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The Relationship between Strategy of Work-life Quality and Sustainable Competitive Advantage: A Survey Study on in Yemeni Manufacturing Industries

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Abstract The current strategies of increasing work-life quality are being given special attention by both public and private organizations. These quality strategies have arisen because of the highly competitive environment. Also, a safe and healthy work environment that provides the opportunities for employees to enhance their loyalty, affiliation and love towards their work and organization is required in order to achieve the current and future aspirations of the organization. Accordingly, this study aims to explore the direct relationship between the variables: the strategy of work-life quality, strategic agility and sustainable competitive advantage, to identify their indirect relationships with their own dimensions. In order to achieve this, a questionnaire was distributed to both heads of companies and their deputies in large and medium Yemeni manufacturing companies, using a random sampling technique to reach 227 companies out of 554 by distributing 454 questionnaires for the selected population. Cronbach's Alpha coefficient and exploratory statistics were carried out to identify the quality of measurements used to examine the proposed theoretical method using SEM. The results of the study are that there is a direct relationship between the variables. Additionally, there is an indirect relationship between the independent variable (strategy of work-life quality) and the dependent variable (sustainable competitive

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advantage) using strategic agility as a mediator in Yemeni large and medium manufacturing companies. These findings ensure the validity of the proposed theoretical model. In addition, it fills the knowledge gap regarding this issue and the findings highlight the competitive challenges that Yemeni companies must be aware of.

Keywords Strategy of Quality of Work-life; Strategic Agility; Sustainable Competitive Advantage

1. Introduction

In the Yemeni context, the industrial sector is in a similar situation as other sectors in developing countries since the companies in these sectors encounter serious challenges due to intense competition. In addition, these companies lack experience since they are newly developing. Additionally, globalization and the opening up of multinational companies, which have high expertise and power, weaken Yemeni companies on marketing their products locally and regionally (National center for information, 2011). This could be a main challenge for the Yemeni companies requiring of them to improve and develop a more conducive work environment, in terms of organizational processes and structure, as well as the practical aspects of life that support and create the value in order to enhance employees' competence and performance. If the current and future aspirations of employees are strengthened, Yemen's sovereignty could also be enhanced through a stronger role played by the industrial sector to boost the economy (Qaid, 2010). Moreover, the contribution of the manufacturing production in the Yemen GDP through seven years 5,114,668, 6,083,938, 5,846,234, 5,949,357, 6,382,116, 6,073,766 and 4,690,309 Million RY from 2009 to 2015, respectively. A total of 178,591 employees are working in the industrial sector, of which 105,270 are employed in the manufacturing industries, which indicates the significance of this vital sector. While, the contribution of the manufacturing industries in

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GDP was 472,512, 573,265, 514,685, 583,615, 602,088, 587,845 and 588,035 Million RY in the same period from total industrial production contribution (Annual Report 2015). These numbers emphasize the importance of the manufacturing industries, specifically to the industrial sector, and to the Yemeni economy, in general. Based on the above, it is clear that the Yemeni authorities should pay attention to this vital sector, and research must be conducted on how to improve it and enhance its competitive position. In this regard, the literature review related to these challenges has shown many solutions associated to the issue. These previous studies have used a set of modern theories in order to identify the challenges and help in solving the related problems; these studies have confirmed the positive impact of the strategy of work-life quality in improving competitive advantage (Barahma, 2018; Huzzard, 2003; Chimol, 2012; Esfahani, Soltani & Shirouyezad, 2013). However, sustainable competitive advantage has received little attention in the field of research. On the other hand, several studies have confirmed that strategic agility of the organization is affected by the agility of the labor force. However, this issue has not received sufficient attention from researchers (Beltrán & Puig, 2013; Alavi, Abd Wahab, Muhamad & Arbab Shirani, 2014; Sherehiy and Karwowski, 2014; Shafer, Dyer, Kilty, Amos & Ericksen, 2001). In addition, previous studies have focused on the relationship between strategic agility and competitive advantage e.g., (Chen, 2012; Almahamid, Awwad, & McAdams, 2010; Dabiri & Gholami, 2015). But these studies did not investigate the sustainable competitive advantage directly. In fact, there are many important points that should be known about the role of both strategies of work-life quality and strategic agility in enhancing sustainable competitive advantage in a diverse business environment. To the best knowledge of the researcher, no other study has examined the indirect effect of the strategy of work-life quality in enhancing sustainable competitive

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advantage with strategic agility as a mediator. The current study conducted this investigation in Yemeni large and medium manufacturing industries to enrich the theory through the results obtained via statistical analysis. The research problem is based on the information obtained by the researcher from the previous studies and reports related to the manufacturing industries, such as the World Bank (2015) report, that the contribution of the manufacturing industries to the GDP in 2010 was 24%, and it decreased in 2013 to 5%, 6.0% in 2014 and 6.4 in 2015. This decline which is illustrated in the report is associated with various reasons, such as lack of experience and an inappropriate environment to work. Moreover, according to the same report, as a result of these factors, Yemeni manufacturing industries are facing difficulties in competing with international companies that work in Yemen and are also unable to export their products to the regional markets. Consequently, these kinds of challenges indicate the magnitude of problems that this sector faces and the necessity for creating opportunities for this sector. Therefore, the present study investigates the impact strategic of work-life quality in enhancing sustainable competitive advantage with strategic agility as a mediator variable.

