Investigating the role of leadership and organisational culture in fostering innovation

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Abstract---To be competitive in the global market, businesses must innovate. Innovation is a force of change in today’s competitive market, and organisations that reject change are at danger. The goal of the study was to figure out what leadership style and organisational culture may be used to create a long-term work environment that encourages organisational innovation. Companies cannot protect themselves against change, regardless of the size of their resource pool or their organisational excellence. Change brings with its danger and uncertainty, but it also brings with its opportunity. The decision to innovate must be accompanied by activities that establish an atmosphere that encourages individuals to be creative. For an organization’s innovation initiatives to be effective, it must have a culture that encourages individuals to participate in innovation. The study employed quantitative method. To investigate this relationship, the researcher adapted a survey instrument to obtain the date from UAE firms. A Self-administrated questionnaire was distributed to employees who were randomly selected from the organisation. The data was collected through survey questionnaire from 500 participants working in the companies in UAE. The data was analysed by using smart-PLS software. Organizational culture and leadership style have a substantial positive link with organisational
innovation, according to the findings of the data study. Positive improvements in organisational culture and leadership style are likely to create an environment that is more receptive to innovation. The findings of this study add to the behavioural and psychological literature in general, as well as the literature on transformational leadership in particular. They give field specialists, policymakers, and administration of public security organisations, particularly from Gulf nations, with helpful insights regarding the level of transformational leadership.

**Keywords**---Organisational innovation, organisational culture, and leadership.

**Introduction**

The process of generating and executing a novel concept is referred to as innovation (Demircioglu & Van der Wal, 2021). They go on to say that innovation is the process of bringing in any new problem-solving concept and putting it into practise, as well as the implementation of new ideas, processes, goods, or services. Innovation is crucial for long-term organisational success, especially in dynamic marketplaces (Wegner et al., 2021). In terms of a company's innovation, Lei, Leaungkhamma, and Le (2020) describes it as "change" that encompasses the production and marketing of new information. Even though it is commonly portrayed in this way, innovation is not restricted to technical development or new goods, as these definitions demonstrate.

He claims that only through leadership can one genuinely build and nourish a culture that is adaptable to change (Mokhter, Khairuzzaman, & Vakilbashi, 2018), and that only through leadership can one truly develop and nurture a culture that is adaptable to change. Cui, Lim, and Song (2022) postulated a connection between leadership style and organisational culture, with organisational culture mediating the relationship between leadership style and performance. Leadership style isn't directly connected to performance; rather, it's linked in a roundabout way (Sedq, 2020, Khatab et al., 2019; Mokhtar, et al., 2019; Mokhtar, et al., 2019, Othman et al., 2019, Ghaffarkadhim et al., 2019). Competitive and inventive cultures that are responsive to external situations, on the other hand, have a significant and beneficial influence on organisational success (Zuraik & Kelly, 2018). The amount to which a leader is supportive of followers and engages followers in decision-making processes has a substantial impact on the development of an externally oriented corporate culture (Yang, Nguyen, & Le, 2018).

Others who have looked at the link between organisational culture and innovation, such as Tian et al. (2018), have found that there is one. Only a few empirical research on the influence of organisational culture on organisational innovation are available, according to Abdul-Halim et al. (2019). The organization's culture should be built to encourage continuous improvement, enhance workers' work styles, and so raise quality awareness. As a result of the appropriate actions and attitudes toward various tasks in the firm, organisational
culture has affected employee work behaviour (Lounsbury et al., 2019). The efficiency and efficacy of an employee’s job is heavily influenced by the organization's culture. To put it another way, organisational culture and leadership are two significant factors of how people perform or behave in their jobs in order for the company to succeed (Azeem et al., 2021). The purpose of this study is to look into the relationship between leadership and organisational culture as two fostering factors of innovation, based on previous research in the field of innovation.

**Literature review**

**Leadership**

Scholars have attempted to identify leadership styles that are suited for encouraging innovation in their efforts to understand the link between leadership and innovation. Some authors claim that supportive, participative, visionary, democratic, and collaborative leadership styles are effective in encouraging innovation (Zheng et al., 2019), while others claim that transformational leadership is the best style for promoting innovation (Alqatawenh, 2018; Alzahrani, 2019; Atan & Mahmood, 2019).

