Linking Outsourcing with Organisational Structure and Culture: The Impact on Operational Performance

Mohammad J Adailehª, Khalid J Adailehª, Muneer alrwashdehª, Nasim A Matarª, a Associate Professor, Faculty of Business, Middle East University, Amman-Jordan, b Department of Engineering projects, Universitat Politecnica de Valencia, c Assistant Professor, Faculty of Business, Middle East University, Amman, Jordan d Assistant Professor, Faculty of Administrative and Financial Sciences University of Petra, Amman, Jordan, Email: a madaileh@meu.edu.jo, b kajab57@gmail.com, c malrwasheh@meu.edu.jo, d nasim_matar@yahoo.com

This paper investigates the impact of outsourcing on the operational performance of industrial companies in Jordan. It also tests the effect of organisational structure and organisation culture as mediator variables. To achieve this goal, a questionnaire was developed based on previous literature, while evaluating face and content validity. To ascertain construct, converging and discriminant validity, confirmatory factor analysis was carried out using AMOS 24 software to fit the measurement model with the sample data selected from industrial companies in Jordan and confirm the validity and reliability of the scale. Testing of hypotheses using structural equation modelling revealed that all hypotheses suggested were supported, in addition, organisational structure and culture fully mediate the impact of outsourcing on operational performance.

Keywords: Outsourcing, Organisational Structure, Organisational Culture, Operational Performance
Introduction

This paper seeks to investigate the impact of outsourcing on the operational performance of industrial companies in Jordan and explore the role of organisational culture and structure as mediator variables. The empirical study focuses on developing a model to measure the variables identified in the study’s conceptual model, then testing the hypotheses and providing recommendations that assist decision-makers Jordanian companies when making outsourcing decisions. Considering the most important aspects that can be outsourced, as well as focusing on how outsourcing impacts organisational structure and culture, this research opens new perspectives on literature, enabling experts and researchers to apply the same knowledge in various environments. Outsourcing has become a major business tool that can create a competitive advantage (Lamminmaki, 2011; McCarthy & Anagnostou, 2004). During the 1980s and 1990s, many corporate restructuring processes disbanded companies in order to become more competitive (Bergh et. al., 2008). Most of the outsourcing was confined to the manufacturing sector, and began to spread rapidly to the service sector (Barrar & Gervais, 2006).

Organisations need to focus on critical and strategic aspects that might be carried out internally and the activities that should be outsourced. Although the strategic implications of outsourcing have been discussed for several years, they have been generally taken on a cost basis (J Momme & Hvolby, 2002). Additionally, many studies have discussed practical guidance for outsourcing decisions, taking into account other dimensions such as the impact of outsourcing on people and teams. Outsourcing can also affect the structure and culture of organisations as pointed out by Espino-Rodríguez & Gil-Padilla, (2005).

To ensure the effectiveness of outsourcing, some knowledge and data must reflect boundaries between the leading company and its suppliers. When outsourcing to perform simple final tasks, the information is simple as well as clear and confidential. However, if the tasks tend to be more complex, more important and less clear than peripheral tasks, outsourcing is conducted, where the transfer of required knowledge is extensive and systematic and includes explicit and implicit knowledge. Therefore, outsourcing decisions often require a specific review of organisational boundaries, as they are a new perception on a more important organisational structure (Nyameboame & Haddud, 2017). Effective control in the organisation is also closely linked to its organisational structure. Outsourcing part of tasks or processes will lead to change within the organisational structure (Wüllenweber, et. al., 2008). Likewise, control systems should be examined and formulated to the new business model accordingly to ensure their effectiveness. Outsourcing companies generally use a functional organisational structure, which is the accepted method to standardise business activities (Nadkarni & Herrmann, 2010).
Outsourcing leads to unknown and unexpected results regarding the dynamics of working groups, as well the possibility of having unintended consequences on the corporate culture that includes standards, values, expected and shared behaviours between most or all of organisational members (Trice & Beyer, 1993), as well as the approaches by which people interact repeatedly with each other. The regularity of these interactions and the problems they interact with may dramatically change the corporate culture (Luki Karunia, 2020).

