The Role of Educational Leadership Styles in Leading the Digital Transformation Across Amman's Private Schools: Administrative Perspectives

دور أنماط القيادة التربوية في قيادة التحول الرقمي في المدارس الخاصة في عمان: وجهات نظر الإداريين

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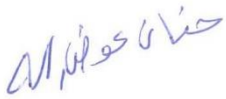

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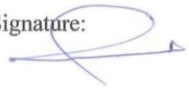
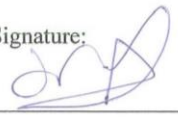
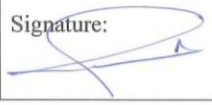
2	Dr. Mohd Habib Samkari	Middle East University	Internal Examiner	Signature: 
3	Dr. Ali Tarawneh	Middle East University	Internal Examiner	Signature: 
4	Dr. Wafa' AlAshqar	Associate Professor	External Examiner	Signature: 

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Dedication

To my Father's soul,

To my mother.

To my daughter Maryam.

To my sons Faisal & Khalid…

To my brothers and sisters,

To all the loved ones…

To myself…

I dedicate this thesis

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The Role of Educational Leadership Styles in Leading the Digital Transformation Across Amman Private Schools: Administrative Perspectives

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Abstract

Digital transformation helps educational institutions, to keep pace with sustainable development and to overcome the ongoing challenges, which requires educational leadership styles that can implement the transformation seamlessly. This study aims to investigate the role of educational leadership styles in leading digital transformation in Amman private schools from administrative perspectives. To achieve the objective of the study, descriptive survey method was used to acquire the data for the two major areas of study concerns: firstly, the styles of educational leadership, which are situational leadership, strategic leadership, and technological leadership, and secondly: the level of implementation of digital transformation, which are inputs, processes, and outputs. The data is collected from a stratified random sample, consisted of 250 participants who cover all educational administration levels (department director, assistant principal, and floor supervisor) in Amman private schools, within the University District, for the Academic year 2021/2022. The overall results showed that the educational leadership styles are often available; that Strategic-Technology leadership is the dominant leadership style, and the implementation of digital transformation is often available as well; that Input - Output is the level of implemented digital transformation. Moreover, the results showed that there is a role of strategic leadership and technology leadership styles in leading digital transformation, while there is no role at all of situational leadership style. It also showed that only a technology leadership style can predict the level of implementation of digital transformation. The most important recommendations of this study are to develop strategic alternatives and a technological roadmap that will help to achieve digital transformation in schools, and to promote a culture of digital transformation among community members and engage them in training programs that support digital transformation.

Keywords: Educational leadership styles, Situational Leadership, Strategic Leadership, Technology Leadership, Digital Transformation.

دور أنماط القيادة التربوية في قيادة التحول الرقمي في المدارس الخاصة في عمان: وجهات نظر الإداريين

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الملخص

يساعد التحول الرقمي المنظمات والمؤسسات؛ وخاصة التعليمية منها، على مواكبة التنمية المستدامة والتغلب على التحديات المستمرة؛ التي تتطلب أساليب قيادة تعليمية قادرة على تنفيذ التحول بسلاسة. تهدف هذه الدراسة إلى استقصاء دور أساليب القيادة التربوية في قيادة التحول الرقمي في مدارس عمان الخاصة من الناحية الإدارية. ولتحقيق الهدف من الدراسة، تم استخدام منهج المسح الوصفي للحصول على البيانات الخاصة بالمجالين الرئيسيين من اهتمامات الدراسة: أولًا، أنماط القيادة التربوية، وهي القيادة الظرفية، والقيادة الاستراتيجية، والقيادة التكنولوجية، وثانيًا: مستوى تنفيذ التحول الرقمي، وهي المدخلات والعمليات والمخرجات. تم جمع البيانات من عينة عشوائية طبقية، مكونة من 250 مشارك تغطي جميع مستويات الإدارة التعليمية (مدير القسم، مساعد المدير، مشرف الطابق) في مدارس عمان الخاصة، لواء الجامعة، للعام الدراسي 2022/2021. وأظهرت النتائج الإجمالية أن أساليب القيادة التربوية غالبًا ما تكون متاحة، والقيادة الاستراتيجية–التكنولوجية هي أسلوب القيادة المهيمن، وغالبًا ما يكون تنفيذ التحول الرقمي متاحًا أيضًا؛ والمدخلات–المخرجات هو مستوى التحول الرقمي المنفذ. علاوة على ذلك، أظهرت النتائج أن هناك دورًا لأنماط القيادة الاستراتيجية والقيادة التكنولوجية في قيادة التحول الرقمي، في حين لا يوجد دور على الإطلاق لأسلوب القيادة الظرفية. كما أظهرت أن أسلوب القيادة التكنولوجية هو وحده القادر على التنبؤ بمستوى تنفيذ التحول الرقمي. ومن أهم توصيات هذه الدراسة وضع بدائل استراتيجية وخارطة طريق تكنولوجية تساعد على تحقيق التحول الرقمي في المدارس، وتعزيز ثقافة التحول الرقمي بين أفراد المجتمع وإشراكهم في برامج تدريبية تدعم التحول الرقمي.