Future-focused, open-minded, dynamic, and planning-conscious, transformational leaders are visionaries (Busari et al., 2019). They re-define the organization's goal and vision, reinvigorating employee devotion (Priarso, Diatmono, & Mariam, 2019). Employees of transformational leaders are expected to think beyond themselves and become high achievers and leaders. They boost creativity and improve employees' ability to develop by using charisma, customised concern, inspiration, and intellectual stimulation (Al-Husseini, El Beltagi, & Moizer, 2021).

Employees are encouraged to work together to make the organization’s goal a reality through transformational leaders (Bonsu & Twum-Danso, 2018). Challenge familiar organisational processes, inspire a shared vision among employees, enable employees to act in accordance with their vision, model the way for employees to perform, and encourage employees through recognition and celebration of success, according to Posner and Kouzes (1988) theory of transformational leadership. Leaders who model and display these characteristics are more likely to produce followers who behave similarly.

Searching for new chances, experimenting, and taking risks are all part of challenging familiar procedures. Organizational systems are challenged by leaders to develop new programmes, services, and procedures. Inspiring shared vision requires leaders to anticipate and express the future while also enlisting others’ support in moving in new directions Othman et al., 2018, Khorsheed, 2020; Majed et al., 2020; Muslim, Aini; Harun et al., 2020; Ping et al., 2019; Hafeez, et al., 2020). Leaders utilise their own vision, beliefs, and values to inspire employees to participate in the organization's vision (Kotamena, Senjaya, & Prasetya, 2020). Leaders make it possible for people to collaborate and work together. Setting an example and organising little victories are at the heart of modelling the path. Finally, encouraging the organisational heart entails
energising employees, demonstrating how they may succeed, acknowledging their efforts, and celebrating achievements (Posner & Kouzes, 1988).

The capacity to persuade a group of individuals to pursue a common objective is known as leadership (Atan & Mahmood, 2019). As top executives supply managerial power to someone, the sources of these impacts might be official or informal. When subordinates (followers) are motivated to do what is ethical and advantageous to the company and themselves, leadership emerges (Milhem, Muda, & Ahmed, 2019). To ensure the effectiveness of an organisation, it requires a strong leader and good management (Jaroliya & Gyanchandani, 2021). According to Yuki (2010) leadership is the process of providing collective work a purpose (meaningful direction), resulting in the effort invested to attain the objective. According to Purwanto et al. (2020), one of the organization’s important success components is leadership. A leader is someone who acts first, goes first, makes the first step, pioneers, directs action, considers others’ opinions, guides, leads, and mobilises people via influence. The situational approach recognised that there is no one-size-fits-all leadership style that can be applied to all circumstances and contexts (Purwanto et al., 2020).

In general, it is stated that in the dynamic nature of competitive workplaces, a leader is an important aspect with a potent source of influencing personnel (Yukl, 1989). Meanwhile, transformational leaders may create a vision, motivate staff, and aid in the establishment of an organisational culture that promotes creativity, risk-taking, and innovation (Yukl, Gordon, & Taber, 2002). Furthermore, senior management’s responsibility in developing a strong organisational culture that supports innovation becomes even more critical. Previous research has demonstrated that transformational leadership may help shape an invention by fostering cultural acceptance (Scott & Bruce, 1994).

Organisational culture

The beliefs and assumptions about what and how things are done inside an organisation shape organisational culture. The rituals (celebrations, communications, rules, etc.) that reinforce such ideas, assumptions, and values appear as the organisation’s and its leadership’s perceived values (Rebelo & Gomes, 2017). The shared goals, common behaviours, joint attitudes, and patterns of meaning that guide the activities of an organization’s or community’s members are framed by the culture of the organisation or community. The effect of a culture is generally subconscious until one focuses and thinks on these characteristics. Bass and Avolio (1993) define an adaptable organisational culture as one that prioritises devotion to core constituents while also valuing new ideas and process-creating change.

Cox and Soobiah (2018) claimed that because ideas are useless unless they are put into practise, innovation refers to the acceptance of a new practise in a community. From this standpoint, innovation is a social development in a society, implying a cultural connection. A culture of innovation is one in which everyone in the business is always looking for ways to assist themselves and their customers improve their performance without the need for explicit direction from management (Minkov & Kaasa, 2020). Based on leadership influence rather than
instruction, culture determines the beliefs about how and why things are done. If innovation can become a way of life, an organisational culture like this may be a key source of competitive advantage that pays off over time (Abdul-Halim et al., 2019).

