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The relationship between strategic leadership and intellectual capital management: Evidence from the faculty members at the Northern Border University

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ABSTRACT

The purpose of this study is to analyze the relationship between strategic leadership and intellectual capital management from the point of view of the faculty members at Northern Border University. The study used descriptive and analytical methodology. Questionnaires were distributed to 245 faculty members at the Northern Border University. The Statistical Package for Social Sciences (SPSS) is used to analyze the data and test hypotheses. The study concluded that there was an adequate and acceptable amount of the special practices related to the variables of the study, mainly: (strategic leadership and intellectual capital management). Moreover, there are no statistically significant differences in the perception of faculty members towards the study variables (strategic leadership and intellectual capital management), due to demographic variables (gender and academic level), as well as a positive correlation between both strategic leadership and intellectual capital management. Moreover, the study found that the most critical dimensions of the strategic leadership that affect the management of intellectual capital were the investment of strategic capabilities and talents, strategic vision, implementation, and focus, respectively. Strategic leadership with its different dimensions (strategic vision, implementation, focus, investment of capabilities, and strategic talent) explains 82.1% of the variance in intellectual capital management. The study recommended the dissemination of the organizational culture that focuses on strategic leadership parallel with the policies and work procedures besides, the focus on the strategic dimension to managing intellectual capital during the design and development of the university strategy. Finally, supporting talented people who have the ability to create visions and ideas has a positive impact on the overall performance of the university.

1. Introduction

The world has witnessed a wide range of developments and changes in recent years. These changes have several effects on the local, regional, and international situations of organizations. The international environment has become more complicated than before. Indeed, different challenges occurred, which required a strategic-oriented leadership style that can handle these challenges and achieve the goals and aspirations of development plans with the strongest will and consideration for the future. The vital role of the university leadership imposes the necessity for developing and modernizing managerial roles and patterns of the university to meet the challenges forced by environmental changes. The most significant leadership style is the strategic leadership style, which can formulate a vision for development and creativity through a strategic approach that looks forward to the future and depends on intellectual capital in its different dimensions.

Given the importance of both strategic leadership and intellectual capital management, with their impact on the educational process as a whole, this study aims to identify the relationship between strategic leadership and intellectual capital management from the perspective of the faculty members of the Northern Border University.

Most of the organizations in our present time face many challenges as a result of the rapid and

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continuous changes in science and technology. With regard to the numerous challenges faced by these organizations, especially the educational organizations, the traditional administration is unable to cope with these changes. The thing requires relying on modern management methods that enable them to achieve their objectives. This study seeks to answer the following questions:

"What is strategic leadership and the roles it plays in the organization? and what is the relationship between strategic leadership and intellectual capital management, and to what extent does strategic leadership affect intellectual capital management?

Based on these questions, the problem of the study is focused on whether there is the existence of the relationship between strategic leadership and intellectual capital management, and to what extent the strategic leadership contributes to the development of intellectual capital.

Moreover, the present study aims to explain the important role of strategic leadership and intellectual capital management and its impact on the organization's ability to meet the challenges posed by environmental changes. Also, the study attempts to build a theoretical framework based on the variables of the study, as well as explaining the interactions and influences that illustrate the relationship between both strategic leadership skills and intellectual capital management. The identification of the nature of strategic leadership and intellectual capital management practices is representing as another objective besides the provision of some suggestions that may contribute to increasing the level of influence of strategic leadership skills on the intellectual capital management.

Furthermore, the significance of this study represents in the attempt of the study to test the relationship between strategic leadership and intellectual capital management. In addition, the study emphasizes the impact of both strategic leadership and intellectual capital on strengthening the organization's ability to achieve objectives and to face challenges. On the other hand, the study investigates obstacles that challenge strategic leadership and intellectual capital management. Finally, the present study is considered a genuine contribution to the studies of strategic leadership and intellectual capital management.

2. Theoretical framework of the study

2.1. First: Strategic leadership

The leadership issue with its philosophical and scientific dimensions is regarded as an important part of the administrative literature which addresses strategic management in particular. The ability to direct, motivate, contain critical situations, and to shape the future direction of any organization is primarily depends on the leadership style. A leader of a certain behavior can inevitably influence the formation of the vision to the organization.

Furthermore, the strategic management topic has attracted the attention of many researchers, who addressed the role of strategic leadership and defined the long-term direction and objectives of the organization (Bass, 2007).

Hence, the concept of strategic leadership is remained a profound concept, with a set of practices that contribute effectively to the development of workers and lead to the achievement of employees' objectives and strategic objectives of the organization.

Strategic leadership differs from other types of leadership in several key points (Hughes and Beatty, 2005):

- Strategic leadership is broader in terms of scope and field.
- The impact of strategic leadership is remaining longer than other types of leadership.
- The strategic leader is distinguished from the ordinary leader by his strategic thinking.

Macmillan and Tampoe (2000) viewed strategic leadership as "the process of enhancing the organization's uniqueness and distinction in order to achieve a competitive advantage compared to competitors. Rowe (2001) pointed out that strategic leadership is referred to as "the ability to influence others to make decisions that improve the organization's viability in the long term."

Hitt and Duane (2002) defined strategic leadership as "the leader's ability to anticipate, visualize, maintain flexibility, and encourage others to create strategic change as necessary."