الكلمات الدالة: أنماط القيادة التربوية، القيادة الظرفية، القيادة الاستراتيجية، القيادة التكنولوجية، التحول الرقمي.

Chapter One

Background and Significance of the Study

Introduction

Nowadays, digital transformation is regarded as one of the most powerful forces transforming and changing within every dimension of human life, besides, changing enterprises (Morakanyane et al., 2020). These changes have an impact on how the organization's work, activity, system, and even administrative process must be updated and maintained to keep up with the changing parts of life.

According to Libert et al. (2016), digital transformation is a considerably more significant shift than a simple process or system upgrade. It can be used to create strategies, implement them, and deal with the obstacles and opportunities that come with them.

Furthermore, digital transformation has impacted almost every aspect of our life. It can be regarded from the standpoint of societies, industries, educations, economies, and individuals, and is not merely an issue of capital investment. It's no surprise, however, that these digital transformation trends have had a significant impact on education.

According to Wu and Hu (2019), due to a rising reliance on Information and Communication Technology (ICT) tools and technology, most educational institutions in developed and developing nations have been affected by digital transformation, which is unavoidable in order to meet the challenges of the time and delivering the best services.

Schools are among the most experienced educational institutions that have witnessed the global impact of digital transformation, particularly considering the current COVID-19 Epidemic (Gyang, 2020). This has motivated private and public schools to seek opportunities to create work on a continuous basis. Most private schools have been able to keep up with

technological advancements and digital transformation due to the availability of resources and human capacity.

Clipa and Greciuc (2018b) emphasizes the importance of the headmaster's leadership style employed by leaders to enhance managerial environment, for leadership to become more effective.

Makgato and Mudzanani (2019) recommended in their study that educational leadership should shift from traditional leadership styles to effective, efficient, and flexible leadership styles that improve administrative performance, promote a culture of digitization in teaching and learning, and are able to keep pace with changes and challenges in the era of digital transformation.

Many researchers (Guthrie & Meriwether, 2018; Kolomitz & Cabellon, 2016; Ravesteyn & Ongena, 2019), have pointed out that there is a link between distinct leadership styles and digital transformation, and that the more of these styles they have, the more effective the digital transformation in the organizations where they operate is.

Problem Statement

Several research is available on topics of Leadership Styles and digital transformation, such as (April & Dalwai, 2019; Kazim, 2019; Sainger, 2018; Sow & Aborbie, 2018). While research that combines the concepts of educational leadership Styles with digital transformation is very limited.

Some scientific studies (Guthrie & Meriwether, 2018; Ravesteyn & Ongena, 2019) found that successful digital transformation is linked to management philosophy and leadership. To keep pace with recent innovations and problems in educational institutions, it is necessary

to know the educational leadership styles needed to effectively implement digital transformation.

Besides that, the researcher has touched the problem of research through her experience in the field of education, as well as her experience of reality because of the current circumstances (COVID-19 Epidemic) that have led to a change in the education process in general and has particularly affected the reality of our schools. The researcher notices that there is a weakness in the practices of educational leadership styles owned by school principals, through traditional stereotypes in solving problems, and not keeping up with modern digital developments and changes in educational institutions.

Study Purpose

The aim of this study is to investigate the role of Educational Leadership Styles in leading Digital Transformation from the Perspectives of Amman's private school administrators.

Study Questions

To achieve the goal, the researcher tries to answer these questions:

Q1. What is the degree to which private school administrators in Amman apply educational leadership styles?

Q2. What is the level of employment of private school administrators in Amman for the requirements of digital transformation?

Q3. What is the role of educational leadership styles for Amman private school administrators in leading the digital transformation?

Q4. To what extend can the educational leadership styles of private school administrators in Amman predict the level of their implementation of digital transformation?

