The impact of strategic leadership on strategic performance in higher education institutions: The mediating role of change management

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ABSTRACT

This study aims to identify the impact of strategic leadership (SL) in enhancing strategic performance (SP) using the balanced scorecard (BSC) approach in Jordanian higher education institutions. In addition to identifying what change management (CM) can provide in explaining the role of SL in enhancing SP. The study population consisted of all official universities in Jordan, which numbered (11) official universities. The study followed a comprehensive survey method, where questionnaires were distributed to all official universities. The sampling unit consisted of deans of colleges in official Jordanian universities. The sample size was 350 respondents. The recovered questionnaires were (238) questionnaires. The results of analyzing the study data indicated that there was an effect for all dimensions of SL on SP. The study also found that all dimensions of SL affect SP in Jordanian official universities. Finally, the results of the data analysis indicated that the CM variable plays a mediating role in the impact of SL on SP. Based on the results, the study recommends the need for Jordanian official universities to pay attention to strengthening aspects of SL among current and future leaders and raising them to higher levels.

Keywords: Strategic Leadership, Change Management, Strategic Performance, Balanced Scorecard, Higher Education Institutions

1. Introduction

The transformation of institutions from the era of industrial competition to the era of information competition has led to the inevitability of companies possessing new capabilities that guarantee their success in light of the competitive environment that surrounds them [1]. It has become necessary for institutions to work to find, develop, and use modern management methods and tools through which they can measure their SP in a way that enables them to continue to advance, grow, and maintain their competitive advantage [2, 3], not just relying on traditional performance measurement systems, which many studies have indicated are weak and unable to provide a true picture through which companies can work to achieve the desired development and growth [4, 5]. Which led to the search for modern trends that overcome the shortcomings of traditional performance measures [6]. And access to new ways to measure and evaluate SP [7]. One of the trends that has emerged is the balanced scorecard (BSC), which is considered a comprehensive and integrated system for measuring SP [8]. BSC achieves a balance between short- and long-term goals [9] and focuses on financial and non-financial performance [10]. BSC achieves integration between external and internal performance standards [11].

The BSC has a significant and significant impact when it is used to create change across the organization [12]. In a rapidly transforming environment, leading and large institutions have begun to increase the use of the BSC
to define the primary factors that create future values via indicators and measures that determine the institution's direction [13]. If institutions want to survive and continue in a competitive environment, they must use measures and management systems derived from their strategies and capacities [11]. Thus, the BSC can be considered a management system that aims to bridge the gap between the institution's set of strategic objectives and their operational implementation [4]. This is done by translating the institution's vision and strategy into goals and standards, providing a clear framework for communicating the vision and strategy to employees, and thus directing the energies, capabilities, and knowledge of people within the organization to reach long-term goals [14]. Using BSC to measure performance provides the company with an organized and comprehensive measurement of all dimensions of internal and external performance [8, 15]. Employing a BSC in preparing reports allows for focusing on strategic services and excellence, adapting to the annual activity plan, and providing the necessary information to improve companies [4]. Through BSC, institutions can transform the vision and mission into goals, measures, goals, and strategic initiatives [16]. BSC is not just an ordinary system for measuring performance, but rather a system that works to transform strategic objectives into a set of coherent performance measures [17]. BSC has now become an integrated system for measuring performance that helps achieve harmony among members of the organization [5], and helps share knowledge across the organization [6], thus achieving success across all parts of the organization [15, 18].

The BSC measures performance through four dimensions, each of which depends on the other. It considers that performance is a sequential process that begins with learning and growth in the institution, which in turn is reflected in improving internal processes, and thus improving products and services, which leads to customer satisfaction, thus improving financial performance [15]. The learning and growth dimension covers employee training, institutions cultural attitudes related to individual self-improvement, and partnerships in the company through knowledge dissemination [7]. People are a key resource in today's environment of change [19]. Educating and developing individuals will be reflected positively in internal operations, as it allows leaders within the company to determine how effective their work is and whether the products and services being offered are in line with customer desires [13]. Improving internal processes helps improve service quality and add value to customers, this leads to meeting customer expectations, improving timely delivery, customer retention, market share, and customer acquisition [20]. Enhancing market share and customer acquisition will lead to increased revenues and thus enhance financial performance [11, 21].

