

1 Culture Context Profiles: A Case of Institutional Websites in 2 Nigeria

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6 **Abstract**

7 Criticisms owing to rigidity and obsolescence has been directed to the hallowed positions (and
8 often cited) cultural models proposed by Hall and Hofstede. This is largely because
9 globalization and culture are verily fluid, amorphous and always in transition; and not defined
10 by geographical borders existing between countries. In this paper we consider the cultural
11 contexts of several websites owned by commissions/agencies of the Nigerian Government,
12 using recent improvements of Hall's and Hofstede's model because their dimensions did not
13 include Africa. Specifically, we evaluated we evaluate websites of the Cooperate Affairs
14 Commission of Nigeria, Federal Inland Revenue Service of Nigeria, National Agency for Food
15 and Drug Administration Commission of Nigeria, National Pension Commission of Nigeria,
16 Nigeria Export Promotion Commission, Nigerian Tourism Development Corporation, National
17 Emergency Management Agency of Nigeria so as to determine their cultural context profiles.
18 In order to actualize these we employed the online survey methodology by distributing
19 questionnaires to different groups of experts drawn from the various regions of Nigeria.
20 Finally, the results showed that, most website designers in Nigeria follow the high context
21 style in terms of animation, promotion of values, level of transparency, navigation, multiple
22 use of links, color, search and polite/direct approach in actualizing their websites.

24 *Index terms*— website, culture contexts, e-governance.

25 **1 Introduction**

26 he proliferation of internet use coupled with the increasing number of web designers has positively affected
27 institutions in showcasing and achieving their dreams on the World Wide Web through their websites. The
28 marketing industries mostly, were quick to adopt this approach since it provided a batter platform for showcasing
29 their goods and services to both local and foreign customers. Recently, websites have gone beyond simple static
30 and text-based styles to dynamic and interactive styles with multimedia possibilities like; the addition of flash,
31 sound and video. There by, setting a higher level of quality for better communication through the web. However,
32 in order to create a crosscultural satisfactorily website from a marketing perspective, designers must deal with
33 issues that surround "culture-specific color connotations, preferences in layout, animation, sounds, and other
34 effects that are characteristic of today's generation of Web sites" [7]. This stand point is maintained to a large
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36 extent for e-government websites which basically strive to provide a citizen-centric tool for effective and efficient
37 service delivery by government agencies. Studying user dispositions to design elements elicits, some of the clues
38 a designer should exploit to ensure that "values and behavior indoctrinated through cultural influences may be
39 reflected in design practices" [7].

40 Criticisms on the rigidity and obsolescence of some designs has been directed to the hallowed positions of
41 cultural models proposed by Hall [2] and Hofstede [4]. This is largely because globalization and culture are

5 RESULTS YIELDED BY THE STUDY

43 verily fluid, amorphous and always in transition [5]; and not defined by geographical borders existing between
44 countries. Despite these criticisms, qualitative studies on websites designs still border on the propositions of Hall
45 and Hofstede. Hall proposed some variable that aids the situating of cultures along a dimension spanning from
46 high-content/low-content to the low-context/high-content. These variables include Nonverbal communication,
47 Directness vs Indirectness, Time perception (monochronic vs polychronic) and Message speed. On the other
48 hand Hofstede also proposed variables for culture which include Collectivism versus Individualism dimension.

49 **2 II.**

50 **3 Related Empirical Studies**

51 Using Hall's dimensions, Wurtz [7] performed a cross-cultural qualitative analysis in order to explore and explain
52 the differences between website samples of both High Context (HC) and Low Context (LC) cultures. To aid his
53 analysis, different countries were first classified as either HC or LC. Specifically, Japan, China, and Korea were
54 classified under HC while Germany, Denmark, Sweden, Norway, Finland, and the United States were classified as
55 LC. The design parameters with which the analyses were conducted include visual communication and navigation.
56 In the study, while visual communication was based on the analytical model of Thorlacius [6] and dealt with the
57 featured product on the site using layout, images, photographs, and animation. The navigation dealt with the
58 features of the website being considered.

59 Taking a different perspective from egovernance websites, Gygi and Spyridakis [1] developed a cultural model
60 based on extant demographic data and values in order to analyze a school's website in Uzbek with the assumption
61 that "Web sites designed by local producers for local users would embody and exhibit identifiable cultural
62 markers". More so they evaluated the effect of language (Russian/English) in the Uzbek school website.