Significance of the Study

The study derives its significance from:

Theoretical significance:

Highlighting the effective styles of educational leadership to be available in school principals. Besides, providing such research to Arab libraries in general, as well as Jordanian libraries, to help activating the digital transformation in the development of administrative work in their educational institutions.

Practical significance:

Diagnosing the reality of active educational leadership practice for private school principals may provide the data required for management leaders to take appropriate development and change decisions, in planning appropriate programs and training courses that help in developing administrative performance and administrative competencies for leaders, to lead digital transformation effectively.

Definitions of Key Terms

The study includes a range of concepts and terms that need to be clarified as follows:

Educational Leadership Styles: defined as a systematic pragmatic function, which involves a social process that influences and directs people to willingly act and work to coordinate and guide practices useful for attainment of school goals and implementing organizational reform and change. (Abdel-Hameed et al., 2018; Gyang, 2020)

Procedurally, it is defined as activating the leadership process using different leadership styles (Situational, Strategical, and Technological), to facilitate administrative processes to influencing all employees who support the implementation of learning activities for achieve

educational goals by employing the lowest level of their resources available, in Amman private schools.

Situational leadership: defined as the characteristics of a successful leader will adjust his style to fit and meet the needs of others in the organization based on followers he is trying to influence based on the situation. (Rosita, 2019; Ruslan et al., 2020)

Procedurally, it is defined as the leader's use of the most appropriate leadership style that can be changed depending on the situation, taking into account factors that may affect the choice of style in each situation.

Strategical leadership: defined as a leader's ability to influence others, express a strategic vision, communicate and motivate the team to achieve that vision while imposing change on the organization. (Hill, C. & Jones, G., 2016; McGrath & Laksana, 2018).

Procedurally, it is defined as the leader's ability to express and communicate the strategic vision of the academic organisation, motivate the team, and impose the required changes towards achieving the vision.

Technology leadership: defined as the implementation of the DT strategy of the organisation the accomplishment of a goal through the change in attitudes, feelings, thinking, behaviour, and performance. (Promsri, 2019; Ravesteyn & Ongena, 2019).

Procedurally, it is defined as the leader's ability to promote the effective use of technology in teaching and learning.

Digital Transformation: Defined as the change in the organization based on new technology in business models and processes to catalyst to achieve improved solutions. (Kazim, 2019; Ravesteyn & Ongena, 2019).

Procedurally, it is defined as the process of employing digital technologies in schools to create new, or modify products, processes, and organizational aspects to meet educational and changing market demands. That encompasses: Inputs (leadership, physical and human resources, daily schoolwork, planning and educational procedures) to begin the digital transformation process, Processes (data management, training and capacity-building, communication, and development plans), and Outputs (technology implementation, customer satisfaction, technology platform, adaptive changing, and cost).

Study Limitations and Delimitations

Study Limitations

Human Limits*:* The study was conducted on the educational departments and leaders in Amman's private schools, including school principals and assistants, department heads, and floor supervisors.

Geographical Limits: The study was included educational departments and leaders in Amman private schools, in University District.

Time Limits: The data were collected during the second semester of the Academic year 2021/2022.

Content Limits: The study was conducted on the Educational Leadership styles and its role in leading Digital transformation.

Study Delimitations

The study determines by precisely and objectively the response of the sample members, their scientific sincerity in their response to the questionnaire prepared for the purpose of this study, and the comprehensiveness, validity, and reliability of the instrument. In addition, the results of the study will only be published to the community from which the sample was withdrawn, and similar communities.

Chapter Two

Review of the Literature

This chapter discusses the conceptual foundation underlying the study's variables: educational leadership styles and digital transformation, as well as a review of relevant theoretical literature and prior research.

Conceptual Framework

Figure (2.1) shows the conceptual framework of the study, and also shows the relationship between the study's variables and questions.

