**Paymaster’s Cultures for Nigerian Construction Industry**

*Sani Abdullahi Sarki* and Razali Bin Adulhamid

Department of Quantity Surveying, University Technology Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia; abdulsani43@yahoo.com, b-razali@utm.my

---

**Abstract**

**Objective:** This paper gives expert opinions on culture of paymasters in the construction industry.

**Method/Statistical Analysis:** The research adopted Delphi technique in data collection. A table of 50 different types of culture was administered to the Experts for consensus evaluation in two numbers of rounds.

**Findings:** The decision rule for the study is 70%. A score of 70% and above was retained and below was dropped. The Norm of work, Task culture, Constructive culture, Passive or defensive culture, Bureaucratic culture, Innovative culture and Supportive culture were identified by experts as construction industry cultures.

**Application/Improvement:** The culture could be considered and incorporated into the payment act in order to tackle the late payment issues effectively.

**Keywords:** Culture, Construction Industry, Construction Industry Culture, Organizational Cultures

---

**1. Introduction**

Culture has been well-defined by many researchers, though there is no consensus on the specific definition of culture. However, most of the researchers of culture in humanity considered it as the behaviour, norms and values that is practice over a period of time by members of society, community, organization or nation at large. Recent studies showed that organizational culture is the profile that differentiates one organization from another. Some organization has organizational culture that encourages excellent performance. Organizational culture is the success or failure indicator of organization.

**2. Methods**

**2.1 Culture**

Many researchers that undertook studies about culture suggested that the idea of culture is the climate and day to day practice of organization, learnt at a particular setting in order to promote value and statement of their beliefs. Culture is the values that is shared among the groups members and is practice within the environmental setting. It is embedded within the ‘consciousnesses of individual. It could be identified through stories, special language, artefacts and norms that emerge from personal and organizational behaviour. The responsibility lies on leaders to create and manage cultures. The word culture was derived from the word cultivate; cultivation of soil for production of crops, which means the way people behave and act in nature. In the case of human being, culture is the set of norms, values, attitude and belief that are shared by the member of organization.

**2.2 Organizational Culture**

According to, organizational culture comprise of two strata of concepts, that is, seen and unseen characteristics. The seen level means an external building, clothing,
behaviour styles, regulations, myth, stories and rites. On the other hand, the unseen level means shared values, norms, faith and assumptions of organizational business members.

The culture of organization is determined by its existence on a defined organization; in the sense of some people interacting with each other for the purpose of achieving some goal in their defined situation. Organizational culture is a set of structures, sequences, rules and norms that regulate and compel behaviour. It is the combined programming of the mind which differentiates the members of one organization from another. Culture defines the central values, assumptions, interpretations and methods that characterize an organization.

2.3 Construction Industry
Nigerian Construction Industry is a dynamic and complex in nature in terms of industrial development over the years. According to the national office of statistics, the construction industry in Nigeria produced about 69% of the country’s fixed capital formation. This means that the industry represents nearly 70% of the capital base of the country. Nowadays, Nigerian construction industry comprises of clients, contractors, sub-contractors design management, specialist consultants and suppliers.

2.4 Construction Industry Culture
According to the participants in the coalition project interrelate in two primary ways; in one hand through culture and political and in the other hand represented by the ideology or shared values of the project participants. Cultural issues are therefore always at the forefront. In trying to give more flesh to this cultural arena, defined culture within construction to be about the “characteristics of the industry, approaches to construction, the competence of craftsmen and people who work in the industry and the goals, values and strategies of the organizations they work in”. In essence, the culture of construction is what is carried out, how and when it is done, who is involved and why certain things are done the way they are. This study utilized a Delphi methodology in contrast to the traditional quantitative studies. The Delphi questionnaire consist of a table of 50 different types of culture for the expert to gives their opinion using a 9-point Likert’s scale.

Delphi technique is a method of data collection in which expert will be selected to present a question to answer in a series of round or section. The contribution from expert will be gathered in a form of summary and referred back to the expert in a form of questionnaire of second session. The expert will look at the result of the first and assess the issues again taken into consideration the view of the other experts. This process continues until a point of consensus is reached among the expert on the issue. The identification of the member of the panel are not disclosed simply for the reason that no member should allow to dominant the opinion of others and more importantly to encourage all member to participate actively.