This research focuses on areas of outsourcing that influence the structural and cultural aspects within an organisation, as well as with its operational performance. The conceptual model has been adapted to fit the industrial environment in Jordan through an empirical study and data analysis using confirmatory factor analysis and structural equation modelling. This paper is divided into several sections including the introduction, review of the theoretical literature and development of hypotheses development, study methodology, results and discussion, conclusion and implications.

**Literature Review and Development of Hypotheses**

**Outsourcing, Operational Performance**

The literature identified the concept of outsourcing as using human resources associated with information technology services to perform tasks or part of those tasks, while others indicate obtaining services by independent suppliers locally or globally (Lamminmaki, 2011). Some have indicated a reliance on external sources for component manufacturing and other value-added activities. In general, outsourcing is an important factor in influencing the goods and services that companies can buy from foreign companies.

Limited literature has been directed towards measuring the impact of outsourcing in industrial companies, most studies being limited to the technology sector. Several studies have pointed out that the influence of outsourcing on operational performance is strongly supported (Liu, Wang, & Huang, 2017). The results indicate that working with external suppliers led to significant improvement in productivity, efficiency, quality, continuous improvement, profitability, quality of working life and and social responsibility (Narayanan, et. al. 2011). This implies that outsourcing can significantly affect operational performance and achieve desired results if linked to effective planning and implementation.

Espino-Rodríguez & Padrón-Robaina’s 2005 study examined outsourcing in the services sector leading to organisational productivity, as it has a direct impact on quality and achieving competitive advantage. The study confirmed the need for a backup system to prevent the loss of important knowledge. Mwichigi & Waiganjo, (2015) conducted a study on the energy sector, noting that outsourcing specific services related to administrative support,
financial services, human resources, and technical services affect the operational performance of Kenyan energy companies. Energy companies witnessed an increase in profits by 75% for the year 2009, the companies achieving a remarkable growth of 16%, while the operating costs were reduced and operational efficiency increased.

MacKerron et. al. (2015) established an effective performance management framework for outsourcing projects in a financial services organisation in the UK, and the way it can contribute to successful outsourcing and assistance from external sources. The projects outsource valuable information on goal setting, performance measurement and performance improvement. It is recommended to use a modified version of the Balanced Scorecard called Logic Scorecard as a measurement tool, which provides guidelines for practitioners in implementing performance management in outsourcing projects.

Espino et. al. (2006) indicate that the outsourcing decision depends on risks in the business environment, company policy, and the tasks to be outsourced in terms of supplier competence and commitment. Outsourcing can lead to positive and/or negative results. The study indicates that improvements can be made to improve the positive impact and increase the value of outsourcing, concluding that outsourcing opens markets for free trade and development. It is no longer confined to purchasing technical services, but rather extends to many business sectors. A limited amount of prior literature explored the impact of outsourcing on other sectors. Gilley et. al, (2004) studied human resource outsourcing and operational performance in manufacturing firms. They have shown that a coaching job can have a positive impact on a company's performance. Nyameboame & Haddud, (2017) explored the impact of outsourcing on operational performance in oil and gas companies in Ghana. They discussed the impact of outsourcing on competitive advantage in non-profit organisations. and studied the effect of outsourcing of management functions on operational performance. Based on the above, the following hypothesis is defined:

**H1:** Outsourcing positively impacts operational performance

*Outsourcing, Organisational Structure, Culture and Operational Performance*

Outsourcing is an appropriate strategic choice for companies which are limited to core competencies in their business (Jesper Momme, 2002). Usually companies develop models for identifying production elements and internal support functions. Outsourcing is linked to strategic planning, the focus directed towards the logical sequence of key activities concerning integrated performance indicators and expected results expected (Jia, et. al., 2017).
The emphasis on organisational structure, roles that individuals and groups play within the organisation, competencies and responsibilities were discussed in the literature on a large scale. Companies establish their organisational structures to internally co-ordinate operations, which is considered critical when associated with outsourcing because as enables the company to realise the value of outsourcing (Schilke & Cook, 2015). Moreover, co-ordination is imperative to achieve effective activities, such as daily technology services. Formalisation, standardisation, specialisation, the number of layers in the hierarchical level, professionalism and horizontal integration are important factors in determining outsourcing decisions (Bals, Kirchoff, & Foerstl, 2016). Likewise, the degree to which decisions are made (the subject of decision-making: high and low), levels of the decision hierarchy (many or few managerial levels), and vertical integration are important issues in the organisational structure which need further discussion (Rao, 2015). Organisational structure is an important factor in making outsourcing decisions because it is influenced by many outsourcing factors, thus affecting operational performance.

