The impact of organizational culture on cognitive empowerment in selected banks in Colombo District in Sri Lanka

O impacto da cultura organizacional na capacitação cognitiva em bancos selecionados no distrito de Colombo, no Sri Lanka

El impacto de la cultura organizativa en la capacitación cognitiva en una selección de bancos del distrito de Colombo en Sri Lanka

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ABSTRACT
Cognitive empowerment plays a critical role in the banking sector in Sri Lanka as well as in the global financial industry which may enhance customer experience, efficient operations, effective decision making, innovations as well as adaptability while gaining an edge over competition. This study investigates how organizational culture (Clan, Adhocracy, Market, and Hierarchy) can enhance cognitive empowerment of bankers in Sri Lanka. A quantitative approach was used whereas, initially a preliminary investigation was conducted to gain a general understanding of the culture of few leading banks in Sri Lanka and eventually cascading down to four banks that covers all four cultures. Further, 239 responses were received through a structured questionnaire from four leading banks covering all four cultures. Results showed higher levels of cognitive empowerment in entities with strong clan, adhocracy, and market cultures, while higher hierarchy culture was associated with lower levels of cognitive empowerment.

Keywords: adhocracy culture, clan culture, cognitive empowerment, hierarchy culture, market culture, organizational culture.

RESUMO
A capacitação cognitiva desempenha um papel fundamental no setor bancário do Sri Lanka, bem como no setor financeiro global, o que pode melhorar a experiência do cliente, as operações eficientes, a tomada de decisões eficazes, as inovações e a adaptabilidade, ao mesmo tempo em que se obtém uma vantagem sobre a concorrência. Este estudo investiga como a cultura organizacional (Clã, Adhocracia, Mercado e Hierarquia) pode aumentar a capacitação cognitiva dos banqueiros no Sri Lanka. Foi utilizada uma abordagem quantitativa, sendo que, inicialmente, foi realizada uma investigação preliminar para obter uma compreensão geral da cultura de alguns dos principais bancos do Sri Lanka e, por fim, uma cascata de quatro bancos que abrange as quatro culturas. Além disso, foram recebidas 239 respostas por meio de um questionário estruturado dos quatro principais bancos, abrangendo as quatro culturas. Os resultados
mostraram níveis mais altos de capacitação cognitiva em entidades com fortes culturas de clã, adhocracia e mercado, enquanto a cultura de hierarquia mais alta foi associada a níveis mais baixos de capacitação cognitiva.

**Palavras-chave:** cultura de adhocracia, cultura de clã, capacitação cognitiva, cultura de hierarquia, cultura de mercado, cultura organizacional.

**RESUMEN**

La capacitación cognitiva desempeña un papel fundamental en el sector bancario de Sri Lanka, así como en la industria financiera mundial, ya que puede mejorar la experiencia del cliente, la eficiencia de las operaciones, la eficacia en la toma de decisiones, la innovación y la adaptabilidad, al tiempo que se obtiene una ventaja sobre la competencia. Este estudio investiga cómo la cultura organizativa (clan, adhocracia, mercado y jerarquía) puede mejorar el empoderamiento cognitivo de los banqueros en Sri Lanka. Se utilizó un enfoque cuantitativo, mientras que, inicialmente, se llevó a cabo una investigación preliminar para obtener una comprensión general de la cultura de unos pocos bancos líderes en Sri Lanka y, finalmente, en cascada a cuatro bancos que cubren las cuatro culturas. Además, se recibieron 239 respuestas a través de un cuestionario estructurado de cuatro bancos líderes que abarcan las cuatro culturas. Los resultados mostraron niveles más altos de potenciación cognitiva en entidades con fuertes culturas de clan, adhocracia y mercado, mientras que la cultura de jerarquía superior se asoció con niveles más bajos de potenciación cognitiva.

**Palabras clave:** cultura de adhocracia, cultura de clã, empoderamiento cognitivo, cultura de jerarquía, cultura de mercado, cultura organizativa.

**1 INTRODUCTION**

Cognitive empowerment is crucial in today's rapidly changing world, as it provides individuals with the cognitive abilities and mindset needed to thrive in uncertain times. It enhances corporate agility, competitiveness, and employee well-being, Peterson (2014). In the banking sector, cognitive empowerment fosters efficiency, creativity, and overall organizational success through decision-making, problem-solving, innovation, adaptability, excellent customer service, risk management, and digital transformation. The banking industry faces challenges due to the volatile economy and rapid technological advancements. This study aims to explore the relationship between organizational culture and cognitive empowerment in Sri Lanka's banking industry, focusing on the need for long-term functioning in the sector. It aims to address the empirical gap on psychological empowerment components and the association between cognitive empowerment subscales and predicting conceptually related factors, thereby fostering professional development and national prosperity.
1.1 GENERAL OBJECTIVE

- to investigate the impact of organizational culture on cognitive empowerment amongst the bankers of Sri Lanka.