Guillot (2003) saw strategic leadership as "the ability of an experienced leader, the master of wisdom and vision to devise and implement plans as a result of making decisions in a mysterious, volatile and complex strategic environment."

Mungonge (2007) argued that strategic leadership is "the ability to sign, visualize, maintain flexibility, and enable others to make a strategic change whenever necessary." Hough and Scheepers (2008) referred to strategic leadership as a series of decisions and activities, which are oriented in nature to bring into line the past, present, and future of the organization. Zoogah (2009) emphasized that there is a difference between leadership and strategic leadership. The first relates to any level of management in the organization, while the second relates to the senior management of the organization.

Magalhaes (2011) believed that strategic leadership is "leadership that is linked to the strategic planning process, choosing the right pathways wisely and making changes whenever necessary."

In light of the studies mentioned above, we can refer to strategic leadership as "the main determinant of organizations goals and orientations, and this thing is only possible through the unique

ability to make strategic decisions and the flexibility to deal with future changes in a changing world in order to improve the organization's growth and success."

Also, the importance of strategic leadership lies in the desire to satisfy all parties' demands, even if their wishes are contradictory, Strategic leadership with capabilities and qualifications is keen to achieve a strategic balance between aspirations and cross-cutting needs, as well as its contribution to the overall performance improvement of the organization in the light of the internal and external environment requirements (Bass, 2007).

2.1.1. Dimensions and practices of strategic leadership

There is a range of dimensions and practices that strategic leadership performs, and these dimensions and practices overlap together to achieve the strategic success of the organization, where there are many models that explain the practices and dimensions of strategic leadership. Covin and Slevin (1988) focused on the dimensions of risk and innovation and the degree of rigidity or flexibility of the organization. Thompson (1997) asserted seven dimensions of strategic leadership: Strategic vision, problem-solving, politics, communication, management, culture, and change management.

Neumann and Neumann (1999) developed a strategic leadership model consisting of three sub-dimensions whose primary skills are strategic vision, focus, and implementation.

Hough and Scheepers (2008) explained that strategic leadership practices and dimensions are human capital development, effective use of new technology, appropriate strategic behavior, development of organizational structures, and new organizational culture. Pisapia (2009) developed a model of strategic leadership that includes four dimensions: the transformational dimension, the administrative dimension, the political dimension, and the moral dimension. Cathy (2010) believed that there are several strategic leadership practices: Creating an organizational vision, establishing core values of the organization, developing strategies and managing the organizational structure, providing an enabling environment for learning and organizational development, and acting as an agent for the organization.

Volberda et al. (2011) referred to six strategies and dimensions of strategic leadership, which include: strategic direction, investment of strategic capabilities and talents, development of human capital, support of organizational culture, empowering of ethical practices, and setting of regulations. After reviewing the models mentioned above, the author relies on the Neumann and Neumann (1999) model, which included three dimensions of strategic leadership: Strategic vision, focus, implementation, as well as strategic dimension and strategic investment, because of its critical impact on institutional excellence.

In details, these dimensions will be reviewed as follows:

1. Strategic vision: It means the ability of the strategic leader to realize the future vision of an organization in an integrated and complete manner. This skill or ability quality is represented in the change in the current situation, the desire to adopt new goals, the ability to identify opportunities in the environment in which the organization works, and the ability to develop long-term strategies in order to exploit opportunities.
2. Concentration: It refers to the ability of the leader to shift the organization into its new position. This new approach includes the ability of the leader to convince the subordinates to adopt an organization's vision, the ability to develop guidance, the ability to identify new priorities, and the ability to form teams capable of implementing and motivating employees.
3. Implementation: The term denotes the ability of the leader to develop strategic objectives and plans, which include the ability to encourage the organization's members to actively participate in the implementation of the plans, and the ability to inspire and motivate the organization to achieve high performance. As well as the ability to provide accurate feedback in short for the individuals, teams, and units so as to work in line with the organization's vision, and to lay a foundation for the effective control to implement strategic plans and achieve objectives.
4. Investment in strategic capabilities and talents: The investment in strategic capabilities and talents means the ability of the leader to discover, care, and embrace the capabilities and talents of individuals, and to bring out their best activities and creativity, by providing the appropriate work environment necessary to stimulate and develop talents permanently. What is should be noted here is that this last dimension is suggested by the author due to its importance in achieving the objectives of the strategic plan in a simple way.

2.2. Second: Intellectual capital

The concept of intellectual capital is one of the broad concepts which refer to the potential creative outputs in the distinct human minds, and it is not linked to a particular administrative level, as it represents a set of cognitive and innovative capacities that can exist in all administrative levels (Allee, 2000).

Investment in intellectual capital plays an important role in making a competitive advantage for intellectual assets by strengthening human potentials and capabilities and helping people to discover their potential capabilities. Moreover, to enable intellectual capital management to contribute to the achievement of competitive advantage of the organization.

Therefore, the organization should set its programs in accordance with the strategy and

requirements of the organization (Firer and Williams, 2003).

Stewart (1997) defined it as the total permanent knowledge of the organization, as well as the tools used to make use of it. Hansen et al. (1999) argued that intellectual capital is "competitive assets that undertake the process of creative and strategic development based on innovation and creativity, which is the key to continuity in a changing work environment."