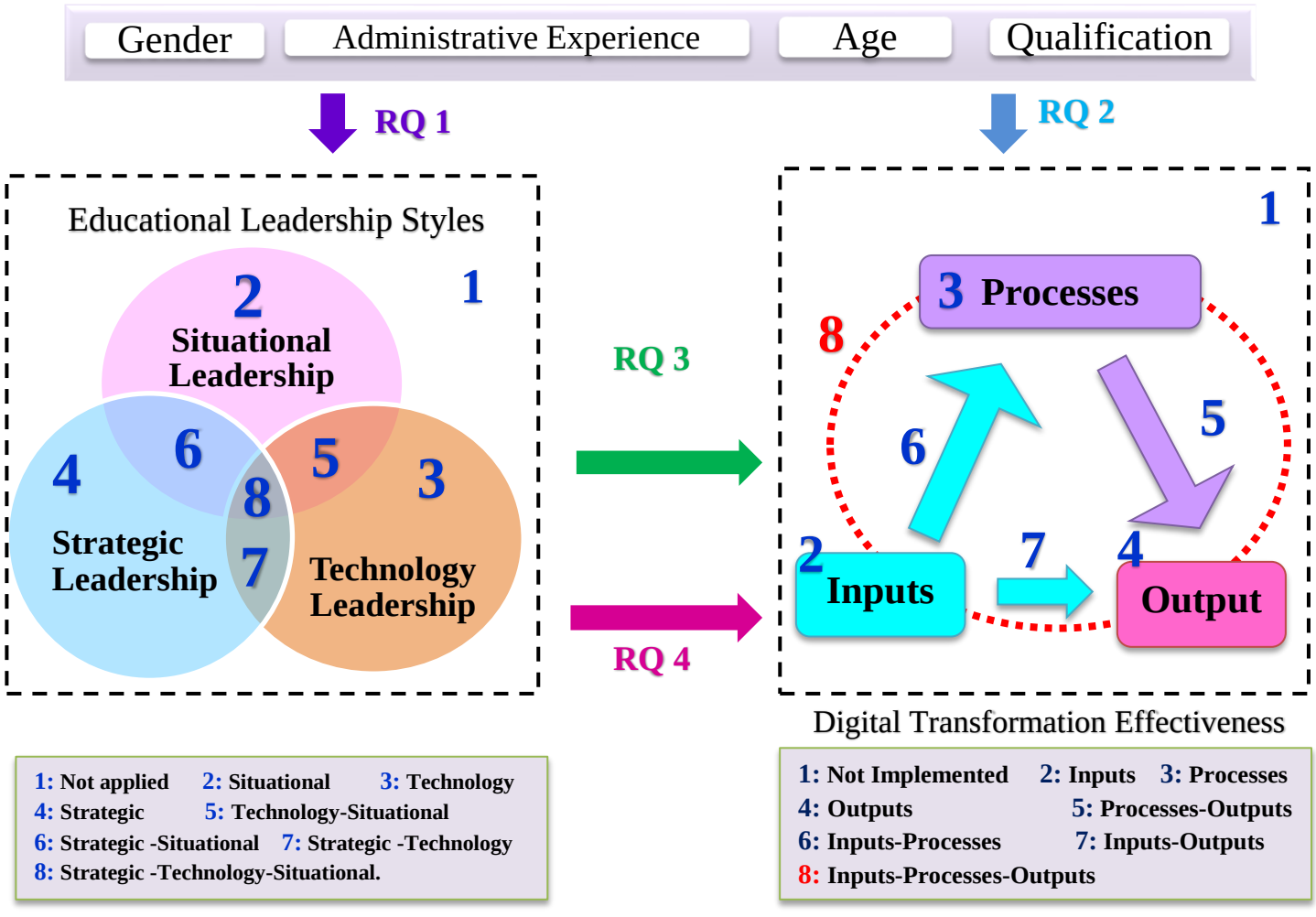

Fig. (2.1) Study Conceptual Framework

Theoretical Literature

Educational Leadership Styles:

It has become recognized to the management thought and leadership of the organizations that the vitality of the organizations and their willingness to accomplish the tasks assigned to them are largely linked to the nature of the leadership that dominates the human and material capabilities of these organizations, and their ability to coordinate efforts to ensure that the goals are achieved (Clipa & Honciuc, 2020; Hussain & Hassan, 2016; Vasilescu, 2019).

Administrative literature is full of studies on leadership in general and leadership styles, depending on the development of administrative thought in response to various developments in this area.

According to Amanchukwu et al. (2015), because of the diversity of the concept of leadership, the entrances to its study varied to achieve integration and inclusiveness in its understanding as a humanitarian phenomenon necessary to accomplish tasks and achieve results and thus embody them as a practice on the ground properly.

Leadership relies on responsibility to achieve certain aims and objectives by applying available resources (human and material) and ensuring cohesive and coherent organization in the process (Ololube, 2013). Clipa and Greciuc (2018a) describe leadership as a social influence process on others aiming at structuring the activities and relationships.

Vasilescu (2019) explore leadership as continuous process to motivate organizational environment to be competitive through charisma, inspiration, intellectual stimulation, and manifest the employees' abilities and initiative.