Given that change and development have become an urgent necessity that falls on the shoulders of institutions, in order to keep pace with the various changes, it is an extremely important administrative requirement [22]. Change does not mean that transformation that occurs in a random, unorganized manner as a result of the emergence of emergency circumstances, rather, this is pre-planned work [23], which is carried out based on scientific principles, taking into account the current reality of the institution and the strategic objectives set, thus enhancing the SP of the institution [24]. The changes that occur surrounding organizations require the use of appropriate methods and techniques to deal with them based on careful study and sound planning, while providing the necessary capabilities, and choosing the appropriate time to bring them about because random change does not achieve the desired goals [23, 25]. CM is considered an important process that includes the leaders of organizations developing a plan within a specific period, which is implemented with precision, organization, advanced coordination, and control to achieve the desired goals, through the proper employment and on a scientific basis of both the capabilities and resources that the organization possesses, in addition to the human staff working for it [26]. This requires leadership with a long-term vision focused on strategic goals [27]. Successful CM helps leaders achieve strategic goals, due to the fundamental impact it has on all aspects, and it is one of the most important priorities for the success of institutions in our current era [28, 29].

Leadership has a set of classifications, types, and styles [30]. SL is one of the most important of these types, as it possesses a strategic vision that contributes to enhancing the SP of institutions [31]. The need for SL appears in achieving a balance between the needs and requirements of institutions compared to future aspirations, and it also has a role in achieving excellence in competition [32]. SL is responsible for the strategic thinking that takes place at the level of the institution as a whole, and then drawing plans with the aim of development [33]. SL is the element responsible for introducing development and change to the organization [34]. Then evaluating the impact of these changes on the institution’s performance [35]. Strategic leaders can build a clear future strategic vision [36]. This vision works to achieve a balance between the present and the future and between the strength of the institutional system and the strength of human resources [37]. Strategic leaders discover the core capabilities that their organizations possess, optimally invest their resources [31], thus become more efficient in making their institutions successful and dealing with challenges in ways that carry a great deal of creativity.
and excellence [38]. SL is characterized by being proactive in its ability to set a future vision, a flexible vision, and the ability to provide support and motivation to others to bring about the required and necessary strategic change for the organization [39]. A strategic leader possesses the ability to predict, be supple, and enable subordinates to make strategic alterations as necessary [23]. The difference between classical leadership and SL is that classical leadership exists at all levels within the institution, while SL appears and its role is concentrated at the senior management level, with a focus on the institution’s SP [40]. Classical leadership is primarily concerned with organizing the relationships between the leader and his subordinate, while SL is keen to implement the work in the strategic direction by achieving harmony and harmony among the organization’s various resources [41].

With the rapid development witnessed by Jordanian higher education institutions and as a result of the intense competition with private and foreign universities, it has become necessary for Jordanian higher education institutions to make major changes to be able to compete and survive in the new environment [42]. As a result of the major changes in the services provided by higher education institutions in Jordan, it was necessary to identify the results of these changes through the use of appropriate tools to manage and measure performance [43]. Traditional performance management, which is based on financial performance only, has become incapable of measuring comprehensive and SP to meet the higher education institutions’ strategic needs, as the lack of interest in measuring the performance of various operations makes it difficult for the leaders of these higher education institutions to recognize the effects of the changes they have made. This is because traditional performance measures that focus on financial performance only reflect past performance without addressing future performance. Also, traditional metrics do not help higher education institutions analyze the external environment during CM, and therefore the BSC approach may be appropriate to solve this problem. Hence, this study aims to identify the impact of SL in enhancing SP using the BSC approach in higher education institutions. In addition to identifying what CM can provide in explaining the role of SL in enhancing SP. The study derives its importance from the importance of the topic it addresses and the variables investigated, as the topic of SL, CM, and the BSC approach are among the topics that have gained the attention of many researchers and scholars. Therefore, this study can provide a knowledge base related to studying the importance of SL, as it is considered an essential input for influencing many administratively significant processes in organizations. The need to study the impact of change management emerged as a result of universities adopting Jeddah policies after the Covid-19. The old policies are no longer suitable for the Jordanian university population, as universities have moved to a distance learning system. At this stage, universities adopted new strategies. It was necessary to evaluate the results of these strategies on the performance of universities. Because traditional performance measures focus on financial performance. Therefore, this study is important with regard to measuring the results of implementing new policies in universities. The realistic results and recommendations based on the foundations of authentic scientific research that this study may reach may provide a scientific reference if taken into account by the higher education institutions in Jordan studied. It will have great practical and economic importance represented by the reflection of this on their performance, development, and excellence in the future. The challenges and pressures facing higher education institutions in Jordan at present are increasing, as a result of the major changes surrounding their external environment and the great uncertainty surrounding them, in addition to the intense competition. This requires the presence of new, non-traditional leadership, modern leadership such as SL that has distinctive characteristics such as long-term strategic vision, flexibility, and the ability to adapt to new developments.