The main objective of this study is to fill the knowledge gap in this field since previous researchers have addressed the issue from other perspectives. The current study focuses on the direct relationship between:

- (i) strategy of quality of work-life and its dimensions and sustainable competitive advantage;
- (ii) strategy of quality of work-life and its dimensions and strategic agility and its dimensions;
- (iii) Strategic agility and its dimensions and sustainable competitive advantage.

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In addition, this study focuses on the indirect relationship between strategy of quality of work-life and sustainable competitive advantage mediated by strategic agility in Yemeni large and medium manufacturing industries (the selected sample of this study) in order to come up with a suitable framework.

2. Literature Review

Since the mid-1980s, the concept of strategy of work-life quality has been considered and is still ongoing in various fields up to the present time. Previous studies have shown that it is clear that this concept differs from one individual to another and from one organization to another. It also has different meanings. These differences have led to the lack of a consensus on the meaning of the concept, mainly due to the researchers' varying points of view on the same concept (Sirgy, Efraty, Siegel, & Lee, 2001; Lin, Wong & Ho, 2013). Flippo (1984) explained that the employees of the American Center of Work-life Quality have developed a concept related to work-life quality; they say that it is associated with the activities which aim to raise the organization's effectiveness at all levels by enhancing and developing the workers' efforts. It is also by adopting new techniques and strategies regarding the quality of work-life and identifying the changes that could occur in the work site. Anderson (1988) viewed that work-life quality could increase the participation of employees in the decisions of superiors. This could lead to improvement in productivity by providing employees with better job security, health, career satisfaction and share returns. On the other hand, Srivastava and Kanpur (2014) viewed it as a process and they defined it as the common interaction of people, managers, supervisors and employees, to solve problems at work. This kind of process is cooperative rather than totalitarian; it is also a process of development and change rather than status-quo; it is flexible and open rather than apathy; and lastly, it is informal rather than

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formal. Thus, from the above discussion, it could be said that the strategy of work-life quality is a process that varies according to the number of activities included within its scope, as confirmed by Flippo (1984); Dermol and Rakowska (2014). They showed that the strategy of work-life quality is a multi-faceted concept that begins by improving the work environment and extending it to the participation in decision making, returns, gains and benefits achieved by the organization. This significance of strategic work-life quality applies to both social and human sciences. The dimensions and areas of the strategy of work-life quality are varied according to its activities. Flippo (1984) showed that the concept of strategy of work-life quality covers the efforts and activities that are used by the human resource department in the organization to achieve several goals, such as securing a better work-life and improving performance. Hence, it could be said that strategy of work-life quality is a multidimensional concept. Some of the dimensions were presented by Lawler and Nadler (1983) as follows: open communication, a fair reward system, a sense of security, the participation in job design, numerous efforts that focus on enriching the job, improved teamwork and reduced job pressure. These kinds of dimensions are considered indicators to measure whether or not an appropriate work environment exists. Additionally, Davoine, Erhel & Guergoat (2008) identified that strategy of work-life quality has six dimensions as follows: social and economic security, wages, safe mobility, training and development, work situation and work and life balance. Moreover, Chimo (2012) examined four dimensions of work life quality: appropriate work situation, adequate and fair compensation, training and continuous development for work and the opportunities for career growth. These dimensions are adopted in the current study to measure strategy of work- life quality to meet this study's objectives. Because of rapid global changes, business organizations face a turbulent and uncertain working

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environment. This has contributed to increased competition among organizations and their survival. In such a context, knowledge mechanisms can allow organizations to detect and adapt to environmental changes; thus, adaptive capacity is very significant. Additionally, recognizing and adapting to changes will lead the organizations to achieve greater success by exploiting the opportunities and new sources of competitive advantage. This is known as strategic agility and is a fundamental ability for survival in the face of serious competition (FeLipe, Roldán, & Leal-Rodríguez, 2016; Cai, Huang, Liu & Wang, 2018). Strategic agility could be applied by dynamically reconfiguring the organization and its strategies to be in line with the dynamic business environment. Organizations need to continuously anticipate, adapt to and interact with market and competitive trends and customers' needs, without compromising the organization's strategic vision (Saha, Gregar, & Sáha, 2017). Goldman and Nagel (1993) described strategic agility as the ability to operate profitably in an increasingly competitive environment as well as to deal with unexpected changes in customers' needs. According to Dove (2002), strategic agility is the ability to survive and continue to compete by focusing on knowledge and effectively and quickly responding to changes and developments, in terms of marketing new products or improving the production of the existing products. This can be done by enhancing operations, exploiting the opportunities and overcoming the threats. Lin, Desouza & Roy (2010) defined strategic agility as the ability to continuously adjust and adapt to the strategic directions of the business, as well as changing circumstances, through the creation of new products and business models and coming up with innovative ways to create value. As for the dimensions of strategic agility, previous studies have indicated that there are no great differences in the views of researchers and writers about these dimensions. If any, it would be an attempt to diagnose the situation to enable organizations to keep pace with