In the domain of education, educational leadership is an essential pillar of development, that involves a comprehensive and complex task involving many functions and procedures for school business management (Sharma, 2006).

Ololube (2013) asserted educational leadership as applying the best educational policies and strategies, which improve educational programs and administrative services. While Neese (2017) defined educational leadership as a social process that affects people and guides them to work towards achieving the goals set in schools.

Gyang (2020) reckons that educational leadership is a systematic pragmatic function, which involves a social process that influences and directs people to willingly act and works to coordinates and guides practices useful for attainment goals.

Vasilescu (2019) pointed out that current leadership theories described leaders based on traits, behaviours, attributes, and situations or how the influence and power are used to achieve objectives of the organization. In addition, leadership style is the way of how leaders direct the work and team by direction methods, implementing plans, and motivating employees.

The leadership literature has been able to identify different styles educational leadership such as: democratic style, transactional style, transformational style, team-oriented style, coercive style, visual style, situational style, servant leadership style, shared leadership style, directive style, supportive style, achievement-oriented style, tolerant style, strategic style, relationship-oriented style, digital style, consultative style, integrity leadership style…etc. These leadership styles have similar characteristics that two or more styles can be grouped into one style (Hussain & Hassan, 2016; Salter et al., 2014)

As a result of the accumulation of many recent studies of leadership styles, Hussain and Hassan (2016) has proposed a new typology in order to incorporate all the leadership styles available in the literature into a few manageable styles according to a general formula. The results of their study emphasis four representative styles of leadership according to follow:

Integrated Style 1: include transformational, coaching, affiliative, servant, shared, supportive, tolerant, consideration, relationship oriented, and authentic and integrity leadership styles.

Integrated Style 2: contain authoritative, transactional, coercive, visionary, achievement oriented, initiating structure, task oriented, and telling leadership styles.

Integrated Style 3: involve democratic, laissez-faire, team, participating, selling, LMX, and consultative leadership styles.

Integrated Style 4: contain pacesetting and directing leadership styles.

Educational leadership styles vary for achieving educational goals, but for the purposes of this study, we will highlight three leadership styles: (situational, strategic, technology), for the critical role they play in the sustainability of educational institutions in the age of digitization. (Porfírio et al., 2021).

Situational leadership:

According to Meier (2016) Situational leadership is one of the best styles in the field of managerial leadership, which a leader applies different leadership styles according to a follower's maturity level.

Ruslan et al. (2020) defined Situational leadership as the characteristics of a successful leader who adjust his style to fit and meet the needs of others in the organization based on followers he is trying to influence based on the situation.

Situational leadership model suggests that leaders should vary their behaviour in order to meet the changing needs of their followers, and the model represents four different leadership style, based on: types of leader behaviour (Directive of Task, and Support of Relationship) and types of follower readiness (Ability (Does one have the capacity), and Willingness (Does one have the desire)). (Rosita, 2019; Ruslan et al., 2020).

As a more effective leader, various situations you encounter require different responses to create a flexible and adaptive work environment. Fig (2.2) shows the four-leadership styles of applying Situational Leadership. (Greenberg & Baron, 2008).

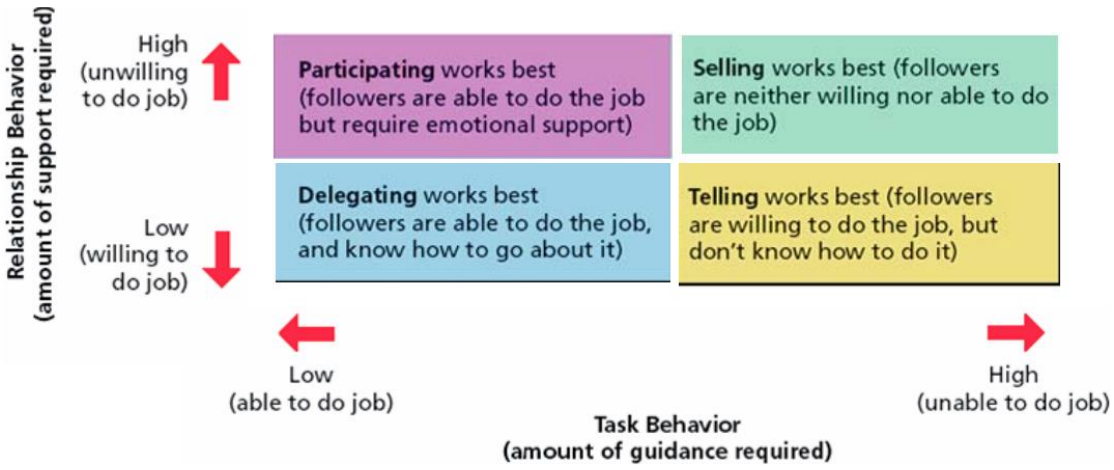

Fig. (2.2). Applying Situational Leadership Styles

The educational process is a changing and renewed process that requires a positional leadership that responds to the nature of each situation, circumstance or crisis experienced by the educational institution, thus ensuring continuity with a competitive level of education. (Rosita, 2019).