Because the structure and development of innovation systems must be integrated in an organization’s cultural basis in order to maintain innovation, an organization’s culture determines the aspects and pieces that have an influence on innovation processes (Sebastião, Zulato, & Trindade, 2017). Cultural norms and values are effective stimulants of creativity and innovation. People behave in accordance with an innovative value system that pervades the whole organisation (Lee, 2020). Managing innovation necessitates the use of social and cooperative rules. A system of exchange or a foundation of social conventions underpins a culture of invention. As a result, an organization’s innovation must be regarded as a set of social systems that support its strategy. Looking at innovation systems as a social system might help to simplify innovation research and offer up new avenues for research in innovation strategies (Minkov & Kaasa, 2020). The connection to culture is stronger because of the social component of innovation. There are behaviours and mechanisms that must be everywhere and accepted by everyone inside the business to establish a culture of creativity (Cox & Soobiah, 2018).

**Organisational innovation**

The invention and deployment of a novel concept in a specific social situation with the goal of producing commercial advantages is described as innovation. To produce new ideas, innovation needs both creativity and the capacity to put those ideas into action (Alblooshi, Shamsuzzaman, & Haridy, 2020). Nguyen and Malik (2020) went on to describe innovation as "the result of prior acts and experimentation that is superior than what has been done or generated previously." Successful innovation results in the creation of new goods, new methods of generating services or products, and new business models (Arranz et al., 2019). Innovation, according to Rezaei, Allameh, and Ansari (2018), is the process of transforming competitive processes and assets into ones that provide an even greater competitive advantage.

An organization’s competitiveness and long-term performance may both be improved via innovation (Nguyen, Hooi, & Avvari, 2021). According to Navio-Marco, Ibar-Alonso, and Bujidos-Casado (2020) innovation does not just refer to new services or goods, but also to new organisational approaches, marketing tactics, organisational procedures, external contacts, and workplace arrangements. Occasionally, innovation involves old ideas that haven't been pursued extensively, and the innovators are frequently from a different nation or sector. This type of innovation is important because businesses operate in a global market where successful inventions from other businesses or nations may be duplicated and adapted to match local needs (Rezaei et al., 2018).

Innovation is critical because it may help businesses gain a competitive edge by allowing them to penetrate markets more quickly. Organizations in affluent nations can take advantage of additional chances since innovation allows for
stronger links to emerging markets. Because innovation aids organisations in developing novel concepts, innovators adopt a proactive risk-taking mindset and see things through. Although the innovation process is not always straightforward, it may be rewarding for organisations that support and encourage innovation (Chatterjee et al., 2021).

Several external factors, such as economic growth or decline, difficult local and worldwide rivals, and demanding consumers, can compel businesses to rethink their existing service and product offerings. Staying ahead of the competition may be difficult, and businesses must endeavour to create products or services that are of high value to their customers. As a result, innovation is a key component that is frequently tied to business growth goals and is also critical to an organization's survival and long-term success. Multinational corporations frequently employ innovation in their goods, services, processes, and branding to deter newcomers from joining a market (Nguyen et al., 2021).

**Link between leadership and organisational innovation**

Leaders are responsible for establishing an environment in the workplace that may either foster or stifle innovation. A leader's actions may help others solve problems, increase intrinsic motivation, and create a pleasant team environment. Leaders must also drive an organization's strategic objectives, assign tasks, distribute resources, and empower workers to carry out their obligations. As a result, leaders have a significant impact on managing and directing the complex innovation process in an ever-changing environment (Demircioglu & Van der Wal, 2021).

Change may be regarded as innovation, and leaders are expected to overcome the hurdles and opposition to change that others may confront. Leaders must believe in change and be able to motivate others in their organisations to keep innovating. Leadership is not just for people at the top of an organisation; it is necessary at all levels to manage the process and sustain the momentum needed to accomplish the desired goals (Nguyen et al., 2021). According to Cui et al. (2022), leadership is responsible for building a work climate that fosters innovation, which is why they are critical to the innovation process. Leadership's cultural and intrinsic motivating effect has the greatest impact on innovation (Demircioglu & Van der Wal, 2021).