To achieve the desired results in operational performance, companies need to align their structure, making some changes to respond to the requirements of external suppliers (Espino-Rodríguez & Padrón-Robaina, 2005). Decision-making should focus on relevant key performance indicators while outsourcing impact on performance is based on the ability to reorganise to adapt to customer conditions and needs and facilitate employee training to work in multi-functional teams (Leeman & D Reynolds, 2012). Amongst possible changes in organisational structures is the change of written rules and procedures to improve the quality of services provided and changes may be reflected in the decision-making process in general, that is, the shift from centralisation to decentralisation (Espino-Rodríguez & Gil-Padilla, 2005). One of the most prominent manifestations of change in the organisational structure is the presence of multiple work teams, which should be more agile to deal with external suppliers as a change in the number of hierarchical layers can occur quickly (Tsai et al., 2012). Based on the above, the following hypotheses are proposed:

**H2:** Outsourcing positively impacts organisational structure.
**H3:** Organisational structure positively impacts operational performance.
**H4:** Organisational structure positively mediates the impact of outsourcing on operational performance.

In addition, organisational culture plays an important role on outsourcing. Factors associated with organisational culture affected by outsourcing have been widely discussed (Kshetri, 2007). Studies have shown that outsourcing can affect the relationships with organisational culture (e.g. Messner, 2013; Lee & Kim, 1999; Handley & Angst, 2015). Attitudes and
behaviours related to design and selection, implementation and subsequent implementation of outsourcing were also explored. Some specific cultural factors such as the degree of dependence on a professional path, confidence, and avoiding uncertainty are related to organisational culture. Organisational culture is unique to each Organisation as it includes traditions, values, shared beliefs, expectations of organisational life and the relationship with the present and future. Organisational culture is the result of a long-term process of disseminating and unifying values, principles, procedures, attitudes, methods of work and informal elements (Schilke & Cook, 2015).

Outsourcing affects organisational culture by fostering creativity (Schilke & Cook, 2015). When the same processes and products continue to be used for a long time, new knowledge may be needed to introduce flexibility and originality. Innovative companies grow more rapidly than companies with limited creativity. Outsourcing not only motivates management to develop products but also provides new methods of working and creative ideas that nurture corporate culture (Lonsdale, 2001; Kalaignanam et al., 2013).

Change may be frightening, but obtaining new technologies to improve corporate culture can have an important influence on employee participation. Outsourcing also allows the company to rethink ambitions and attitudes, understanding the reason behind the need to improve products, which leads to long-term decisions that are more effective and efficient. Zack, et. al., (2009) refer to organisational culture and outsourcing as complementary tools for building capacity and improving business performance.

According to Pascale, (1990) institutional culture can predict the ability of organisations to withstand some of the changes that come from the external environment. An important part of the role that corporate culture can play in organisations is the impact on employee attitudes and behaviours (Avey, Wernsing, & Luthans, 2008). Numerous studies (e.g. Bals et. al., 2016; Yang & Chen, 2007; Ajmal & Koskinen, 2008) indicate that organisational culture is an important factor that must be considered in order to foster successful outsourcing and achieve organisational effectiveness from an individual-level perspective. Organisational culture can contribute to overcoming outsourcing employee resistance so it becomes more aware of potential benefits. Accordingly, outsourcing is an effective strategy for organisations to obtain significant performance, when employees share knowledge and experience with external peers, they may demonstrate positive relationships in workplaces which lead to higher levels of performance (Kamdar & Van Dyne, 2007). The following hypotheses were formulated:

**H5:** Outsourcing positively impacts organisational culture.
**H6:** Organisational culture positively impacts operational performance.
**H7:** Organisational culture positively mediates the impact of outsourcing on operational performance

**Methodology**

**Data**

Data was collected using a questionnaire. The paragraphs used in the questionnaire were pooled from literature, while face and content validity were tentatively verified through expert opinions. Several paragraphs matched these expert opinions, then the initial draft of the questionnaire was prepared. Since most paragraphs corresponded to theoretical literature, the researchers conducted a confirmatory analysis to ensure construct, convergent and discriminate validity, as well as the reliability of the measurement scale (ALLISON, 2000). Likewise, it is possible to ensure the correctness of responses to paragraphs, as the paragraphs are free of linguistic errors which have also been confirmed. All items were evaluated using a 5- Likert scale ranging from (1 “Strongly Disagree” to 5 “Strongly Agree.” The first part of the questionnaire included questions to collect demographic information such as (gender, company age, educational manager's education, and size of the company). These variables were measured using qualitative measures.