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changes and developments in the surrounding environment (Muduli, 2017). Thus, Doz and Kosonen (2008) explained that there are three dimensions of strategic agility, i.e., strategic sensitivity, collective commitment and the flow of resources. Sharifi and Zhang (1999) determined four dimensions of strategic agility as the main methods for achieving it: efficiency, flexibility, speed and responsiveness. Dabir and Gholami (2015) indicated two dimensions of strategic agility: differentiation in innovation and differentiation in the market. With the implementation of the strategic agility concept in a wide range of supply chains in non-rigid organizations, Sambamurthy, Bharadwaj, and Grover (2003) postulated three dimensions of strategic agility, i.e., customer agility, operational agility and partnership agility. These are the same dimensions which were adopted by Vagnoni and Khoddami (2016) and Hijjawi and Shawabkeh (2017). These dimensions are adopted in the current study to measure the strategic agility to meet this study's objectives. The following explain the dimensions in more detail. Sharma, Conduit & Hill (2014) showed that customers' agility could be detected by the extent to which customers' innovative ideas contribute to the creation and production of new products and services. Thus, it could be said that the agility of the customers allows companies to identify the latest opportunities which are available in the market. Vagnoni and Khoddami (2016) pointed out that operational agility is related to the company's ability to redesign business processes quickly enough in order to exploit new opportunities. At the same time, Denning (2017) ensured that operational agility is increasingly necessary for companies since it enables the companies to keep up with customers' preferences as well as predict customers' future needs and future preferences. A number of researchers, including Sukwadi, Wee & Yang (2013), have pointed out that partnership agility is based on the supply-side initiatives that could be captured by the company's ability to build

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an extensive network to exploit the available opportunities, through an effective and efficient supply and logistics chain. Sambamurthy, et al. (2003) emphasized that partnership agility is the result of the company's ability to modify and expand its networking to acquire the knowledge, competencies and scarce assets that competitors do not have. The concept of sustainable competitive advantage over the last century has become one of the most promising concepts, especially in the field of strategic management. Many management schools have concentrated on the wide range of issues that have been dealt with under this concept (Huang, Dyerson, & Harindranath, 2015). For example, Porter (1985), in his early writings, proposed that competitive strategies help in the sustainability of competitive advantage. Porter discussed the main competitive strategies through which organizations could obtain the lowest cost or cost distinction to achieve sustainable competitive advantage (Porter, 1998). Beal (2001) considered that the traditional way of achieving sustainable competitive advantage depends on environmental structure and overall competitive strategy. Barney (1991) is considered as one of the pioneers of the modern resource-based view (RBV) of sustainable competitive advantage. He pointed out that an organization is said to have sustainable competitive advantage when it implements a value-creating strategy simultaneously with current and future competitors. It has also been pointed out that sustainable competitive advantage can be achieved when other organizations are not able to capitalize on the benefits of this strategy. Dickson (1992) believed that for an organization to achieve sustainable competitive advantage, it must learn how to create new features that can maintain its strategic leadership in the market and remain ahead of its competitors. Hoffman (2000) pointed out that sustainability requires a new way of thinking and strategic intelligence that differs from the conventional way of thinking. Hitt, Ireland & Hoskisson (2012) described sustainable competitive advantage

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as the long-term benefits to the organization that cannot be replicated or duplicated by other organizations for the purpose of providing greater value to the customers and for continuing claims to the superiority of their products. Donald and Sanderson (2001) explained that sustainable competitive advantage is the organization's combination of business strategies to achieve its strategic objectives and customer satisfaction locally and globally, and to establish a long-term profit position. As for the sources of sustainable competitive advantage, a number of researchers (e.g., Coyne, 1986) have said that sustainable competitive advantage could be achieved by exploiting the gaps, namely: business system gaps, gaps in positions, regulatory/legal gaps and quality management gaps. Harrison (2004) explained that research on the potential sources of sustainable competitiveness has shifted to the importance of an effective and distinct corporate strategy. Thus, the sources of sustainable competitive advantage have become multiple and complex and there is no consensus on the definition of this concept. Many individual interpretations of this concept that have not been agreed to in the related literature still exist. Day and Wensley (1988) identified two main factors that contribute to the achievement of sustainable competitive advantage. Firstly, superior skills that include the distinct capabilities of individuals, which distinguish them from the capabilities of individuals in other competing organizations. Secondly, the company's concrete requirements that allow it to exercise its capabilities. These kinds of factors were also confirmed by Grant (1996). Prahalad and Hamel (1990) pointed out that companies should combine their resources and skills in the core competencies to achieve sustainable competitive advantage. Hoffman (2000) believed that the success of companies in achieving sustainable competitive advantage, regardless of the nature of their business, depends on their ability to combine skills and abilities in a unique and distinctive way. Barney (1991) explained this by exploring the relationship