Choi et al. (2016) research of top leaders to examine the influence of leaders on innovation found that leaders had a beneficial impact on the innovation process in organisations. The role of leadership in the innovation process is not challenged in this study, but it is critical to understand which leadership behaviours and styles might boost the likelihood of delivering effective innovation results, and in what type of organisation. The leadership style under investigation in this study is transformational leadership, which has been linked to a range of organisational outcomes (Lei et al., 2020). Transformational leadership has been found as a way to increase creativity by appealing to employees' value systems, hence enhancing employee incentive to perform and think creatively (Zheng et al., 2019). Leadership has also been recognised in a number of studies as a key factor in fostering a culture of organisational innovation (Lei et al., 2020).
Link between organisational culture and organisational innovation

According to Tian et al. (2018) companies that want to become more innovative may really build an atmosphere that encourages them to do so. Numerous research have looked at the characteristics of an inventive culture because of its importance. An innovation-supportive culture, according to Zheng et al. (2019), provides a fundamental frame of reference that connects employee behaviour with corporate goals for innovation, balancing the contradicting demands for control and flexibility. They emphasise that while deadlines need control, these cultures also promote expectations and rules for flexibility, innovation, experimentation, and risk-taking (Cox & Kirby, 2018).

Many studies on the value of innovation to an organization’s performance have been undertaken in the past (Gorzelany et al., 2021; Kashan, Wiewiora, & Mohannak, 2021; Zheng et al., 2019). These results as a result of innovation may be dependent on the company’s culture. Individual, organisational, and environmental levels might be used to categorise organisational cultural levels. Organizational culture relates to the strategy, financial support leadership, organisational culture, and human resource management techniques at the organisational level (Tian et al., 2018).

Organizational culture is a collection of day-to-day conventions and practises inside the workplace that are seen and observed by individuals who work there (Rezaei et al., 2018). Bass and Avolio (1993) defined organisational culture as a set of beliefs, conventions, attitudes, values, and behaviours held by the organization’s workers and participants. A traditional stable arrangement of ideas and conventions maintained by a group or departments inside an organisation is referred to as organisational culture (Zheng et al., 2019). As a result, according to Gorzelany et al. (2021), organisational culture encourages individual members of a company to engage in creative activities. Culture and innovation have a significant link, according to empirical studies (Gorzelany et al., 2021; Rezaei et al., 2018; Zheng et al., 2019).

![Research framework](image-url)
Methodology

Research method

The study used a quantitative research approach. Quantitative research aims to explain a human problem or social phenomena by putting ideas with many variables to the test. These factors are measured using numbers, which are then analysed to see if a theory predicts or explains a phenomenon of interest (Khalid, Abdullah, & Kumar M, 2012). The study falls within the positivistic paradigm due to the statistical analysis used to explore the dependent and independent variables. Data obtained from a selected sample will be recorded and coded using numerical codes, and then interpreted and analysed using descriptive and statistical analysis (Collis & Hussey, 2014).

Survey instrument development

A survey method was employed in this study. An email survey has advantages that include being cost effective, providing time to consider responses, ease of administering and a strong response rate. A questionnaire with a five-point likert scale is used to collect data to assess organisational innovation (De Jong & Den Hartog, 2008) and organisational culture (Purwanto et al., 2020) and transformational leadership (Zheng et al., 2019).

The first component of the questionnaire gathered information about the participants’ demographics. The section served two purposes: (1) it allowed the researcher to describe the sample using the Likert scale data collected about the numerous variables that influence organisational innovation, and (2) it allowed the researcher to collect Likert scale data about the numerous variables that influence organisational innovation. Gender, age, and the number of years spent in the present organisation were all obtained. In the second segment, participants were asked questions that allowed them to choose between independent (leadership style and organisational culture) and dependent (organisational innovation) factors. The returned and valid questionnaire included 256 samples.

Study sample and Data collection

A population is a group of people that are taken into account for statistical reasons. A sampling frame may be described as a record of the population from which a sample can be obtained, whereas a sample can be defined as a subset of the population (Collis & Hussey, 2014). The population for this study is made up of all UAE employees who work in the industry. Because the population is considered vast, a representative sample of respondents will be chosen from a corporation. To gather a sample from a population of employees in UAE enterprises, simple random sampling was utilised.

