IMPACT OF LEADERSHIP STYLE ON ELECTRONIC COMMERCE ADOPTION AMONG SME: A CASE OF AD DAKHILIYYAH GOVERNORATE IN OMAN

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ABSTRACT

Today's rapidly evolving technology has an impact on businesses as it offers new ways and means of conducting business. Undoubtedly, e-commerce has created new opportunities to change the way businesses operate. In such a critical situation, leaders need to develop visions and make important preparations to keep their companies afloat. The Multifactor Leadership Questionnaire (MLQ) was used to explore the relationship between leadership style and e-commerce adoption among managers of small and medium enterprises (SMEs) in Ad Dakhiliyyah Governorate. Managers of 9104 SMEs in Ad Dakhiliyyah responded to the questionnaire with 367 responses. SmartPLS 4 was used to analyse the data. The study found that there is a significant and positive relationship between transactional leadership and e-commerce adoption. However, the results show that there is a positive but not significant relationship between transformational
leadership and e-commerce adoption. This study has important implications for how SME managers should demonstrate the right leadership style to support e-commerce adoption. This study provides SME managers with a better knowledge of the influence of leadership style on the adoption of e-commerce in Ad Dakhiliyah.

**Keywords**: Leadership Style, E-commerce, Technology Adoption, SME, Oman, SmartPLS.

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**INTRODUCTION**

Successful leadership often contributes to the ’success of the business (Chaudhry, Raziq, Saeed, Sajjad, & Borini, 2019). Due to the rapidly evolving business environment, today’s world is more complicated than it was decades ago in terms of business competitiveness. Any company that wants to evolve and succeed must have a clear direction and strategy for dealing with current and expected business trends (Sophonthummapharn, 2005). Leaders (managers) are the ones who set the direction of organisations as they define the work to be done, the roles required and ensure that the structures are in place for the whole organisational team (Humphreys, 2001). Ren, Collins and Zhu (2014) stated that the success or failure of an organisation depends on the leader’s ability to make decisions when it matters. The world has experienced dramatic change in recent years. New technologies have made people's lives more comfortable and convenient, unlike in the past, as the world has shifted to the digital age. From a business point of view, the Internet is considered a medium for expanding business worldwide, with low costs compared to traditional business transactions. However, when a business is conducted over the internet, it is called e-commerce. E-commerce has become a phenomenon in developed countries since the early 2000s and has evolved with the integration of social media (Vivian, Aidi, & Ram, 2018). E-commerce is a way of doing business online. Some leading companies have anticipated the e-commerce trend and have quickly entered this space (Sasu, 2017). Many companies have gained competitive advantage by conducting business over the internet. Most SMEs in the region do not have their own websites and use free emails such as Gmail, Yahoo Mail and other mail platforms to communicate with customers; the adoption of e-commerce varies from business to business.

Scupola (2014) believes that top management and the Chief Executive Officer (CEO) play a critical role in small and medium enterprises, especially in the development and adoption of e-commerce. He further argues that the prevailing leadership style can be either directive or consultative. The government of Oman has launched several important initiatives, such as OEC 2020, to promote the growth of the e-commerce market. The main objective of this initiative is to decipher the future transformation in governance, transportation, logistics and commerce that can usher in digital transformation in the economy (ReportLinker, 2021). There is a huge need for leaders in many companies. Even CEOs need excellent leadership skills to run the business effectively. However, researchers have differing opinions on whether leadership style plays a role in e-commerce adoption (Mishra, Grunewald, & Kulkarni, 2014). This study aims to examine the relationship between leadership style and e-commerce adoption, focusing on managers of SMEs in the Ad Dakhiliya region of Oman.

As leadership plays a crucial role in any organisation, it is a process of arousing the interest of others, releasing their energy and directing them. The success of leaders in organisations depends on whether they apply an appropriate and effective leadership style to those under their charge.
With the growing internet and usage rate in Oman, the number of internet subscribers has increased to 473,487 in 2019, an increase of 11.4% from the previous year 2018 (ReportLinker, 2021). In addition, the number of active broadband subscribers increased to approximately 4.739 million subscribers compared to 4.11 million subscribers in 2018. However, according to Kemp (2022), the total number of internet users in Oman is 5.02 million as of January 2022. Oman's Ministry of Commerce and Industry is continuously working to ensure that people use e-commerce for shopping, imports and other activities. Despite the government's initiative, the growth of the food industry, for example, has been quite sluggish (Raisi, Yousuf, & Ebuen, 2017).

