Testing the Relationship between Strategic Consciousness and Organizational Excellence A case study at Duhok Polytechnic University

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Abstract

This study aims to examine the relationship between strategic consciousness (SC) and organizational excellence (OE) in the selected technical institutes at Duhok Polytechnic University (DPU) that constituted the research sample. Duhok Polytechnic University was selected as the only university located in the governorate of Dohuk that runs bachelor's and technical diploma programs as well as several other short-term specializations courses leading to certification. The current study examined two main variables: the independent variable strategic consciousness consisting of three dimensions reframing, reflection, and system thinking and the dependent variable of organizational excellence. For the purpose of data collection, a questionnaire survey was administered to a total of 77 respondents (university leaders) from 6 technical institutes at DPU. Findings from the study indicate that the three dimensions of strategic consciousness were present and significantly related to organizational excellence in the selected technical institutes.

Keywords: strategic consciousness, organizational excellence.

Introduction

The 21st century is riddled with challenges as well as possibilities where the organizational landscape and innovative business models are subject to constant change due to information explosion. In this context, it is imperative that managers and business people be perceptive enough to recognize the change in the business environment and be prepared to take the measures necessary for help the organization face new challenges (Ajmal & Lodhi, 2015). In the past twenty years, society has witnessed the emergence of a new function of higher education that tasks universities to serve society and to be the driving force of the economy and promoter of the quality of life of its citizens. It is worth noting that while this new function does not relieve universities' of their historical role as the "conscience of society", it urges them to take on a more pragmatic role by providing qualified human resources and expert knowledge. These inevitable changes will directly impact how higher education institutions function (Gibbons, 1998).

In light of the current era of scientific and technological developments in various fields of science, the development of higher education institutions is no longer an option but a necessity. Given the desperate need for preparation of technical personnel, scientific, cultural, professional, and human energies, higher education institutions all around the world face the unavoidable challenge of implementing the required changes to cater for this need. It is here that the role of consciousness as a strategic perspective emerges. Through this consciousness, educational organizations become able to devise and carry out strategic plans that enlighten them about how to adapt to the new era and face the various environmental challenges in their endeavor for achieving excellence and distinction.

Strategic Consciousness

The 1980s saw the emergence of the use of confidence in research on consciousness. One example of early research on non-conscious perception is the seminal work of Cheesman and Merikle (1984, 1986) in which the participants' conscious awareness of visually presented stimuli was measured using confidence ratings. The use of confidence ratings today is common practice in several experimental paradigms in the realm of consciousness research, i.e. implicit learning and perceptual discrimination tasks. Here, the focus of interest is the degree of resemblance between confidence and the accuracy of one's performance (Norman & Price, 2015). Several definitions and applications are often used for the term consciousness. One definition may refer to a person or other living creature with the quality of being awake or responsive. The term may also be used to indicate awareness of a phenomenon or one's surroundings. Another equally valid definition suggests the presence of mental states such as the ability to perceive, feel, and think completely district from unconscious mental states. Rosenthal (2015) stresses that these overlapping definitions must be differentiated from one another when evaluating the major theories that aim to describe consciousness. Not surprisingly, various business organizations have tried to take advantage of this term by including it within their business contexts, knowing that every organization and its staff must be conscious and aware of the events taking place in its surroundings, and as such, be able to adapt, respond and achieve excellence.

A number of recommendations and theoretical frameworks have been put forth in the literature on organizational consciousness that act as guidelines to study this paradigm. However, it is worth noting that due to the presence of different definitions of consciousness, the proposed guidelines need to be interpreted according to the context in which the concept of consciousness is used. It is therefore inevitable that debates may occur among specialists on how to define and measure a firm's potential for consciousness. Campion and Palmer (1996) proposed that organizational consciousness is embedded an organization's culture, ethical values, perception of social responsibility, and its numerous stakeholders. A paradigm of organizational consciousness is advantageous in that it not only makes corporate actions and trends easier to understand it is also advantageous for strategic planning. Besides, there seems to be agreement among researchers that organizational consciousness involves values, business ethics, culture, corporate social responsibility, and diverse stakeholders as precursors in the framework. As Ajmal and Lodhi (2015) stated various corporate actions including strategic decision making, global thinking, procedural justice, and so on are dependent upon this framework.

