AN INTEGRATED LEADERSHIP AND MANAGEMENT MODEL FOR EFFECTIVE INDUSTRIAL-ORGANIZATION PERFORMANCE: AN INVESTIGATION OF THE DYNAMIC MANAGERIAL LEADERSHIP MODEL

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Abstract

The concern and focus of this paper is investigation into the role of an integrated Leadership Management model in Nigerian industry Organizations. Most Management and Leadership Researchers saw Industrial Organization as over managed or under managed. This paper therefore presents a Dynamic Adoptive System that will be utilized in Nigerian Industrial Organizations to improve performance standards. The respondents in the study consisted of 96 females involved in Quasi-experimental research which comprise of the “moontent” production exercise. The experimental group = 24, representing High Per Organizations. Participants of this group represent DML principles. The control groups are 24 each representing Medium, low and Non-trained principle respectively. The results showed that the Dynamic Managerial Leadership organizations performed better than all others. An Integrated Leadership and Management Principle is, therefore, recommended for Nigeria Industrial-Organizations.

Keywords: integrated leadership, management model, Nigeria

INTRODUCTION

In the last few years, the concepts of Leadership and Management have come under serious discussions by different ethnographers (Levinson, 1994; Hogan Curphy and Hogan 1994). Some have urged that management has contributed to the failure of Organizations in general and industrial organizations in particular (Eze, 1995, Anikpo 1994). There are those who have argued that whenever industrial failures, economic failure and recessions occur in Africa, Asia, Europe, Latin America or in America, management is to be blamed (Sparrow and Pettigrew, 1987; Pettigrew and Hendry 1986). Some have even argued that the concept of management has outlived its usefulness (Eze, 1995; Curphy 1993). Some have argued further that Industrial-Organizations have been over managed and underled, (Bennis, 1993; Drucker, 1974). Similarly, some have argued that the concept of leadership in Industrial-Organizations have outlived its usefulness (Eze, 1988). From the Traits approach to leadership (Stogdill, 1948, Ghieselli, 1977) through the Human Relations approach (Blake and Mouton, 1964).through the situational approach (House, 1971) through the Transactional approach (Peter and Waterman, 1982) and to the Transformation approach (Tichy and De Valila, 1990). It is obvious that the leadership concept just like the management, concept has outlived its usefulness.

This desperate position, as it were, has led the field organizational behaviour to a position of a “trash’ can”, “the dust bin” and “dumping ground”. Theories and practices on organizational behaviour are now in shambles. Hence, it is not surprising that current efforts at showing the way forward have included attempts at reconceptualisation of management and leadership theories. These attempts in recent times especially since the 1980’s have included major organizational change models such as Total Quality Management and Dynamic Managerial Leadership Model. While the present paper is not an attempt to examine critically these recent organizational management and change models, it is pertinent to observe at this point that as elegant as these models are, they are not culture free, because they are based on the ethics of Western and Japanese industrial civilizations (Egwu, 1997).

The concern and focus of this study is an investigation into the role of management and leadership in Nigerian Industrial Organizations: critical step in this investigation was taken in 1996 when Nigerian Industrial Organizations were classified and categorized into three major groups. The Nigerian Stock Exchange unaudited trading performance average of 32 listed companies in 1995 and during the first half of 1996 shows that the
following ii Public Limited Liability Companies with gross profit margin averages can be classified under high performing Organizations.

Every research consists of empirical and theoretical aspects. While the theoretical aspect of this study is the current disenchantment with the field of organizational theory especially as it relates to the concepts of management and leadership, the practical aspect flows out from field observations. Therefore observations have led us to the following tentative conclusions.

i. The first category of industrial ranked as number three in table 1 which is referred to as, the 0f performing Organizations (NPO) is heavily characterized in terms of corporate Governance, by MANAGEMENT:- This has a lot to do with management styles, concept, and practices Taylor (1911),

ii. The second category of organizations which is called the Medium Perform in Organization (MPO) is characterized in term of Corporate Governance by LEAD’ This has to do with leadership principles styles, and practices Yuki (1989)

iii. While the third category of industrial Organization characterized in terms Corporate Governance by the integration management and leadership characteristic styles and practices. This group of Organization form the indicators of Performance; production and profit that is called High Performing Organization (HPQ). These observations have led to the conceptualization of the DML model (Dynamic Managerial Leadership) in Organizational behaviour, Which this paper addresses empirically.