Naqvi (2014) noted that more than half of Oman's population has smartphones, while mobile infrastructure in Oman currently covers 95% of the country, according to the Ministry of National Economy (cited in Naqvi (2014)). Looking at Oman from the perspective of NCSI (2022) with a total of 9104 SMEs in the Ad Dakhiliyah region, the adoption of e-commerce is still evolving. E-commerce is not comparable to developed countries such as the United States of America and some parts of Europe. This assertion is especially true for SMEs, which are believed to benefit significantly from e-commerce (Scupola, 2014). The adoption rate of e-commerce among SMEs in Oman is generally low (Vivian, Aidi, & Ram, 2018; Al-Alawi, & Al-Ali, 2015; Esmaeilpour, Hoseini, & Jafarpour, 2016). This suggests that locally based business owners are doubtful about possible investments in e-commerce, especially when awareness of the impact of online business is limited.

Previous studies have examined various leadership styles, with numerous studies conducted on leadership style models developed many years ago, such as contingency, behavioural, trait and situational theories. Nevertheless, few research studies have been conducted on how leadership leads to the adoption of technologies such as e-commerce in organisations (Al-Junaibi et al., 2022; Vivian, Aidi, & Ram, 2018; Ahmed, 2017; Yan & Yan, 2013; Al-Gharbi, & Ashrafi, 2010). Many previous studies and literature on SMEs and e-commerce adoption tend to focus on factors that influence adoption decisions or differentiate users from non-users (Scupola 2014). Therefore, it is imperative to conduct this study to fill the gap and understand why the adoption of e-commerce in SMEs is slow and to determine the attitude of managers towards adoption in the Ad Dakhiliyah region of Oman.

The main objective of this study is to investigate the relationship between leadership styles (transactional and transformational) and e-commerce adoption among managers of SMEs in Ad Dakhiliyah Governorate in Oman. Based on the objectives of the study, the following research questions were proposed.

1. What is the relationship between transformational leadership and e-commerce adoption among Ad Dakhiliyyah SME managers?
2. What is the relationship between transactional leadership style and e-commerce adoption among Ad Dakhiliyyah SME managers?

LITERATURE REVIEW

According to Mishra, Grunewald, and Kulkarni (2014), leadership style is defined as “the consistent patterns of behaviour that leaders use when working with others as perceived by
them”. Leaders may apply different leadership styles depending on the situation and organisational environment. However, a leader may apply all styles, but one style is usually the dominant one, because leadership is understood as social influence that seeks the participation of subordinates in achieving organisational goals.

In today’s world, organisations undoubtedly need leaders who effectively understand the complexities of the ever-changing business environment around the world. Burns (1978) developed two leadership styles, transactional and transformational, and concluded that these two styles co-exist. However, Bass and Avolio (1993) further examined the two leadership styles and concluded that they are complementary and important in organisations. Transformational leaders influence and motivate their subordinates, while transactional leaders set goals, structure and facilitate tasks while providing a shorter path to achieve the goals (Avolio, 2010). According to Handoyo, Hamid and Iqbal (2015), who found that the relationship between transformational leadership style and work motivation was insignificant, the findings of this study support previous research stating that transactional leadership style is positively correlated with work motivation. Although both styles are important, a good balance must be found to make the organisation successful.

**Transformational Leadership Style**

Transformational leaders achieve organisational goals by creating a vision for the future of the organisation and inspiring employees to be part of that vision and make it a reality. This leadership style creates a sense of commitment within the organisation, encourages new ways of tackling problems and promotes learning across organisational teams (Humphreys, 2001). Such leaders pay attention to the concerns and development needs of their followers (Mishra et al., 2014). Transformational leadership is thus based on leaders changing the values, beliefs and needs of followers. Despite the appropriateness of transformational leadership style, Bass (1990) argued that such leadership style can be learned and “should” be the main topic of management training and development. There are four factors for transformational leadership (Tefera, 2018).

**Idealised Influence**

Leaders who set an excellent example for their employees are considered idealised influence. Employees can trust and respect that managers with idealised influence make the best decisions for the organisation (Avolio, 2010).

**Inspirational Motivation**

Managers who inspire employees to support the organisation's vision are called inspirational motivators. In order to achieve the company’s goals of increased sales and market growth, managers who inspire employees must foster a sense of teamwork (Avolio, 2010).

