

# Exploring the status and effects of balanced scorecard adoption in the non-western context

## Evidence from the Middle East

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Status and  
effects of BSC  
adoption

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Received 30 June 2016  
Revised 23 January 2017  
21 March 2017  
Accepted 23 March 2017

### Abstract

**Purpose** – The purpose of this paper is to explore the status of corporate performance management (PM) in the Middle Eastern context, represented by the United Arab Emirates (UAE) and the Kingdom of Saudi Arabia (KSA). In addition, the current study investigates the effects of the adoption of the balanced scorecard (BSC) and aims to explore the impact of the BSC on workplace attitudes and behaviors, as shown by accountability, inspiration, and motivation.

**Design/methodology/approach** – Due to the limited knowledge about the subject matter and the limited number of companies adopting the BSC in the Middle East, this study has adopted a descriptive approach to verify the significance of the BSC and to explore the causal relationship amongst the performance perspectives and the different dimensions of the BSC. The sample was drawn from five major business sectors in the UAE and KSA.

**Findings** – The results indicate that the BSC indicators are effective tools to evaluate and reflect on corporate performance. The concept of the BSC is considered good practice in the UAE and the KSA. Because of the concept's compatibility with the local culture and business practices, it can be used to balance shareholder and stakeholder demands.

**Research limitations/implications** – One of the main limitations of this study is that the sample is drawn from only two countries from the Middle East and, hence, cannot be generalized.

**Originality/value** – This study is one of the first attempts to explore the status of the corporate PM systems in a non-western context using a BSC technique created and typically applied in the western world. In addition, this study is considered a valuable attempt at exploring the effects of the adoption of this technique on an organization's performance.

**Keywords** United Arab Emirates (UAE), Balanced scorecard (BSC), Kingdom of Saudi Arabia (KSA), Middle East (ME)

**Paper type** Research paper

### Introduction

The current business environment is constantly changing (Yadav and Sagar, 2013). Organizations are trying to manage the performance of their employees, teams, and processes to ensure that company goals are met in an efficient manner to achieve continued success (Sahoo and Jena, 2012). Interest in performance measurement and management (PMM) has increased notably in recent years (Taticchi *et al.*, 2010). The effective utilization of the performance management (PM) system is critical in enhancing organizational performance (Franceschini *et al.*, 2010). Its regular use leads to improved, higher results (Yadav *et al.*, 2015).

Most companies around the world are adopting PM systems, as they are considered quite effective and efficient in achieving organizational goals and objectives. However, limited research has been performed on corporate PM in general and the balanced scorecard (BSC) in the Arab World (Al Thunaiyan, 2014; Behery *et al.*, 2014; Jayashree *et al.*, 2009). Jayashree *et al.* (2009) proposed a framework for applying the BSC in the private higher education sector in the United Arab Emirates (UAE). Behery *et al.* (2014), in their



Journal of Management  
Development  
Vol. 36 No. 8, 2017  
pp. 1063-1075  
© Emerald Publishing Limited  
0262-1711  
DOI 10.1108/JMD-05-2016-0077

study on UAE-based fast-growth small-to-medium enterprises, reported that BSC initiatives already exist in companies but are not clearly linked together and directed toward their effective implementation. In Saudi Arabia, Al Thunaiyan (2014) reported that staff members and managers possessed a trivial understanding of various BSC perspectives. Hence, this study is an attempt to bridge the gap between the western theories and under-researched Middle Eastern context. This study is significant in the Middle East for two reasons. The first is the growing emergence of Middle Eastern companies in the global economy. The second is the pressing issue of bureaucracies and systems of patronage in the Middle East, which have set static measures that inhibit progress and development, as opposed to their western counterparts.