The process of preparing and acquiring data is known as data collection. Data is collected systematically from numerous sources that have been recorded, observed, and organised for a specific goal using this method. Data gathering is an essential component of every research project. Inaccurate data can have an impact on a research study's outcomes and findings, leading to the study's findings being ruled invalid. When looking into the research topic, you'll need a
lot of sources of information. The information might come from primary, secondary, or both sources (Khalid et al., 2012).

Data will be obtained utilising secondary and primary data gathering approaches for this investigation. The researcher gathered secondary data from journals, books, internet publications, and newspaper articles, among other sources. To get first-hand information from the selected sample, an email survey with closed-ended questions is used. Closed-ended questions are those that have a set of alternate and predetermined answers to pick from, such as ordinal, nominal, ratio, or Likert scales (Khalid et al., 2012). Closed-ended questions can be answered with a simple yes or no, or a precise short and factual response, which is straightforward and sensible. The data was evaluated with SmartPLS 3.0 software, and the SEM method was applied.

**Data Analysis**

Data analysis is summarising data using descriptive statistics and presenting the summary in tabular form so that the information is easily understood. PLS-SEM can help researchers form conclusions about a target population by using sampling distribution and random sample ideas. The data acquired from the sample was recorded on a Microsoft Excel spreadsheet and then statistically analysed using the Smart PLS-SEM programme in this study. Descriptive statistics, a measurement model, and a structural model are all test factors in the data analysis.

**Demographic features of respondents**

The first component of the questionnaire consisted of questions about the participants’ demographics. Gender, age, and years of work within the present organisation were among the demographic data. Table 1 summarises the demographic data pertaining to the individual participants.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>151</td>
<td>59.0</td>
</tr>
<tr>
<td>Female</td>
<td>105</td>
<td>41.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 30</td>
<td>56</td>
<td>21.9</td>
</tr>
<tr>
<td>30 to 40</td>
<td>95</td>
<td>37.1</td>
</tr>
<tr>
<td>41 to 50</td>
<td>79</td>
<td>30.9</td>
</tr>
<tr>
<td>51 to 60</td>
<td>25</td>
<td>9.8</td>
</tr>
<tr>
<td>61 and above</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years and above</td>
<td>70</td>
<td>27.3</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>53</td>
<td>20.7</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>73</td>
<td>28.5</td>
</tr>
<tr>
<td>16 to 20 years</td>
<td>53</td>
<td>20.7</td>
</tr>
</tbody>
</table>
Males made up 59 percent of the total replies, while females made up 41 percent. Table 1 demonstrates that males were somewhat more likely than females to react. When it came to age, the bulk of the respondents (37%) were between the ages of 30 and 40. At least one responder (0.4 percent) was between the ages of 61 and 70. Seventy-nine percent of the respondents (30.9 percent) were between the ages of 41 and 50, while 56 percent (21.9 percent) were under the age of 30. Table 1 shows that seventy respondents (27.3 percent) have worked for the current employer for five years or more, fifty-three respondents (20.7 percent) have worked for the employer for six to ten years, seventy-three respondents (28.5 percent) have worked for the employer for ten to fifteen years, and seven respondents (2.7 percent) have worked for the current employer for more than twenty years.

**Measurement model**

The measurement model’s testing phase includes tests for Convergent Validity and Discriminant Validity. If all indicators in the PLS model meet the standards of convergent and discriminant validity, the findings of the PLS analysis may be utilised to evaluate research hypotheses.