**Intellectual Stimulation**

Managers who encourage inventiveness and creativity by challenging a group’s accepted assumptions or viewpoints are considered intellectually stimulating. In an effort to improve the organisation, intellectually stimulating managers encourage critical thinking and problem solving (Avolio, 2010).
Individual Consideration
Managers who coach and mentor their employees have individual concerns in mind. Managers who are responsive to individual needs motivate their employees to achieve goals that benefit the organisation (Avolio, 2010).
Based on these characteristics, the following hypotheses are formulated.

H1. There is a significant positive relationship between transformational leadership style and e-commerce adoption.

Transactional Leadership Style
According to Ololube, Amanchukwu and Stanley (2015), transactional leadership style makes the role of organisation, supervision and performance an exchange that takes place between managers (leaders) and workers in the organisation. This leadership style is based on reward and punishment. This means that the manager does whatever is necessary to ensure that the employee or follower performs the task assigned to him/her and that the consequences for performing or not performing the task are directed to the employee (Lamb, 2013). This shows that employees who successfully complete the task are rewarded and those who fail are punished.

Contingent Reward
Transactional leaders are characterised by setting mutually agreed goals and offering a variety of rewards for good performance. They formulate expectations clearly, provide adequate resources and link the goal to rewards. For their subordinates, they set specific, measurable, achievable, reasonable and timely goals (Avolio, 2010).

Active - Management by Exception
Leaders actively look for violations of policies and procedures, and transactional leaders take remedial action to avoid mistakes (Avolio, 2010). In other words, active management by exception means that management proactively handles situations, helps with problems, participates in all activities in real time, and keeps an eye on what its employees are doing to avoid mistakes. As a result, the author has made the following hypothesis:

H2. There is a significant positive relationship between transactional leadership style and e-commerce adoption.

Small and Medium Enterprises in Oman
In recent years, the Omani government has increased its efforts to improve the SME sector. This is happening as the government begins to diversify its economy and reduce its dependence on the oil industry. According to the National Centre for Statistics and Information (NCSI), there are 81,460 registered SMEs in Oman, up from 55,491 in 2022, an increase of 46.8%. At the end of July 2022, Ad Dakhiliyah Governorate had the least number of SMEs with 9104 registered small and medium enterprises. Any economy relies heavily on SMEs to expand, and SMEs are one of the main focal points of the Omani government’s Vision 2040 to reduce unemployment, especially among young people. To help young entrepreneurs who need guidance, a variety of skills and funding through various financial programmes, the government has developed several initiatives, grants and training opportunities (Ramachandran et al., 2019). Small and medium enterprises (SMEs) have brilliant ideas, but it is not clear how they can turn them into reality. However, with the help of a strong leader and effective business practises, the company can achieve its goal (Al Bulushi & Bagum, 2017).
For the business to function well, strategy is crucial and important. For products that are made available to the general public, a sound approach should be developed, according to Al Bulushi and Bagum (2017). SMEs face several difficulties despite being recognised as crucial to Oman’s economy. These include a lack of basic business expertise, a lack of information about the market, a lack of effective leadership, slow adoption of new technologies, and others (Ramachandran et al., 2019; Al Bulushi & Bagum, 2017; Ahmed, 2017). Alam and Alam (2019) claim that the Omani government has launched several initiatives to support SMEs, including grants, loans and the expansion of financial guarantees.

**E-commerce Adoption**

There are many business models that already work on the internet. These models include e-shops and e-emails, which share some common underlying principles, such as raising money, improving productivity in the business process, developing and supporting new automated processes, and changing the way entrepreneurs interact with existing and potential customers (Simpson & Docherty, 2004). E-commerce involves the exchange of information, buying and selling of goods and services over electronic networks. Technology is involved as various technological infrastructures are involved in the electronic process. E-commerce has reshaped the modern market, but this new form of commerce has its advantages and disadvantages. While it has been proven that e-commerce offers several significant benefits to businesses, there are also some limitations to using e-commerce (Ahmad, 2017). E-commerce offers significant benefits and opportunities through new technologies (Nazir & Roomi, 2021).

The e-commerce market is growing rapidly due to the consumption rate and higher sales of smartphones in Oman (Observer, 2021). According to Japanese market research firm Shibuya Data Count, the Omani government's various initiatives, such as OEC 2020, are boosting the growth of this market. The main objective of this initiative is to decipher the future transformation in governance, transportation, logistics and trade that can usher in the digital transformation of the economy. Moreover, the growing GDP of the country will drive the primary growth of this market. According to the National Centre for Statistics and Information (NCSI), the number of internet users in Oman has increased to 5.02 million, representing 95.2 per cent internet penetration as of January 2022 (Kemp, 2022). Many studies in emerging economies looking for these benefits have been disappointing overall, according to Nazir and Roomi (2021), as various studies have also concluded that the problems faced by SMEs in developing countries may be completely different from those in advanced countries. SMEs adopting e-commerce in developing countries face unique challenges that are more severe than those in developed countries (Kartiwi, 2018).