1.2 SPECIFIC OBJECTIVES

- to investigate the impact of the Clan Culture on the Cognitive Empowerment of the selected four Sri Lankan banks;
- to investigate the impact of the Adhocracy Culture on the Cognitive Empowerment of the selected four Sri Lankan banks;
- to investigate the impact of the Market Culture on the Cognitive Empowerment of the selected four Sri Lankan banks;
- to investigate the impact of the Hierarchy Culture on the Cognitive Empowerment of the selected four Sri Lankan banks.

2 METHODOLOGY

The study aimed to validate concepts about organizational culture and cognitive empowerment using a quantitative approach. A preliminary investigation was conducted on seven leading banks to identify four banks that cover clan, adhocracy, market, and hierarchy cultures. Cameron & Quinn's (2006) model categorizes organizational culture into these types, with indicators such as collaboration, employee development, open communication, innovation, entrepreneurial spirit, flexibility, decentralized decision making, result-oriented, competitive environment, customer focus, goal alignment, and structure and stability. The study focused on four banks: Commercial Bank of Ceylon plc, Sampath Bank of Ceylon PLC, Nations Trust Bank PLC, and Bank of Ceylon. A self-developed questionnaire was used to gather primary data, while secondary data was extracted from annual reports, journals, and related websites. A descriptive and statistical data analysis was conducted to achieve the study's objectives. The research findings were generalized to the population of banks in Sri Lanka, with executive and above grades considered as the most requiring cognitive skills. The study used cross tabulation, correlation analysis, regression analysis, chi square analysis, and hypothesis testing to analyze the data. SPSS 26.0 software was used for descriptive and statistical analysis.
H1: There is a significant impact of Clan Culture on Cognitive empowerment amongst the employees in the respective banks.

H2: There is a significant impact of Adhocracy Culture on Cognitive empowerment amongst the employees in the respective banks.

H3: There is a significant impact of Market Culture on Cognitive empowerment amongst the employees in the respective banks.

H4: There is a significant impact of Hierarchy Culture on Cognitive empowerment amongst the employees in the respective banks.

Source: Author developed

2 DATA ANALYSIS AND DISCUSSION

As per the demographic factors it is evident that the majority of the sample consist of males, while majority of respondents are of managerial category covering up 5-10
years of experience. This is beneficial for the study as the sample covers the personnel who are mostly utilizing the cognitive aspects while working.

Table 1: Reliability statistics (Cronbach’s Alpha)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan Culture</td>
<td>.975</td>
</tr>
<tr>
<td>Adhocracy Culture</td>
<td>.977</td>
</tr>
<tr>
<td>Market Culture</td>
<td>.958</td>
</tr>
<tr>
<td>Hierarchy Culture</td>
<td>.951</td>
</tr>
<tr>
<td>Cognitive empowerment</td>
<td>.967</td>
</tr>
</tbody>
</table>

Source: Analyzed statistical output from field survey

The Cronbach’s alpha values for all variables are high ranging from .951-.977. Therefore, these values indicate a strong internal consistency reliability.

Table 2: Validity statistics (KMO and Bartlett’s Test)

<table>
<thead>
<tr>
<th>Clan Culture</th>
<th>Adhocracy Culture</th>
<th>Market Culture</th>
<th>Hierarchy Culture</th>
<th>Cognitive Empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>Approx. Chi-Square</td>
<td>3306.540</td>
<td>2383.190</td>
<td>1550.828</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>df</td>
<td>45</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Analyzed statistical output from field survey

According to the above values, all KMO values are relatively high, implying that variables are related and share common underlying factors. Additionally, the significant Bartlett’s test results support the presence of relationships between the variables.

Table 3 - Correlations

<table>
<thead>
<tr>
<th>Cognitive Empowerment</th>
<th>Clan Culture</th>
<th>Adhocracy Culture</th>
<th>Market Culture</th>
<th>Hierarchy Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.598**</td>
<td>.648**</td>
<td>.553**</td>
<td>.262**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>239</td>
<td>239</td>
<td>239</td>
<td>239</td>
</tr>
</tbody>
</table>

Cognitive Empowerment = 2.409+0.208*Clan Culture+0.222*Adhocracy Culture+0.146*Market Culture-0.206*Hierarchy Culture

Source: Author developed

Table 4 - Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.772*</td>
<td>.597</td>
<td>.590</td>
<td>.299</td>
<td>2.043</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Hierarchy Culture, Adhocracy Culture, Clan Culture, Market Culture
b. Dependent Variable: Cognitive Empowerment