Strategic leadership:

Afandi (2017) emphasize that strategic leadership skills and activities are essential in a dynamic workplace to keep pace with digitalisation. Strategic leadership defined by (Hill, C. & Jones, G., 2016) as A leader who influences, motivates and guides others to achieve long-term strategic goals. While McGrath & Laksana (2018) defined as the ability for manager's potential to express a strategic vision, and to communicate and to motivate the team to achieve that vision while enforcing change to the organization.

According to Ariratana and Deeboonmee (2014), the characteristics of strategic leadership include having envisions a future with the present in mind, paying attention to the short-term goals with an eye to accomplishing the long-term goals. A few concepts related to strategic leadership to clearly understood and applied. These concepts are: mission (the reason for being), vision (where do we go from here?), objectives and goals (what to accomplish, by when), and strategy How to accomplish objectives and goals?).

Carter and Greer, (2013) explored in their study how leadership style might influence strategic leadership choice and organizational outcomes. They discussed the leadership styles that focus on leader behavioural styles are relevant to strategic leadership (transactional, transformational, and charismatic leadership).

While Özer and Tınaztepe (2014) emphasized that many leadership styles are relevant to strategic leadership, especially those that focus on leader behaviour and motivating capacity, Like: transformational leadership, transactional leadership, and Parental leadership.

The importance of strategic leadership lies in achieving educational objectives by optimizing the resources and possibilities available and the consequent organization of

administrative processes, and the subsequent guidance of subordinates and a course of action to ensure the achievement of leading outcomes. (McGrath & Laksana, 2018).

Technology leadership:

Leadership implications of The Professional Standards for Educational Leaders to "promote the effective use of technology in the service of teaching and learning" (National Policy Board for Educational Administration, 2015, P. 12).

Ravesteyn and Ongena (2019) defined Technology leadership as the implementation of the digital transformation strategy of the organisation the accomplishment of a goal through the change in attitudes, feelings, thinking, behaviour, and performance.

Promsri, (2019) briefly outlined key characteristics of technology leadership, which included: understanding digital transformation, developing digital skills at all levels of the organization, using the digital process and technologies to shape the organization and create strategies, financial support, and the ability to delegate to the digital experience, understanding human nature and customers, and inspiring the team to see the benefits of digital transformation.

The need for technology leadership is no longer a luxury, but a fundamental and important requirement to take advantage of all modern technical possibilities in accepting the increasing changes in the educational process, in addition to the fact that e-leadership has become a necessity as an innovative and innovative method of influence practiced in educational departments and schools along with other leadership methods. (Aurangzeb & Mazhar, 2019)

Based on the above:

Clipa and Honciuc (2020) leadership in the education sector requires multidimensional patterns that enable educational leaders to confront all kinds of situational differences that exist within and outside educational settings, in addition to bridging gaps and reducing mismatches between situational need, individual teacher requirements, and student development.

Researchers pointed to supporting educational leadership styles, which adopt a strategic mindset coupled with the ability to behave properly that leverages the school's resources to create a meaningful and attractive culture to transform investments in technologies and digital transformation into a competitive advantage. (Gyang, 2020; Porfírio et al., 2021; Promsri, 2019)

Confirms (Porfírio et al., 2021; Sebastian et al., 2020) that leadership characteristics sorted based on three leadership styles (Situational, Strategic, and technology Leadership), are key aspects of effective educational leadership that can keep pace with the change and challenges facing the education sector, as well as influencing the level of digital transformation.

Digital Transformation:

In recent years, we are noticing how digital technologies have been widely integrated in different sectors. The digitalization and digital transformation through digital technologies can potentially change almost every aspect every dimension of human life.

According to Yücebalkan (2018) digitization is not limited to rewriting existing processes; It's about starting from scratch and knowing how to engage with products, services, and customers in an unconventional way. Afandi (2017) emphases that digitization focus on the restructuring of operations by integrating digital technologies and tools.