**METHODOLOGY**

This study examines leadership styles in terms of transformational and transactional types. This study also examines the impact of leadership style on the adoption of e-commerce in SMEs. The data for this study was collected using an online questionnaire and a quantitative research approach. The sample was drawn from a group of executives (managers) working in SMEs in Ad Dakhiliyah province in Oman. In order to obtain enough data for analysis, a total of 375 responses were collected in this study, including SME owners, managers and even those who own and manage SMEs. The instrument used was the Multifactor Leadership Questionnaire.
(MLQ). The leadership instrument consists of 28 items and indicates leadership style. It is based on the Full Range Leadership Model by Avolio and Bass (2004) and was developed to assess the level of a person's characteristics and behaviours in all types of organisations. The e-commerce adoption scale contains 5 items. Some items were removed due to insufficient loading. SmartPLS 4 also provides an internal consistency reliability (coefficient alpha) between 0.787 and 0.921 for the two leadership scales and 0.89 for the e-commerce scale. The scales thus have a high internal reliability.

**ANALYSIS AND RESULTS**

**General Demographic Information of Respondents**

Table 1

**Demographic Information of Respondents**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>269</td>
<td>71.7%</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>28.3%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 - 34 years</td>
<td>116</td>
<td>30.9%</td>
</tr>
<tr>
<td>35 - 44 years</td>
<td>176</td>
<td>46.9%</td>
</tr>
<tr>
<td>45 - 55 years</td>
<td>70</td>
<td>18.7%</td>
</tr>
<tr>
<td>55 years and above</td>
<td>13</td>
<td>3.5%</td>
</tr>
<tr>
<td>Management position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner</td>
<td>190</td>
<td>50.7%</td>
</tr>
<tr>
<td>CEO/Manager</td>
<td>185</td>
<td>49.3%</td>
</tr>
<tr>
<td>No. of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10</td>
<td>124</td>
<td>33.1%</td>
</tr>
<tr>
<td>10 - 20 employees</td>
<td>134</td>
<td>35.7%</td>
</tr>
<tr>
<td>21 - 30 employees</td>
<td>69</td>
<td>18.4%</td>
</tr>
<tr>
<td>30 employees and above</td>
<td>48</td>
<td>12.8%</td>
</tr>
</tbody>
</table>

Table 1 shows the demographic data of the study participants. There were 269 male participants (71.7% of the 375 completed responses) and 106 female participants (28.3%). The age of the respondents can be divided into four groups: Most participants were between 35 and 44 years old (46.9%), followed by those aged 25 to 34 (30.9%), those aged 45 to 55 (18.7%) and those aged 55 and over (3.5%). Owners accounted for 50.7% (190) of respondents in leadership positions, while CEOs/managers accounted for 49.3% (185). 134 (35.7%) reported having between 10 and 20 employees, 124 (33.1%) reported having 10 or fewer employees, 69 (18.4%) reported having 21-30 employees, and 48 (12.8%) reported having 30 or more employees.

**Assessment of Measurement**

In order to validate the dimensions and items of the measurement model, the reliability and validity of the variables were first assessed, followed by an investigation of the convergent and discriminant validity.

**Convergent Validity and Reliability**

Table 2

**Convergent Validity and Reliability**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Indicators</th>
<th>Loading</th>
<th>Cronbach alpha</th>
<th>Composite reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>TRFL_IC1</td>
<td>0.744</td>
<td>0.921</td>
<td>0.933</td>
<td>0.559</td>
</tr>
<tr>
<td></td>
<td>TRFL_IC2</td>
<td>0.735</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRFL_IC3</td>
<td>0.776</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRFL_IC4</td>
<td>0.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRFL_IIA1</td>
<td>Deleted</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Some indicators with lower loadings were removed and the revised result shows good reliability and validity. Table 2 shows that all variables have high Cronbach's alpha and composite internal consistency. The reliability for all variables is greater than 0.70, indicating high overall reliability. According to Hair et al. (2017), an appropriate level of convergent validity is demonstrated by a AVE of greater than 0.50. Due to its robustness and incremental nature in predicting endogenous variables, the Partial Least Square (SmartPLS) method mentioned in section 3.7 was used to further analyse the data. This was done to assess the validity and reliability of the measurement model. The main analysis of the study consists of two components: the measurement analysis and the structural model analysis (Hair et al., 2017). Figure 1 shows the graphical representation of the new measurement model, while Figure 1 shows the evaluation value.