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between the company's resources and sustainable competitive advantage. He stated that all the internal resources of the organization can be used to achieve sustainable competitive advantage if they are characterized by four attributes: scarcity, value, the impossibility of imitation, and the impossibility of finding an alternative. Hunt and Morgran (1995) showed a range of sources of sustainable competitive advantage, namely, financial, legal, human, organizational and informational sources. They argued that comparative advantage in resources can be sustainable competitive advantage in the market if it meets the four conditions set by Barney (1991). Hill and Jones (1998) identified four factors in building sustainable competitive advantage: superior efficiency, superior quality, superior innovation and responding to customer needs, which are considered as the foundations for building and sustaining competitive advantage. It also explains the way to reduce costs and achieve excellence in its entirety. Additionally, any organization can adopt it, whether it is in the industrial or services sector. Through the analysis of previous findings and as confirmed by the researchers mentioned above, it is clear that most researchers agree that the sources of sustainable competitive advantage depend on the organization's superior skills and resources, which must be combined to achieve sustainable competitive advantage. According to the researchers, the intangible resources are the most effective among other resources to achieve sustainable advantage because it has a combination of behavioral skills and knowledge that enables them to mobilize resources towards organiztional goals. It is also characterized by the four attributes identified by Barney (1991), as mentioned above. This is also confirmed by Barney and Wright (1998) in their study on the role of human resources in the acquisition of competitive advantage. It is further supported by a number of researchers (e.g., Miller, 1996; Senge, 1990; Hoffman, 2000) who explained that the development of superior employees' skills contributes to achieving

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sustainable competitive advantage of companies. Further, the four factors identified by Hill and Jones, as mentioned above, could create value as these factors can explain how and which cost can be reduced and excellence achieved. Consequently, the researcher adopted the factors (superior efficiency, superior quality, superior innovation and responding to customer needs) as outlined by Hill and Jones (1998) in order to measure the dependent variable of this study, which is treated as a one-dimensional variable. Therefore, this study hypothesizes that:

- H₁: There is a direct and positive relationship between the strategy of worklife quality represented by its dimensions and sustainable competitive advantage in Yemeni large and medium manufacturing industries.
- H₂: There is a direct and positive relationship between the strategy of quality of work-life represented by its dimensions and strategic agility represented by its dimensions in Yemeni large and medium manufacturing industries.
- H₃: There is a direct and positive relationship between strategic agility represented by its dimensions and sustainable competitive advantage of Yemeni large and medium manufacturing industries.
- H₄: There is an indirect and positive relationship between strategy of worklife quality and its dimensions and sustainable competitive advantage, mediated by strategic agility in Yemeni large and medium manufacturing industries.

3. Method

The model of this study is based on the three variables, i.e., the independent variable, the strategy of work-life quality, the mediator variable, strategic agility and the dependent variable, sustainable competitive advantage as a one-dimensional variable. This model can clarify the direct and indirect relationships between these variables based on the RBV (Barney, 1991), the

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dynamic capabilities theory (Phuen, Teece & Pisano, 1997) and the theory of human needs (Maslow, 1943). The theoretical framework of this study explains the relationship of the variables to each other through its assumed direction as shown in the following Figure (1).



Fig. 1. Theoretical Framework

Primary data was collected by using a questionnaire to obtain data from the target population or the selected sample. The questionnaire items were based on criteria developed by researchers, and also adapted from similar studies in terms of the purpose and the target population. The independent variable, strategy of work-life quality used the measurement by Chimol (2012); the mediator, strategic agility, used the measurement set by Sambamurthy, et al. (2003); and the dependent variable, sustainable competitive advantage, used the measurement set by Hill and Jones (1998). The validity and reliability of this questionnaire was measured using Cronbach's Alpha. For the independent variable, strategy of work-life quality, Cronbach's Alpha is .894 and its dimensions obtained the coefficient of stability of .789, .842, .836 and .943, for the health of the work environment,

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fair and adequate compensation, training and development and career growth opportunities, respectively. As for the mediator variable, strategic agility, the value of Cronbach's Alpha is .861, and its dimensions obtained the coefficient of stability of .756, .779 and .221 for customer agility, operational agility and partnership agility, respectively. The Cronbach's Alpha value for the dependent variable, sustainable competitive advantage, is .883, while the coefficient of stability for all variables is .90, which ensured the reliability of the present study's instrument. The number of questionnaires that were distributed according to the sample of the target population was 454 questionnaires. Only 330 questionnaires were returned, representing a response rate of 72%. A total of 57 questionnaires were found to be not valid for analysis, and therefore, only 273 questionnaires were analyzed, representing a response rate of 60%. In order to choose the suitable sample for the present study in a way that it suits the research problem, objectives and limitations, the target population was confined to large and medium manufacturing industries in the Republic of Yemen, which reached a total of 554 companies. The industrial sector companies were selected due to their economic vitality and good reputation. Additionally, the companies met the criteria in terms of years of experience and the number of workers, as specified for large and medium industries by the Ministry of Commerce and Industry (2010) and (annual Report, 2015). The sample of this study was simple randomly selected from the total target population, which reach 227 companies, according to the formula (Thompson, 2012). The selected respondent's sample consisted of the heads of companies and their deputies, almost to 454 respondents, because they understand the study variables and their strategic nature better than employees at other levels. In order to achieve the objectives of the study, the researcher used a number of statistical processing methods, such as Cronbach's Alpha, to test the stability and