Gimpel et al. (2018) indicate that digital transformation is the ability of an organizations to adapt and capitalize on digital technologies to change business models, improve existing activities work, and ensure sustainability.

Ravesteyn and Ongena (2019) considered digital transformation to refer to the change in the organization based on new technology in business models and processes. Morakanyane et al. (2020) assert it is an evolutionary process that serves as a central concept to leverages digital technologies by integrate the entire coordination, prioritization, and implementation of digital transformation to keep up with changing competitive.

Libert et al (2016) differentiate between digital upgrade, which is the use of digital technologies to increase efficiency and effectiveness in an organization's business operations, and digital transformation, which occurs when digital technologies are used to fundamentally change the overall business operations.

The digital transformation of the industry depends on four basic elements, as Yücebalkan (2018) summarized: Customer demands and mass customization, The value of data and new

business models, Resource limits and sustainability, and Moving on to investment and skilled worker.

Digital transformation is the modern mainstream development worldwide that organizations are reluctant to keep up with the digital transformation are likely to fail and disappear in the labor market. Many factors are driving organizations to adopt digital transformation: (Morakanyane et al., 2020)

1. Taking advantage of lower prices of both hardware and software.
2. Customer demands, expectations, and behavior towards digital transformation.
3. Remain competitive and ensure sustainability for organizations.

Researchers (Afandi, 2017; Demirkan et al., 2016) presented a range of benefits of digital transformation, which reflected to organization, employees, work environment, and customer service:

- New business models and service offerings.
- Improve employee productivity and creativity.
- Enhance customer experiences by providing better service.
- Improving processes efficiency and accuracy.
- Increasing competitiveness to provide the best.

According to Sainger (2018) there are important organizational dimensions to creating an organization capable of successfully digital transformation, which are: business model, structure, people, processes, IT capability, offerings and engagement model.

The notion of digital transformation and their impact on organizational structures requires special attention and proper management as it is complex process. (Nwankpa & Roumani, 2016).

Most studies on digital transformation focus on the concepts of digital transformation, elements, stages and dimensions, while no specific proposals have been made to organizations for the mechanism for monitoring and evaluating digital transformation strategies. (Korachi & Bounabat, 2019)

The digital transformation system framework is designed to create a repeatable method or process for planning and guiding a digital transformation, that protect businesses from digital disruption (Baiyere et al., 2020; Korachi & Bounabat, 2019).

The system analysis approach depends heavily on how the system is defined, by defining its component parts and their mutual relationships. Dobrolyubova (2021) reckons that digital transformation is a continuous stages involving: input (resources), processes (a series of actions and steps taken to achieve goals), and outputs (ultimate results), and each component of this stage contributes to the achievement of the next component.

Digital transformation has become a duty for educational institutions and a necessary means of survival. According to AlHaroon and Barakat (2019) digital transformation increases the competitiveness of the education sector by improving the quality-of-service delivery and increasing the operational efficiency of administrative services, students, teachers and society to meet the changing needs of education and the market job.

To implement the digital transformation in education system, we need to know the key elements for the process: Inputs (prepare components of the education system to begin the digital transformation process.), Process (employing components of the educational system for digital technologies, and the mechanism of their interaction), and the Output; results (Outcomes and services resulting from digital transformation that improve situation and revenue, ensure sustainability in the education system). (Georgios et al., 2021; Paper & Devlin, 2019).

Educational leadership Styles and digital transformation:

Laurence (2006) asserts that educational institutions are the first to accept the development and rapid change of the world, and it is essential that they be the first to embrace nurture and support digital transformation.

Maintaining the sustainability of the education system requires schools to adopt Educational Leadership Styles that can stimulate digital transformation to become more competitive. In the wake of the COVID-19 Epidemic, people have begun to realize the far-reaching power of education-driven technology (Gyang, 2020).

Studies highlighted that digital transformation does not depend on technology adoption but on the leadership mindset and its strategies. Kane et al. (2015) asserted that leaders don't need to be technology experts, but they must understand the power of digital technologies, so they can initiate the process, manage the process, and find new ways of conducting operations and delivering services.

Despite technological developments in the educational field for all administrative and technical work, the role picture remains unclear between the practice of leadership styles (Situational leadership, Strategical leadership, and Technology leadership) in leading digital transformation effectiveness, hence the problem of research, which is to try to find out the role of practicing educational leadership styles in leading of digital transformation in private schools in Amman.