Marr et al. (2004) argued that intellectual capital is a set of knowledge assets that can exist in the organization and effectively contribute to improving its competitiveness and increasing value to stakeholders in the organization.

Hashmi and Naqvi (2012) considered intellectual capital as the aggregation of intangible elements (experience, experience, skill, creativity) that enables the organization to become innovate and compete. In light of the above-mentioned studies and definitions, we can refer to intellectual capital as the total intellectual, technological, organizational and organizational potential of the organization, as well as the network of customer relations that enables the organization to achieve excellence in comparison with competing organizations in pursuit of the objectives for which it was found.

2.2.1. Elements of intellectual capital

Intellectual capital is divided into three components: Human capital, structural capital, and relational capital (Stewart, 1997). This can be addressed in the following:

1. Human capital: Human capital represents the store of knowledge for individuals in the organization, which helps them to achieve outstanding performance when faced with difficult situations and to propose solutions in unconventional ways (Bontis, 2001). Human Capital is the heart of intellectual capital. It is the source of innovation and improvement, but it is a difficult component for measurement (Kaya et al., 2010). Human capital is, therefore, the human resource, capabilities, knowledge, and previous expertise of the organization.
2. Structural capital: Structured capital includes organized knowledge, classified and coordinated expertise that is used through databases, patents, structures, systems, and processes (Subramaniam and Youndt, 2005). Structural capital is the organization's mechanisms and structures that assist in supporting employees in their pursuit to reach an advanced level of performance (Bontis, 1996), thereby improving the overall performance of the organization.
3. Relational Capital: Relational capital refers to the organization's distinct and ongoing relationships with the individuals and organizations that it serves them, so it maximizes the value of the organization by creating customer satisfaction and deepening loyalty (Mouritsen et al., 2001). The relationship capital reflects the organization's relationship with its customers, and this relational capital is measured by the strength of the relationship, robustness, and customer satisfaction (Cabrita and Vaz, 2006).

3. Literature review

According to Shrivastava and Nachman (1989) explained that the aim of the study was to test the extent to which strategic leadership patterns were adopted in a number of private companies. The study relied on data related to 27 companies operating in various fields. The study concluded that there are a number of reasons that make the leader adopt a certain pattern of leadership.

The study of Neumann and Neumann (1999) sought to measure the impact of the strategic leadership style adopted by an executive manager on the performance of the institution. The study was conducted on a sample of private higher education leaders in the United States. The impact of strategic leadership patterns was measured by several indicators: Resource growth, degree of improvement of processes, and quality in the institutions surveyed. The study concluded that there is a direct impact of the strategic leadership style in performance indicators and that certain patterns increase the organization's ability to grow and increase its resources.

Authors Phipps and Burbach (2010) also discussed the impact of strategic leadership on organizational performance in nonprofit organizations. The study emphasized that the application of strategic leadership contributes to the improvement of organizational performance by interpreting fluctuation in organizational performance, benefiting from learning organizations' capabilities, the ability to change, developing quality of decisions, and administrative and organizational innovation.

The study of Lear (2012) attempted to test the relationship between strategic leadership and strategic orientation in high performing institutions in South Africa. The study concluded that strategic leadership influences strategic orientation. The study also asserted that effective strategic leadership helps organizations to improve performance.

The investigation of Carter and Greer (2013) focused on the identification of the gap between theoretical knowledge and practical application of strategic leadership and understanding the impact of strategic leadership on organizational performance. The study concluded that strategic leaders faced by demands from stakeholders that strategic leadership has to satisfy especially the strategic leadership has a positive impact on organizational performance.

The attempt of Deeboonmee and Ariratana (2014) aimed at identifying strategic leadership levels, effectiveness levels in schools and the relationship between strategic leadership performance and school effectiveness in Thailand. Strategic leadership level was studied through the

strategic description, strategic implementation, organizational culture, evaluation, and control. The study found that the relationship between strategic leadership and school effectiveness is positive and enhances its contribution to the improvement of schools.

The author Abuzaid (2016) sought to test the impact of strategic leadership in terms of (vision, focus, and implementation) on brilliant organizations. Results indicated that vision, focus, and implementation as dimensions of strategic leadership had a positive impact on organizational creativity, and that dimension of vision was most influential and then the implementation dimensions. Whereas, the dimension of focus had less effect. These results reflect the need for a clear vision of the strategic leaders as well as their commitment to the implementation process to achieve organizational excellence that gives their organizations superior performance and maintain their chances of survival.

The study of Bilgin et al. (2017) focused on verifying how civil society organizations followed the strategic leadership style, and at what level? The study applied to a group of Turkish civil society organizations having international operations. The study concluded that civil society organizations had effectively implemented strategic leadership in the side of identifying and developing core competencies, creating a sustainable and effective organizational culture, and monitoring strategic activities in a balanced way.