<table>
<thead>
<tr>
<th></th>
<th>Leadership</th>
<th>Organisational culture</th>
<th>Organisational innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ld1</td>
<td>0.872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ld2</td>
<td>0.877</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ld3</td>
<td>0.846</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ld4</td>
<td>0.706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ld5</td>
<td>0.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ld6</td>
<td>0.881</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC1</td>
<td></td>
<td>0.838</td>
<td></td>
</tr>
<tr>
<td>OC2</td>
<td></td>
<td>0.857</td>
<td></td>
</tr>
<tr>
<td>OC3</td>
<td></td>
<td>0.862</td>
<td></td>
</tr>
<tr>
<td>OC4</td>
<td></td>
<td>0.741</td>
<td></td>
</tr>
<tr>
<td>OC5</td>
<td></td>
<td>0.746</td>
<td></td>
</tr>
<tr>
<td>OC6</td>
<td></td>
<td>0.760</td>
<td></td>
</tr>
<tr>
<td>OI1</td>
<td></td>
<td></td>
<td>0.902</td>
</tr>
<tr>
<td>OI2</td>
<td></td>
<td></td>
<td>0.823</td>
</tr>
<tr>
<td>OI3</td>
<td></td>
<td></td>
<td>0.850</td>
</tr>
<tr>
<td>OI4</td>
<td></td>
<td></td>
<td>0.882</td>
</tr>
<tr>
<td>OI5</td>
<td></td>
<td></td>
<td>0.854</td>
</tr>
<tr>
<td>OI6</td>
<td></td>
<td></td>
<td>0.753</td>
</tr>
</tbody>
</table>
The loading factor value of each indicator to the construct is used to conduct a convergent validity test. Most references regard a factor weight of 0.5 or greater to have good enough validation to explain latent components (Hair et al., 2019). The minimum size of loading factor obtained in this investigation was 0.5, with the stipulation that the AVE value of each construct be more than 0.5. (Hair et al., 2019).

According to the PLS model’s estimate findings in table 2, all indicators already have a loading factor value greater than 0.5, indicating that the model fulfils convergent validity requirements. Convergent validity is determined by looking at the AVE value of each construct in addition to the loading factor value of each indicator. The PLS model is said to have satisfied convergent validity if the AVE value of each construct is > 0.5. (Hair et al., 2019). Table 3 below shows the AVE value for each construct:

Table 3. Composite reliability and AVE

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>0.917</td>
<td>0.936</td>
<td>0.711</td>
</tr>
<tr>
<td>Organisational culture</td>
<td>0.893</td>
<td>0.915</td>
<td>0.644</td>
</tr>
<tr>
<td>Organisational innovation</td>
<td>0.919</td>
<td>0.937</td>
<td>0.715</td>
</tr>
</tbody>
</table>

Discriminant validity is used to guarantee that each latent variable’s idea is distinct from the other variables. The model meets the Fornell and Lacker criteria for discriminant validity, as well as the HTMT (Hair et al., 2019). The following are the findings of the discriminant validity test:

Table 4. Fornell and lacker criterion

<table>
<thead>
<tr>
<th></th>
<th>Leadership</th>
<th>Organisational culture</th>
<th>Organisational innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>0.843</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational culture</td>
<td>0.690</td>
<td>0.802</td>
<td></td>
</tr>
<tr>
<td>Organisational innovation</td>
<td>0.793</td>
<td>0.671</td>
<td>0.845</td>
</tr>
</tbody>
</table>

The discriminant validity test results in the table above demonstrate that all constructs have an AVE square root value greater than 0.7, indicating that the model is discriminant valid.

Table 5. HTMT

<table>
<thead>
<tr>
<th></th>
<th>Leadership</th>
<th>Organisational culture</th>
<th>Organisational innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td>0.738</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assessing the Structural equation model

The relevance of direct and indirect effects is tested, as well as the extent of the influence of exogenous factors on endogenous variables. R Square values and significance test values are determined using the bootstrapping procedure, as shown in the table below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta value</th>
<th>Standard Error</th>
<th>T Statistics</th>
<th>P Values</th>
<th>R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership -&gt; Organisational innovation</td>
<td>0.629</td>
<td>0.046</td>
<td>13.549</td>
<td>0.000</td>
<td>0.658</td>
</tr>
<tr>
<td>Organisational culture -&gt; Organisational innovation</td>
<td>0.237</td>
<td>0.051</td>
<td>4.637</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Table 6 shows that, with a p-value of 0.05, transformational leadership and organisational culture have a positive and significant influence on organisational innovation. Furthermore, for all lines, the T value Statistics is greater than 1.96, and all route coefficients are positive. The substantial structural association between research variables and standardised path coefficients is shown in Table 6. The path analysis reveals that the higher the level of leadership and organisational culture, the greater the favourable influence on organisational creativity. H1 and H2 are supported by this result. Because the association between leadership style and organisational innovation is considerable, leadership style has little effect on organisational innovation. All of the possibilities received a lot of support.

**Discussion on findings**

The study's main goal was to figure out what kind of leadership style and organisational culture may be used to create and maintain a work environment that encourages organisational innovation. The study investigated the link between three dimensions, namely organisational culture, leadership style, and organisational innovation, in order to attain this goal.