### Literature review

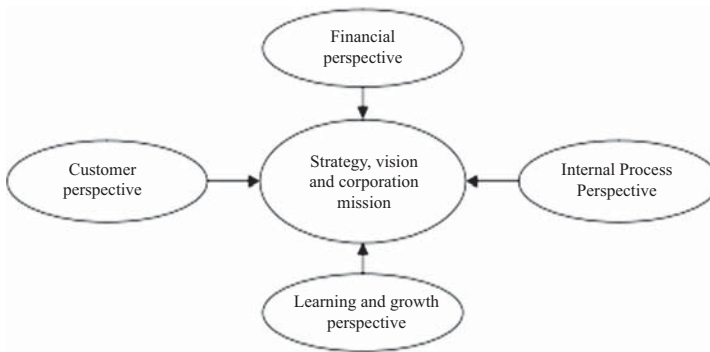
#### *PMM*

PMM is defined as a technique by which an organization is guided through the systematic delineation of its mission, strategy, and goals which are quantified and measured through critical success factors and key performance indicators (KPIs) (de Waal, 2007). PM has become a progressively vital research realm (Helden and Reichard, 2016) in both the public (Goddard, 2010) and private sectors (Scapens and Bromwich, 2010). It remains the most critical activity for those concerned with strategic planning and administration (Sainaghi *et al.*, 2017). The link between strategy and performance is crucial (Phillips and Moutinho, 2014), as the use of PM establishes decision-making processes together with the communication of renewal strategies (Cheng and Coyte, 2014), which enhances performance (Speklé and Verbeeten, 2014). The key motive behind implementing PMM in various organizations is to attain a competitive advantage and to develop the ability to constantly respond and acclimate to external variability (Cocca and Alberti, 2010).

The PM framework continues to be studied by researchers and professionals (Paladi and Fenies, 2016). Previous researchers have examined several PM frameworks such as the Du Pont Pyramid (Skousen *et al.*, 2001), the integrated PM framework (Medori and Steple, 2000), the BSC (Kaplan and Norton, 1992), and the link and effect model. The BSC is one of the principal frameworks (de Waal and Kourtit, 2013) and has been used in many organizations due to its familiarity and popularity (Srimai *et al.*, 2011). Several companies have reported improved operational efficiency and profitability as a result of using the BSC (Bigliardi and Dormio, 2010).

#### *BSC conceptualization and operationalization*

The BSC is a management system that translates the organization's vision and strategy into action (Kaplan and Norton, 2008). It provides a set of measures that offers managers a quick and comprehensive view by complementing financial measures with operational measures (Kaplan and Norton, 1992). The BSC offers a varied set of performance measures through the four perspectives of learning and growth, internal business processes, customers, and financial performance (Cheng and Humphreys, 2016; de Waal and Kourtit, 2013) (Figure 1). These perspectives are intertwined by cause-and-effect relationships. The general direction of causality moves from the learning and growth perspective toward the financial perspective (Ferreira *et al.*, 2016). The learning and growth perspective measures how frequently a company innovates novel products, services, or manufacturing methods to warrant that it constantly renews itself. The internal process perspective measures the effectiveness of the processes by which the companies create value. The customer perspective measures performance in terms of how the customer experiences the value formed by the organization. The financial perspective measures the growth, costs, return on investment, and various other business performance variables. It follows the customer's perspective because the greater the customer satisfaction is, the higher the company's financial performance will likely be.



Source: Kaplan and Norton (1996b)

Figure 1. The BSC four dimensions

The BSC offers a clear explanation and wider outlook about what organizations should measure to “balance” their financial and non-financial aspects (Kaplan and Norton, 2006). Khomba (2015) established that the BSC model plays a pivotal role in assisting business executives in making holistic long-term management decisions. The most innovative aspect of the BSC is its capacity to produce strategic learning (Ferreira *et al.*, 2016), providing a global vision of organizational performance and improving the understanding of its objectives as a pre-requisite to their goal achievement (Quesado *et al.*, 2016). The BSC framework has the potential to provide managers with both the information and the control mechanisms needed to meet the evolving prospects (Cheng and Humphreys, 2016) and ensures that there is an alignment between the strategic objectives of an organization (Wake, 2015). The success of the BSC relies heavily on its logic and simplicity, appealing to all organizations and managers (Davila, 2012) (Figure 2).