Managers in industrial companies were selected and required to answer the questionnaire paragraphs. The purpose of data collection and how to process this data has been explained. Despite a low valid sample size for statistical analysis, it included the responses from managers where several studies such as Byrne, (1995) and Fornell & Larcker, (1981) indicate that managers’ responses provide greater insight and considered valuable, while managers can provide more information about outsourcing activities and how it reflects the change in the organisational structure and culture, as well as indicators of operational performance. However, a sample size greater than 150 responses was considered appropriate to facilitate parameters’ estimation about the population as indicated by Byrne, Shavelson, & Muthen, (1989) and McGaw & Jöreskog, (1971). On the other hand, Allison, (2000) suggests that when the model includes 5 to 7 latent variables, and each latent construct includes 3 or more items, a sample of 150 and higher considered sufficient for conducting CFA and SEM using Maximum Likelihood Estimation. The researchers used a sample of 211 responses for analysis, 12 incomplete responses were excluded, while 199 (94%) were considered valid for analysis. IBM, SPSS and AMOS.24 software were used to analyse and summarise the data.

**Measures**

The Measurement model was estimated using AMOS 24. In Table 1, the measurement scale and its respected estimates for items and constructs included in the questionnaire were
presented to evaluate convergent validity and reliability. Table 2 shows the means, standard deviations, correlations matrix amongst the data constructs and the square root of average variance extracted to assess construct discriminant validity.

The first step involved conducting confirmatory factor analysis for data to assess measurement scale validity and reliability. Confirmatory factor analysis is one of the multivariate analysis techniques used to verify the structure of the observed construct groups Allison, (2000) and McGaw & Jöreskog, (1971) can help identify reliable structures, and ensure their validity (construct discriminant and convergent validity). Data was analysed using AMOS 24, various model fit indices mentioned in numerous previous studies were used to evaluate the fitness of the measurement model to the sample population. All indices exceeded the acceptable thresholds as follow: CMIN/DF (X2/df) =1.930 < 3.00, GFI=818 close to 1.00, CFI=0.914 close to 1.00, RMR=0.04 < 0.8, IFI= 0.915 close to 1.00, TLI=0.903 close to 1.00, RMSEA=0.074 < 0.08, note that accepted thresholds were reported in Ahmad, Bosua, & Scheepers, (2014); Allison, (2000) and Anand & Goyal, (2009). Acceptable model fit indices indicate construct validity, the acceptable model fit can be obtained whenever we eliminate weak factor loading. Also, when conducting CFA, the modification indices revealed redundant items between Q25 and Q26. These two items were not eliminated due to their importance to the theory. However, they made a significant error in producing overlapping with other paragraphs. Adjusting these errors makes them free and avoids overlapping those paragraphs with other paragraphs within the measurement model. This procedure is called a free parameters estimate through making Error Covariance for the following variance errors in (e25, e26) which belong to the above-mentioned paragraphs. Furthermore, excluding low factor loading items raises the convergence of indicators for each construct. According to Allison (2000), it is also possible to infer convergent validity when the Average Variance Extracted (AVE) exceeds 0.50. This indicates that the paragraph is related to the construct and explains a sufficient amount of variance. Standardised factor loading was checked and all factor loading exceeded 0.60 following the suggestion of Ahmad et. al., (2014); Allison (2000) and Song, Li, & Zhao, (n.d.). All values of AVE are greater than 0.50 as shown in Table 1, which indicates that the convergent validity of items with each respected construct has been achieved. Table 1 also summarises the composite reliability CR and Cronbach Alpha where they are all above the acceptable cut-off point of 0.70, revealing reliability of the measurement scale (Daghfous, Belkhodja, & Linda, 2013). To assess measurement discriminant validity, Table 2 shows the correlation matrix and respected square root for AVE, furthermore, the mean and standard deviation for each construct. The square root of AVE that exceeds the correlation coefficients values in rows and columns within the correlation matrix support the fact that these constructs are different, which is an indication of discriminant validity (Hair, et. al., 2010), which also supports the non-linearity
relationship (Multicollinearity) between two or more independent variables as indicated by (Okazaki, 2009).