Table 1: High Performing Business Organizations

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Dairy Cities Co.</td>
<td>3.7</td>
<td>1st</td>
</tr>
<tr>
<td>The Church Oil Palm Co.</td>
<td>2.6</td>
<td>2nd</td>
</tr>
<tr>
<td>Leather Goods &amp; Metal Co.</td>
<td>75.3</td>
<td>4th</td>
</tr>
<tr>
<td>World Trade Co.</td>
<td>4.3</td>
<td>7th</td>
</tr>
<tr>
<td>Nipco Paint Pte Ltd</td>
<td>24.50</td>
<td>6th</td>
</tr>
<tr>
<td>Airline Pte Ltd</td>
<td>24.50</td>
<td>6th</td>
</tr>
<tr>
<td>Nigerian Paint &amp; Allied Co.</td>
<td>19.75</td>
<td>3rd</td>
</tr>
<tr>
<td>United Oil &amp; Gas Co.</td>
<td>19.05</td>
<td>5th</td>
</tr>
<tr>
<td>Zonal Consumers Nig. Pte</td>
<td>18.25</td>
<td>12th</td>
</tr>
<tr>
<td>Oil &amp; Gas Co.</td>
<td>15.3</td>
<td>1st</td>
</tr>
</tbody>
</table>
Source: Nigerian stock Exchange Unaudited, Trading performance of listed companies in 1995 and during the first half of 1996.

**DYNAMIC MANAGERIAL LEADERSHIP MODEL (DML)**

DML is presented in this study as both a process and a dynamic adaptive system. As a process, DML operates as a change management technique whereby workers and managers in High Performing Organizations are exposed
to an entirely different Organizational culture and climate, managerial values, leadership values, motivational strategies, reinforcement and feedback strategies which are lacking in the other two categories of organizations. As an adaptive dynamic system, DML consists of a set of three components; input, throughout, output which when operationalised through change management techniques are sufficient to improve or maintain high performance standards in Industrial Organizations.

The input components of the DML are made up of personality variables such as; surgency, emotional stability, conscientiousness, agreeableness and intelligence. The throughout components consist of; technology, cultural changes, political changes, people and structure, produce an increase in output. When the input and throughout components are merged together produce high output which results into high performance. The DML behaviour is largely a function of personality and environment. This largely has been the general conception of behaviour which Lewin (1939) asserted, as in the following formula: B = F(PxE)

DML (B) = Planning and organizing, informing and communicating, supporting and consulting, managing and solving problems, motivating and rewarding. Is a function of: DML Personality (p) Surgency, emotional stability, conscientiousness, agreeableness, intelligence, and; DML Environment (e) = changes, political structural changes.

From the above premise, we derive that Organizational Behaviour (OB) the DML Personality (DMLP) Environment (DMLE).

OB = F(DMLP X DMLE).

The assumptions for the equation are thus:

(1) DML plans are organise through a dynamic and adaptive system.
(2) DML informs and communicates utilizing immediate and concrete feedback.
(3) DML supports and consults at all levels.
(4) DML manages conflicts by involving in moderate risk.
(5) DML motivates and rewards through challenging and autonomous work groups.

The above five characteristics emerged from the results of the pilot report that investigated the importance of the 14 leadership characteristics and 14 management principles in the 2 listed Business Organizations in Nigeria with published profits records by the Nigerian Stock Exchange in 1995 and during the first half of 1996. A Likert open ended questionnaire was developed by the researcher and distributed to managers, supervisors and subordinates to rate their leaders on the various the equation is a function of and the DML Technology, cultural changes, people and leadership characteristics identified by and Lepsinger (1990) and the 14 principles by Fayol (1917).