2. literature review
2.1. Strategic leadership and strategic performance

Many studies of SL seek to understand the extent to which leaders’ behavior affects performance [5]. This study is based on Hambrick and Mason’s [44] upper echelons theory, which posits that: “organizational outcomes, strategic choices, and performance levels are partly predicted by managerial background characteristics”. Özkanlı and White [45] pointed out that strategic choices are linked to leadership, and therefore leadership style is expected to have clear effects on performance, including SP. The importance of SL is highlighted by the fundamental and highly influential effects it has on the organization, through its role in achieving its long-term goals [46]. The strategic leader plays an important role in seizing opportunities and making decisions that assist in innovation and creativity processes and enhance long-term performance [47]. The influence of SL extends to wide areas that may exceed the functional areas belonging to the leader, business units, and outside the organizational framework, due to his comprehensive, interconnected view of the organizational entity, as the decision taken affects all parts when a small part of the organization is affected [48]. Effective SL can help
organizations survive and succeed in turbulent competitive environments that are difficult to predict, by attracting talented, creative competencies, then work to develop these capabilities and capabilities to face emergency circumstances and future challenges with creative methods and a future vision by harmonizing changes within the organization with environmental conditions surrounding it [49]. Therefore, it can be assumed that SL is linked to SP. Thus, the following hypothesis was proposed:

**H01: There is no effect of SL on SP in higher education institutions in Jordan.**

SL includes a set of practices, which include the strategic vision, core capabilities, and ethical practices. It is expected that each of these practices will have an impact on the SP of higher education institutions in Jordan.

### 2.2. Strategic vision and strategic performance

Vision is a vital issue to push the organization towards achieving its utmost importance [50]. Without an accurate and implementable vision, entire institutions and organizations will be in a state of chaos internally and externally, and will not have the ability to continue in this turbulent competitive environment [41]. Many researchers have indicated that the strategic vision is one of the most important tasks entrusted to senior strategic leaders [50, 51]. Strategic vision refers to the strategic leader’s possession of a vision with comprehensive dimensions stemming from a true desire for change so that it carries a clear and integrated future vision [41, 52]. The strategic vision is a direct compass for the direction in which the organization will move to exploit the opportunities around it and achieve its goals in the long term [53]. Ashal [54] indicates that the leadership’s adherence to the strategic vision enables the company to mobilize and focus efforts to achieve future goals based on the vision and vision established in advance to achieve the desired results effectively. Effective strategic vision includes the experiences and values of leaders, in addition to the interests of all stakeholders in the organization, whether workers, suppliers, customers, or society, after understanding the external variables that occur in the internal and external environment surrounding the organization [36]. Therefore, having a strategic vision is linked to all dimensions of the BSC. Having a strategic vision provides a comprehensive view of the organization’s desired image in the future, which is considered a reflection of the skills, experience, and sophistication of the leadership it sets, taking into account the interests of all parties associated with the organization [55]. In addition to its realism, which is derived from the reality of the organization’s situation, which is realized through conducting a survey and visualization of inside and outside the organization, aiming to achieve the maximum levels of success for the organization, by exploiting the opportunities and capabilities that it possesses, and trying to overcome the challenges and ambiguities that it may face [56]. Thus, the following hypothesis was proposed:

**H01-1: There is no effect of strategic vision on SP in higher education institutions in Jordan.**

### 2.3. Core competencies and strategic performance

For organizations to remain at the forefront in a highly competitive environment, they need core capabilities, to contribute to increasing the value provided to customers, and raising competitiveness while expanding new product arenas [57]. The concept of core capabilities involves “the sum of an organization’s unique capabilities, skills, and technology, the likes of which are difficult to obtain” [58]. Al Halbusi et al. [59] believes that core capabilities are a set of capabilities and resources that represent a competitive advantage, and they are represented by various functional activities within the organization such as marketing, production and operations, finance, research, and development. This is related to the dimensions of SP according to the BSC. The core capabilities within an organization are related to the unique management skill set, product design, technology used, and management information systems [60]. Here comes the role of SL in exploring core capabilities through environmental analysis when formulating and implementing strategies to exploit available opportunities and avoid existing threats constitutes a major strength factor [61]. Core capabilities are characterized by superiority by enhancing the company's ability to create value by meeting customers' desires in a way that exceeds the capabilities of competitors in this field, and this is done by exploiting opportunities or avoiding threats from the external environment [62]. Therefore, core capabilities are expected to have an impact on SP. Thus, the following hypothesis was proposed:

