Agba et al. 2020; Obiora, 2021). These factors have impacted negatively on the operations and wellbeing of hotels in Nigeria, imposing certain obligations and responsibilities not only towards the safety of their clients but also towards their employees as well. Thus coping and operating within such an era emphasizes on specific forms of competencies which not only address the need for sustained service quality but also the increased interpersonal capacities for improved trust levels and cooperation (Osuchukwu, Agba andEmeh, 2017; Obiora andKpakol, 2015).

Obiora and Kpakol (2015) posited that one of the strategic ways hotels in Nigeria could mitigate the influence on pandemics on their business, draws on the strengthening of customer relations and by

that the deepening of customer trust and confidence in the organization. This agrees with Mugo, Namusonge and Sakwa(2016), who noted that apart from the imperatives of increased mindfulness and caution during such crisis periods, considerations of others, and their wellbeing should be paramount. This follows the observation that interpersonality and communication between the organization and its clients should not be burdensome but rather focus on enhancing customers increased identification and loyalty to the organization (Derwin, 2016).

Literature (Abou-Moghli, 2015; Sushil and Burgess, 2016) reveals that most often gaps related to interpersonal skills and competencies are overlooked, paled in comparison to task related skills sets and competencies such as the use of new technology, the achievement of profit target goals, or the timeliness of product quantities and output (Zeb-Obipi, 2017). Thus, an extension of focus to change era competencies such as bothers on relationships and the effective control of self and others during crisis events would advance useful content, necessary for hotels and other organizations within the context of Nigeria.

#### 3. METHODOLOGY

This paper adopted a qualitative methodology in its investigation of the role of workforce analytics in building competencies for the new change era of the COVID-19 pandemic as it relates to the hospitality industry in Nigeria. The phenomenological design (Neuman, 2011) is adopted as the research design for the study and a total of 25 referents are selected purposively from five (5) 4-star hotels situated in the South-south of Nigeria. Referents selection criteria was premised on their positions and ranking within the hotel management as either managerial or supervisory staff (with particular focus on human resource management officers and supervisors).

One-on-one interviews were conducted via the zoom application as a result of the highly dispersed nature of the hotels. Interviews adopted a hotel-specific approach detailing the existing workforce practices of the hotels, their challenges in terms of skills and capabilities, and their projections and plans for the future including change that is unforeseen. Analysis of the data generated was thematic and coded in line with Corbin and Strauss (cited in Patton, 2002) categories of selective coding, axial coding and the open or initial coding system. While video sessions were recorded, observations were also noted using notes. All data were thereafter cleaned and transcribed into text form and analysis was carried out using the RQDA (R-Qualitative Data Analysis) software.

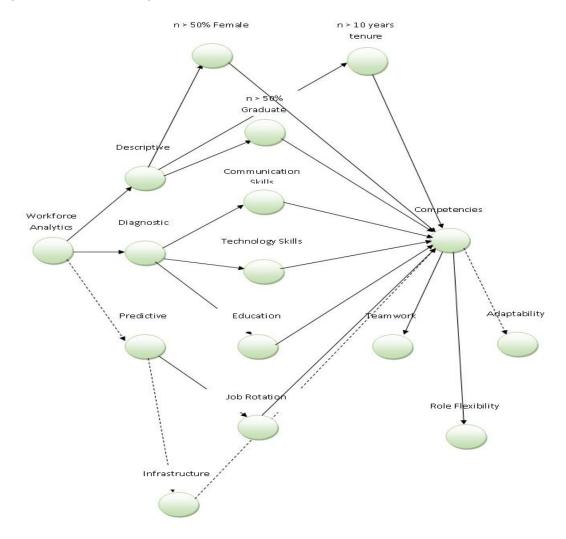
#### 4 RESILTS

A total of 16 codes were generated for from the data for the study – out of which two (2) were selective, three (3) axial and eleven (11) open codes. In addressing existing human resource features and how these enhanced the functionality and competencies of the hotels, participants identified their hotels as having substantial number of staff, majority of which had acquired graduate degrees and also have considerable number of years (above 10 years) in the hospitality industry. Participants also pointed to such features as being critical to their success. It was also noted that majority of the workers within these hotels were female with most participants identifying the gender as preferable given the imperatives of the industry with regards to care, attention and empathy – factors which they identified as imperative for connecting with and building trust with their clients.