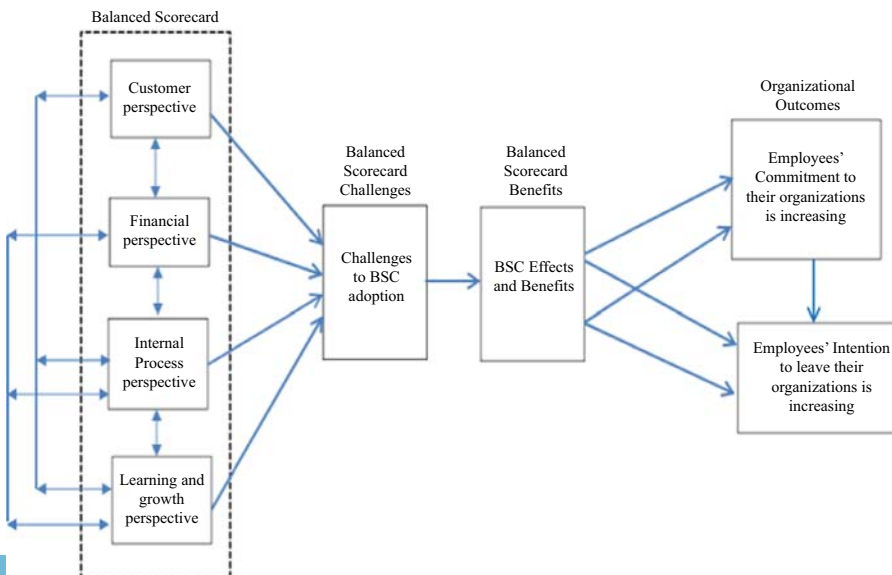


Figure 2. The balanced scorecard and organizational outcomes-challenges vs benefits

Quesado *et al.* (2016) indicated that the degree of diversity of the products/services of the organization and the company's size are positively associated with the implementation of the BSC. As the context and operating environment of individual organizations vary significantly, the BSC has continued to evolve as it crosses industries, sectors, and even countries (Perkins *et al.*, 2014). This framework has been adopted by different types of organizations (Lucianetti, 2010), because it provides an objective benchmarking indicator for evaluating the achievement of the strategic goals of an organization (Alhyari *et al.*, 2013). It has been applied in a number of sectors including healthcare (Moullin, 2011), the pharmaceutical industry (Janota and Major, 2012), automobile manufacturing enterprises (Yadav *et al.*, 2015), education (Hladchenko, 2015; Libing *et al.* 2014), the petrochemical industry (Varma and Deshmukh, 2009), banking (Barclays PLC Citizenship Report, 2013; Quesado and Letras, 2015), and trade unions (Thursfield and Grayley, 2016).

## Methodology

### *Sampling*

The sample was drawn from five major business sectors in the UAE and the Kingdom of Saudi Arabia (KSA), namely, petrochemical, transportation, employment agencies, telecommunication, and education, as shown in Table II. The researchers used a random sampling method where they targeted 96 companies (UAE = 50; KSA = 46) listed in chamber of commerce and Ministry of Economy of both countries. The companies were chosen based on two considerations: either they have started BSC implementation or they are in the process of implementing the BSC. A self-administered questionnaire in English was created on Survey Monkey to collect the relevant data. After prior corporate approval via inter-organizational mailing systems, potential respondents were given an electronic cover letter that included the researcher's contact details, the procedures of the research, understanding and confidentiality. As strategic uncertainty relates to business level strategy, the researchers targeted only senior officials responsible for strategic business units who are most likely to have an overview of both the performance measures used and the strategic uncertainty faced by their organizations. Hence, the questionnaires were sent to the chief executive officers (CEOs), chief financial officers (CFOs), chief marketing officer, director of operations, and chief human resource officers of the companies. A total of 998 questionnaires were distributed. The final sample size suitable for analysis consisted of 479 respondents, with an overall response rate of 48 percent. The surveys were conducted over 12 months with approximately 350 follow-up e-mails.