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consistency of the study parameters; exploratory factor analysis (EFA) to determine the degree of saturation of the items of the measurements and noninterference in more than one factor; Confirmatory Factor Analysis (CFA) to ascertain the quality of the model's conformance to the indicators; and structural equation modeling to test the hypotheses of the study and verify the compatibility of the proposed model with the data of the study. It is clear in the Table (1) below that the measurement model of this study is characterized by construct validity evidence, which includes both of the items by the strength of the correlation of the items with their underlying factors as well as through obtaining the items the value of the strength of the high correlation (standardized factor loading) with its component variables, which are based on the assumed model.

Table 1.

Loading,	Cronbach	's Alpha,	CR and AVE	
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variables	items Loading		α (> 0.7)	CR (> 0.7)	AVE (> 0.5)
strategy of work- life quality			.889		
fair and adequate compensation			.943	.994	.807
	SWFQcompe4	.890			
	SWFQcompe3	.941			
	SWFQcompe2	.904			
	SWFQcompe1	.857			
career growth opportunities			.836	.843	.643
	SWFQGrowth2	.844			
	SWFQGrowth1	.860			
	SWFQGrowth3	.690			
training and development			.842	.845	.578
*	SWFQtrain4	.805			

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CR AVE α variables Loading items (> 0.7)(> 0.7)(> 0.5)SWFQtrain3 .766 SWFQtrain2 .776 SWFQtrain1 .690 health of the work .737 .798 571 environment SWFQhealth4 .733 SWFQhealth2 .840 SWFQhealth1 .685 strategic agility .934 customer agility .963 .963 .896 AGILITYcust1 .935 AGILITYcust3 .964 AGILITYcust4 .941 operational agility .929 .905 .761 and AGILITYopere9 .885 AGILITYopere8 .915 AGILITYopere7 .907 partnership agility .901 .929 .814 AGILITYpart17 .915 AGILITYpart16 .918 AGILITYpart15 777 sustainable .934 .864 .616 competitive advantage COMPETITIV10 .646 COMPETITIV14 781 COMPETITIV15 .908 COMPETITIV16 .783

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Note: $\alpha > 0.7 =$ Cronbach alpha (calculated by SPSS tool); AVE= Average Variance Extracted; CR= Composite reliability calculated by Amos.

Therefore, it reveals that discriminant validity is supported for all the measurement items. Hence, the measurement model possessed adequate convergent validity, discriminant validity, and reliability.

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4. Findings

According to the figure (2), in order to test the direct and indirect hypotheses of the present study and to know the direction, strength and effect of the relationship, the researcher used Structural Equation Modeling to ascertain the efficiency of its conformity with the data through a number of indicators. The value of the square (chi) is 496.234, while the degree of freedom is 314 and the significance level (p-value) (.000) is statistically significant. This means that there are no differences between the theoretical model and the data, although the value of the degree of freedom is high. However, this does not detract from the quality of the conformity due to the high number of the sample (273). In addition, the level of significance is less than value .05. This made the researcher ascertain the quality of the conformance by the value of the chi square which is 1.580, i.e., less than the specified criterion (5.0).



Fig. 2. Structural Equation Modeling

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Also, all the fit indices were above the recommended values. DF=314; CFI .968; TLI .964; RMSEA .046; GFI .880; AGFI .885; IFI .91 and NFI .968, (Byrne, 2010; Bentle, 2010; Hair et al, 2016). Thus, the results of goodnessof-fit indices provide irrefutable evidence of model fit, and therefore, the researcher tested the hypotheses as shown in Table (2).

Table 2. . .

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Variable	Path	Variable	Path	Estimate	S.E.	C.R.	P value	Result
sustainable competitive advantage	<	strategy of work- life quality	.27	.362	.107	3.377	***	Significant
strategic agility	<	strategy of work- life quality	.45	.877	.183	4.785	***	Significant
sustainable competitive advantage	<	strategic agility	.53	.365	.058	6.307	***	Significant

Note: Estimate= Path coefficient; S.E. = Standard Error (t-value); C.R. = Critical ratio

By doing the evaluation on mediating variable means there is a mechanism to find out the effects of the casual variable to the outcome. Based on table (3), it shows the direct relationship between the strategy of work-life quality and sustainable competitive advantage significantly, with the coefficient value 0.50 without the mediator. In table 4, it reveals a significant and positive relationship between variables.

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Table 3.

Direct Effect Strategy of Work-life Quality on Sustainable Competitive Advantage Without Mediated

Variable		Direct Effect	Indirect effect	Total	Р	Result
sustainable competitive <- advantage	strategy of work-life quality	0. 50	0	0. 50	***	Significant

Table 4.