Successful implementation of plans requires strategic consciousness on the part of individuals within an organization. The presence of people with strategic consciousness minimizes the time an organization takes to react to changes which in turn is crucial the strategic planning to achieve its goals (Çetin, 2012).

Moreover, strategic orientation and consciousness are key factors in a firm's ability to create sustainability by taking a strategic position. In literature, awareness, orientation, or consciousness is referred to as the cognitive support crucial for the successful application of strategic management (Turkay et al., 2012). As strategic consciousness is closely affiliated to the way strategic issues are interpreted, it is profoundly subject to and affected by managers' ability to efficiently interpret what counts as strategic (Thomas & McDaniel Jr, 1990).

Naktiyok et al. (2009) believed strategic planning processes are strongly affected by strategic consciousness. Despite the importance of strategic consciousness, there is a dearth of empirical research on strategic consciousness in different industries. According to Hannon and Atherton (1998), strategic consciousness can be defined at an organization's ability to foresee environmental change and implement the necessary planning. Researchers converge on the belief that the extent to which managers are aware of the perceived environment can affect their ability to plan efficiently. Strategic consciousness is also viewed as a structure consisting of "reframing, reflecting, and system thinking" competencies (Naktiyok et al., 2009). The currently study exploited these three-fold competencies or dimensions to measure strategic consciousness in DTU technical institutes.

- **Reframing**

According to Naktiyok et al. (2009), reframing as a cognitive skill refers to a person's ability to evaluate or consider phenomena, happenings, and factual information from different points of view. It also refers to what extent company personnel are aware of their strengths and weaknesses. Reframing may also mean whether a person is capable of incorporating different perspectives, cognitive models, frames, and paradigms in new ideas and actions (Pisapia et al., 2005).

- **Reflection**

Pisapia et al. (2005), believe that reflection refers to a person's ability to use experiential, perceptual, and informational knowledge to associate logical and rational thinking by evaluating past events and creating instinctive rules about how to act in the future. Boud et al. (1985), on the other hand, viewed reflection was indispensable to any kind of learning. The author regarded reflection as a versatile phenomenon with an effect similar to the one generated by experience-based learning. Therefore, reflection is crucial to a person's ability to synthesize, integrate and appropriate knowledge, validate personal knowledge, develop a new affective state, and decide whether to initiate a new activity.

- **System Thinking**

System thinking is a view that describes one's ability to generalize and develop a general view to problem solving. In system thinking all the components of a system governing a group's behaviors, relations, interactions, and the entire social networks deserve consideration (Halis et al., 2010; Turkay et al (2012). In system thinking, attention is paid to the entirety of an organization to develop a general approach necessary for problem-solving. Pisapia et al. (2005) proposed that "systematic thinking" involved a holistic view of the system that accounted for the diverse elements, qualities, and relationships that forge the way systems behave.

Organizational Excellence

Excellence is a distinct source such as a person, a technology, or a unique method exclusively owned by an organization. Organizational excellence is an investment in education in general and higher education, in particular that is vital to an organization's success in maintaining excellence in all aspects of its activity defined by a set of criteria. Corporations achieve excellence through a number of practices including self-appraisal to boost the efficacy of the organization, improve its competitive advantage, maintain its flexible working environment, and ensure the participation and cooperation of all personnel in each section of the organization (Shawqi& AL-kharsha, 2008).

In Dahlgaard and Dahlgaard's view (1999), one way to maintain organizational excellence is to deploy people, partnerships, processes, and products that are excellent, hence 4 P's. However, top management must motivate the personnel's commitment to organizational excellence. Moullin (2007) referred to organizational excellence as the managers' outstanding ability to manage their organizations and deliver value to their stakeholders. In this view, organizational excellence refers to outstanding practices such as innovation and improvement that organizations undertake to achieve the ultimate goal (organizational performance). The European Foundation for Quality Management views organizational excellence as the practice of clarifying the effect of independent variables on the performance of organizations with the ultimate goal of developing a set of strategies and practices (innovation) to achieve optimum organizational performance rather than to achieve recognition, prizes, and medals (Van Rompuy, 2012).