On the other hand, Mitchell (2010) attempted to test the intellectual capital management model derived from the organization's vision and strategy. The study found that although most of the specific aspects of the study model were present in the company, there was no recognition from the organization's management to the intellectual capital management due to lack of interest in change for the behavior of the staff of the organization. Puhakka (2010) examined the relationship between intellectual capital and the strategies used to identify successful business opportunities for entrepreneurs. The results of this study showed that entrepreneurs have management experience that enables them to know the different future trends facing their businesses. Moreover, they rely on their knowledge and creativity to reduce the competitive gap and enable them to predict opportunities that help them narrow that gap. Gordillo and Ramirez (2014) sought to provide a model for estimating and valuing intellectual capital in Spanish universities by providing a set of intellectual capital indicators to help universities provide useful information to their shareholders. The study identified the intangible elements that need to be measured besides the identification for the group of homogeneous indicators that measure intellectual capital.

In their study, Khalique et al. (2015) assessed the relationships between the intellectual capital sub-components and organizational performance of small and medium enterprises in the electrical and electronic industries in Pakistan.

The results showed the appropriateness of intellectual capital components and the degree of their effect on organizational performance. The results were significant, while the only component, which represented in human capital, was not proved to be significant and was not significant in influencing organizational performance.

Moreover, Dzenopoljac et al. (2017) attempted to study and analyze the relationship between intellectual capital and companies' performance. The research sample included a group of companies whose shares are traded by Forbes Middle East. The study concluded that the profits were heavily influenced by structural capital, while the market performance was affected by human capital.

Furthermore, Obeidat et al. (2017) aimed at studying the effect of intellectual capital on innovation in telecommunications companies in Jordan by mediating knowledge management. The study sample consisted of three telecommunications companies in Jordan. The study confirmed the mediation model because of the intellectual capital that had no direct impact on innovation. The results showed that intellectual capital had a significant impact on the management of knowledge and innovation. Ozkan et al. (2017) focused on the analysis of the relationship between intellectual capital performance and the financial performance of 44 working banks in Turkey between 2005 and 2014. The intellectual capital performance of the banks was measured by Value Added Intellectual Coefficient (VAIC), Capital efficiency and human capital efficiency positively affect the banks' financial performance, and the intellectual capital performance of the Turkish banking sector is generally affected by the efficiency of human capital.

The study found that capital efficiency and human capital efficiency affect the banks' financial performance positively. Also, the intellectual capital performance of the Turkish banking sector is generally affected by the efficiency of human capital.

4. Methodology of the study

The study was methodologically based on the descriptive-analytical methodology for the purpose of building a theoretical and conceptual basis for the concepts and variables of the study, namely strategic leadership, intellectual capital management, as well as studying and analyzing the data related to these variables and revealing the relationship between them.

4.1. Hypotheses of the study

H1: There are no statistically significant differences in the views of the faculty members on the variables of the study (strategic leadership-intellectual capital management) due to the demographic variables (gender-academic rank).

H2: There is no statistically significant relationship between strategic leadership and intellectual capital management in the area of application.

H3: There is no statistically significant impact of strategic leadership dimensions on the overall measure of intellectual capital management.

5. Study tool

In light of the study hypotheses and the independent variables, the author designed a survey list of 32 words. The survey list was divided into two parts:

The first part: measuring strategic leadership (independent variable) by using 17 phrases distributed across the different dimensions of the strategic leadership, namely the strategic vision which composed of five phrases, the focus which composed of five phrases, the implementation which composed of four terms and investment capabilities and strategic talents which composed of three phrases. The second part: Measuring the intellectual capital management (the dependent variable) by using 15 phrases distributed over the three components of intellectual capital management, human capital five phrases, structural capital five phrases, relational capital five phrases. The five-point Likert scale was used in the questionnaire that was divided into five criteria ranging from (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree). The five responses above were given scores 5, 4, 3, 2, 1, respectively.

5.1. Study population

The study population consists of all 1117 members of faculty members at the Northern Border University who are also faculty members at the time of the study.

5.2. Study sample

A random sample was selected from the university faculty members. A sample of the study population was selected by using the Robert Mason equation, with a population size of 1117 members, at 95% confidence level and error limits ±5%. The sample size was 286 faculty members, according to the following equation:

$$n = \frac{M}{\left(\frac{S^2(M-1)}{pq}\right)+1}$$

The questionnaires were distributed randomly to the study categories, taking into account their relative distribution. The correct validated retrieved questionnaires were 245, with a response rate of 85.7%. Table 1 shows the demographic characteristics of the study sample.

6. Study model

Fig. 1 shows the model of the study, which includes the variables of the study. With regard to the independent variable (strategic leadership), Neumann and Neumann (1999) scale was used, which includes three dimensions of the strategic leadership: Strategic vision, focus, implementation in addition to another dimension which is an investment of strategic capabilities and talents, because of its important impact on achieving institutional excellence. With regard to the dependent variable (intellectual capital management), it was guided by the views and literature of some writers such as Stewart (1997) and Bontis (2001). The paragraphs of this variable were formulated and developed to serve the purposes of the study.