3. Results and Discussion
The column labelled “6+9%” in Table 1 contains statistical information used to decide which culture would be retained or dropped. The decision rule for the study is 70%. At least, 70% of the participants should give scores of 6 and above in order for the item to be retained as culture of the industry. The ultimate objective of Delphi is to determine consensus. These particular descriptive statistics are intended to indicate the panel’s central tendency and the dispersion of the opinion among the panel participants. The median and mean are measures of central tendency, while the standard deviation and the Interquartile Range (IQR) are measures of dispersion around those central tendencies respectively. In suggested that the median is preferable when the number of outliers is sufficient to warrant evaluation of bi-modal tendencies. The first inspection of the data revealed no evidence suggesting a bimodal behavior; however, the median and IQR are presented for completeness.
### Table 1. Cultures evaluated by Delphi round inquire

| S/N | **Organizational Cultures** | N  | Mean | Median | SD  | IQR | %    | Action |
|-----|-----------------------------|----|------|--------|-----|-----|------|--------|
| 1   | Clan Culture                | 24 | 5.46 | 6.5    | 2.7 | 5   | 62.5 | Drop   |
|     | Agreement                   |    | 5.21 | 6      | 2.734 | 6  | 54.2 | Drop   |
| 2   | Adhocracy Culture           | 24 | 5.67 | 6      | 2.648 | 5  | 66.7 | Drop   |
|     | Agreement                   |    | 5    | 5.5    | 2.934 | 6  | 50   | Drop   |
| 3   | Hierarchy                   | 24 | 5.33 | 6      | 2.745 | 6  | 58.3 | Drop   |
| 4   | Market Culture              | 24 | 5.88 | 6      | 2.559 | 4  | 60.8 | Drop   |
| 5   | Reward Culture              | 24 | 5.21 | 6      | 2.449 | 4  | 54.2 | Drop   |
| 6   | Stability Culture           | 24 | 5.54 | 6      | 2.536 | 5  | 62.5 | Drop   |
| 7   | Competitiveness Culture     | 24 | 4.54 | 4      | 2.587 | 5  | 45.8 | Drop   |
Table 1 Continued

|   |                      |   |   |   |   |        |
|---|----------------------|---|---|---|---|--------|
| 10| Entrepreneurial Culture |   |   |   |   |        |
|   | Agreement            | 24| 5.13| 6 | 2.61| 5 | 54.2   | Drop |
| 11| Consensual Culture   |   |   |   |   |        |
|   | Agreement            | 24| 4.75| 5.5| 2.592| 5 | 50     | Drop |
| 12| Involvement          |   |   |   |   |        |
|   | Agreement            | 24| 5.17| 6 | 2.297| 3 | 62.5   | Drop |
| 13| Consistency          |   |   |   |   |        |
|   | Agreement            | 24| 5.33| 6 | 2.444| 4 | 66.7   | Drop |
| 14| Adaptation           |   |   |   |   |        |
|   | Agreement            | 24| 4.83| 4.5| 2.259| 3 | 41.7   | Drop |
| 15| Mission              |   |   |   |   |        |
|   | Agreement            | 24| 5.83| 6.5| 2.39 | 4 | 58.3   | Drop |
| 16| Attitude to work     |   |   |   |   |        |
|   | Agreement            | 24| 5.67| 6 | 2.278| 4 | 54.2   | Drop |
| 17| Belief in the Work   |   |   |   |   |        |
|   | Agreement            | 24| 5.58| 6.5| 2.569| 4 | 54.2   | Drop |
| 18| Norm of Work         |   |   |   |   |        |
|   | Agreement            | 24| 6.5 | 7  | 2.284| 4 | 75     | Retain|
|   | Category                           | Agreement |   |   |   |   |
|---|-----------------------------------|-----------|---|---|---|---|
|19 | Value of Work                     | 24        | 4.83 | 4.5 | 2.648 | 4 | 45.8 | Drop |
|20 | Power culture                     | 24        | 5.33 | 6  | 2.839 | 6 | 50 | Drop |
|21 | Role Culture                      | 24        | 5.5  | 6  | 2.284 | 4 | 54.2 | Drop |
|22 | Task Culture                      | 24        | 5.79 | 6  | 2.621 | 4 | 70.8 | Retain |
|23 | Person Culture                    | 24        | 4.88 | 5  | 2.924 | 5 | 45.8 | Drop |
|24 | Universalism Culture              | 24        | 5.79 | 6  | 2.303 | 4 | 62.5 | Drop |
|25 | Particularize Culture             | 24        | 4.63 | 5  | 2.618 | 5 | 41.7 | Drop |
|26 | Masculinity vs. femininity        | 24        | 4.58 | 4.5 | 2.283 | 5 | 41.7 | Drop |
|27 | Communitarianism Culture          | 24        | 4.46 | 4.5 | 2.57  | 4 | 37.5 | Drop |
**Table 1 Continued**