63 Yeratziotis and Greunen [8], employed Hall's cultural model of cultural context to determine the culture
64 context profile of the South Africa (SA) government website and it ascertained whether it followed the standard
65 e-government guidelines of the UK government for its design and implementation. Using a table they presented an
66 assessment of the SA government's website on a three point scale compliancy level. However, they discovered that
67 the SA government website did not follow the U.K. guidelines for government website development. Therefore,
68 the website just provided a basic level of satisfaction for service delivery.

69 In order to aid governments in ensuring that their websites cater for actual needs of local users, Herselman and
70 Greunen [3], performed a global survey on culture differences and contexts. They argued that their contribution
71 will add to the websites effectiveness and usability. The study focused its questionnaire on selected populations;
72 therein ten participants were identified through purposive sampling and divided into two groups (5) in low-
73 context culture and (5) in highcontext culture. Results of the study were contrary to literature and have it that
74 high-context participants preferred more low-context styles when using government websites.

75 It is noteworthy that the analyses on the contexts of culture in websites in Yeratziotis and Greunen [8]
76 and Herselman and Greunen [3] were done using parameters gleaned from Table 1 and Table 2 below. While,
77 Table 1 present the observations of the characteristics of high and low cultures websites, Table 2 present the other
78 perspectives for values and features that are necessary when designing software products for high and low-context
79 societies.

80 **4 Methodology**

81 To generate requisite information for the study, three major sources were explored. Firstly, a literature review was
82 carried out on the fields of culture, culturecontext dimensions, e-government and government websites design.
83 Apart from analyzing these concepts individually, analyses of one concept in relation to the other were also
84 done. The aim of the analysis was to generate an online questionnaire survey to enable the evaluation of the
85 e-government websites in Nigeria. A sample size drawn from the six geopolitical regions of Nigeria contributed
86 to the survey findings. The questionnaire was designed to mirror the parameters shown in Table 1 and Table 2
87 respectively. The selected websites for the survey are presented in Table 3.

88 **5 Results Yielded by the Study**

89 The considered some of the basic factors listed in tables 1 and 2. The design parameters gleaned from the tables
90 included animation, promotion of values, individuals separate or together with the product, level of transparency,
91 linear vs parallel navigation on the web site, multiple use of links, creating friendly relationship with the website
92 visitor, use of aesthetics, color and use of search engines.

93 A four point method was employed to analyze the above-listed heuristics. These include; a. YES: when one
94 concurs with a statement b. NO: when one disagrees with a statement c. UNDECIDED: when one cannot seem
95 to make up his/her mind on an accurate answer to a statement d. NOT APPLICABLE (N/A): when one feels
96 that the statement does not apply to the web site.

97 The questionnaire also included a section for open ended answers with respect to Table 1 and Table 2.
98 Therefore, we solicited for the rationale for response to the questions using any of the four points listed above.
99 In addition, the respondents were instructed to judge the use of more than one image/banner as high and to
100 judge the use of more than three colors as high. The implication of this is that, one image alone is judged as low

101 while the use of less than three colors is judged as low. Eventually, the entire questionnaires were collated and
102 analyzed according to whether a particular design parameter is either high or low-context.

103 **6 a) Corporate Affairs Commission (CAC)**

104 This commission/agency is an independent body whose function is to regulate the creation as well as the
105 management of companies in Nigeria. Specifically, their functions include registration of new companies,
106 registration of business names and the registration of incorporated trustees. They are able to achieve all these
107 through accredited members of some associations within the country. The commission's website is depicted in
108 Figure 1 while the analyses of its culture context profile are presented in Table 4.

109 **7 b) Federal Inland Revenue Service (FIRS)**

110 The FIRS is a government institution that is charged with collating and collection of federal government taxes
111 across Nigeria. Their other functions include ensuring tax payment compliance by companies, enterprises and
112 individuals, giving taxpayers the moral and legal right to demand for the culture of accountability and providing
113 sustainable finance and funding for governance, public and social services and economic development. The
114 commission's website is depicted in Figure 2 while the analyses of its culture context profile are presented in
115 Table 5. NAFDAC is another federal government agency in Nigeria whose responsibilities include the regulation
116 and control of the manufacture, importation, exportation, advertisement, distribution, sale and use of every
117 type of food, drugs, cosmetics, medical devices, chemicals and packaged water. The organization also performs
118 tests, inspection of the items mentioned above and ensures that there is a total compliance with stipulated and
119 acceptable standards and quality. The agency's website is depicted in Figure ?? while the analyses of its culture
120 context profile are presented in Table ??.