**Discriminant Validity**

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Heterotrait–Monotrait ratio (HTMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional Leadership</td>
<td>0.460</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>0.404</td>
</tr>
</tbody>
</table>
The study also considered the heterotrait-monotrait ratio (HTMT), which is presented in Table 3, with values below one (1) indicating good and demonstrated discriminant validity (Franke & Sarstedt, 2019). Having established that the measurement model has good reliability, convergent validity and discriminant validity, this study achieves discriminant validity. The measurement model assesses both reflective and formative constructs. PLS-SEM has the advantage that all variables can be analysed in a single model. Leadership style is used as a reflective construct in this approach. In preparation for the hypothesis testing, the structural model was assessed.

Assessment of Structural Model

Following the measurement model, the structural model is evaluated to test the hypotheses. The structural model ($Q^2$) is assessed using metrics such as multicollinearity, t-statistics, path coefficients, coefficient of determination ($R^2$), effect size ($f^2$) and predictive efficacy. Multicollinearity was assessed using the variance inflation factor (VIF), as shown in Table 4.

<table>
<thead>
<tr>
<th>Transformational Leadership</th>
<th>VIF Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRFL_IC1</td>
<td>2.028</td>
</tr>
<tr>
<td>TRFL_IC2</td>
<td>1.861</td>
</tr>
<tr>
<td>TRFL_IC3</td>
<td>2.361</td>
</tr>
<tr>
<td>TRFL_IC4</td>
<td>2.015</td>
</tr>
<tr>
<td>TRFL_IA2</td>
<td>2.268</td>
</tr>
<tr>
<td>TRFL_IA3</td>
<td>2.03</td>
</tr>
<tr>
<td>TRFL_IA4</td>
<td>1.975</td>
</tr>
<tr>
<td>TRFL_IM2</td>
<td>1.936</td>
</tr>
<tr>
<td>TRFL_IM3</td>
<td>2.051</td>
</tr>
<tr>
<td>TRFL_IM4</td>
<td>1.871</td>
</tr>
<tr>
<td>TRFL_IS3</td>
<td>2.043</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transactional Leadership</th>
<th>VIF Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRSL_CR1</td>
<td>1.646</td>
</tr>
<tr>
<td>TRSL_CR2</td>
<td>2.671</td>
</tr>
</tbody>
</table>
The VIF analysis in Table 4 shows that all values are below the threshold of 5, indicating that there is no concern for multicollinearity in the data. Hair et al. (2017) and Ringle et al. (2015) set guidelines. For each independent variable, the statistical software calculates the VIF. VIFs start at one and have no cut-off value. If the independent variable has a value of 1, it means that it has no relationship with other variables. A VIF value between 1 and 5 indicates a significant relationship, but not severe enough to warrant action. The VIF number should preferably be less than or equal to 3 (Hair et al., 2019).

**Path Coefficient (Structural Model) - Hypothesis Testing**

Once the results of the measurement model were satisfactory, the structural model was used to evaluate the hypothesis of the study. According to Hair et al. (2019), if collinearity is not a problem, the next step is to examine the $R^2$ value of the endogenous construct. The PLS algorithm and bootstrapping approach were used to evaluate the hypotheses as well as the t-statistics, path coefficients, coefficient of determination ($R^2$), effect size ($F^2$) and predictive significance of the model's predictive significance ($Q^2$). The structural model identifies not only the mediating and moderating effects of the factors, but also the direct relationship between the components (Hair et al., 2011). The researchers then used an accelerated bootstrap with a 95% bias correction and 5000 replicate samples of the data. Table 5 shows the results. SmartPLS software was used to test the hypotheses of the study, with e-commerce adoption as the dependent variable and transformational and transactional leadership as the independent variables.