**H01-2: There is no effect of core competencies on SP in higher education institutions in Jordan.**

### 2.4. Ethical practices and strategic performance

Ethics is defined as “a set of principles, values, and rules that guide and determine the behavior of individuals as to whether it is right or wrong, acceptable or unacceptable.” [63]. Ethical practices refer to acting by the system of ethical values that prevail within the organization, and they are considered one of the most important
tools that will create mutual trust and give a bright, good image that aims to achieve everything that achieves the organization’s interests and organizational goals [64]. An ethical leader operates within a set of written or unwritten principles that define types of behavior, including fairness, equality, honesty, trust, and equality [65]. This is linked to job satisfaction, which leads to improved employee performance, which is reflected in the internal operations of the institutions and thus enhances customer satisfaction. Ethical practices have received great attention from leaders and managers [66]. Practicing and maintaining values and ethics within the organizational climate plays a role in achieving profits and great superiority for organizations [67]. Ethical leadership enhances the self-control of subordinates, this will be reflected in the company’s internal operations and will lead to improving services, thus enhancing SP [68]. Sekerka et al. [69] pointed to the basic axes of business ethics, represented by the social responsibility of organizations, environmental sustainability, commitment, and values. When these axes are available in the company, it is expected that this will be reflected in its long-term sustainability [70]. Thus, the following hypothesis was proposed:

**H01-3: There is no effect of ethical practices on SP in higher education institutions in Jordan.**

### 2.5. Strategic leadership and change management

The extent to which change is adopted depends on the leader’s skill in involving subordinates in designing the change [71]. A successful strategic leader has the ability to empower subordinates to make strategic changes through their ability to deal with complex problem-solving models [72]. SL focuses on creative ideas to form appropriate dynamics for the change process, motivate subordinates to accept change, and manage various activities during the period of change by creating a balance between the human dimension, discipline, and commitment to the vision of the change process [73]. Effective leadership takes advantage of existing resources while managing the change process, and considers how to employ these resources in the future [71]. The strategic leader has an orientation to be open to creative ideas and learning, directing and inspiring subordinates towards change, by creating a clear culture that fits the organization’s values and is consistent with its vision [74]. Effective leadership can bridge the gap between strategic decisions and implementing changes in the organization while at the same time maintaining a positive change climate and the participation of subordinates in change decisions by controlling conflicts, providing protection for participants in the change, and finding the appropriate and appropriate path to formulating the strategic goals of the change process following the organization’s vision and mission [75]. Thus, the following hypothesis was proposed:

**H02: There is no effect of SL on CM higher education institutions in Jordan.**

### 2.6. Change management and strategic performance

The changes that occur surrounding organizations require the use of appropriate methods and techniques to deal with them based on careful study and sound planning, while providing the necessary capabilities, and choosing the appropriate time to bring them about because random change does not achieve the desired goals [76]. This requires organizations, over a long time, to work on developing problem-solving capabilities [77] and renewing activities and processes [78]. This requires creating a comprehensive organizational climate that focuses on sharing knowledge [79, 80]. The change that coincides with the development of a plan specific to a period, implemented with precision, organization, prior coordination, and control, will achieve the desired goals, through the proper employment and on a scientific basis of both the capabilities and resources that the organization possesses, in addition to the human staff working for it, which leads to enhancing SP [81]. Lloréns et al. [82] referred to CM as a process in which the organization transforms from a specific current reality to another that it aims to reach, by following a comprehensive and integrated approach and developing actions and behaviors by following modern methods that help bring about the desired change, and this is consistent with all dimensions of the BSC approach to SP. Tsai and Yen [83] referred to CM as a process that involves a long-term effort to improve the organization’s ability to solve problems, provided that this is done through development and innovation, and bringing about a comprehensive improvement in the current organizational climate, with a focus on increasing the effectiveness of individuals working in the organization, this can be done with the help of an expert or consultant specialized in the field. This means that managing change successfully will lead to enhanced SP across all parts of the organization. Thus, the following hypothesis was proposed:

**H03: There is no effect of CM on SP in higher education institutions in Jordan.**

### 2.7. The mediating role of change management in the effect of strategic leadership on strategic performance

SL can change job duties, and this can either be in terms of changing new systems, procedures, and methods that directly affect the organization of work within the organization, these changes have a direct impact on the
organization of work within the organization and also have a significant impact on employees [83]. Therefore, this type of change requires giving it great importance and dealing with it with a strategic vision so that its impact is reflected in the company’s performance. In the same context, CM includes the change in organizational culture, as it is necessary to change the pattern of values, shared beliefs, attitudes, rituals, collective standards, habits of thinking, and values adopted within the organizational entity, which help individuals understand organizational performance and thus provide them with the rules of behavior in the organization, which link all components of the organization come together, as organizational culture can be a strategic asset for the company that contributes to enhancing adaptability to environmental changes [79]. Dunphy and Stace [84] believe that CM involves a set of internal processes through which the company aims to adapt to its external and internal operations. Therefore, the starting point for making change is by identifying the most important positive behaviors and working to encourage and support them with methods that provide a healthy competitive environment so that it works to create new mindsets with positive ideas that support organizational goals. This is consistent with the role of SL in enhancing long-term performance. Degnegaard [85] argues that CM involves creating a future vision, as this vision helps to enhance the concept of commitment and clarify the direction towards which the organization is moving so that the focus is towards achieving the goals through developing a model of change and implementing it in line with the vision of change. Therefore, the availability of a strategic leader will enable the organization to successfully implement this model, which will lead to achieving the strategic goals. Thus, the following hypothesis was proposed:

**H04: CM mediating the effect of SL on SP in higher education institutions in Jordan.**

3. **Methodology**

This study is considered a type of explanatory research, as it clarifies and explains the relationship between SL variables, SP, and CM to reach cause and effect. In terms of the time horizon, this study is considered a cross-sectional research study, as the study sample was studied at one time. The study population consisted of all official universities in Jordan, which numbered (11) official universities. The study followed a comprehensive survey method, where questionnaires were distributed to all Jordanian official universities. The questionnaire was designed based on literature related to the study variables. We relied on [25, 27, 30, 32] regarding strategic leadership questions and [4, 7, 13] regarding strategic performance questions. And study [22, 47, 71, 73] regarding change management. Questionnaires were pre-tested to ensure content validity. The sampling unit consisted of deans of colleges in official Jordanian universities. College deans were chosen because they are directly responsible for ensuring the implementation of new policies in education after Covid-19. The sample size was 350 respondents. The recovered questionnaires were (235) questionnaires, with a recovery rate of (0.67), which is a statistically acceptable percentage according to [86, 87]. The number of deans in Jordanian universities was 1750, according to Sikran’s [86] tables, (350) is considered an appropriate sample. For the sample not to be biased, questionnaires were distributed to all universities in Jordan. To test the mediating role of CM in the relationship between SL and SP, the direct and indirect effect was tested. Path analysis was used, using the Amos program, to verify the presence of a direct and indirect effect on the study variables.

3.1. **Results and discussion**

3.1.1. **Descriptive analysis**

The results in Table 1 indicate that strategic vision (SV) was with the highest mean (3.934), while SP was with a mean (3.690). Moreover, the of CM, (3.736). The results also indicate that there are significant relationships between the variables of the study model.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>SV</th>
<th>CC</th>
<th>EP</th>
<th>SP</th>
<th>CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV</td>
<td>3.934</td>
<td>0.752</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>3.733</td>
<td>0.776</td>
<td>0.648**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP</td>
<td>3.706</td>
<td>0.880</td>
<td>0.674**</td>
<td>0.702**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>3.690</td>
<td>0.731</td>
<td>0.628**</td>
<td>0.680**</td>
<td>0.740**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>CM</td>
<td>3.736</td>
<td>0.728</td>
<td>0.610**</td>
<td>0.619**</td>
<td>0.663**</td>
<td>0.711**</td>
<td>1.000</td>
</tr>
</tbody>
</table>


**Correlation is significant at the 0.01 level (2-tailed).**
3.1.2. Confirmatory factor

Table 2 showed that CFA measures represent a good fit as CFI = 0.996, GFI = 0.994, NFI = 0.995, and RMSEA = 0.01 are all acceptable ranges.