### *Questionnaire design*

Efforts were made to minimize bias as per McGrath's (1986) recommendations. Some of the items in the measurement scales were negatively ordered. Additionally, the scales were randomly structured within the questionnaire, and all the measurement scales were selected from previously established scales. In particular, the questionnaire used in this study was designed to include six main dimensions that measure the perceptions of the sample towards the major topic of this study. Respondents were asked to provide their responses using the five point Likert scales that measure the extent to which they agree with or to which an item describes the situation in their organization. The first (11 items), the second (7 items), the third (7 items) and the fourth (4 items) dimensions measured the BSC's four perspectives using a modified version of the scale created by Blackmon (2008) and Kaskey (2008). As for the fifth and sixth dimensions, these addressed the BSC effects (17 items) and challenges (27 items) and were adapted from (Othman, 2005; Othman *et al.*, 2006).

Cronbach  $\alpha$  values for overall performance are provided in Table I, indicating satisfactory internal reliability of the scale, with Cronbach  $\alpha$  coefficients equal to 0.810.

*Participants*

As shown in Table II, 55.11 percent of the total sample size is from the UAE and 44.67 percent from the KSA. In view of the nature of the company, in both UAE and KSA, the majority of the respondents were from petrochemicals (UAE = 54.9 percent; KSA = 29.9 percent) and the education sector (KSA = 51.9 percent; UAE = 36.7 percent). This is because in both the UAE and KSA, major oil exporters are trying to transform into a knowledge economy by focusing on the education sector. Regarding the size of the company (head counts), both UAE and KSA have the largest percentage of the head counts of the company at 37.5 and 55.6 percent, respectively, in the category of over 500 employees. In total, 46.6 percent of the participants from the UAE companies have between five and ten years of experience. However, 46.3 percent of the participants of companies from the KSA have more than ten years of experience. The majority of the individuals responding to the survey indicated that they were positioned as chief human resource officer or director of human resource (UAE = 36 percent; KSA = 27.1 percent). Chief executive officers (CEOs) were the least represented in the sample.

Dimension	Number of items	Cronbach's $\alpha$
Customer perspective	11	0.782
Internal Processes perspective	7	0.742
Learning and growth perspective	7	0.730
Financial perspective	4	0.710
BSC effects	17	0.901
BSC challenges	27	0.940
Overall	73	0.810

**Table I.**  
Scales and items reliability

Variable	Category	The company base			
		UAE		KSA	
		Frequency	Percent	Frequency	Percent
The nature of the company and (business sector)	Petrochemicals	145	54.9	64	29.9
	Transportation	2	0.8	19	8.9
	Employment business	12	4.5	14	6.5
	Telecommunication	8	3.0	6	2.8
	Education	97	36.7	111	51.9
The size of company (headcounts)	Less than 20	42	15.9	22	10.3
	Between 21 and 50	80	30.3	43	20.1
	Between 51 and 100	40	15.2	10	4.7
	Between 101 and 500	3	1.1	20	9.3
	Over 500	99	37.5	119	55.6
The age of the company (years of operations)	Less than 5 year	30	11.4	59	27.6
	Between 5 years to 10 years	123	46.6	56	26.2
	More than 10 years	111	42.0	99	46.3
Job title	Chief executive officer	13	4.9	6	2.8
	Chief financial officer/director of finance	30	11.4	43	20.1
	Chief marketing officer/director of marketing	94	35.6	50	23.4
	Chief operations (productions or services) officer/director of operations (productions or services)	32	12.1	57	26.6
	Chief human resource officer/director of human resource	95	36.0	58	27.1

**Table II.**  
Descriptive characteristics of the sample

Notes:  $n = 264$  (UAE);  $n = 214$  (KSA)

### Data analysis

Descriptive reporting for the demographic intervals-factors is conducted. The BSC construct with its four perspectives, its effects and its challenges were subjected to “item validation” through explanatory factor analysis to determine the internal structure of the various dimensions of this study. To study the relationships between the different variables, Pearson’s correlation analysis was utilized. Subsequently, to test the impact of the different demographics on the various variables of this study, a one-way ANOVA test was performed.