**Table 1: Measurement scale items**

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimate</th>
<th>Standardised Estimate</th>
<th>S.E</th>
<th>C.R (t-value)</th>
<th>P</th>
<th>AVE</th>
<th>Composite Rel.</th>
<th>SQRT (AVE)</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9</td>
<td>Outsourcing of graphic design services.</td>
<td>1</td>
<td>0.706</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>Maintenance services.</td>
<td>0.988</td>
<td>0.743</td>
<td>0.107</td>
<td>9.317</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>Call centre services.</td>
<td>1.193</td>
<td>0.841</td>
<td>0.112</td>
<td>10.517</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>Marketing services.</td>
<td>1.12</td>
<td>0.807</td>
<td>0.112</td>
<td>10.113</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>Personnel recruitment</td>
<td>0.973</td>
<td>0.766</td>
<td>0.102</td>
<td>9.606</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>Manufacturing processes</td>
<td>0.834</td>
<td>0.663</td>
<td>0.11</td>
<td>8.308</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>IT services</td>
<td>0.757</td>
<td>0.592</td>
<td>0.103</td>
<td>7.424</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>Legal services</td>
<td>0.825</td>
<td>0.653</td>
<td>0.102</td>
<td>8.213</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>Accounting services</td>
<td>0.866</td>
<td>0.603</td>
<td>0.116</td>
<td>7.552</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q11</td>
<td>Service improvement</td>
<td>1</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13</td>
<td>Cost reduction.</td>
<td>1.054</td>
<td>0.834</td>
<td>0.093</td>
<td>11.474</td>
<td>***</td>
<td></td>
<td>0.633</td>
<td>0.873</td>
</tr>
<tr>
<td>Q14</td>
<td>Quality of products</td>
<td>1.17</td>
<td>0.837</td>
<td>0.12</td>
<td>11.549</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q15</td>
<td>Flexibility.</td>
<td>1.062</td>
<td>0.749</td>
<td>0.106</td>
<td>10.108</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>Promoting communication and information</td>
<td>1</td>
<td>0.747</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q17</td>
<td>Supports information sharing across organisational units</td>
<td>0.933</td>
<td>0.858</td>
<td>0.082</td>
<td>11.578</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q18</td>
<td>Encouraging individual initiatives towards outsourcing</td>
<td>0.867</td>
<td>0.83</td>
<td>0.078</td>
<td>10.977</td>
<td>***</td>
<td>0.617</td>
<td>0.887</td>
<td>0.786</td>
</tr>
<tr>
<td>Q19</td>
<td>Providing clear guidance on the completion of its operations.</td>
<td>0.92</td>
<td>0.843</td>
<td>0.07</td>
<td>11.342</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q20</td>
<td>Following the administrative sequence according to organisational structure.</td>
<td>0.654</td>
<td>0.628</td>
<td>0.07</td>
<td>8.203</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q21</td>
<td>Supporting the transfer of knowledge culture</td>
<td>1</td>
<td>0.663</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q22</td>
<td>Adapting a culture of knowledge acquisition</td>
<td>1.183</td>
<td>0.753</td>
<td>0.13</td>
<td>8.432</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q23</td>
<td>Adapting a culture of knowledge application</td>
<td>1.076</td>
<td>0.787</td>
<td>0.124</td>
<td>8.734</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q24</td>
<td>Solving problems faced by employees.</td>
<td>1.099</td>
<td>0.777</td>
<td>0.126</td>
<td>8.653</td>
<td>***</td>
<td>0.487</td>
<td>0.849</td>
<td>0.698</td>
</tr>
<tr>
<td>Q25</td>
<td>Engaging employees when making management decisions.</td>
<td>0.647</td>
<td>0.552</td>
<td>0.102</td>
<td>6.433</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q26</td>
<td>Allowing individuals an opportunity to present their initiatives.</td>
<td>0.842</td>
<td>0.613</td>
<td>0.13</td>
<td>7.054</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note Average variance extracted (AVE), composite reliability (CR), Standard Error (S.E), Critical Ration (C.R)  
*** Statistically significant at p < 0.001.