Table 2. CFA analysis

<table>
<thead>
<tr>
<th>Measure</th>
<th>CMIN/DF</th>
<th>CFI</th>
<th>GFI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold</td>
<td>&lt;5</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&lt;0.08</td>
</tr>
<tr>
<td>Result</td>
<td>0.940</td>
<td>0.996</td>
<td>0.994</td>
<td>0.995</td>
<td>0.01</td>
</tr>
</tbody>
</table>

3.2. Hypothesis testing

The study used “multiple regression analysis” to determine the impact of SL dimensions (Strategic Vision, Core Competencies, Ethical Practices) on SP as measured by the BSC in higher education institutions in Jordan, as shown in Table 3:

Table 3. Hypothesis test results H01

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(R)</th>
<th>(R²)</th>
<th>Calculated F</th>
<th>Sig*</th>
<th>Regression coefficient β</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Calculated T</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>0.781</td>
<td>0.610</td>
<td>120.380</td>
<td>0.000</td>
<td>Strategic Vision</td>
<td>0.148</td>
<td>0.057</td>
<td>0.152</td>
<td>2.579</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Core Competencies</td>
<td>0.249</td>
<td>0.058</td>
<td>0.264</td>
<td>4.317</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ethical Practices</td>
<td>0.376</td>
<td>0.052</td>
<td>0.452</td>
<td>7.168</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*A statistically significant effect at the significance level (α ≤ 0.05)

Table (3 shows the impact of the dimensions of SL (Strategic Vision, Core Competencies, Ethical practices) on SP in higher education institutions in Jordan. The results in the table above indicate that there is an impact for all dimensions of SL on SP. The results indicate that 61.0% of the change in SP results from SL practices in all its dimensions. This finding is consistent with Hambrick and Mason's [44] upper echelons theory, in that performance can be predicted by leadership background and leaders’ characteristics. This result is consistent with what was indicated by the literature review. The results confirm that SL has direct effects on the organization, through its role in achieving its long-term goals [46]. These results can be attributed to the strategic leader's ability to make decisions that enhance long-term performance [47]. These results indicate that SL affects all dimensions of the BSC for SP. Phipps [18] noted that a leader's strategic decision extends across all parts of the organization. These results confirm that effective SL attracts competencies and develops them to achieve long-term goals by enhancing employee performance to enhance the higher education institution’s operations and thus improve service, which is reflected in SP.

Table 3. Hypothesis test results H01-1

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(R)</th>
<th>(R²)</th>
<th>Calculated F</th>
<th>Sig*</th>
<th>Regression coefficient β</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Calculated T</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>0.628</td>
<td>0.394</td>
<td>151.578</td>
<td>0.000</td>
<td>Strategic Vision</td>
<td>0.611</td>
<td>0.050</td>
<td>0.628</td>
<td>12.312</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*A statistically significant effect at the significance level (α ≤ 0.05)

Table (4) shows the impact of strategic vision on SP in higher education institutions in Jordan. The results in the above table indicate that there is an impact of strategic vision on SP. The results indicate that 39.4% of the change in SP results from the strategic vision. This result indicates that higher education institutions in Jordan have a clear strategic vision can continue, as the vision of these institutions is reflected in their operations that
enhance SP [41]. This result is consistent with what was indicated by Ashal [54] who argues that leadership’s commitment to the strategic vision enables the company to focus on achieving future goals and results effectively. Having a clear strategic vision is linked to all dimensions of the BSC.

Table 5. Hypothesis test results H01-2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(R)</th>
<th>(R^2)</th>
<th>Calculated F</th>
<th>Sig*</th>
<th>Regression coefficient β</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Calculated T</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>0.680</td>
<td>0.463</td>
<td>200.671</td>
<td>0.000</td>
<td>Core Competencies</td>
<td>0.642</td>
<td>0.045</td>
<td>0.680</td>
<td>14.166</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*A statistically significant effect at the significance level (α ≤ 0.05)

Table 5 shows the impact of core competencies on SP in higher education institutions in Jordan. The results in the table above indicate that there is an impact of the core competencies on SP. The results indicate that 46.3% of the change in SP results from core competencies. This result indicates that possessing core capabilities contributes to increasing the value provided [57]. This will increase their loyalty and improve the performance of higher education institutions in Jordan. This result is because core competencies affect various functional activities within the organization such as marketing, production, operations, finance, research, and development, all of which are dimensions of SP according to the BSC approach. This result is consistent with what Huikkola and Kohtamäki [60] indicated that core capabilities are related to unique management skills, product design, systems improvement, and process flow. This leads to enhancing the ability of higher education institutions to create value by meeting customer desires in a way that exceeds the capabilities of competitors in this field.