|   | Individualism Decision Culture |   |   |   |   |   |   |
|---|--------------------------------|---|---|---|---|---|---|
|   | Agreement                      | 24 | 4.38 | 4.5 | 2.7 | 5 | 33.3 | Drop |
| 29 | Ascription Culture             |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 4.67 | 4.5 | 2.531 | 5 | 37.5 | Drop |
| 30 | Achievement Culture            |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 4.21 | 4 | 2.413 | 4 | 25 | Drop |
| 31 | Power Distance                 |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 5.29 | 6 | 2.095 | 3 | 62.5 | Drop |
| 32 | Individualism Care Culture     |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 4.17 | 4 | 2.461 | 6 | 41.7 | Drop |
| 33 | Collectivism                   |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 5.04 | 5.5 | 2.156 | 2 | 50 | Drop |
| 34 | Quantity of Life               |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 5.38 | 6 | 2.392 | 4 | 54.2 | Drop |
| 35 | Quality of Life                |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 5.67 | 6 | 2.353 | 4 | 29.2 | Drop |
| 36 | Uncertainty and avoidance      |   |   |   |   |   |   |   |
|   | Agreement                      | 24 | 5.21 | 6 | 2.146 | 3 | 54.2 | Drop |
**Table 1 Continued**

|   | Description                                      | Agreement | Mean | SD | N | Drop |
|---|--------------------------------------------------|-----------|------|----|---|------|
|37 | Long term Orientation                            |           | 2.322|    | 4 | 41.7 |
|38 | Short term Orientation                           |           | 2.481|    | 4 | 45.8 |
|39 | Organizational and Personal Pride                |           | 2.71 |    | 5 | 37.5 |
|40 | Term work and Communication                      |           | 2.656|    | 5 | 66.7 |
|41 | Cost effectiveness and productivity              |           | 2.416|    | 5 | 62.5 |
|42 | Work hard play hard culture                      |           | 2.33 |    | 4 | 45.8 |
|43 | Tough guy macho culture                          |           | 2.388|    | 4 | 33.3 |
|44 | Process Culture                                  |           | 6.392|    | 4 | 33.3 |
|45 | Bet the company culture                          |           | 2.367|    | 4 | 41.7 |
|46 | Constructive cultures                            |           |      |    |   |      |
Below are the items that respondents selected below 6 in the survey questions and upon applying the decision rule to the data, the following cultures were dropped:

1. Clan Culture
2. Adhocracy Culture
3. Hierarchy
4. Market Culture
5. Reward Culture
6. Stability Culture
7. Competitiveness Culture
8. Performance Culture
9. Corporate Social Responsibility
10. Entrepreneurial Culture
11. Consensual Culture
12. Involvement
13. Consistency
14. Adaptation
15. Mission
16. Attitude to Work
17. Belief in the Work
18. Value of Work
19. Power Culture
20. Role Culture
21. Person Culture
22. Universalism Culture
23. Particularize Culture
24. Masculinity vs. femininity
25. Communitarianism Culture
26. Individualism Decision Culture