Table 2: Means, standard deviations, and correlations matrix

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>St. Deviation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing</td>
<td>3.5</td>
<td>0.934</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>3.18</td>
<td>0.657</td>
<td>0.277</td>
<td>0.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational Structure</td>
<td>3.44</td>
<td>0.668</td>
<td>0.323</td>
<td>0.157</td>
<td>0.786</td>
<td></td>
</tr>
<tr>
<td>Organisational Culture</td>
<td>3.32</td>
<td>0.725</td>
<td>0.277</td>
<td>0.283</td>
<td>0.167</td>
<td>0.698</td>
</tr>
</tbody>
</table>

Values in bold and italics represent the square root of average variance extracted

Testing the Hypotheses

Structural equation modelling (SEM) was used to test the assumptions about the conceptual model. Due to nature of the model that includes several independent and dependent variables, this requires testing mediating variables, as well as direct and indirect effects. SEM is considered to be an effective method for this type of model, whereby causal relationships, interrelationships between variables and hypotheses are tested in a simultaneous manner (Hair Jr, et. al., 2010; Jamal & Anastasiadou, 2009). Testing of the structural model, hypotheses testing and direct and indirect effects are presented in Fig 1 and Table 3 respectively. A structural model was constructed to test the hypotheses. The hypotheses were tested using SEM with Maximum Likelihood Estimation. Initially, it was necessary to confirm acceptable model fit indices, note that the following indices were adapted based on (Bagozzi & Edwards, 1998; Hu & Bentler, 1999) CMIN/DF (X2/df) =1.957 < 3.00, GFI=818 close to 1.00, CFI=0.911 close to 1.00, RMR=0.042 < 0.8, IFI= 0.912 close to 1.00, TLI=0.901 close to 1.00, RMSEA=0.075 < 0.08, all values did not move away from acceptable cut-offs points. Figure 1 represents standardised estimates for the structural model, while Table 3 displays the hypothesis testing and its direct and indirect effects for the structural model.
Figure 1. The Structural Model

Table 3: Hypotheses testing, direct and indirect effects

<table>
<thead>
<tr>
<th>Hypothesis (Direct Effects)</th>
<th>Unstandardised Estimate</th>
<th>Standardised Estimate ($\beta$)</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Structure ---&gt; Outsourcing</td>
<td>0.91</td>
<td>0.806</td>
<td>0.052</td>
<td>17.793</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Organisational Culture ---&gt; Outsourcing</td>
<td>0.667</td>
<td>0.708</td>
<td>0.053</td>
<td>13.012</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Operational Performance ---&gt; Outsourcing</td>
<td>0.637</td>
<td>0.572</td>
<td>0.084</td>
<td>7.53</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Operational Performance ---&gt; Organisational Structure</td>
<td>0.223</td>
<td>0.223</td>
<td>0.066</td>
<td>3.398</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Operational Performance ---&gt; Organisational Culture</td>
<td>0.167</td>
<td>0.142</td>
<td>0.063</td>
<td>2.597</td>
<td>0.009</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Hypothesis (Indirect Effects)