### Results and discussion

Many significant relationships have been observed in the UAE context (Table III). For example, the type of industry to which the organization belongs is negatively correlated with the size of organization (head counts), with the number of years in operations, and the customer perspective ( $(r = -0.382, p < 0.01)$ ,  $(r = -0.313, p < 0.01)$ , and  $(r = -0.332, p < 0.01)$ , respectively). However, it is positively correlated with the financial perspective ( $r = 0.236, p < 0.01$ ). The size of the organization (head counts) is moderately strongly positively correlated with the number of years in operation and the customer’s perspective ( $(r = 0.413, p < 0.01)$  and  $(r = 0.326, p < 0.01)$ , respectively). On the contrary, the size of organization (head counts) is negatively correlated with the financial perspective ( $r = -0.256, p < 0.01$ ). The results show that the financial perspective is positively correlated with the total construct of the BSC with its four perspectives ( $r = 0.512, p < 0.01$ ). Additionally, it is found to be positively correlated with the BSC effects ( $r = 0.190, p < 0.01$ ). Finally, the total construct of the BSC with its four perspectives is positively correlated with the BSC effects and the BSC challenges ( $(r = 0.238, p < 0.01)$ ,  $(r = 0.147, p < 0.05)$ , respectively).

Surprisingly, the results (Table IV) show that the type and size of the organization for KSA companies have no positive/negative relationship with any of the variables. The size of organization (head counts) is positively correlated with the following variables: the number of years in operation, the customer perspective, the internal processes, the total construct of the BSC with its four perspectives, the BSC effects and the BSC challenges ( $(r = 0.361, p < 0.01)$ ,  $(r = 0.320, p < 0.01)$ ,  $(r = 0.241, p < 0.01)$ ,  $(r = 0.318, p < 0.01)$ ,  $(r = 0.151, p < 0.05)$ , and  $(r = 0.420, p < 0.01)$ , respectively). Notably, the results show that the financial perspective is positively correlated with the total construct of the BSC with its four perspectives ( $r = 0.226, p < 0.01$ ). Logically, the financial perspective is negatively correlated with the BSC effects and the BSC challenges ( $(r = -0.145, p < 0.05)$  and  $(r = -0.135, p < 0.05)$ , respectively). Additionally, the total construct of the BSC with its four perspectives is positively correlated with the BSC effects and the BSC challenges ( $(r = 0.151, p < 0.05)$  and  $(r = 0.258, p < 0.01)$ , respectively). Finally, the BSC effects and the BSC challenges are positively correlated ( $r = 0.310, p < 0.01$ ).

From the results, it is evident that the BSC is a good practice and can be used to balance shareholder and stakeholder demands, given its compatibility with local culture and business practices in the UAE and KSA. Additionally, BSC helps Middle Eastern companies with a managerial “focus”, gives them a sense of “balance”, and helps to align goals. The positivity was observed more in UAE than in KSA companies. Even though both countries share a similar cultural context, the reason for this positivity can be attributed to the more open, modernized and flexible culture of the UAE companies. The study supports the findings of Madsen and Stenheim (2014a) in another national setting.

