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# Human Intelligence and Organisational Agility of Head of Departments Tertiary Institutions in Rivers State, Nigeria

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**Abstract:** *This paper examined the extent to which human intelligence influence organizational agility of head of departments (HODs) of tertiary institutions in Rivers state. The researcher adopted the cross-sectional survey research design and a total of 45 HODs were sampled using the random sampling technique. The Spearman correlation statistic was used in testing the hypotheses formulated. A total of three (3) tertiary institutions were investigated. The findings indicated that human intelligence influences both the sensing and the speed agilities of the understudied heads of departments of tertiary institutions positively and significantly. Therefore, the study concluded that human intelligence can act as a tool in attaining organizational agility. It was recommended that tertiary institutions should develop an enabling environment to enhance the propensity of her HODs to display their intelligence as this will boost a deeper sense of interconnectedness, cohesiveness and harmony.*

**Keywords:** *Agility, human intelligence, speed agility, sensing agility*

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## INTRODUCTION

The world of business is evolving and unpredictable owing to changes that originates from its environmental elements, and as such, the need for managers and stakeholders of organizations to adequately position it for the achieve of stated goals and objectives with the sole aim of survival. This strategic interplay of responsiveness for managers is termed organizational agility. No wonder Bottani (2001) proposes that agility is a fundamental attribute for organization survival and competition. This assertion further stipulates that organizational agility will include actions, reactions, learning and unlearning which helps the organizations survive and stand strong/tall in business. An organization assuming an agility disposition is an effective strategy to gain market leadership position. Since human mind capabilities are limited in terms of grasping important changes that takes place in the environment surrounding it, so has the current business environment for any organization in the world become complicated and highly dynamic (Zain et al., 2005). The need therefore for organization to consolidate on and support high level performance through energizing human mind and effort (human intelligence) to survive the dynamism facing the organizations and its management.

Human intelligence is the general mental ability for reasoning, problem solving and learning, which integrates cognitive functions such as perception, attention, memory, language or planning (Whyte, 2016). Based on the above definition, intelligence relies on measures that are standardized via testing with those results in social outcomes such as educational achievement, job performance, health and longevity. The intelligence described here is human. Everyone is

created with some level of intelligence which serves as the basic intelligence for all. The basic intelligence can be nurtured and groomed into assuming another status of enhanced intelligence. In the unpredictable and competitive world of today, the organizations must have different competitive features to compete otherwise, they will move toward decline and eventually extinct from the business world. One of these features that organizations need in the turbulent environments of today is agility. Agility provides the organization with the possibility of quick response and compatibility with environment and allows the organization to improve its efficiency (Yeganegi & Azar, 2012). Organizational Agility (OA), plays an important role in the life of the organization as it provides personnel with knowledge, high skills, restructuring and organizational processes, employing new technology (Sherehiy, 2008).

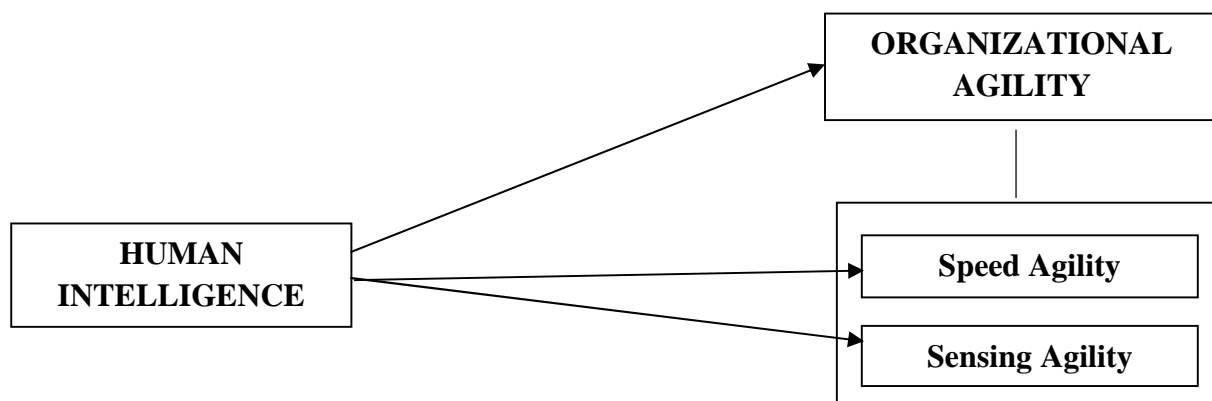
Porter (1980) identified five basic elements which characterized the competitive intensity of an industry in the external business environment as, threat of entrant, threat of exit, suppliers bargaining power, buyers bargaining power and rivalry among competitors. Hence this study seeks to examine the relationship between human intelligence and organizational agility operationalized in speed and sensing agilities. The study objective therefore is as follows:

- i) to determine the relationship between human intelligence and speed as a measure of organizational ability.
- ii) To determine the relationship between human intelligence and sensing as a measure of organizational ability.

Given the above identified objectives, the following research questions were posed as basis for assessment of the relationship between human intelligence and organizational agility.

- i. What is the relationship between human intelligence and speed as measure of organizational agility of heads of departments of tertiary institution in Rivers State?
- ii. How does human intelligence affect sensing agility of heads of departments of tertiary institution in Rivers State?

**Figure 1:** Showing the relationship between human intelligence and organizational agility.



**Fig. 1** Conceptual frame work of human intelligence and organizational agility.

**Source:** Desk Research (2021).

Based on the stated research questions, we therefore make the following hypothesis as basis to ascertain the relationship between human intelligence and organizational agility of heads of department tertiary institutions in rivers state.

**HO<sub>1</sub>:** There is no significant relationship between human intelligence and speed as a measure of organizational agility of heads of department of tertiary institutions in Rivers State.

**HO<sub>2</sub>:** There is no significant relationship between human intelligence and sensing as measure of organizational agility of heads of department of tertiary institutions in Rivers State.

### **THEORETICAL FOUNDATION: SOCIAL COGNITIVE THEORY (SCT)**

Social Cognitive Theory (SCT) describes the interactions between person and their situation (Mischel, 1973). This theory focuses on how individuals interpret and respond to various situations. According to Davis and Powell (1992), individual and their environment are said to influence each other. SCT explains a triadic relationship where the individual psychological factor, their environment and the behavior they engage in are determinants that influence each other given but not simultaneously (Bandura, 1977a). It was also determined that employees might behave based on their observation of others which then leads to self-corrective judgments and improvement in self-efficacy (Bandura, 1977b). The past research on conflicts literature has examined behavior with environment (Peterson, 2002; Applebaum, Deguire & Lay, 2005) or personality with organizational culture (Judge & Cable, 1997). Thus the present study aims to fill in the gap by using the social cognitive theoretical lens as a baseline in analyzing the relationship between human intelligence and organizational agility.

### **HUMAN INTELLIGENCE**

According to Whyte (2016), Human intelligence is the general mental ability for reasoning, problem solving and learning: intelligence integrates cognitive functions such as perception, attention, memory, language or planning. Based on the definitions, intelligence relies on measures that are standardized via testing with those results in social outcomes such as educational achievement, job performance, health and longevity. The intelligence described here is human. Everyone is created with some level of intelligence which serves as the basic intelligence for all. The basic intelligence can be nurtured and groomed into assuming another status of enhance intelligence.

The connection between intelligence and human body are inextricably connected, according to (Churchland 2012, and Searle 2015), intelligence is an emergent property of human body. Although, intelligence today is also system-based and not only of human organs; we must recognize that we need more input on our thinking processes, which are embodied in our senses and requires bodies to work. Cognition, problem solving and learning are critical aspects of human intelligence. People reason about everything from learning to problem solving. Modest and extremely complex social interactions can be learned during one's lifespan: there are general individual differences in thinking abilities, solving problems and learning. The future of humanity is in co-evolution with technology and technology plays an important role in augmenting human activities of working and learning. Sensory augmentations that can allow

people to perceive more, focus better and act more effectively are all strategies for augmenting, not just perception, but also intelligence. The senses are not always associated with intelligence, because the tendency for people when discussing intelligence is to think more or less in terms of the brain in the vat of early science fiction and philosophy.