On the diagnostic aspect of workforce analytics, participants noted that consistent assessments were carried out by management to assess workers use of technology related devices and computer programs in the organization. level of education and the extent to which they effectively communicated (that is the nature of their relationship) with other staff and with co-workers. These factors according to some participants, formed the basis for workers performance evaluation and were also central to their promotion, and continued contract with the hotel. The data affirmed to the diagnostic analytics as an essential tool and practice, however, it was observed that diagnosis detailed mostly internal features of the hotels and offered no comparisons with the environment or trends within the industry or market.

With regards to the third dimension – predictive workforce analytics was observed to have a low and poor level of reference from the participants. While few of the participants identified the imperatives of predictive analytics as being fundamental and necessary for advancing the health and competencies of their organization, these however noted that related actions such as job rotation which have

contributed to competencies such as teamwork, adaptability and role flexibility are were however convenient practices within the organization – nonetheless, participants agreed that these features enabled improved flexibility, robustness and resilience for the organization – thus enhancing its functionality and ability to thrive during the COVID-19 pandemic. This lack of focus was identified as one of the reasons behind hotels lack of change oriented infrastructure and its poor adaptability to change the COVID-19 change era.



**Figure 1.** *Links between the codes for the study* 

The figure 1 illustrates the nexus between the codes of the study – demonstrating the nature of the interaction between actions which reflect workforce analytics by the hotels and the outcome of competencies manifested and considered as useful or effective to the hotels. The evidence shows that while descriptive and diagnostic analytical practices or actions are considered common place and a norm to the hotels, predictive analytical practices were however not deliberate. The weak link between workforce analytics and predictive analytics for the hotels is depicted using the broken arrow. This also applied to other manifestations which are considered as weak and not substantial such as infrastructure and adaptability.

### 5. DISCUSSION OF THE FINDINGS

The findings of this study identified three major competencies necessitated by the workforce analytics of 4-star hotels in the South-south of Nigeria – these include teamwork, role flexibility and adaptability. While role flexibility and teamwork were noted to be substantially manifested by the hotels, adaptability however was observed to be a challenge and thus weak in its manifestation. The findings reinforce earlier assertions of scholars (Buono& Kerber, 2010; Obiora and Kpakol, 2015; Kpakol, Obiora and Jaja, 2016) that relationships are essential to the health and wellbeing of

organizations. This follows the identification of competencies such as teamwork and role flexibility which were reported to be strongly manifested in this investigation. Sushiland Burgess(2016) agreed that role flexibility supports functional robustness and stems primarily from the workers understanding through involvement in other responsibilities or functions within their organization. The authors, while corroborating Obiora and Asiegbu (2019), argued that while such actions maybe on a volunteer basis or obligated through job designs such as job rotation, it nonetheless enhances the workers integration and ability to cover for others during crisis or turbulent periods.

The observed relationship between workforce analytics and the development of competencies for change era implies a focus on both task and interpersonal capabilities. This is in line with the noted emphatics by the hotels on technology and communication skills; both of which provide and equip workers with the required cognitive and emotional tools to deal with the changing forms of organizational functions and also the changing dynamics or relating and engaging co-workers and customers at the same time – two important factors necessary for effectiveness in the hospitality industry (Derwin, 2016; Dias and Escoval, 2014).

This paper thus contributes towards the enablement of theoretical frameworks which place workforce analytics as a substantial predictor of organizational competencies necessary for navigating through pandemic related change outcomes (Sushil and Burgess, 2016). From the evidence generated, it is affirmed although task related competencies are imperative; however, interpersonal competencies which translate to teamwork and role flexibility are also critical for sustained operations during pandemics.

#### 6. CONCLUSION

Change is complicated, moreso pandemic related change. This is because not only does it advance further considerations in terms of human life and safety, it invokes the need for deeper connections, empathy and understanding. In this paper, evidence generated demonstrates that although task based competencies are important, considerations of interpersonal skills and actions during such pandemic change is also necessary. This is because related skills such as communication and job rotation strengthen internal bonds between staff and ensure levels of interdependency that ultimately enhance competencies such as teamwork and role flexibility. These facilitate features for work systems that enhance resilience, robustness and sustained operations during pandemic change or crisis events – especially for hotels in Nigeria. It is therefore the position of this paper that workforce analytics provides for learning and a structuring of the organizations human resources in ways that improve its adaptability, role flexibility and teamwork during the new change era of the COVID-19 pandemic.

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