<table>
<thead>
<tr>
<th>Hypothesis (Indirect Effects)</th>
<th>Unstandardised Estimate</th>
<th>Total S. Estimate</th>
<th>Lower</th>
<th>Upper</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing ---&gt; Org. Structure ---&gt; Operational Performance</td>
<td>0.21</td>
<td>0.179</td>
<td>0.086</td>
<td>0.308</td>
<td>0.01</td>
<td>Supported</td>
</tr>
</tbody>
</table>
Testing of the structural model reveals that all proposed hypotheses are supported as the standardised estimates ($\beta$) were found to be significant. Additionally, the mediator variables (organisational structure, culture) also explained the operational performance alongside outsourcing (see Table 3) as the total estimates for the path model were found to be significant. Following the procedures of MacKinnon, et. al., 2002) who pointed out that since all paths in the model are statistically significant, the mediation effect is partial, organisational structure and culture partially mediate the impact of outsourcing on operational performance. There is clear resonance with our research results, whether the relationships are direct or indirect. Regarding the first assumption, numerous studies indicate that outsourcing directly affects performance indicators such as cost, flexibility, innovation, quality and business performance (Bals et. al., 2016; Messner, 2013). Some studies have confirmed that the convergence between outsourcing engines positively affects the performance of the entire supply chain (Handley & Angst, 2015). Some support the idea that outsourcing leads to increased export performance (Schilke & Cook, 2015). Others have emphasised that outsourcing technical services by small and medium-sized companies has a positive impact on competitiveness both locally and internationally. The results are also consistent with Bals et. al., (2016), who indicate a significant impact on competitive advantage and lower operating costs. Mwichigi & Waiganjo, (2015) maintain that outsourcing administrative and financial services reduce operating costs and help improve operational efficiency, providing effective services and allocation of resources to meet the needs of customers. Likewise, many researchers agree that outsourcing inevitably leads to changes in the organisational structure. Outsourcing some tasks may create more flexible organisational structures, which will lead to higher levels of performance (Arrigo, 2020). Based on organisational culture, many researchers have confirmed that due to outsourcing, there may be a problem in accepting a third party to perform certain tasks, which may lead to organisational conflict (Espino et. al., 2006). Some see it as an opportunity to acquire new skills and knowledge. According to Messner (2013), organisational cultural factors can be affected by trends towards outsourcing, which are related to the design and implementation of outsourcing. In conclusion, positive attitudes towards outsourcing determine individuals’ and working groups’ acceptance or resistance of the third party performing some tasks, if they accept that performance levels will increase in response. Finally, given the indirect effects, outsourcing leads to more flexible and specialised organisational structures, which leads to improved levels of performance, since organisations will respond to outsourcing requirements by creating changes to their organisational structures. The
acquisition of new knowledge, skills, and sharing of knowledge with others outside the Organisation can improve the Company’s performance levels, since knowledge sharing becomes rooted in corporate organisational culture.

Conclusion and Implications

This study was designed to explore the impact of outsourcing on operational performance in industrial companies in Jordan. The literature revealed that outsourcing and performing certain tasks through a third party may lead to changes within organisational structures and culture. Therefore, this research assumes that organisational structure, along with organisational culture, could explain operational performance in industrial companies in Jordan. The study was designed to explore the impact of outsourcing on industrial companies' operational performance. The majority of previous literature examined outsourcing and its benefits to performance indicators in the IT sector. Few studies have focused on outsourcing other functions, such as financial and administrative functions. In addition, most studies explored financial performance indicators such as cost and revenues, few of which incorporated other indicators such as quality, flexibility and improving services. Also, the studies did not address the impact of outsourcing on organisational structure and culture, nor did they focus on investigating how to explain operational performance along with outsourcing. The research ensured the fitness of the measurement model with the industrial environment in Jordan as well as the structural model were also confirmed prior testing the hypotheses. All assumptions suggested in the conceptual model are statistically significant in line with previous literature. Additionally, mediator variables’ organisational structure and culture partially mediate the impact of outsourcing on operational performance. Several implications have been addressed for organisations based on these findings. As noted earlier, outsourcing is a strategic decision and should be linked to strategic planning. Since the results support the outsourcing effect on both structural and organisational culture, the impact can be negative, positive, or mixed, therefore the outsourcing decision must be related to its suitability to company goals. The company must determine when to resort to outsourcing. In the Jordanian industrial environment, outsourcing is seen as an effective approach because it allows activities to be sponsored effectively and improved competition in the market. This research provides a full image of the activities that can be outsourced, as companies need to assess its impact on a variety of organisational and cultural characteristics to create dynamic compatibility. The relationship organisation and service vendor and the introduction of a third party to perform specific tasks cause organisational conflicts that can negatively affect performance measures. Companies need to manage change to build capacity, changing the organisational culture to benefit from new experiences and knowledge. The paper developed a set of recommendations for future research. Firstly, future research should include other business sectors to generalise the study model and reach critical empirical evidence.
Secondly, there is no doubt that companies, according to their size differ in their organisational and cultural components. Therefore, conducting comparative studies between large, medium and small companies provides a clearer view of the unique organisational and cultural characteristics for each company type. Thirdly, it is important to expand the model to include other variables such as competitive advantage, customer satisfaction and strategic performance. Finally, although the sample size is considered appropriate to achieve empirical results, future studies should include larger samples so accurate results can be obtained.

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REFERENCES