The result of Ebaii (1997) study on DML shows that the variables Considered most important are planning and organizing; 12.5%, informing and communicating; 13% supporting and consulting; 14% managing conflict and solving problems, 14.5%, motivating and rewarding; 14%. Integrating these characteristics by merging the highly rated qualities of management and leadership shows that there were some merits in executive performance, because managers, supervisors and workers in the high performing organizations (HPO) rated these characteristics far higher than the other characteristics Effective Dynamic Managerial Leadership refers to the leader with high need to achieve and to possess quick and concrete feedback on moderate risk taking basis, with personal responsibility for his own success in terms of average times for productivity, number of quality products, profit margin, productivity decisions, satisfaction of all Concerned and the number of finished products.

THEORETICAL BACKGROUND

Achievement is an accomplishment or attainment of goal. The Dynamic Managerial Leader’s behaviour (DML) is invariably directed toward certain ends or goals. The DML postulates a managerial-leader that is similar to the concept identified by McClelland (1961) need for achievement. McClelland (1961) asserted that in general, a high need for achievement in an individual refers to a high degree of hope for success. The DML designs way of creating a work situation that stimulates achievements. In this case there is fear of failure of avoidance.
McClelland (1961) asserts that achievers fear to fail. The DML is emotionally stable, steady, self confident, conscientious, hardworking, preserving, organized and responsible. The DML is agreeable, sympathetic, cooperative, good natured and warm. The DML is friendly and has need for love, (Stodill, 1974).

The DML responds to social rewards, compliments and praise from others, the DML motivates and rewards by giving challenging responsibility and autonomous task. Thus making personal relationship through communication and immediate and concrete feedback’ to take precedence over task accomplishment. It is the characteristics of achievers to take risks, ask for feedback and set measurable objectives, (McClelland, 1961).

**Major Principles of the DML are:** (i) it explores sources of motive satisfaction in work, (ii) it helps to integrate growth in managerial-leadership skills and improves organizational goals and productivity and (iii) DML designs ways of creating a work situation that stimulates achievement.

The DML is an emotionally stable, conscientious, agreeable and intelligent person who utilizes a dynamic and adaptive process in involving subordinates, workers and customers in a sociotechnical system culture, with a high need to achieve and to want immediate and concrete feedback on a moderate risk taking basis and, through personal responsibility, increase production decisions, quality of products, satisfaction of all concerned in the finished products and thereby improving and maintaining performance standard in Industrial Organizations. This concept of the DML is similar to the concept identified by Stogdill (1974) of big five models of personality and the motivational concepts of McClelland (1961), McIntyre (1966), and Litwin and Stringer (1968). Hogan, Curphy and Hogan (1994) refer to leadership as:

“Leadership involves persuading other people to set aside for a period of time their individual concerns and to pursue a common goal that is important for the responsibilities and welfare of a group’.

Brech (1985) describes management as:

“A social process entailing responsibility for effective and economic planning and regulating of the operation of an exercise in fulfillment of a given purpose, and responsibility”: Eze (1995) defined motivation as: “a psychological process initiated by existence of a need and involving goal-seeking to purposive activities directed towards reaching a goal-object and thereby satisfying the needs”.

Allport (1936) refers to personality as: the dynamic Organization within the individual of those psychological systems that determines his unique adjustments to his environment.

**TOTAL QUALITY MANAGEMENT (TOM) AND DML**

**A Comparative Analysis**

There are four key elements that form the foundation of TOM advocated by Deming (1986). People, continuous improvement process and the customer:

DML and TOM have similar features like people. Other shared components in the TQM and DML are continuous improvement and emphasis on the customers. TQM problem solving process is also seen in the DML person The DML is a person who in a position of authority utilizes a dynamic and adaptive process. In summary the question of whether TQM does produce economic value, has not been fully resolved due to methodological problems, along with contingencies raised in the Ernst and Young report, which is the most rigorous study to date. It is to this end that the Dynamic Managerial Leadership model, which is superior to TQM, has been proposed and tested in the present paper.