121 **8 Global Journal of Computer Science and Technology**

122 Volume XVII Issue II Version I () Promotion of values High 3.
123 Individuals separate or together with the product Low 4.
124 Level of transparency High/Low 5.
125 Linear vs parallel navigation on the web site High 6.
126 Multiple use of links High 7.
127 Sell approach Low 8.
128 Use of aesthetics Low 9.
129 Color High 10.
130 Searching High 11.
131 Polite/Direct High

132 **9 e) Nigeria Export Promotion Council (NEPC)**

133 This Council in Nigeria, is the leading Federal Government agency charged with the responsibility of promoting
134 non-oil export in Nigeria to diversify away from oil and build a formidable economy. The agency is also saddled
135 with the responsibility of promoting development of export trade, maintaining adequate representation in other
136 countries and to administer grants and benefits related to export promotion and development. The council's
137 website is depicted in Figure 5 while the analyses of its culture context profile are presented in Table 8. NTDC is
138 the Nigerian agency to the federal government which is responsible for the overall development of the country's
139 tourism. The agency promotes the country as a domestic and international tourist destination for leisure, business,
140 religion, festivals and commerce. The commission's website is depicted in Figure 6 while the analyses of its culture
141 context profile are presented in Table 9. The National Emergency Management Agency (NEMA) is a federal
142 government agency in Nigeria, created with the sole purpose of managing all types of disasters. Their functions
143 include the coordination of resources towards efficient and effective disaster prevention, preparation, mitigation
144 and response in Nigeria. The agency's website is depicted in Figure 7 while the analyses of its culture context
145 profile are presented in Table 10. Promotion of values High 3.

146 Individuals separate or together with the product Low 4.
147 Level of transparency High/Low 5.
148 Linear vs parallel navigation on the web site High 6.
149 Multiple use of links High 7.
150 Sell approach High 8.
151 Use of aesthetics High 9.
152 Color High 10.
153 Searching High 11.
154 Polite/Direct High
155 V.

10 Conclusion

156 This study employed the online survey method in order to determine the culture context profile of some prominent
157 Nigerian institution's websites. The questionnaires were distributed to a group of experts in the field of website
158 design and their responses were collated and analyzed and presented in Table 11. According to the answers
159 derived from the respondents' to the questionnaire based on the reasons for the choice of their answers, the
160 following conclusions were derived; That the following four agencies which include; CAC, NAFDAC, NEPC,
161 NEMA out the seven websites understudied, used green and white for their design. These are the colors that
162 make up the Nigerian flag. Also, the websites involved the use of lots of images and banners. As an example, the
163 NEMA homepage in two separate sections has 9 banners and 5 images. The banners and images alternatively
164 appear on the homepage. There were also cases where respondents answered both YES and NO to questionnaire
165 items with respect to the design parameters and gave their reasons for doing so. The implication of these is
166 that such websites exhibited both high and low context tendencies in that design parameter. Table 12 depicts
167 the profile of institutions' website in Nigeria in terms of actual design parameter. Apart from parameters 3 in
168 the table 12, individual/separate and together with product, 7 (sell approach) and 8 (use of aesthetics), other
169 parameters was high-context style. The implication is that, Nigerian agencies' website designers follow high
170 context style in terms of animation, promotion of values, level of transparency, navigation, multiple use of links,
171 color, search and polite/direct approach. But for aesthetics, the responses for high were for harmony and beauty
172 which is evident in some of the websites and not for art, designs and nature. Furthermore, we would perform a
173 more holistic study to determine the culture-context profiles of other websites in Nigeria. This is verily necessary
174 if we are to posit Nigeria (and Africa) in Hall's culture continuum. ¹



Figure 1: Figure 1 :



Figure 2: Figure 2 :

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Figure 3: Figure 5 :

10 CONCLUSION



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Figure 4: Figure 6 :



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Figure 5: Figure 7 :

Figure 6:

Figure 7:

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Figure 8: Table 1 :