### **ORGANIZATIONAL AGILITY**

Researchers have strived in their individual and collective effort to give meaning to the idea agility in the organization, some researcher identified some factors as a stimulus towards agility in the organization is “change” (Tahmasebufard, Zangovienezhad & Jafari, 2000). Changes that now transpired faster than ever, may come to pass in the market completion, consumers technology and other social factors (Sharifi and Zhang 1999). Agility disposition as a fundamental attribute of an organization is basically aimed at enriching and satisfying the needs of customers definitely rightly and timely. Agility lay numerous merits for organizations, and such merits include, Ability to respond quickly, swiftly and effectively to the changing market need, high ability to provide customized products to satisfy customers, ability to provide new products to market at lower prices (Swafford, Ghosh & murthy 2006). Reduce production cost, increase customer satisfaction, elimination of non-value-added activities and increase competitiveness (Tseng & Lin 2011). Given the rapid and unpredictable changes, turbulence, hostility, and complexity of environmental elements. Agility is characterized as fundamental attribute for organizations survival and competition. (Bottani 2001). Indeed, organizations assuming an agility disposition are an effective strategy to gain market leadership position.

**Speed Agility:** The pace at which society and business world progresses, from which organizations need to take measures to maintain its market and remain in business. The speed of every organization is felt and could be measured using variety of factors such as, decision making time lag, innovative moves, responsiveness or responding to customers’ needs and process of task execution. Speed is a very important success factor in business. These days, chances are that most organization failure is as a result lack of adequate speed and not that they lack the right mix and competitive positioning. Failing organization simply lacks speed to catch up with prevalent trend and meeting the customers/ consumers need timely. Hence, Nima (2016), described speed as the ability to perform operations in the shortest possible time, speed also entails prompt supplies of new product to meet individual market need, distribution of new products into the market and quickened operation time.

**Sensing Agility:** For organization to remain afloat, it must consciously develop innate abilities that can enable her inspect, monitor and scan swiftly changes within the changing environment of the business world. Customer preferences changes and changes in systems such as technology and time is on its own evolving. Park (2011) posits that the task of sensing means the strategic monitoring of environmental events that could have an impact on organizational strategy. Competitive work and future performance, including several activities such as access to information related to events which shows environmental change on the one hand. Getting rid of trivial information, on the other hand, in light of predetermined foundations and rules (El-

sawy 1985). This task related to decision making and its execution (Daft & Weick, 1984, Dutton & Duncan, 1985). Paraphrased, sensing is a must factor for organizational adaptation to prevalent changes that occur in the surrounding environment (Smircich & Stubbart, 1985).

**METHODOLOGY**

This study adopted the cross-sectional survey design, the population of the study comprise of all the heads of department in three tertiary institutions located within Port Harcourt metropolis, in Rivers State, Nigeria. They are namely; Port Harcourt Polytechnics, Rivers State University, and Ignatius Ajuru University of Education. The researcher sampled 45 heads of departments in these tertiary institutions, with each institution giving a total of 15 respondents within Port Harcourt metropolis in Rivers State Nigeria. The questionnaire consisted of 27 close-ended questions addressing human intelligent (7), speed agility (7) and sensing agility (7) respectively on a 5-point Likert scale (where, 5 = very high extent, 4 = high extent, 3 = moderate extent, 2 = low extent, 1 = very low extent), showing the level of perceptions with the content of each item. The structured questionnaire the relationship between artificial intelligence and organizational agility was tested using the spearman rank order correlation coefficient at 95% confidence level, to enable us arrive at a conclusion regarding the null hypothesis postulated earlier by the researcher.

**FINDINGS**

The study analyzed how human intelligence relates to the measures organizational agility. There was analysis of two measures (speed and sensing) against human intelligence respectively using the Spearman rank order correlation coefficient statistical tool via the SPSS software.

**Hypothesis 1**

**Ho<sub>1</sub>:** There is no significant relationship between human intelligence and the speed agility of heads of department in tertiary institutions in Rivers state.

The test statistics used in testing the above hypothesis is the spearman’s rank order correlation coefficient. The computation of the value of the test statistics as done using SPSS is represented in the table below.

**Table 1. Spearman rank order calculation**

			Correlations	
			Human Intelligence	Speed
Spearman's rho	Human Intelligence	Correlation Coefficient	1.000	.530**
		Sig. (2-tailed)	.	.000
		N	45	45
	Speed	Correlation Coefficient	.530**	1.000
		Sig. (2-tailed)	.000	.
		N	45	45

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source: Survey data, 2021.**

The statistics gave an r value of 0.530 which it gives from our scaled list a substantially marked correlation between the variables under investigation. The probability value from the table is 0.000, which implies that the variables are statistically significant. Therefore, we can reject the null hypothesis which states that “there is no significant relationship between human intelligence and speed as a measure of organizational agility”, and accept the alternative hypothesis, “there is significant relationship between human intelligence and speed as a measure of organizational agility”.