Table 1: Demographic characteristics of the study sample (n=245)

Sample Distribution		Frequency	Percentage
Gender	Male	137	55.92
	Female	108	44.8
Academic Rank	Professor	7	2.86
	Associate professor	15	6.12
	Assistant Professor	99	4.41
	Lecturer	94	38.37
	Teaching Assistant	30	12.24

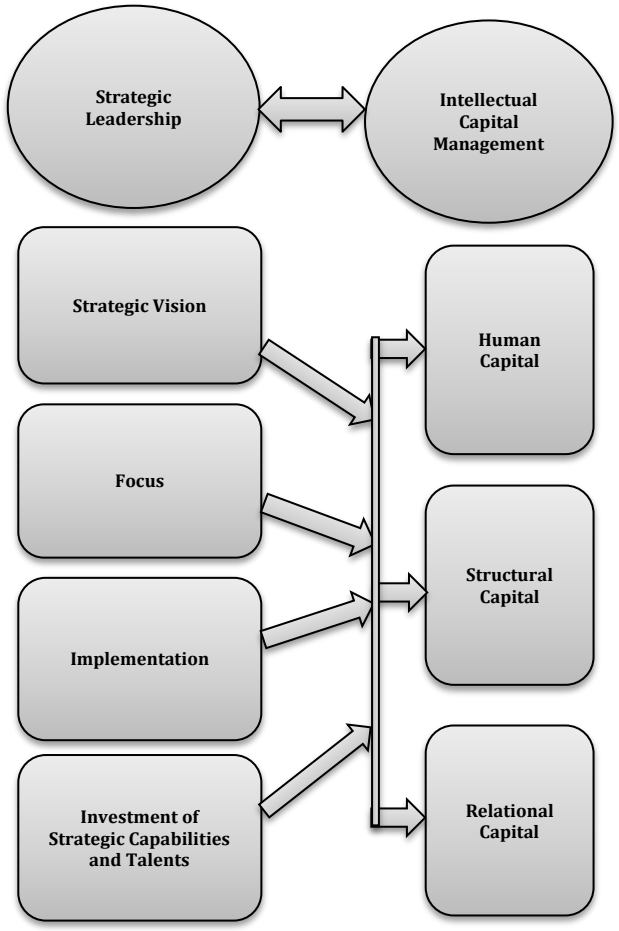

Fig. 1: Study model

7. Results and discussion

7.1. The reliability coefficient of Cronbach's Alpha

The Reliability Coefficient of Cronbach's Alpha was calculated for the study instrument (survey list).

Table 2 shows that the reliability coefficient values are acceptable for all parts. The reliability coefficient ranged between 0.810 for the second dimension of the first variable, "concentration" and 0.988 for the second variable, "intellectual capital management."

The value of the validity coefficient ranged between 0.900 for the second dimension of the first variable, "concentration" and 0.993 for the second variable, "intellectual capital management." From the above, we conclude that the data of the sample of the study has reasonable reliability, where the value of alpha exceeded 0.60% on all dimensions and parts, which indicates the stability of responses and the reliability of the results and dissemination of these results to the whole study population.

Table 2: Reliability coefficients of Alpha Cronbach and self-validation of the survey list

Parts	Elements	No. of items	Reliability Coefficient (Alpha)	Self-validity coefficient
Part One	Strategic Leadership (X)	17	0.847	0.920
First	Strategic vision (X1)	5	0.871	0.933
Second	Focus (X2)	5	0.810	0.900
Third	Implementation (X3)	4	0.893	0.945
Fourth	Investment of strategic capabilities and talents (X4)	3	0.967	0.983
Part Two	Intellectual Capital Management (Y)	15	0.988	0.993
First	Human capital (Y1)	5	0.982	0.991
Second	Structural capital (Y2)	5	0.936	0.967
Third	Relational Capital (Y3)	5	0.890	0.943

7.2. Descriptive statistics

The study relied on descriptive statistics represented by means and standard deviations.

From Table 3 that the views of the respondents about the elements of strategic leadership have gained an acceptable level of "I agree," ranging from minimum (3.525) to maximum (3.935), and the views of the study sample on the strategic leadership variable was 3.678. This means the views of the sample gained the level of agreement. It can be concluded the Strategic leadership dimension is in the area of existed. The implementation occupied the second rank with mean of 3.935 and this due to the leadership's commitment to set strategic objectives and plans and its ability to encourage human elements to actively participate in the implementation of the plans, as well as monitoring the implementation process and identifying the obstacles that prevent the process of effective implementation of the strategy (Thompson and Strickland, 2003). The element "focus" occupied the last position with mean of 3.560, due to the leadership ability of the university to adopt new visions and to convince the members of the university with that vision through effective communication with workers, and through identifying new priorities in addition to the formation of team works capable of implementing tasks.

Table 3: Descriptive statistics of strategic leadership dimensions

Elements	No. of Elements	Mean	Standard Deviation
Strategic vision (X1)	5	3.525	0.654
Focus (X2)	5	3.560	0.694
Implementation (X3)	4	3.935	0.960
Investment of strategic capabilities and talents (X4)	3	3.692	1.052
Strategic Leadership (X) (Total)	17	3.678	0.709

Table 4 presents the descriptive statistics of the components of intellectual capital management from the point of view of the sample of the study. It is clear that the views of the respondents on most elements of intellectual capital management gained an acceptable level of the phrase "I agree" on most elements ranging between 3,389 as minimum level and 3,728 as the maximum level. The views of the sample on the intellectual capital variable (total) reached 3.555 as a degree of agreement. It is then concluding that the intellectual capital management variable is sufficiently existed.