**MANAGEMENT BY OBJECTIVE (MBO) AND DML**

**A Comparative Analysis**

Management by objective (MBO) is one of the methods of management advocated by Drucker (1964) for achieving objectives. The basic concept is that top executives and managers should be involved in determining company objectives and defined major areas of responsibility, and integrate into them the goal of the employees. MBO is an integration of Organizational or company objectives with employees. MBO is an integration of Leadership and management characteristics for Organizational performance.
RESEARCH DESIGN METHOD

The design of the present study is 2x2 factorial design with the following factors as dependent variables. (i) High task accomplishment level; which includes factors such as average/assembly time, quality of products, profit ration, production decisions, satisfaction and production. (ii) High group maintenance level; which includes such factors as immediate and concrete feedback, moderate risk taking situations personal responsibility satisfaction.

DML personality variables (DMLP) which include such factors as surgency, emotional stability, conscientiousness, agreeableness and intellectance. DML environmental variables (DMLE) which include such factors as technology, cultural changes, political changes, people and structure. The objective of this paper is: to propose and demonstrate the feasibility and practicality of a Dynamic managerial Leadership (DML model or theory) in Nigeria, to investigate if the DML will outperform management and Leadership models in terms of time spent on completing a task number of quality products profit margin, satisfaction and productivity. The question is (i) Could Organization Performance be determined by Organizational climate factor such as achievement, moderate risk, immediate and concrete feedback responsibility challenging work, relationship and autonomy? (ii) Would there be any difference among organizations in terms of how their organizational climate factors such as achievement principles moderate risk, immediate and concrete feedback, responsibility influence, their performance? (iii) Which of the categories of organizations would describe the environment of their organizations as best in terms of satisfaction and productivity? Empirical studies on researches similar to DML principles have concluded that it improves quality and reduces time which are precious to customers and industrialists. This was demonstrated from the studies of organizational climate and motivations by Litwin and Stringer (1968), and “the Math Game” studies by McIntyre, (1966). Litwin and Stringer (1968), for instance, created three mock companies in the same business and varied them only on style of the manager and the climate he created. At the end of the 2 week experiment, the company that had been run on the DML achievement principles had outperformed, the other two on most dimensions including quality and time (the other two had been organized on “authoritarian and friendly” principles. McIntyre, (1966) has demonstrated a similar effect with fifth grade mathematics students, raising performance and learning levels by changing the classroom structure to emphasize personal responsibility, feedback strategies and moderate risk taking.

Most existing empirical studies on TQM conclude that it does produce value. However, most of the studies were conducted by consulting firms of quality associations with vested interests in their outcomes, and most did not conform with generally accepted standards of methodological-rigour. For example; in 1983 the Union of Japanese Scientists and Engineers published a study of Japanese companies that won the Deming Prize between 1961 and 1980.

The purpose of the investigation was to test the significance of the DML model in organizational performance through the experimental exploration of the variables contained in the research model. Accordingly, it is hypothesized that:

Hypothesis 1: DML Organization will outperform Non-DML Organization.

Hypothesis 2: DML performance is more positively related with short Assembly times used in production high quality products, high profits, high production decision, high satisfaction and productivity ratings.

The study location was the Delta State University, Abraka, campus III. The thirty-two (32) industrial Organizations chosen for this study were selected from the Nigerian Stock Exchange Unaudited Trading performance records of listed companies in 1995 (as listed in table 1) and during the first quarter of 1996. The industrial-organizations were mainly remunerative public liability companies. These were classified into High Performance records of listed companies in 1995 and during the first quarter of 1996. The industrial- Organisation were mainly remunerative public liability companies. These were classified into High performing, Medium performing and Low performing industrial-organisations. These classified organizations were represented by students in the experimental and control groups with leaders and workers who were trained to initiate the real listed or quoted companies. Majority of the classified organizations have their headquarters located in Lagos with branches scattered all over the country. Most of the Industrial-Organizations under review are directly involved in servicing, manufacturing or production of goods or commodities, such as glass, palm oil, soap, detergent, salt beverages, pharmaceutical products, containers, toiletries, crude oil, textile fabrics clothing and metal.
Participants (Main Study)

The respondents for this study consisted of 96 students randomly selected from the Department of Sociology and Psychology of Delta State University, Abraka. They were 48 males and 48 females, involved in the research which comprised of the “Moontent production” exercise.

Participants for the Moon-tent Production

The Moontent production exercise consisted of two phases. The production of the Moontent was by participants who represented the leaders in their organizations only in the first instance. The second phase was the production of the Moontent by the participants who represented the General staff of the organizations, including the leaders in the initial study.