Table 6. Hypothesis test results H01-3

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(R)</th>
<th>(R^2)</th>
<th>Calculated F</th>
<th>Sig*</th>
<th>Regression coefficient β</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Calculated T</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>0.740</td>
<td>0.548</td>
<td>282.359</td>
<td>0.000</td>
<td>Ethical Practices</td>
<td>0.615</td>
<td>0.037</td>
<td>0.740</td>
<td>16.804</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*A statistically significant effect at the significance level (α ≤ 0.05)

Table (6) shows the effect of ethical practices on SP in higher education institutions in Jordan. The results in the table above indicate that there is an impact of ethical practices on SP. The results indicate that 54.8% of the change in SP results from ethical practices. This result indicates that the leadership’s commitment to working within a system of ethical values contributes to creating mutual trust within higher education institutions in Jordan, which contributes to achieving organizational goals. This result may be attributed to the leader’s ethical practices leading to improved employee performance, which is reflected in the internal operations of higher education institutions and thus enhances customer satisfaction. This result is consistent with the opinion of Kawiana et al. [67] who believe that practicing and maintaining values and ethics within the organizational climate plays a role in achieving profits and great superiority for organizations. This result is also consistent with what Yazdanshenas and Mirzaei [68] indicated that ethical leadership enhances self-control among subordinates, and this will be reflected in the institution’s internal operations and will lead to improved services, thus enhancing SP.

Table 7. Hypothesis test results H02

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(R)</th>
<th>(R^2)</th>
<th>Calculated F</th>
<th>Sig*</th>
<th>Regression coefficient β</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Calculated T</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM</td>
<td>0.715</td>
<td>0.511</td>
<td>80.607</td>
<td>0.000</td>
<td>Strategic Vision</td>
<td>0.220</td>
<td>0.064</td>
<td>0.228</td>
<td>3.452</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Core Competencies</td>
<td>0.209</td>
<td>0.064</td>
<td>0.223</td>
<td>3.260</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ethical Practices</td>
<td>0.292</td>
<td>0.058</td>
<td>0.353</td>
<td>5.003</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*A statistically significant effect at the significance level (α ≤ 0.05)
Table 7 shows the impact of the dimensions of SL (Strategic Vision, Core Competencies, Ethical Practices) on CM in higher education institutions in Jordan. The results in the table above indicate that there is an impact for each of (Strategic Vision, Core Competencies, Ethical Practices) on SP. The results indicate that 51.1% of the CM results from SL practices in all its dimensions. This result is consistent with what was indicated by Mansaray [71] who indicated that the success of the change process is related to the leader’s skills and his ability to involve his subordinates in designing the change. The strategic leader focuses on creative ideas and motivates leaders to adopt change [73]. This result may be attributed to the ability of SL to bridge the gap between strategic decisions and implementing changes in the institutions while at the same time maintaining a climate of positive change and the participation of subordinates in change decisions by dealing with resistance to change.

Table 8. Hypothesis test results H03

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(R)</th>
<th>(R^2)</th>
<th>Calculated F</th>
<th>Sig*</th>
<th>Regression coefficient β</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta β</th>
<th>Calculated T</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>0.811</td>
<td>0.658</td>
<td>449.127</td>
<td>0.000</td>
<td>CM</td>
<td>0.816</td>
<td>0.39</td>
<td>0.811</td>
<td>21.193</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*A statistically significant effect at the significance level (α ≤ 0.05)

Table 8 shows the impact of CM on SP in higher education institutions in Jordan. The results in the table above indicate that there is an impact of CM on SP. The results indicate that 65.8% of the change in SP results from CM. This result indicates that implementing CM effectively with the availability of capabilities achieves the desired goals. Successful CM occurs through creating comprehensive development in the prevailing climate of institutions, with a special focus on increasing the effectiveness of its work groups [79]. Therefore, it will have an impact on SP. CM is carried out according to a comprehensive and integrated approach that helps in developing actions and behaviors by following modern methods, and this is compatible with all dimensions of the BSC approach to SP.