Source: Author developed
Table 5 - Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.409</td>
<td>.202</td>
<td>11.944</td>
<td>.000</td>
</tr>
<tr>
<td>Clan_Culture</td>
<td>.208</td>
<td>.030</td>
<td>.329</td>
<td>6.839</td>
</tr>
<tr>
<td>Adhocracy_Culture</td>
<td>.222</td>
<td>.036</td>
<td>.368</td>
<td>6.093</td>
</tr>
<tr>
<td>Market_Culture</td>
<td>.146</td>
<td>.044</td>
<td>.184</td>
<td>3.303</td>
</tr>
<tr>
<td>Hierarchy_Culture</td>
<td>-.206</td>
<td>.038</td>
<td>-.226</td>
<td>-5.371</td>
</tr>
</tbody>
</table>

Cognitive Empowerment = 2.409 + 0.208 * Clan Culture + 0.222 * Adhocracy Culture + 0.146 * Market Culture - 0.206 * Hierarchy Culture

Source: Author developed

The study found significant correlations between Cognitive Empowerment and various organizational culture types, with p-values less than 0.05 for all. Yet, it is important to note, even though a positive relationship can be identified between cognitive empowerment, clan, market and adhocracy cultures, correlation with hierarchy culture is weaker.

Based on the regression data, the model explains 59.7% \( (R^2=0.597) \) of the variance in cognitive empowerment, indicating a moderately strong fit. Since the adjusted \( R^2 \) is 0.590, the model suggests that 59% of the variance is explained, which accounts for potential overfitting. Based on the coefficient values, for one unit of increase in clan, adhocracy and market culture, the cognitive empowerment increases by 0.208, 0.222 and 0.146 units respectively. Yet, a unit increase in hierarchy culture is expected to decrease cognitive empowerment by 0.206 units which is a worthy fact to consider.

Table 6 - ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>30.886</td>
<td>4</td>
<td>7.721</td>
<td>86.498</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>20.888</td>
<td>234</td>
<td>.089</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51.774</td>
<td>238</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Cognitive_Empowerment
b. Predictors: (Constant), Hierarchy_Culture, Adhocracy_Culture, Clan_Culture, Market_Culture
Source: Analyzed statistical output from field survey

Based on the anova test, the overall model is highly significant \( (F=86.498, P=0.000) \) suggesting that at least one of the predictors significantly contributes to predicting cognitive empowerment. In general, the regression model which considered the clan, adhocracy, market and hierarchy cultures is statistically significant and explains substantial portion of the variance in cognitive empowerment. It is eminent that cognitive empowerment is significantly affected by each cultural component; the most substantial
effects are shown in the areas of clan and adhocracy cultures, and market culture to a lesser extent, while hierarchy impacting in a negative manner. The study indicates that organizational culture positively influences cognitive empowerment, suggesting that innovative and cooperative environments can boost employee empowerment, while hierarchical arrangements may have negative consequences.

3 CONCLUSION AND RECOMMENDATIONS

This study aims to investigate the relationship between different organization cultural dimensions (clan, adhocracy, market, and hierarchy) and cognitive empowerment. Significant correlations were found using correlation analysis, emphasizing the role that company culture plays in shaping cognitive empowerment. The study revealed that the most significant positive relationships were found between clan, adhocracy and market cultures. Companies that prioritize market orientation, innovation, and cooperation tend to have higher levels of cognitive empowerment. However, a negative association was found between hierarchy culture and cognitive empowerment, suggesting that a hierarchical structure may hinder it. The regression analysis confirmed the statistical significance of the model, explaining a substantial portion of the variation in cognitive empowerment. The Durbin-Watson statistic confirmed its dependability.

3.1 LIMITATIONS AND FUTURE STUDIES

The study on organizational culture and cognitive empowerment, based on cross-sectional data, faces challenges in establishing causal correlations. Future research should use longitudinal design to investigate changes over time. The data may be biased due to self-report bias, and additional measurements like observations or performance metrics may be included. The study's generalizability may be limited due to its focus on four cultural dimensions, and it is suggested that future studies explore a broader spectrum of cultural aspects. Additionally, mediating and moderating variables such as leadership styles, employee engagement, and organizational structure should be investigated to better understand the relationship between organizational culture and cognitive empowerment.
3.2 RECOMMENDATIONS

Organizations should focus on cultivating clan, adhocracy, and market cultures to enhance employee cognitive empowerment. Initiatives like team building exercises, innovation programs, and customer-centric training can strengthen these cultural dimensions. Leadership programs should develop skills aligned with collaborative and innovative cultures, promoting employee participation and empowerment. Hierarchy negatively influences cognitive empowerment, so organizations with a more hierarchical structure should assess its impact. Introducing flexible structures, flattened hierarchies, or hybrid models can balance structure with employee empowerment. Regularly assessing the organization's culture and its impact on cognitive empowerment is crucial. Employee feedback is also essential for adaptation. Training programs should focus on enhancing cognitive skills, critical thinking, and problem-solving. A learning culture that supports ongoing development and empowerment is recommended.
REFERENCES


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