The human capital occupied the first position with a mean of 3.728, which reflects "agree." This is due to the employees' understanding and conviction to change job status with feeling to influence the organization in which they work. The relational capital ranked in the last with a mean of 3.389. This means that the opinions of the respondents in the sample ranged from neutral to I agree. This is due to the workers' need for more freedom in choosing the appropriate method for performing works and accomplishing tasks according to their abilities.

The human capital occupied the first rank with a mean of 3.728 which equivalent to the agree response, this result is due to the understanding among the sample of the about the necessity for change in job status of the respondents. On the other hand, the relational capital occupied the bottom class with a mean of 3.389. The thing means that the sample of the study ranged between neutral and agreed. The reason behind this result is the need for more concern with relationships among different community organizations, university clients, and beneficiaries.

7.3. Testing of the hypotheses

H1: There are no statistically significant differences for the views of the faculty members by (gender-academic rank) on the practices of (Strategic Leadership-Intellectual Capital Management) at the Northern Border University.

Table 4: Descriptive statistics of components of intellectual capital management

Elements	No. of Elements	Mean	Standard Deviation
Human capital (Y1)	5	3.728	0.966
Structural capital (Y2)	5	3.547	0.991
Relational Capital (Y3)	5	3.389	0.873
Intellectual Capital Management (Y) (Total)	15	3.555	0.934

7.3.1. First: Hypothesis test by gender

Table 5 shows that the mean of views of the respondents (females) was higher than the average of the views of the respondents (males) on the dimensions of the strategic leadership (vision, implementation, investment of strategic capabilities and talents) with an average of 3.80, 4.34 and 3.57 respectively for females. Whereas, the average of the male respondents being 3.68, 3.61, and 3.60, respectively.

The average views of the two study groups (male and female) were about 3.5.8 and 3.55 for males and females, respectively, and for a standard deviation of 0.666 and 0.731, respectively. There is a similarity in the average of the respondent views (males and females) around the dimension of (Focus) at an average of 3.56 and 3.55 for both males and females, respectively, and with standard deviation 0.666 and 0.731, respectively.

Concerning the intellectual capital management variable, it is clear from the previous Table 5 that the average of the respondents views (females) was higher than the average of the respondents views (males) around the components of intellectual capital management (human capital, structural capital), with an average of 3.50, 3.61, and 3.82 respectively for females, and an average of 3.29, 3.65 and 3.49 for males.

Table 5: Descriptive statistics of respondent views (Faculty members) by gender

Variable		Frequency	Mean	Standard Deviation
Strategic Leadership (X)	Male	137	3.5673	.69730
	Female	108	3.8192	.70358
Strategic vision (X1)	Male	137	3.4866	.57453
	Female	108	3.5741	.74408
Focus (X2)	Male	137	3.5650	.66682
	Female	108	3.5537	.73146
Implementation (X3)	Male	137	3.6168	.91908
	Female	108	4.3403	.85616
Investment of strategic capabilities and talents (X4)	Male	137	3.6010	1.06169
	Female	108	3.8086	1.03340
Intellectual Capital Management (Y)	Male	137	3.4813	.92435
	Female	108	3.6481	.94179
Human capital (Y1)	Male	137	3.6555	.93107
	Female	108	3.8204	1.00538
Structural capital (Y2)	Male	137	3.4920	1.00499
	Female	108	3.6167	.97295
Relational Capital (Y3)	Male	137	3.2964	.87046
	Female	108	3.5074	.86616

In order to test the existence of a significant difference among the average of the views of the faculty members at the Northern Border University and within the variables of the study, mainly the demographic variables of (gender). Mann Whitney test was used, which is considered as one of the non-parametric tests, which tests the difference between the two averages). Table 6 presents the results of a test, which says that there is no significant difference between the views of faculty members around the variables of the study, which is due to gender and at a significance level of 5%. Moreover, the value of Sig. is greater than the significance level. An exception is only for the (implementation) dimension, which indicates the absence of difference between the averages of views of the faculty members around the study variables by gender.

Table 6: Man Whitney test results by gender

Variables	Mann-Whitney U	Sig.	Significance Interpretation
Strategic Leadership (X)	6555.000	0.126	Not significant
Strategic vision (X1)	7207.000	0.727	Not significant
Focus (X2)	6915.000	0.378	Not significant
Implementation(X3)	3925.500	0.000	Not significant
Investment of strategic capabilities and talents (X4)	6528.000	0.105	Not significant
Intellectual Capital Management (Y)	6679.500	0.189	Not significant
Human capital (Y1)	6442.500	0.079	Not significant
Structural capital (Y2)	6926.500	0.388	Not significant
Relational Capital (Y3)	6624.000	0.156	Not significant

7.3.2. Second: Respondents views by academic rank

Table 7 shows the descriptive statistics related to the sample of the study at the Northern Border University according to academic rank. Table 7 shows that the mean of the views of the sample of the assistant professor on the dimension of "human capital" is 4.26, while the standard deviation is 0.854. Followed by the rank of professor on the same

dimension of "human capital" with a mean of 4.24 and standard deviation of 0.685, followed by the rank of assistant professor on the dimension "strategic vision" with a mean of 4.15 and standard deviation of 1.174, then the rank of associate professor on the dimension “concentration” with a mean of 4.14 and a standard deviation of 0.657. Table 7 also shows a decrease in the mean of the views of the sample of the study at the Northern Border University from the position of lecturer on the dimension of "strategic vision" with a mean of 3.35 and standard deviation of 0.603, followed by the same position on the dimension of "concentration" by a mean of 3.43 and standard deviation of 0.958.