Statement of the Problem

The higher education system in post-war Iraq has made a remarkable development and rapid progress in the face of the existing sociopolitical as well as military challenges that the country has had to grapple with in recent years. It is encouraging to see that interest in the development of institutions of higher education has become a necessity. This interest is driven by the desperate need to usher Iraq into the current era of scientific and technological developments. A key player in helping the country to keep up with the more developed countries in this regard is Iraq's higher education system. The country's universities are now playing a unique role in the progress of Iraqi society by proving technical, scientific, cultural, and professional individuals.

As one of the newly established higher education institutions in Iraq, Duhok Technical University straddles geographically between the districts of Duhok Governorate. Duhok's unique position requires that it develop future strategic plans that enable the university to achieve excellence by exploiting its various resources in a bid to respond to the requirements and challenges of the educational environment. Accordingly, this study undertook to answer the following questions pertinent to the research problem.

- What contributions can institute leaders make to strategic consciousness and how can they help create it?
- Does strategic consciousness in selected institutes lead to improved organizational excellence?
- Do Duhok Polytechnic University institutes have a suitable environment that renders the university as an excellent organization?
- How do strategic consciousness and organizational excellence correlate in the selected institutes?

Research Objectives

This study aimed to measure to what extent strategic consciousness and organizational excellence were interrelated in the selected technical institutes at Duhok Polytechnic University. After a discussion of the origin of this concept in the literature review and an overview of the definitions, terms and classifications, and an integrated view of the rationale of the study, the researcher attempted to undertake the following:

- Presenting a (theoretical) framework for strategic consciousness and its role in achieving organizational excellence in selected technical institutes.
- Presenting a (theoretical) framework for organizational excellence.
- Measuring the level of strategic consciousness and organizational excellence in selected technical institutes and determining whether the university environment is conducive to achieving a high level of excellence

Hypothesis Formulation

H1: There is a significant relationship between strategic consciousness and organizational excellence in selected technical institutes.
H2: There is a significant relationship between dimensions of strategic consciousness and organizational excellence in selected technical institutes.

Method

To discuss and address strategic consciousness and organizational excellence in selected technical institutes at Duhok Polytechnic University, both empirical studies and theoretical facts were applied. Empirical and theoretical approaches are essential to determine the sites of weakness or defects in the strategic consciousness and the extent, to which the leaders achieved their concept strategy in those organizations, and to measure how they relate to their organizational excellence. A vast body of research comprising literature reviews, papers, brochures, and web-based theories informs the theoretical framework in the study. The main search keywords were strategic consciousness, organizational excellence.

Research design and sampling

The study reported here used a quantitative research design. The study sample included 6 technical institutes affiliated with Duhok Polytechnic University as shown in Table 1 comprising a total of N = 77 respondents including university officials from different positions (dean, associate dean, head of department, unit managers). Those institutes were selected due to their geographical distribution over the districts of Duhok governorate and the presence of various scientific departments. The researcher chose to conduct his research at Duhok Technical University as it is the only university in Duhok governorate that awards a technical diploma in addition to a bachelor's degree in technical sciences. Despite its establishment in 2012, the university has taken big strides in responding to the great demand for educating technicians and professionals in the Duhok governorate.

Data collection procedure

The instrument used in the study for data collection was a five-point Likert Scale questionnaire developed to survey the respondents' views on organizational excellence and strategic consciousness. Participants could choose numbers ranging from 1 to 5 with 1 corresponding to strong disagreement, and 5 representing strong agreement. The questionnaire was designed and validated based on previous research in the field of strategic consciousness and organizational excellence (Alhefiti et al., 2019; Halis et al., 2010; Turkay et al., 2012). SPSS-26 was used to analyze the data obtained from the technical institutes and calculate the statistical part of the study including frequency, distribution, and correlation analysis.