All four BSC perspectives were positively correlated with the BSC challenges in UAE and KSA companies. The respondents reported that it was more difficult to develop non-financial measures in their company. Additionally, the information system of their organization was inadequately developed to track the performance of non-financial measures.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Pearson correlation	1										
(2) Sig. (2-tailed)	-0.382**	1									
(3) Pearson correlation	0.000	0.413**	1								
(4) Sig. (2-tailed)	0.000	0.000	0.033	1							
(5) Pearson correlation	0.080	0.275	0.591	0.060	0.071	0.102					
(6) Sig. (2-tailed)	0.195	0.326**	0.396**	0.335	0.253	0.099					
(7) Pearson correlation	-0.332**	0.000	0.000	-0.038	0.071	0.102					
(8) Sig. (2-tailed)	0.000	0.000	0.000	0.541	0.071	0.102					
(9) Pearson correlation	-0.091	-0.054	0.060	0.071	0.071	1					
(10) Sig. (2-tailed)	0.140	0.380	0.335	0.253	0.099	-0.045					
(11) Pearson correlation	0.063	0.049	0.024	0.118	-0.108	0.471	1				
(12) Sig. (2-tailed)	0.309	0.429	0.701	0.055	0.081	0.016	0.198**				
(13) Pearson correlation	0.236**	-0.256**	-0.088	0.088	-0.221**	0.016	0.001	1			
(14) Sig. (2-tailed)	0.000	0.000	0.155	0.153	0.000	0.799	0.000	0.512**			
(15) Pearson correlation	-0.029	0.048	0.180	0.128	0.321**	0.330**	0.726**	0.000	1		
(16) Sig. (2-tailed)	0.642	0.438	0.003	0.037	0.000	0.000	0.000	0.000	0.238**		
(17) Pearson correlation	0.095	-0.067	0.029	0.002	-0.020	0.073	0.191**	0.190**	0.000	1	
(18) Sig. (2-tailed)	0.037	0.281	0.644	0.974	0.747	0.238	0.002	0.002	0.000	0.147*	
(19) Pearson correlation	0.547	0.057	0.124	0.053	0.279**	0.246**	-0.036	-0.070	0.147*	0.109	1
(20) Sig. (2-tailed)	0.396	0.357	0.044	0.387	0.000	0.000	0.564	0.255	0.017	0.078	0.078

Notes: (1) Which Industry does the organization belong to; (2) The size of my organization; (3) Years of Operation; (4) Job Title; (5) Customer All; (6) Internal Process All; (7) Learning Growth All; (8) Financial All; (9) BSC all; (10) BSC Effects All; (11) BSC Challenges All. \*, \*\*Significant at the 0.01 and 0.05 levels, respectively. (2-tailed)

Table III. Correlations among variables – UAE

**Table IV.**  
Correlations among  
variables – KSA

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Pearson correlation	1										
(2) Sig. (2-tailed)	-0.042	1									
(3) Pearson correlation	0.543		1								
(4) Sig. (2-tailed)	-0.121	0.361**	1								
(5) Pearson correlation	0.076	0.000		1							
(6) Sig. (2-tailed)	0.115	-0.001	0.095	1							
(7) Pearson correlation	0.093	0.991	0.165		1						
(8) Sig. (2-tailed)	0.011	0.320**	0.145*	0.020	1						
(9) Pearson correlation	0.871	0.000	0.034	0.768		1					
(10) Sig. (2-tailed)	-0.061	0.241**	0.012	0.059	0.290**	1					
(11) Pearson correlation	0.378	0.000	0.856	0.392	0.000		1				
(12) Sig. (2-tailed)	-0.042	0.071	0.080	0.076	-0.005	-0.059	1				
(13) Pearson correlation	0.543	0.304	0.242	0.266	0.941	0.391		1			
(14) Sig. (2-tailed)	0.024	0.001	-0.007	0.169*	-0.169*	-0.071	0.043	1			
(15) Pearson correlation	0.722	0.984	0.915	0.014	0.013	0.302	0.527		1		
(16) Sig. (2-tailed)	-0.039	0.318**	0.135*	0.136*	0.611**	0.500**	0.618**	0.226**	1		
(17) Pearson correlation	0.573	0.000	0.049	0.047	0.000	0.000	0.000	0.001		1	
(18) Sig. (2-tailed)	-0.033	0.151*	0.048	0.010	0.179**	0.249**	-0.001	-0.145*	0.151*	1	
(19) Pearson correlation	0.633	0.028	0.487	0.889	0.009	0.000	0.992	0.033	0.027		1
(20) Sig. (2-tailed)	-0.058	0.420**	0.174*	0.074	0.348**	0.386**	-0.071	-0.135*	0.258**	0.310**	1
(21) Pearson correlation	0.396	0.000	0.011	0.281	0.000	0.000	0.298	0.049	0.000	0.000	

**Notes:** (1) Which Industry does the organization belong to; (2) The size of my organization; (3) Years of Operation; (4) Job Title; (5) Customer All; (6) Internal Process All; (7) Learning Growth All; (8) Financial All; (9) BSC all; (10) BSC Effects All; (11) BSC Challenges All. \*, \*\*Significant at 0.01 and 0.05 level, respectively, (2-tailed)