Table 7: Descriptive statistics of respondent views (Faculty members) by academic rank

Variable		Frequency	Mean	Standard Deviation
Strategic Leadership (X)	Professor	7	3.8449	1.0178
	Associate Professor	15	3.8377	.66027
	Assistant Professor	99	4.0293	.75318
	Lecturer	94	3.5074	.65018
	Teaching Assistant	30	3.4930	1.1259
Strategic vision (X1)	Professor	7	3.9654	.86833
	Associate Professor	15	3.8752	.93954
	Assistant Professor	99	4.1525	1.1742
	Lecturer	94	3.3587	.60357
	Teaching Assistant	30	3.5458	.86872
Focus (X2)	Professor	7	3.8851	.58645
	Associate Professor	15	4.1439	.65776
	Assistant Professor	99	3.9821	1.21715
	Lecturer	94	3.4358	.95887
	Teaching Assistant	30	3.4852	.65894
Implementation (X3)	Professor	7	3.6576	.87681
	Associate Professor	15	3.5749	.63695
	Assistant Professor	99	3.8978	.65875
	Lecturer	94	3.5541	.75051
	Teaching Assistant	30	3.4581	.67256
Investment of strategic capabilities and talents (X4)	Professor	7	3.8715	.51406
	Associate Professor	15	3.7568	.86565
	Assistant Professor	99	4.0846	.76152
	Lecturer	94	3.6811	1.3165
	Teaching Assistant	30	3.4829	.90941
Intellectual Capital Management (Y)	Professor	7	4.0566	.88209
	Associate Professor	15	3.8296	1.2626
	Assistant Professor	99	3.9602	.77827
	Lecturer	94	3.7279	.69855
	Teaching Assistant	30	3.7747	.78970
Human capital (Y1)	Professor	7	4.2476	.68548
	Associate Professor	15	3.8560	. 98756
	Assistant Professor	99	4.2623	.85471
	Lecturer	94	3.7548	1.2756
	Teaching Assistant	30	3.6328	1.1669
Structural capital (Y2)	Professor	7	3.9811	.89654
	Associate Professor	15	3.7478	.99881
	Assistant Professor	99	3.7663	. 56985
	Lecturer	94	3.6744	.59753
	Teaching Assistant	30	3.9128	1.3668
Relational Capital (Y3)	Professor	7	3.9411	.98543
	Associate Professor	15	3.8850	.87658
	Assistant Professor	99	3.8519	75698.
	Lecturer	94	3.7544	.69854
	Teaching Assistant	30	3.7786	.85642

To test the existence of a significant difference between the average of the views of the faculty members at the Northern Border University with regard to the variables of the study represented in (academic rank), Kruskal-Wallis test was used which considered as one of the non-parametric tests which test the difference between many averages).

Table 8 shows the results of the test, which says that there is no significant difference between the views of faculty members around the variables of the study, which is due to academic rank and at a significance level of 5%. Moreover, the P-Value (Sig.) is greater than the significance level. The thing confirms that there is no significant difference among the average of the views of the faculty members by academic rank.

From the above, the validity of the first hypothesis is clear: "There are no statistically significant differences in the views of the faculty members on the variables of the study (strategic leadership-intellectual capital management) attributed to the demographic variables (gender-academic rank).

H2: There is no statistically significant relationship between strategic leadership and intellectual capital management.

Table 8: Results of the Kruskal-Wallis test by academic rank

Variables	Kruskal-Wallis H	Sig.	Significance Interpretation
Strategic Leadership (X)	1.146	0.887	Not Significant
Strategic vision (X1)	4.223	0.377	Not Significant
Focus (X2)	1.320	0.858	Not Significant
Implementation (X3)	4.943	0.293	Not Significant
Investment of strategic capabilities and talents (X4)	1.275	0.866	Not Significant
Intellectual Capital Management (Y)	0.966	0.915	Not Significant
Human capital (Y1)	1.467	0.833	Not Significant
Structural capital (Y2)	1.116	0.892	Not Significant
Relational Capital (Y3)	0.887	0.926	Not Significant

Table 9 shows the Pearson correlation coefficient dimensions of strategic leadership and intellectual capital management components. Table 9 shows a strong correlation between the strategic investment of strategic capabilities and talents as one of the dimensions of strategic leadership and human capital as one of the components of intellectual capital management. The correlation coefficient is 0.989, and the level of significance is 1%. Moreover, there is a strong positive relationship between the investment of strategic capabilities and talents as one of the dimensions of strategic leadership and (structural capital) as one of the components of intellectual capital management, where the correlation coefficient was 0.989, and the level of significance is 1% level. Also, there is a strong positive relationship between the investment of strategic capabilities and talents and structural capital. The correlation coefficient was 0.989, and the significance level is 1%.