The Effect of Mediation Variable (Direct and Indirect)

Variable	Path	Variable	Direct Effect	Indirect effect	Total	Р	Result
strategic agility	<	strategy of work-life quality	0.45	-	0.41	***	Significant
sustainable competitive advantage	<	strategic agility	0.53	-	0.37	***	Significant
sustainable competitive advantage	<	strategy of work-life quality	0.27	0.238	0. 508	***	Significant

Furthermore, shown in table(4) above, the direct impact of strategy of work-life quality on strategic agility, with the coefficient value 0.45, As well as it shows the direct impact of strategic agility on sustainable competitive advantage, with the coefficient value 0.53. Therefore, after the moderator variable enters the model, the coefficient value the strategy of work-life quality on sustainable competitive advantage decreased from 0.50 to 0.27. The test for the mediator is only meaningful only if the direct effect is statistically significant, whereas the indirect effect with a coefficient .238. Which considered large value according to subdivisions (Small = .01, Moderate = .09 and Large = .20), as stated by Preacher and Kelley (2011). Hence, the output

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still significant, it means the strategic agility is Partial Mediation. This result indicating that hypothesis four H_4 is accepted, that of strategy of work-life quality have an indirect effect on sustainable competitive advantage through their impact on strategic agility.

5. Conclusion

This study can be considered as additional empirical evidence to the body of knowledge. It enriches the theories on human resource management and strategic management. Based on i.e., the RBV theory by Barney (1991), the theory of dynamic capacity by Phuen, Teece, and Pisano (1997) and the theory of human needs by Maslow (1943). The results of hypothesis testing in this study concur with the findings of other studies, and removes a lot of ambiguity about the intermediate effect of strategic agility in explaining the indirect effect on the relationship between the strategy of work-life quality and its dimensions(health of the work environment, fair and adequate compensation, training and development and career growth opportunities) and sustainable competitive advantage in Yemeni manufacturing industries (as the sample of the study). The proposed structural model of this study emphasizes on the positive impact of the strategy of work-life quality in enhancing the motivation of the employees, raising their abilities, skills and knowledge and ensuring their safety during work. In this way, it strengthens their loyalty and sense of belonging to their companies and ensures that production processes are conducted systematically. This in turn, enhances the ability of companies to meet the customers' evolving needs by formulating strategic directions that are aligned with the external work environment of the organization. Additionally, it explains how to reconfigure the operational processes in a proactive way to adapt to emerging events and overcome the threats posed to them in achieving competitive leadership. The limitations of this study avail

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opportunities for further research on variables not addressed by the researcher, and also due to the lack of studies in the Yemeni context on the determinants of sustainable competitive advantage. The results of this study could be important to decision-makers in business organizations, in general, and large and medium-sized Yemeni manufacturing industries, in particular. They can consider the effective role that is played by the structural model proposed by the current study to overcome the unexpected challenges and competition to improve their competitive position and ensure their survival under the current uncertain circumstances, which have become a permanent feature of the business environment of organizations of the 21st century.

References

- Adams & Lamont. (2003). "Corporate social responsibility: Three key approaches", journal of management studies ;January.
- Alashti, A. H. R., & Mokhtaran, M. (2015). Investigate the Relationship between Organizational Health and Agility as a Competitive and a Strategic Advantage in Organization
- Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organisational learning as the main antecedents of workforce agility. International Journal of Prod uction Research, 52(21), 6273-6295.
- Almahamid, S., Awwad, A., & McAdams, A. C. (2010). Effects of organizational agility and knowledge sharing on competitive advantage: an empirical study in Jordan. International Journal of Management, 27(3), 387.
- Anderson, C. R. (1988). Instructor's Resource Manual to Accompany Management: Skills, Functions, and Organization Performance. Allyn and Bacon.

48	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
Т	HE RELATIONSHIP BETWEEN STRATEGY OF WORK-	LIFE QUALITY

- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of management, 17(1), 99-120.
- Barney, J. B., & Wright, P. M. (1998). On becoming a strategic partner: The role of human resources in gaining competitive advantage. Human Resource Management (1986-1998), 37(1), 31.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of personality and social psychology, 51(6), 1173.
- Baskarada, S., & Koronios, A. (2018). The 5S organizational agility framework: a dynamic capabilities perspective. International Journal of Organizational Analysis, (just-accepted), 00-00.
- Beltrán-Martín, I., & Roca-Puig, V. (2013). Promoting employee flexibility through HR practices. Human Resource Management, 52(5), 645-674.
- Byrne, B. M., & Van de Vijver, F. J. (2010). Testing for measurement and structural equivalence in large-scale cross-cultural studies: Addressing the issue of onequivalence. International Journal of Testing, 10(2), 107-132.
- Chen, X. (2012). Impact of business intelligence and IT infrastructure flexibility on competitive advantage: An organizational agility perspective. The University of Nebraska-Lincoln.
- Chimoi, S. M. (2012). Quality of work life and competitive advantage at the Ministry of Finance, Kenya (Doctoral dissertation, University of Nairobi, Kenya).
- Coyne, K. P. (1986). Sustainable competitive advantage—What it is, what it isn't. Business horizons, 29(1), 54-61.
- Dabiri, S., & Gholami, A. (2015). Surveying the effect of strategic agility on gaining competitive advantage in Gachsaran Oil and Gas Exploitation

49	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
	THE RELATIONSHIP BETWEEN STRATEGY OF WORK-LI	FE OUALITY

Company. Journal of Renewable Natural Resources Bhutan, ISSN: 1608-4330.