EXPERIMENTAL GROUP

A random selection was used in the selections of the 96 subjects for the Moontent production exercise, 24 represented the experimental group i.e. the staff, of the High Performing Organization (HPO). This category of participants were trained with the DML principles vis-a-vis high achievement principle, moderate risk taking situations, immediate and concrete feedback, personal responsibility for their own success and failure, challenging work, relationships and autonomy. The companies of the High performers were named “Sunshine Moontent Group of companies”. Of these 24 participants, 12 were males and 12 females. Amongst them were four groups of 6 members each. In each group there was General Manager (GM) and an Assistant General Manager (AGM). There were 4 GM’s and 4 AG M’s altogether for the initial study.

CONTROL GROUP

Twenty-four others represented a control group (A) that is, staff of Medium Performing Organizations (MPO) (table 2). This category of participants were trained based on leadership behaviour characteristics only and their companies were named “Honeymoon Moontent Group of companies”. Of the 24 participants, 12 were males and 12 females. Amongst them were four groups of 6 members each. In each group there was a General Manager (GM) and an Assistant General Manager (AGM), the group consisting of 4 GM’s and 4 AGM’s of equal sex, for the initial study of leaders only. Another 24 participants represented Control Group (B) that is, the staff of Low Performing Organization (LPO) (table 3). This category of participants were trained based on management principle only and their companies were named “Twilight Moontent Group of Companies”. Of this 24 participants, 12 were males and 12 females. Amongst them were four groups of 6 members each. In each group there was a General Manager (GM) and an Assistant General Manager (AGM), consisting of 4 GM’s and 4 AGM’s of equal sex altogether for the initial study of leaders only.

The following research instruments were used for data collection.

The Biographical information of the Questionnaire: This was designed by the researcher to obtain information on the demographic (biodata) characteristics of respondents, (sex, level of study, place of study.

The Moon Tent Production Exercise The Moon Tent exercise was designed by Kolb, Rubin, McIntyre (1979), to allow subjects to experiment with a socio-technical system of their culture. It is a time practice run-test, with quality control. In fact, it is by practice, bid, time trial, rebid and produce that subjects were asked to divide into teams of six members making the four groups from four different mock companies (considered manufacturing companies). One of the companies was established on “achievement principles”, such as high need to achieve and to want immediate concrete feedback’ moderate risk taking situations and with personal responsibility for their own success or failure. In the present study, the company is named “Sunshine Moontent Group of Companies”. The second company established on “authoritarian” principles and an assembly line fashion was designated “Twilight Moontent Group of Companies” Ifl the present study. The third company established on “friendly” principles was named: honeymoon Moontent Group of Companies in the present research. The fourth
group without training or treatment was named “Rainbow Moontent Group of Companies”. The teams were allowed to produce the Preparation of the Moontent and Quality Control.

After the construction of the Moontent, the researcher recorded the original bid, final bid, product accepted, and profit/loss account on a news print for all the groups with the various companies. To ensure that profits were high and low or minimal losses, the GM recorded these at less than 10% for the original bid and less than 5% for the final bid. He also ensured that products accepted and profits made were above 90%.

Research findings:

The raw data showed in numerical value the times used in assembling the Moontent, the number of quality products the profit ratio in naira value and the production decisions by the GM. The Likert open ended questionnaire was used to qualify productivity and, satisfaction ratings of the GM and the General Workers on a 1-7 scale. The researcher first recorded these analysis with the leaderS GM’s and AGM’S separately and later with the general workers in each group separately in all the various companies.

Table 2: Mean Scores (X), Standard Deviation (Sd) of Measures According to Organizational Level, Principle and Application (Moontent Product10 Exercise) Leaders only.