The lowest correlation coefficient was between (implementation) as one of the dimensions of strategic leadership and (human capital) as one of the components of intellectual capital management where the value of the correlation coefficient is 0.561 which indicates to a positive relationship between the two variables and significant at 1%. There was also a strong correlation between the independent variable (strategic leadership) and the dependent variable (intellectual capital management). The correlation coefficient was 0.943, and the significance level was 1%. There was also a strong correlation between the independent variable (strategic leadership) and the dependent variable (intellectual capital management). The correlation coefficient was 0.943, and the significance level was 1% in addition to a strong relationship between strategic leadership with its components (Strategic vision, focus, implementation, investment of strategic capabilities and talents) and the intellectual capital management in its various components (human capital, structural capital, relational capital). Based on the above, it is clear that the second hypothesis is incorrect and that the validity of the alternative hypothesis is statistically significant. Hence, there is a statistically significant relationship between strategic leadership and intellectual capital management. "There is a statistically significant relationship between strategic leadership and intellectual capital management in the area of application," and the results of the present study are consistent with the findings of Hitt and Duane (2002).

Table 9: Pearson correlation coefficients between the dimensions of strategic leadership and components of intellectual capital management

Elements	intellectual capital management (Y)	Human capital (Y1)	Structural capital (Y2)	Relational Capital (Y3)
Strategic Leadership (X)	.943**	.925**	.931**	.945**
Strategic vision (X1)	.746**	.741**	.723**	.753**
Focus (X2)	.818**	.802**	.816**	.813**
Implementation (X3)	.599**	.561**	.587**	.636**
Investment of strategic capabilities and talents (X 4)	.992**	.993**	.989**	.963**
Sig (2-tailed)	.000	.000	.000	.000
N	245	245	245	245

Note: ** denotes the statistical significance at the 1% level

H3: there is no statistically significant effect of strategic leadership dimensions on the overall measure of intellectual capital management. In order to test this hypothesis, stepwise regression was used.

Table 10 shows the estimates of the stepwise regression model of the dependent variable (the average of the respondent views on intellectual capital management) on the independent variable of strategic leadership dimensions (strategic vision, implementation, focus, investment of strategic capabilities and talents), Table 10 shows the significance of the estimated regression model through the value of F (4986.818) and SIG (0.000). The coefficients of regression and the intensity of the fixed limit are shown by t values and sig values at a significant level of 5%. It is clear from Table 9 that the most important dimensions of strategic leadership that affect the management of intellectual capital are: investment of strategic capabilities and talents, strategic vision, implementation, and focus. The value of the determination coefficient was 0.821, which indicates that the independent variable (strategic leadership) with its different dimensions (strategic vision, implementation, focus, and investment of strategic capabilities and talent) explained by 82.1% of the changes in the dependent variable (intellectual capital management). On the other hand, it is clear from Table 9 that the regression coefficients are positive, indicating a

positive relationship between strategic leadership dimensions and intellectual capital management. The more attention is paid to the dimensions of strategic leadership, the stronger the management of intellectual capital. From the above, the validity of the third hypothesis and the validity of the alternative hypothesis are refuted. Because there is a statistically significant effect of the strategic leadership dimensions on the overall measure of intellectual capital management.

The above result shows that the third hypothesis is not true, but the alternative hypothesis is true, where "there is a statistically significant effect of the strategic leadership dimensions on the overall measure of intellectual capital management," and this finding is consistent with the study of Rastogi (2000) and study of Puhakka (2010).

Table 10: Estimates of the stepwise regression model for intellectual capital management

The Coefficient of Determination R2	F (sig.)	Estimates			
			B	T	Sig.
0.821	4986.818 (0.000)	Constant	-0.006-	-0.127-	0.000
		Investment of strategic capabilities and talents (X 4)	0.797	63.669	0.000
		Strategic vision (X1)	0.084	5.736	0.000
		Implementation (X3)	0.032	3.769	0.000
		Focus (X2)	0.056	3.451	0.001

8. Recommendations

The study presents the following recommendations:

1. Dissemination of the organizational culture is essential because the strategic leadership practices parallel with the policies and procedures of the work provide a greater chance for the development of the institution.
2. Increasing concern with the relations of university customers and beneficiaries as well as making partnerships with various community organizations, besides achieving cooperation among these organizations to contribute to the development of the educational process and satisfying the needs of the community.
3. The focus should be on the strategic dimension of intellectual capital management, especially when designing and developing the university's strategy. The reason is that the strategic dimension contributes effectively to achieve the vision and mission of the university.
4. The need to inspire and increase the capabilities of faculty members to achieve high performance besides strengthening the link between implementation and human capital.
5. More attention on the strategic implementation process by working to translate the strategy into reality by mobilizing human resources through training, meetings and discussions that lead to the implementation and achievement.
6. The need to support talented people who have the ability to create new visions and ideas, which have positive effects on the overall performance of the university, all these can be done through the dissemination of organizational culture, and preparation of enabling environment.
7. Workers should benefit from the strong relationship between the investment of strategic capabilities and talents and human capital, structural capital, and thus enhancing the process of managing intellectual capital in the university.

Workers should maintain a strong relationship between strategic leadership and intellectual capital management, which was demonstrated by the results of the study, in order to achieve the vision and mission of the university.

Compliance with ethical standards

Conflict of interest

The authors declare that they have no conflict of interest.

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