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VolumParameter HC Cultures promote Characteristic Images of collectivist values societies (e.g., being in g

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physical shape, spending time with family and friends)

GlobalIndividuals High-context features Polychronic aspects of time Multiple use of images and/or banners
Jour- separate
nal or
of together
Com- with the
puter product
Sci- Level of
ence trans-
and parency
Tech- Linear
nol- vs.
ogy parallel
naviga-
tion on
the Web
site

Create a friendly relationship
with the customer (soft-sell
approach)

Use of aesthetics to elicit emotion (harmony, beauty, nature, art, designs)

confrontational

Sales orientation (hard-sell approach)

Direct communication (focus on rank and prestige, superlatives, *virtus*)

3

Institutions

Figure 10: Table 3 :

4

S/N	Design Culture Parameter	Context Status
Animation (Multiple use of images/banners)		High
Promotion of values		Low
Individuals separate or together with the product		Low
Level of transparency		Low
Linear vs parallel navigation on the web site		High/Low
Multiple use of links		High
Sell approach		High
Use of aesthetics		Low
Color		Low
Searching		High
Polite/Direct		Low

Figure 11: Table 4 :

5

S/N	Design Culture Parameter	Context Status
Animation (Multiple use of images/banners)		High
Promotion of values		Low
Individuals separate or together with the product		N/A
Level of transparency		Low
Linear vs parallel navigation on the web site		High/Low
Multiple use of links		High
Sell approach		Low
Use of aesthetics		Low
Color		High
Searching		High
Polite/Direct		Low

c) National Agency for Food and Drug Administration
Control (NAFDAC)

Figure 12: Table 5 :

7

S/N	Design Parameter	Culture	Context	Status
1.	Animation (Multiple use of images/banners)			High
2.				

Figure 13: Table 7 :

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S/N	Design Parameter	Animation (Multiple use of images/banners)	Promotion of values	Individuals	Level of transparency	Culture	Context	Status
1.	2.					High	High	High
3.	4.					Low	High	High
5.		Linear vs parallel navigation on the web site				High		
6.		Multiple use of links				High		
7.		Sell approach				Low		
8.		Use of aesthetics				Low		
9.		Color				High		
10.		Searching				High		
11.		Polite/Direct				Low		

[Note: f) Nigerian Tourism Development Corporation(NTDC)]

Figure 14: Table 8 :

9

S/N	Design Parameter	Culture	Context	Status
1.	Animation (Multiple use of images/banners)	Low		
2.	Promotion of values	Low		
3.	Individuals separate or together with the product	Low		
4.	Level of transparency	High		
5.	Linear vs parallel navigation on the web site	High/Low		
6.	Multiple use of links	High		
7.	Sell approach	N/A		
8.	Use of aesthetics	Low		
9.	Color	Low		
10.	Searching	High		
11.	Polite/Direct	N/A		
g) National Emergency Management Agency (NEMA)				

Figure 15: Table 9 :

10

S/N	Design Parameter	Culture	Context	Status
1.	Animation (Multiple use of images/banners)	High		
2.				

Figure 16: Table 10 :

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Figure 17: Table 11 :

12

S/N.	Design Parameter	High	Low	High/Low	N/A
1.	Animation (Multiple use of images/banners)	6	1	-	-
2.	Promotion of values	4	3	-	-
3.	Individuals separate or together with the product	-	5	-	2
4.	Level of transparency	2	3	2	-
5.	Linear vs parallel navigation on the web site	4	-	3	-
6.	Multiple use of links	7	-	-	-
7.	Sell approach	2	4	-	1
8.	Use of aesthetics	2	5	-	-
9.	Color	5	2	-	-
10.	Searching	7	-	-	-
11.	Polite/Direct	3	3	-	1
	Total	42	26	5	4
					=
					77

Figure 18: Table 12 :

176 .1 d) National Pension Commission (NPC)

177 The National Pension Commission fondly called PenCom, is the Nigerian federal government commission charged
178 with the supervision and regulation of the contributory pension scheme (CPS) and the old defined benefits (DB)
179 scheme as well as the pension translational arrangement directorate (PTAD). In summary, the organization's
180 duty is to ensure that retirement benefits are paid to retirees as and when due. The commission's website is
181 depicted in Figure ?? while the analyses of its culture context profile are presented in Table ??.

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