**Hypothesis 2**

**Ho<sub>2</sub>:** There is no significant relationship between human intelligence and sensing agility of heads of department in tertiary institutions in Rivers state.

The table below shows the computed value for the above hypothesis using Spearman rank order correlation coefficient through SPSS.

**Table 2. Spearman rank order calculation**

Correlations			Human Intelligence	Sensing
Spearman's rho	Human Intelligence	Correlation Coefficient	1.000	.835**
		Sig. (2-tailed)	.	.000
		N	45	45
Spearman's rho	Sensing	Correlation Coefficient	.835**	1.000
		Sig. (2-tailed)	.000	.
		N	45	45

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source: Survey data, 2021.**

The statistics gave an r value of 0.835 which it gives from our scaled list a highly marked correlation between the variables under investigation. The probability value from the table is 0.000, which implies that the variables are statistically significant. Therefore, we can reject the null hypothesis which states that “there is no significant relationship between human intelligence and sensing as a measure of organizational agility”, and accept the alternative hypothesis, “there is significant relationship between human intelligence and sensing as a measure of organizational agility”.

**DISCUSSION OF FINDINGS**

**Association between Human intelligence and Speed agility**

There is a positive and significant relationship between human intelligence and speed agility. The speed of every organization is felt and could be measured using variety of factors such as, decision making time lag, innovative moves, responsiveness or responding to customers’ needs and process of task execution (Ibrahim & Ribbers, 2009). This ability as noted by Chen and Chang (2010) is firm-specific and is a factor dependent upon the managers’ experiences, interactions and willingness to factor all stakeholders in one’s decision making process. No wonder Nima (2016) described speed as the ability to perform operations in the shortest possible time, which also entails prompt supplies of new product to meet individual market

need, distribution of new products into the market and quickened operation time. Though the human intelligence can't be likened to artificial intelligence in terms of speed, but Nima (2016) noted that from the above mentioned perspective of speed, the human intelligence becomes exceptional in these aspects of cohesiveness and facilitation.

Therefore;

- i. Human intelligence encourages the learning of shared values and the facilitation of intergroup cohesiveness in an organization.
- ii. Thereby decreasing clumsiness and increasing worker competence and resultant group cohesiveness.
- iii. Therefore, human intelligence enhances speed as a measure of organizational agility.

### **Association between Human Intelligence and Sensing Agility**

There is a positive and significant relationship between human intelligence and sensing agility of heads of departments of tertiary institutions in Rivers state.

Park (2011) posits that the task of sensing means the strategic monitoring of environmental events that could have an impact on organizational strategy. Competitive work and future performance, including several activities such as access to information related to events which shows environmental change on the one hand. Getting rid of trivial information, on the other hand, in light of predetermined foundations and rules (El-sawy 1985). On the other hand, there are some scientists, researches and scholars who are quite pessimistic in the roles and influence of human beings and their intelligences at workplaces in relation to the detection of events and changes within the environment (Mahanta, 2017; Mahmodey, 2017; McFarlane, 2017). Therefore, having the sensing agility requires the ability to draw on the values, traditions, trends and customs of work groups with the aim of attaining targeted goals and objectives.

Thus;

- i. Human intelligence shows and gives employees a sense of work compatibility.
- ii. Therefore, human intelligence increases the sensing agility of heads of departments in tertiary institutions.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the summary of findings, the following conclusion was made. The study concluded that human intelligence contributes positively and significantly to speed and sensing abilities in the understudied tertiary institutions in Rivers state. Therefore, this paper concludes that an increase and effective and efficient application of human intelligence results in a substantial increase in speed and sensing abilities within an organization.

From the conclusion above the following recommendations were made.

1. It was recommended that tertiary institutions should develop an enabling environment to enhance the level at which heads of departments apply human intelligence thereby boosting a deeper sense of interconnectedness and harmony; likely prerequisites for greater cohesiveness and ultimately competence.

2. Institutions should encourage heads of departments to always apply their human intelligence as this will build their sensing capabilities and institutional knowhow.

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