The importance of non-financial indicators is also emphasized by Saraiva and Alves (2015) in their Portuguese study. Additionally, similar findings were reported by Khomba (2015) in the African context, in that the main problem of the BSC model is its rationale of focusing on providing a systematic tool, combining financial and non-financial performance indicators in one coherent performance measurement system. The reasons may be many and varied, such as many executive managers in MENA are still not aware of the different approaches possible in dealing with strategic and operational/financial activities, as reported by Kaplan and Norton (2008). The findings are in alignment with the previous research that has reported that companies may face various problems in the implementation of the BSC process (Antonsen, 2014; Madsen and Stenheim, 2014b; Modell, 2012). They may range from conceptual and technical issues to social and political ones (Madsen and Stenheim, 2014b). Conceptual issues are related to understanding and interpreting the concept, while technical issues may arise when developing a technical infrastructure to support the BSC. Social and political issues are also common, as the implementation of the BSC may trigger many types of behavioral responses from individuals and groups in the organization, such as resistance and a lack of participation (Madsen and Stenheim, 2014b). While the BSC model is regarded as a valuable tool for assessing corporate performance, it is also a fact that it is very risky because of its high failure rate (Khomba, 2015). Hence, UAE and KSA companies that wish to implement the BSC model should be cautious of the measures that are deployed in the model to minimize the failure rates.

The findings are congruent with Leung *et al.* (2006), who affirmed that the importance of any one of the four perspectives cannot be determined without knowing the effects of the relationships between the perspectives. Additionally, it is aligned with Khomba (2015) who affirmed that each perspective has leading and lagging indicators that yield two directional cause-and-effect chains. Hence, the leading and lagging indicators would apply both horizontally and vertically within and between the perspectives.

#### *Implications, limitations, and scope for future research*

The BSC prototype proposed in this study has practical implications. The results shed light on the need for the achievement of causal relationships between and among the four dimensions of BSC. The study results add to the knowledge about the enactment of the BSC in MENA companies, which may be stimulating for administrators who are considering its adoption.

For the research context, promotion of the adoption and implementation of the BSC is aimed at improving management performance and employee behaviors through accountability, inspiration, and incentives. The major limitation of this study was that the data were collected using self-reported questionnaires. In addition, the measures used in this study were Likert scales, which can threaten the validity via the potential for mono-method bias (Podsakoff *et al.*, 2003). The results should be verified by more in-depth analysis to define all direct or indirect relationships between and among the BSC's different perspectives.

Furthermore, additional research study is needed to further enhance the sampling structure by including various employee/managerial levels, adopting a regional instead of country-specific approach, increasing responses within sector specific industries, and up scaling from an exploratory study to one in which contextual, cultural, and theoretical outcomes will be more generalizable.

#### **Conclusion**

This study aimed to explore the status of the BSC as a corporate performance measurement tool in the non-western contexts of the UAE and KSA. Through a literature review and a questionnaire survey, feasible performance indicators, variables, and perspectives were set

up and further verified. Through an analysis of the effect of the BSC on corporate performances and individual attitudes and behaviors, it was found that the adoption of the BSC positively increased the abilities of the companies and enhanced their performance in different perspectives:

- From a learning and growth perspective, the adoption of the BSC would allow companies to effectively use market information to understand customers' needs and wants, make corporate goals more compliant with social needs, and improve corporate reputation and brand image.
- From an internal process perspective, the adoption of BSC would effectively improve the standardization and systematization of service delivery and further reinforce the overall working environment.
- From a customer perspective, the adoption of BSC would create positive customer sentiment, promote customer's long-term support, and enhance customer satisfaction and loyalty.
- From a financial perspective, the adoption of BSC would be beneficial for the promotion of activities, improvement of profitability, and the productivity of facilities.

Additionally, this study developed a number of KPIs for validity and reliability based on the four dimensions of the BSC measurement and the scale, and these indicators may serve as a useful and practical tool for the UAE and KSA business sectors. This scale can be a reference for further research on performance measurement.

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### Further reading

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