Results

- **Analyzing demographic data**

Table 2 provides a demographic description of the participants with regards to their gender, age, educational level, total work experience, and work experience at the current place of employment. It can be noticed that the majority of the participants were male (81.8%) while female respondents made up only 18.2% of the total. It is worth noting while this male-to-female ratio may appear abnormal in more developed countries, it is a normal distribution in developing or third world countries such as Iraq due to the social, values, and cultural restrictions that are imposed on women. The demographic data were also categorized into several age groups. Results indicated that slightly over half of the sample population (50.6%) aged between 31-40 years old. This meant that a considerable cross-section of the university leaders were young motivated individuals who would be useful assets for the university. Those aged 41-50 constituted 33.8% of the total study sample while only 9.1% of the respondents were 51 years of age and above, indicating that only a tenth of the university's management was made up of highly experienced and knowledgeable personnel as DPU's most important resources. As regards the level of education, those who held PhDs and masters qualifications represented 59.8% of the sample population. This constituted a major advantage for DPU as the majority of the university leaders were highly educated. Approximately a quarter of the respondents (23.4%) held an undergraduate qualification, and 16.8% had never completed a university degree. On a similar note, out of 77 university leaders from 6 technical institutes who participated in the study, the majority (71.4%) had 11 or more years of work experience. Those with 6-10 years of word experience represented nearly a quarter of the population with 24.7% whereas only 3.9% of the respondents had worked less than 3 years. The outstanding difference in favor of highly-experienced leaders was another major strength for the university leadership. Despite the presence of leaders with extensive experience, most leaders (44.2%) had been in employment for less than 3 years at DPU (see Table 2). This was accounted for by the fact that the university was newly established and many of the colleges had only recently become operational.

- **Descriptive research variables**

To describe the research variables descriptive statistics measurements (Percentage, Frequency, Mean, and Standard Deviation) were calculated as demonstrated in Table 3. The figures for the main dependent and independent variables of this study are provided in the table. As can be observed, the mean and Std. Deviation were measured at 3.91 and 0.423 respectively for Strategic Consciousness and 3.66 and 0.760 for the dependent variable Organizational Excellence.

Table 4 demonstrates the main dimensions of the independent variable strategic consciousness. When asked about the dimensions of organizational excellence, most respondents identified Reframing as the primary focus which is indicated by RII 0.804 (Relative Importance Index) and an importance level designated at H in the table. The Mean and Std. Deviation for Reframing dimension were calculated at 4.02 and 0.535 respectively. System Thinking, on the other hand, ranked second in the survey with an RII of 0.774 and the Importance Level of H-M. The figures for Mean and Standard Deviation remained at 3.87 and 0.550. The figures for Reflection were the weakest compared to the other two dimensions. While the RII was calculated at 0.768, the Level of Importance remained H-M. While the Mean was measured to be 3.84, the Standard Deviation was calculated at 0.440.

- **Testing Research Hypotheses**

H1: There is a significant relationship between strategic consciousness and organizational excellence in the selected technical institutes.
The Pearson correlation was used by the researcher to examine the significance and direction of relations between strategic consciousness and organizational excellence. Table 5 explains the statistically significant Pearson correlations between SC and OE. According to the results demonstrated in the table, the 0.717**correlation was significant at the 0.001 level (two-tailed). Accordingly, **H1**was confirmed.
H2: There is a significant relationship between the dimensions of strategic consciousness and organizational excellence in the selected technical institutes.

Table 6 displays the relationship between the dimensions of strategic consciousness and organizational excellence. Based on the results shown in Table 6, there was a significant relationship at the 0.001 level (two-

tailed) between the dimensions of SC and OE. The highest relationship (.709**) was obtained for Reflection, followed by System Thinking and Reframing with correlation measuring at (.643**) and (.457**) respectively. Accordingly, **H2** was confirmed.

Conclusion

The importance of strategic consciousness as a strategic weapon to formulate strategic orientation and future planning for higher education organizations has been discussed as a critical ingredient for organizations seeking to ensure improvement and achieve high levels of excellence. The current study attempted to develop a conceptual framework for describing strategic consciousness and its dimensions using previous literature in this field. The study focused on the higher education sector in developing countries like Iraq with its complex and volatile environment. There is ample evidence to believe that the education sector in this country faces various challenges caused by various sociopolitical and economic obstacles Iraq has to overcome on its path to maintain stability and growth. Such an environment requires that the organizations in the education sector should be able to adapt themselves if they are to achieve excellence in their enterprise.