Martins and Terblanche (2003) defined organisational innovation as the amount of encouragement and support provided by organisations to employees to enable the exploration of creative and innovative techniques. Furthermore, the researchers noted that an atmosphere that encourages and rewards creativity while simultaneously allowing for mistakes produces inventive results. According to Bonsu and Twum-Danso (2018) leadership style and organisational culture may employ strategies and practises to create an environment that is conducive to innovation.

Leaders, according to Atan and Mahmood (2019), are responsible for building an organisational atmosphere that may either foster or stifle innovation. Leaders must also drive an organization's strategic objectives, assign tasks, distribute resources, and empower workers to carry out their obligations. Leaders have a significant impact on managing and leading the complex innovation process in a continuously changing environment (Zuraik & Kelly, 2018). According to Mokhber *et al.* (2018), leadership has a strong cultural and intrinsic motivating effect on creativity.

Martins and Terblanche (2003) underlined the relevance of the variables that characterise an organisational culture that inspires creativity and supports innovation, as well as the role that organisations play in organisational innovation. The capacity to successfully adopt and sustain innovation is dependent on the organisational culture, which may either facilitate or hinder it. The impacts are the product of an organization's socialisation process, which includes shared norms and values that define acceptable behaviour and activities, as well as procedures, practise, structures, and rules (Abdul-Halim *et al.*, 2019). When employees see an organization’s culture as supportive of innovation and placing a high value on it, they are more likely to innovate (Lounsbury *et al.*, 2019). Lee (2020) discovered that the views of organisational culture had a direct impact on workplace creativity and innovation. As a result, leaders build, embed, adapt, and finally manage culture. Leaders have an impact on common ideas,
attitudes, and customs that emerge in the early years of a company (Lounsbury et al., 2019). Organizational culture has a substantial positive link with organisational innovation, according to the findings. This positive association showed that the more favourable the organisational culture is to innovation, the more likely the organisation will be to encourage innovation, in other words, the more likely the organization's members will be to innovate.

**Limitation and future research**

Organizational innovation is a relatively new theoretical idea, and there is a scarcity of research on the relationship between organisational culture and leadership variables, both in the UAE and abroad. The link between the constructs has received little attention in research. With relation to surveying more people, the timeline for completing the research caused obstacles. It would have been difficult to collect data from more people than the sample, thus only employees from a few firms in the UAE were considered.

The independent factors (organisational culture and leadership style) and the dependent variable (organisational innovation) were examined in this study, and both independent variables were shown to have a substantial positive association with the dependent variable. It would be fascinating to see the results of a research with a larger sample size. Although the study focuses on organisational culture and leadership variables, there is opportunity for individual components such as employee motivation and its impact on organisational innovation to be included. Future research might employ different ways or a mix of approaches to triangulate the responses gathered, as this study only used one method for data collecting.

**Conclusion**

Organizational culture, leadership, and innovation all have a favourable relationship. However, there are few researches that look at the interrelationships between these three constructs at the same time. The majority of previous research has focused on company organisational innovation. Only a few studies have looked into the link between organisational culture, leadership, and organisational innovation in UAE companies.

The impact of organisational culture, leadership, and organisational innovation on the administrative performance of UAE enterprises was investigated in this study. Organizational culture and leadership characteristics both contribute positively to organisational creativity, and innovation influences organisational performance, according to the findings. Leadership style, on the other hand, has a direct influence on organisational creativity. The following are the particular conclusions:

(1) Impact of organizational culture on organizational innovation
Organizational culture has a direct substantial beneficial influence on organisational innovation, according to this study's entire sample, with the supported kind of organisational culture having the biggest impact. This conclusion is consistent with (Rezaei et al., 2018) findings that corporate culture
has an impact on creativity. If the organization’s culture prioritizes innovation, more resources will be allocated to inventing and pursuing competitive advantage.

(2) Impact of leadership style on organizational innovation

Leadership style and organisational culture had direct and significant influence on organisational innovation, according to this study. Companies in the UAE have a tight organisation culture, with all employee responsibilities well defined and standardised processes. As a result, the influence of inspiring or encouraging subordinates on the organization’s innovation was reduced. As a result, the leadership style used in UAE companies had a considerable beneficial influence on organisational innovation.

Reference


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