- Davoine, L., Erhel, C., & GUERGOAT-LARIVIERE, M. (2008). Monitoring quality in work: European Employment Strategy indicators and beyond. International Labour Review, 147(2-3), 163-198.
- Day, G. S., & Wensley, R. (1988). Assessing advantage: a framework for diagnosing competitive superiority. The Journal of Marketing, 1-20.
- Denning, S. (2017). The next frontier for Agile: strategic management. Strategy & Leadership, 45(2), 12 - 18. https://doi.org/10.1108/SL-02-2017-0021
- Dermol, V., & Rakowska, A. (2014). Strategic approaches to human resources management practice. ToKnowPress Monographs.
- Dickson, P. R. (1992). Toward a general theory of competitive rationality. The Journal of Marketing, 69-83.
- Donald, C, & Sanderson, K , (2001). "Exelence in communicating organisational strategy", State University of New York press, New York ,USA.
- Dove, R. (2002). Response ability: the language, structure, and culture of the agile enterprise. John Wiley & Sons.
- Doz, Y., & Kosonen, M. (2008). The dynamics of strategic agility: Nokia's rollercoaster experience. California Management Review, 50(3), 95-118.
- Esfahani, S. S., Soltani, I., & Shirouyezad, H. (2013). Ranking the Quality of Work Life Aspects Based on Competitive Advantage Factors by Quality Function Deployment Approach in Foolad Technique Co.
- Felipe, C. M., Roldán, J. L., & Leal-Rodríguez, A. L. (2016). An explanatory and predictive model for organizational agility. Journal of Business Research, 69(10), 4624-4631. http://dx.doi.org/10.1016/j.jbusres.2016.04.014

50	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
Т	HE RELATIONSHIP BETWEEN STRATEGY OF WORK-	LIFE QUALITY

- Flippo . Edvin B.(1984), personnel management . sivth edition, Mc Graw Hill International editions. Professional Psychology. 13,293-301.
- Goldman, S. L., & Nagel, R. N. (1993). Management, technology and agility: the emergence of a new era in manufacturing. International Journal of Technology Management, 8(1-2), 18-38.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic management journal, 17(S2), 109-122.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage publications.
- Harrison, M. I. (2004). Diagnosing organizations: Methods, models, and processes (Vol. 8). Sage Publications.
- Hijjawi, G. S., & Al-Shawabkeh, K. M. (2017). Impact of Strategic Agility on Business Continuity Management (BCM): The Moderating Role of Entrepreneurial Alertness: An Applied Study in Jordanian Insurance Companies. International Journal of Business and Management, 12(10), 155.
- Hill Charles, W. L., & Jones, G. R. (1998). Strategic Management theory: An integrated approach. 4thed, Houghton Mifflin, New York.
- Hitt, M. A. & Ireland, R. D., & Hoskisson, R. E. (2012). Strategic management cases: competitiveness and globalization. Cengage Learning.
- Hoffman, N. P. (2000). An examination of the" sustainable competitive advantage" concept: past, present, and future. Academy of marketing science review, 2000, 1.
- Huang, K. F., Dyerson, R., Wu, L. Y., & Harindranath, G. (2015). From temporary competitive advantage to sustainable competitive advantage. British Journal of Management, 26(4), 617-636.

51	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
Т	HE RELATIONSHIP BETWEEN STRATEGY OF WORK-	LIFE QUALITY

- Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. The Journal of Marketing, 1-15.
- Huzzard, T. (2003). The Convergence of the Quality of Working Life and Competitiveness. Work Life Transition, 9.
- Khoshnood, N. T., & Nematizadeh, S. (2017). Strategic Agility and Its Impact on the Competitive Capabilities in Iranian Private Banks. International Journal of Business and Management, 12(2), 220.
- Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. na.
- Lin, Y., Desouza, K. C., & Roy, S. (2010). Measuring agility of networked organizational structures via network entropy and mutual information. Applied Mathematics and Computation, 216(10), 2824-2836.
- Maslow, A. H. (1943). A theory of human motivation. Psychological review, 50(4), 370.
- Miller, D. (1996). A preliminary typology of organizational learning: Synthesizing the literature. Journal of Management, 22(3), 485–505.
- Murungi, A. M (2015). Influence of Strategic Agility on competitive capability of Private Universities in Kenya, Unpublished MBA Thesis, University of Nairobi
- Nadler, D. A., & Lawler, E. E. (1983). Quality of work life: perspectives and directions. Organizational dynamics, 11(3), 20-30.
- Osborne, J. W. (2014). Best practices in exploratory factor analysis. CreateSpace Independent Publishing Platform.
- Porter, M. E. (1998). Competing across locations: Enhancing competitive advantage through a global strategy. Harvard Business School Press.
- Porter, M. E., & Advantage, C. (1985). Creating and sustaining superior performance. Competitive advantage, 167.