Table 5

| H  | Path   | Variable | $O$ | $M$ | STDEV | $|O/STDEV| \times T$ | $R^2$ | $F^2$ | $Q^2$ | $p$-value |
|----|--------|----------|-----|-----|-------|----------------|-------|-------|-------|-----------|
| H1 | TRFL   | ECA      | 0.161 | 0.173 | 0.103 | 1.568          | 0.012 | 0.139 | 0.117 |           |
| H2 | TRSL   | ECA      | 0.258 | 0.254 | 0.096 | 2.702          | 0.030 | 0.007 |       |           |

*TRSL= Transactional leadership, TRFL=Transformational leadership, ECA=E-commerce adoption

**DISCUSSION AND CONCLUSION**

This study investigated all the possibilities that emerged from the literature. It examined the direct impact of transformational and transactional leadership styles on the adoption of e-commerce among SME leaders. H1: The study examined the impact of transformational leadership on e-commerce adoption. The path coefficient and $p$-value ($\beta=.161, p > 05$) indicate that these two variables influence each other positively but insignificantly. H2 examined the influence of transactional leadership on e-commerce adoption. The path coefficient and $p$-value
(β = .258, p < .05) show that transactional leadership has a positive and significant influence on e-commerce adoption. This implies that transactional leadership has a significant impact on e-commerce adoption. Consequently, the study rejects H1 and supports H2.

Hair et al. (2019) state that R² and Q² should be investigated and published, but the F² effect size should only be mentioned if a reviewer requests it. According to the R² values, the independent factors explain 15.9% of the variation in the dependent variable. When the f-value is greater than 0.02, the f² values indicate the predictive power of IV on DV. For values above this, transformational leadership had a minimal effect in this study, while transactional leadership had a moderate to large effect. In general, f-squared values of 0.02 are considered "small effects," 0.15 “moderate effects” and 0.35 "large effects" (Roldán & Sánchez-Franco, 2012). Q² predictive relevance is another test in structural measurement that helps validate the model. According to the R² values, the independent factors explain 15.9% of the variation in the dependent variable. In this study, the Q-squared value represents the predictive relevance of the model, with a value greater than 0 (zero) indicating good predictive relevance.

The empirical analysis achieves the objectives of the study. It analyses the relationship between leadership style and e-commerce adoption and provides information on the different types of leadership styles that influence adoption among SME managers in Oman.

This study developed and tested a model to assess the impact of leadership styles, specifically transformational and transactional leadership, on e-commerce adoption. The study examines the use of the MLQ to predict e-commerce adoption among SME leaders in Ad Dakhiliya Governorate, Oman. The results show that transactional leaders make up the majority of leadership styles in SMEs. Many authors, including Alraja et al. (2015), Raisi, Yousuf and Ebuen (2017), Vivian, Aidi and Ram (2018), Al-Alawi and Al-Ali (2015) and Esmaeilpour, Hoseini and Jafarpour (2016), have argued that e-commerce is still in its infancy in Oman. Small and medium-sized enterprises (SMEs) are often slower to adopt new technologies than developed economies. However, e-commerce adoption varies from country to country. In each country, different factors influence the growth of e-commerce (Ahmad, 2017). In Oman, for example, the country lags Saudi Arabia and the United Arab Emirates in e-commerce adoption.

Although transformational leadership has long been attributed as having the greatest impact on organisations (Tefera, 2018; Avolio, 2010), the empirical study shows that SME managers in Ad Dakhiliyah are more inclined towards transactional leadership (β = .258, p < .05), with a focus on tasks rather than people. Ad Dakhiliyah is known as one of the most important governorates in Oman, and as Oman is generally a developing country, there is strong competition for jobs. Employees are put under pressure if they do not meet the bosses' expectations of their work. Underperforming employees are regularly and easily replaced by managers. As a result, SME managers tend to be transactional (task-oriented) rather than transformational (people-oriented) leaders.

**Limitations & Direction for Future Research**

The paradigm developed in this study can be used to compare how SME managers adopt e-commerce when they adopt transformational and transactional leadership styles. Instead, the impact of transformational and transactional leadership styles on e-commerce was independently
assessed using the responses of SME managers in Ad Dakhiliyah. In order to determine a leader's perspective, it would be more beneficial and insightful to include other variables or forms of leadership, such as charismatic leadership, situational leadership style and others. This study only considers two types of leadership. The idea could be expanded in future research by considering mediating or moderating elements. This study, which examined only one governorate in the country, could be extended to other governorates in Oman to see if the findings are consistent. A qualitative method can be used to collect descriptive data by asking respondents open-ended questions. When open-ended questions are used as in this study, the data collected is drastically different from that obtained using these methods. Future research of this nature should be conducted using a qualitative methodology. To ensure the validity of the current framework, the study could be revised.

References


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**Conflict of Interest Statement**

The contributor has not disclosed any conflicts of interest.

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