Through careful examination and analysis of the orientations of the university leaders at DPU, it was realized that most of the basic dimensions of strategic consciousness were present in varying degrees. Yet, the question remained whether the availability of these dimensions effectively leads to achieving organizational excellence. The data analysis demonstrated high levels of relationships and the presence of a conducive environment. However, it was discovered that long-term government strategizing as a key to promoting organizational excellence was often overshadowed by day to day tactics. In conclusion, the current study managed to establish a benchmark and make a valid contribution for improving the leadership of DPU technical institutes. In this light, the researcher hopes that future research will be encouraged to explore other variables that the current study did not address. These studies will seek to examine innovative ways to improve excellence with regards to the strategic ability of the university and its institutes.

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Table 1. Study Samples

Technical institute	Year Founded	Number of respondents	Geographic Location	Departments
Duhok Technical Institute	1988	11	Duhok city	Nursing, Surveying, Mechanics, Road Construction, , Pharmacy, Medical Laboratory Technology, Information Technology
Shekhan Technical Institute	2007	12	Shekhan	Business Administration , Accounting, Information Technology
Amedi Technical Institute	2004	15	Amediya	Tourism Management, Information Technology, Business Administration, Medical Laboratory Technology, Marketing Management
Zakho Technical Institute	2010	16	Zakho	Information Technology, Banking Management, Hospital Management, Nursing, Medical Laboratory Technology, Refrigeration and Air Conditioning, Electrical, Surveying, Petroleum
Bardarash Institute	2009	16	Bardarash	Health Management, Business Administration, Information Technology, Computer Networks, Nursing, Accounting
Shingal Technical Institute	2014	7	Shingal	Nursing, Accounting

Table 2. Demographic Profile of Respondent

	F	%		F	%		F	%
GENDER			**LEVEL OF EDUCATION**			**WORK EXPERIENCE**		
MALE	63	81.8	PHD	8	10.4	5 AND LESS	3	3.9
FEMALE	14	18.2	MASTER	38	49.4	6-10	19	24.7
AGE			HIGH DIPLOMA	0	0	11 AND MORE	55	71.4
30 AND LESS	5	6.5	BACHELOR	18	23.4	**CURRENT POSITION**		

31-40	39	50.6	TECHNICAL DIPLOMA OR LESS	13	.168	WORK EXPERIENCE		
						3 AND LESS	34	44.2
41-50	26	33.8				4-7	28	36.4
51-AND MORE	7	9.1				8 AND MORE	15	.194

Table 3. Means, Standard Deviations for SC and OE

	N	MEAN	STD. DEVIATION
INDEPENDENT (SC)	77	3.91	0.423
DEPENDENT (OE)	77	3.66	0.760

Table 4. Means, Standard Deviations, RII for Strategic Consciousness Dimensions

	N	Mean	Std. Deviation	RII	Importance level	Ranking by category
Reframing	77	4.02	0.535	0.804	H	1
Reflection	77	3.84	0.440	0.768	H-M	3
System Thinking	77	3.87	0.550	0.774	H-M	2

Table 5: Correlation coefficient between SC and OE

		SC	OE
SC	PEARSON CORRELATION	1	
OE	PEARSON CORRELATION	0.717**	1

**. Correlation is significant at the 0.01 level (2-tailed).   N= 77

Table 6. Correlation coefficient between Reframing, Reflection, System Thinking and OE

		REFRAMING	REFLECTION	SYSTEM THINKING	OE
REFRAMING	PEARSON CORRELATION	1			
REFLECTION	PEARSON CORRELATION	0.524**	1		
SYSTEM THINKING	PEARSON CORRELATION	0.519**	0.570**	1	
OE	PEARSON CORRELATION	0.457**	0.709**	0.643**	1

**. Correlation is significant at the 0.01 level (2-tailed).   N=77