<table>
<thead>
<tr>
<th>Satisfaction ratings</th>
<th>X(n=8)</th>
<th>S</th>
<th>D</th>
<th>X(n=8)</th>
<th>S</th>
<th>D</th>
<th>X(n=8)</th>
<th>S</th>
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<th>X(n=8)</th>
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<th>D</th>
<th>X(n=8)</th>
<th>S</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 19.5</td>
<td>3.8 75</td>
<td>2.16</td>
<td>3.7</td>
<td>50</td>
<td>0.19</td>
<td>56</td>
<td>0.00</td>
<td>1</td>
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</tbody>
</table>

| Productivity ratings | 6.0 70 | 9.26 | 3.5 | 0.00 | 1.66 | 1 | 1.5 81 | 0.00 1 |

Note: DML (Dynamic Managerial Leadership). MGT (Management). LED (Leadership) - NON (Not Trained).
Table 3: Mean Scores (X), Standard Deviation (Sd) of Measures According to Organization Level Principle and Applications (Moonent Production Exercise for General Workers).

Productivity ratings

<table>
<thead>
<tr>
<th>Source of Variable</th>
<th>Sunshinemoonent (Dm1 Principle)</th>
<th>Twilight Moonent (Management Principle)</th>
<th>Honey Moonent (Leadership)</th>
<th>Rainbow Moonent (Non-principle)</th>
<th>Probability Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average assembly time</td>
<td>X group (n=10) S D 43</td>
<td>X group (n=11) S D 9</td>
<td>X group (n=6) S D 55</td>
<td>X group (n=11) S D 9</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: DML (Dynamic Managerial Leadership). Management (Management) LED (Leadership – NON (Not Trained)

Hypothesis 1: DML Organization will outperform other Non-DIL Organizations
DISCUSSION OF RESULT

This Hypothesis was tested by using the mean scores and standard deviation of the measures. Table 2 shows that the DML leaders (GM’s and AGM’s) of Sunshine Moontent Companies with DML principle outperformed the General Workers in the companies with Management principle leadership principle and Zero-principles in terms of Average Assembly times, quality of Products, Profit Ratio, Production decision, satisfaction and Productivity ratings.

Table 3 shows that the General Workers in the Sunshine Moontent Companies with DML principle outperformed the General Workers in the companies with Management principle. Leadership principle and Non-principles in terms of Average Assembly times, Quality of products, Profitability, Production decision, Satisfaction and Productivity ratings. The means for the DML Workers are less for Assembly times and higher in quality, profit, production decision, satisfaction and productivity ratings.

The results of this study have been interpreted in order to achieve an elaborate understanding of the implication. Tables 2 and 3, the mean scores and standard deviation of all mean values according to organizational factors and variables measured, have been presented. In tables 2 and 3 DML organization outperformed the other three organizations when the leader’s scores were computed during the Moontent production exercises, and when the scores of the general workers were computed. The result of the DML organization records show that Nigerian sample had a simpler experience as their Euro- America counterparts, because the organization founded on the “achievement principle” (DML) outperformed the other organizations which were organized based of “authoritarian” and “friendly” principles. Inspite of the Shortcoming, however several aspects of the Outcome of the present paper can be interpreted to have added new dimensions to organize Psychological research in Nigeria. One of the major additions is that Menagerie and Leadership styles can be integrated for maximum performance.

CONCLUSION

The data analysis of this has led to the Conclusion that the Dynamic Managerial Leadership (DML) model is feasible and practicable in Nigerian Industrial. The results of the Study have also Shown that the DML model Potentially is practicable globally. Since similar applications from studies of this nature have been previously demonstrated (Mcintyre, 1966; Litwin, 1968) in other foreign Countries with similar effects. The literature reviewed so far have indicated that while some studies have attributed the Success of organization authoritarian “management” styles, others have attributed the Success of organization to democratic “Leadership” styles. Some of the literature reviewed also indicated that management and leadership styles when integrated and moderately applied in organizations will give maximum performance hence one notion of dynamic — managerial leadership mode— DML.

RECOMMENDATIONS

- In the light of the above discussions, some recommendations are hereby made:
- The DML model is recommended for average or low performing organization so as to achieve high organizational performance and to sustain high performing organizations.
- Most organization are not classified as high performing organization because only an aspect of the component are engaged. The study however, recommends that all components of the DML should be adopted for optimal performance. The adoption of the DML model would help in this regard.
- Industrial workers, should be motivated on achievement principles such as training in order to give them the opportunity to enjoy job satisfaction and maximal productivity.
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