Table 1 Continued

| Agreement   | 24 | 6.57 | 7  | 2.041 | 2 | 79.2 | Retain |
|-------------|----|------|----|-------|---|------|--------|
| 47          |    |      |    |       |   |      |        |
| Passive or defensive cultures | | | | | | |
| Agreement   | 24 | 6.78 | 7  | 1.783 | 2 | 83.3 | Retain |
| 48          |    |      |    |       |   |      |        |
| Bureaucratic Culture | | | | | | |
| Agreement   | 24 | 7.22 | 7  | 1.445 | 2 | 91.7 | Retain |
| 49          |    |      |    |       |   |      |        |
| Innovative Culture | | | | | | |
| Agreement   | 24 | 6.61 | 7  | 1.877 | 2 | 87.5 | Retain |
| 50          |    |      |    |       |   |      |        |
| Supportive Culture | | | | | | |
| Agreement   | 24 | 7.08 | 8  | 2.205 | 3 | 83.3 | Retain |
29. Ascription Culture  
30. Achievement Culture  
31. Power Distance  
32. Individualism Care Culture  
33. Collectivism  
34. Quantity of Life Culture  
35. Quality of Life Culture  
36. Uncertainty and avoidance  
37. Long-term Orientation  
38. Short-term Orientation  
39. Organizational and Personal Pride  
40. Teamwork and Communication  
41. Cost effectiveness and productivity  
42. Work hard play hard culture  
43. Tough guy macho culture  
44. Process Culture  
45. Bet the company culture  

Below are the items that respondents selected 6 and above in the survey questions and upon applying the decision rule to the data, the following cultures were retained:

18. Norm of Work  
22. Task Culture  
46. Constructive Cultures  
47. Passive/Defensive Cultures  
28. Bureaucratic Culture  
49. Innovative Culture  
50. Supportive Culture  

4. Conclusions  

This paper has determined expert consensus on construction industry cultures and the result shows that forty-three cultures were dropped and the Norm of Work, Task Culture, Constructive cultures, Passive/Defensive cultures Bureaucratic Culture, Innovative Culture and Supportive Culture only that have scores of 70% and above were retained based on the decision rules. There can be concluded and referred to as the paymaster cultures of the Nigerian construction industry.

5. References  

1. Hofstede G, Hofstede GJ. Cultures and organizations - Software of the Mind. McGraw Hill Professional; 2010. p. 576.  
2. Corporate culture and performance [Internet]. Administrative Science Quarterly. 1992. Available from: http://books.google.com/books?id=pWudzigb0ucC  
3. Schein EH. Coming to a new awareness of organizational culture. Sloan Management Review Association. 1984; 25(2):1–3.  
4. Deal TE, Kennedy AA. Corporate culture: The rites and rituals of corporate life. Addison-Wesley Publishing Company; 1982. p. 232.  
5. Cameron KS, Freeman SJ. Cultural congruence strength and type. Research in Organizational Change and Development; 1991. p. 23–57.  
6. Schein EH. Defining organizational culture. 6th Class Organ Theory. 2005.  
7. Webster J. Succession of fungi on decaying cocksfoot culms: Part I. Journal of Ecology. 1956; 44(2):517–44.  
8. Schein EH. Organizational culture. American Psychologist; 1990. p. 109–19.  
9. Schein EH. The role of the founder in the creation of organizational culture. DTIC Document. 1983.  
10. Cui X, Hu J. A literature review on organization culture and corporate performance. International Journal of Business Administration. 2012; 3(2):28–37.  
11. Saad M. Impact of organizational culture on employee performance. 2013; 2(1):168–75.  
12. Cameron KS, Quinn RE. Diagnosing and changing organizational culture: Based on the competing values framework. New York: John Wiley and Sons; 2005.  
13. Alinaitwe H, Mwakali JA, Hansson B. Organizational effectiveness of Ugandan building firms as viewed by craftsmen. Journal of Civil Engineering Management. 2009; 15:281–8.  
14. Akpadiaha B. Disposition to organizational learning: A survey of selected construction industry organizations in Lagos State, Nigeria. 2012; 3:487–96.
15. Newcombe R. From client to project stakeholders: A stakeholder mapping approach. Construction Management Economics Taylor and Francis. 2003; 21(8):841–8.
16. Ofori G. Challenges of construction industries in developing countries: Lessons from Various Countries. Citeseer; 2000.
17. Abeysekera V. Understanding culture in an international construction context. CIB Rep. CIB; 2002. p. 39–51.
18. Sekaran U. Research methods for business. A skill Building Approach. UK: John Willey and Son Ltd; 2009.
19. Schneider B. Statistics for business problem solving. South-Western Educational publishing; Mishawaka. 1994.