52	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
Т	HE RELATIONSHIP BETWEEN STRATEGY OF WORK	-LIFE QUALITY

- Prahalad, C., & Hamel, G. (1990). The core corpetence of the corporation. Harvard business review, 68(3), 79-91.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. Psychological methods, 16(2), 93-115.
- Rethinam G S & Ismail, M.(2008). Constructs of Quality of Work Life: A Perspective of Information and Technology Professionals. European Journal of Social Sciences, Vol. 7, pp. 1, pp.58-70.
- Saha, N., Gregar, A., & Sáha, P. (2017). Organizational agility and HRM strategy: Do they really enhance firms' competitiveness?. International Journal of Organizational Leadership, 6(3), 323.
- Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. Psychological science in the public interest, 13(2), 74-101.
- Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. Mis Quarterly, 237– 263. http://www.jstor.org/stable/30036530
- Scully, J. A., Kirkpatrick, S. A., & Locke, E. A. (1995). Locus of knowledge as a determinant of the effects of participation on performance, affect, and perceptions. Organizational Behavior and Human Decision Processes, 61(3), 276-288.
- Senge, P. (1990). The fifth discipline: The art and science of the learning organization. New York: Currency Doubleday.
- Shafer, R. A., Dyer, L., Kilty, J., Amos, J., & Ericksen, J. (2001). Crafting a human resource strategy to foster organizational agility: A case study. Human Resource Management, 40(3), 197-211.

53	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
Т	HE RELATIONSHIP BETWEEN STRATEGY OF WORK-	LIFE QUALITY

- Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organisations: An introduction. International Journal of Production Economics, 62(1), 7–22
- Sherehiy, B., & Karwowski, W. (2014). The relationship between work organization and workforce agility in small manufacturing enterprises. International Journal of Industrial Ergonomics, 44(3), 466-473.
- Sirgy, M. J., Efraty, D., Siegel, P., & Lee, D. J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. Social indicators research, 55(3), 241-302.
- Srivastava, S., & Kanpur, R. (2014). A study on quality of work life: key elements & It's Implications. IOSR-JBM, 16, 54-59.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic management journal, 509-533.
- Thompson, steven. K. (2012). Simple random sampling. In: Sampling. New Jersey: Wiley.
- Vagnoni, E., & Khoddami, S. (2016). Designing Competitively Activity Model through the Strategic Agility Approach in Aturbulent Environment. Foresight, 18(6), 625-648. <u>https://doi.org/10.1108/FS-03-</u> 2016-0012
- World Bank. 2015. Yemen, Republic of Unlocking the potential for economic growth (English). Washington, D.C.: World Bank Group. <u>http://documents.worldbank.org/curated/en/673781467997642839/Ye</u> men-Republic-of-Unlocking-the-potential-for-economic-growth
- Wu, S. L. (2011). Impact of environmental uncertainty on human resource flexibility. In International Conference on business and economics research (Vol. 1).

54	Journal of System Management (JSM) 6(2), Summer 2020, pp. 27-54	Majed Mohamed Abdullah Barahma
Т	HE RELATIONSHIP BETWEEN STRATEGY OF WORK-	LIFE QUALITY

- Qaid, Ali Abdullah. (2010). The large and medium industries sector in the Republic of Yemen, the fourth Arab forum entitled quality and creativity with the existence of globalization (25-26) Sana'a.
- National center for information, Information material on the industrial sector in the Republic of Yemen (2011).
- Annual Report 2015, General Statistical for Research and Statistics, Central Bank of Yemen. <u>http://www.centralbank.gov.ye</u>
- Rashidi, M., Cherabin, M., Akbari, A., & Maghool, A. (2019). Explaining an Organizational Agility Development Model. Journal of System Management, (2), 211-224.
- Cai, Z., Huang, Q., Liu, H., & Wang, X. (2018). Improving the agility of employees through enterprise social media: The mediating role of psychological conditions. International Journal of Information Management, 38(1), 52-63.
- Sharma, S., Conduit, J., & Hill, S. R. (2014). Organisational capabilities for customer participation in health care service innovation. Australasian Marketing Journal (AMJ), 22(3), 179-188.
- Sukwadi, R., Wee, H. M., & Yang, C. C. (2013). Supply Chain Performance Based on the Lean–Agile Operations and Supplier–Firm Partnership: An Empirical Study on the Garment Industry in I ndonesia. Journal of Small Business Management, 51(2), 297-311.
- Lin, J. H., Wong, J. Y., & Ho, C. H. (2013). Promoting frontline employees' quality of life: Leisure benefit systems and work-to-leisure conflicts. Tourism Management, 36, 178-187.
- Muduli, A. (2017). Workforce agility: Examining the role of organizational practices and psychological empowerment. Global Business and Organizational Excellence, 36(5), 46-56.