Table 9. direct and indirect effects coefficients

<table>
<thead>
<tr>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strategic Leader ship</td>
<td>CM</td>
</tr>
<tr>
<td>CM</td>
<td>0.727</td>
<td>-</td>
</tr>
<tr>
<td>SP</td>
<td>0.496</td>
<td>0.416</td>
</tr>
</tbody>
</table>

Table 9 shows that the direct effect of (SL) on (SP) is significant with a value (0.496), and the direct effect of (CM) on (SP) is significant with a value (0.416). While the direct effect of (SL) on (SP) is significant with a value (0.727). Also, table 9 shows that the indirect effect of (SL) on (SP) equals (0.317), this refers to the mediating role of (CM) on the relationship between (SL) and (SP). Moreover, the total effect of (SL) through a mediator (CM) equal (0.813). So, we find that (CM) is partially mediating the relationship between (SL) and (SP). As shown in Figure 1:

![Figure 1. Path analysis results](image-url)
The above results indicate that the CM variable plays a mediating role in the impact of SL on SP. This indicates that CM, through the changes it causes in systems and procedures, directly affects the organization of work within the organization as well as changing the pattern of values, and therefore implementing leadership to manage change effectively provides individuals within higher education institutions in Jordan with rules that contribute to enhancing the ability to adapt to environmental changes and thus improving SP. This finding is consistent with Dunphy and Stace [84] who indicated that CM enables a company to adapt its external and internal operations. Therefore, the starting point for bringing about change is through identifying the most important positive behaviors and working to encourage and support them in ways that provide a healthy competitive environment that works to create new mindsets with positive ideas that support organizational goals. This is consistent with the role of SL in enhancing long-term performance. This result is considered consistent with the point of view of Degnegaard [85] in that CM involves creating a future vision that helps enhance the concept of commitment and clarify the direction towards which the organization is heading so that the focus is toward achieving goals through developing and implementing a change model. Therefore, SL will enable the organization to successfully implement the change model, leading to the achievement of strategic objectives.

4. Conclusions

This study aims to identify the impact of SL in enhancing SP using the BSC approach in Jordanian higher education institutions. In addition to identifying what CM can provide in explaining the role of SL in enhancing SP. The study population consisted of all official universities in Jordan, which numbered (11) official universities. The study followed a comprehensive survey method, where questionnaires were distributed to all official universities. The sampling unit consisted of deans of colleges in official Jordanian universities. The sample size was 350 respondents. The recovered questionnaires were (238) questionnaires.

The results of analyzing the study data indicated that there was a statistically significant effect for all dimensions of SL on SP. The results indicate that 55.4% of the change in SP results from SL practices in all its dimensions. The study also found that all dimensions of SL affect SP in higher education institutions in Jordan. The dimensions of SL (strategic vision, core competencies, and ethical practices) have a moral impact on CM in higher education institutions in Jordan. There is also a statistically significant effect of CM on SP. Finally, the results of the data analysis indicated that the CM variable plays a mediating role in the impact of SL on SP.

This study can add to the administrative literature, as it may provide a knowledge base related to studying the importance of SL, as it is considered an essential input for influencing many administrative aspects in organizations. The practical importance of the study lies in the study population, which is the higher education institutions in Jordan, which have a large and important role in the national economy. It will have great practical and economic importance, as this will be reflected in its performance, development, and excellence in the future.

Based on the results, the study recommends the need for higher education institutions in Jordan to pay attention to strengthening aspects of SL among current and future leaders and raising them to higher levels, due to their importance and major role in achieving SP. As well as attention to the presence of aspects of SL when conducting the selection process or promoting employees to senior leadership positions, so that these characteristics are included within the criteria of the selection process, and thus highly competent leaders are selected who can develop a comprehensive strategic vision, make optimal use of their resources, and develop its human capital continues to grow, and it also can discover these essential resources and capabilities, and create an effective and motivating organizational culture, in addition to these leaders’ emphasis on ethical practices within the organizational environment. Jordanian higher education institutions should also pay attention to holding training programs for senior administrative leaders that focus on the most important aspects that enhance their skills and sense of SL.

Declaration of competing interest

The authors declare that they have no any known financial or non-financial competing interests in any material discussed in this paper.

Author contribution statement

Tamara Alamad: Conceptualization, Methodology. Nahed Alrawashedh: Investigation, Writing - Original Draft Preparation. Alaa Harahshehd: Data Curation, Formal Analysis. Shaker al qudah: Validation, Resources. Omar...

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Data availability

The data used to support the findings of this study are available upon request. However, please note that the data for this study were generated as part of the Administrative System Development Project at Jerash University after the introduction of the distance education system in response to the changes that occurred in the education environment after the Corona pandemic. Due to the nature of the project and in line with the Intellectual Property Rights Protection Law, data can only be shared when obtaining permission from Jerash University.

References