Literature Review

Several studies have been reviewed; By referring to various databases, Internet, periodicals, and refereed journals; Which dealt with the topic of educational leadership styles and digital transformation, to benefit from them, and to clarify the points of agreement and differences between them, and what will distinguish this study from them.

Afandi (2017) study aimed that identifying how and why organizational leaders succeed or fail in digital transformation. Based on a qualitative research method by interviewing 15 business leaders in Saudi Arabia. The outcomes showed that leadership is important in the digital transformation process and successful organizational leaders can create a powerful vision, align employees, and mobilize them for change to embrace new ways of doing business. Beside leaders must possess digital acumen and develop digital imperative.

Sow and Aborbie (2018) study indicated that leadership has been very influential in the effectiveness of the digital transformation of organizations in the Midwest (USA). They adopted qualitative research method, designed using semi-organized interviews with six information technology leaders from health care organizations. The study asserted that leaders must be flexible and support their employees who can make a difference during and after digital transformation, as well as recognize what they have to offer and how they can make a difference in the organization in the long run.

Larjovuori et al. (2018) study aimed at recognizing key leadership foci in digital business transformation. Based on an empirical investigation of eight Finnish organizations operating in the service sector, through a qualitative content analysis of data from 46 interviews. They found four main leadership foci of digital business transformation: strategic vision and action, leading cultural change, enabling, and leading networks. The results showed that strategic vision is an essential starting point for digital business development. The study

indicated that there is a need for a more detailed understanding of the different roles of first-line managers, human resource management, and senior management in the change process.

Balyer and Öz (2018) study was aiming that the importance of the educational leadership's willingness to manage digital transformation and to have appropriate styles to manage this transformation. They used phenomenological research designed by the qualitative approach, applied to 20 faculty members working at nine different universities in the Department of Educational Sciences. They recommended conducting further studies on developing policies, administrators and processes that can help teachers to easily activate Digital Transformation.

Sainger (2018) conducted a conceptual paper based on extensive review of various survey reports on aspects related to leadership and digital transformation. The study explains that the successful digital transformation depends on how leaders, use digital technology for the growth of the organization. He used descriptive literacy approach. The study asserted that importance of leaders' position and their decision making for organizational excellence in the digitally transformed world.

Sahyaja and Rao (2018) study aimed at studying the role of emotional intelligence and its relationship with intellectual intelligence on leadership. This study is purely conceptual with brief discussion about leadership characteristics and factors that suit the new leadership for the digital era. The results indicated to the factors which affect the performance of the firm by using the mediating factor leadership in the digital age and the factors which influence the leadership such as Emotional quotient, Intelligence Quotient, Digital Quotient, Personality Quality. They suggested to architect the leadership styles which are suitable to face challenges for the organization in the digital era, to improve organizational effectiveness.

Kazim (2019) conducted a study aimed at identifying the optimal leadership styles, characteristics, and traits that could enable the successful implementation of digital transformation programmes in organisations headquartered in France. He used the qualitative interview method, applied to eight members purposively selected, who participated of medium and large companies in the hospitality, healthcare, pharmaceutical and banking sectors in France. The results revealed operational leaders are ready to adapt their styles, characteristics, and traits to suit this new digital era. Besides, leaders can positively influence and improved ways of working at all levels by adopting digital transformation once given a clear vision, commitment, and support from executives.

April and Dalwai (2019) study aimed that inductively understand the changing leadership styles practiced, and operating transformations needed, at leading South African Wealth Management (SAWM) organization. Conducted using qualitative interview method with 22 participants leading. The interviews were transcribed and coded, using open and axial coding. The results showed that leadership styles during digital transformation resembled facets of existing leadership theories, while digital leaders demonstrated greater situational awareness and cognitive ability to set the strategic direction of the business.

Hendrasto et al. (2019) study aimed at investigating the development of academic literature on leadership in the digital era. They used bibliometric network analysis that can show that the development of literature on digital leadership themes. This study has mapped out the academic literature on the keyword "digital leadership" from the early year of the rise of the digital era in 2000, up until the end of 2018. This study showed that research on digital and leadership term are not directly correlated, there is still a lot more for discussions on both terms. They suggested to further research that target the area of the organization, to have a better understanding of leadership for the digital start-up.

Cortellazzo et al. (2019) study aimed at investigating how the debate on digital transformation and leadership has evolved in recent years, to identify key theories and findings, and to propose potential future directions of research. They used a mixed method approach, that involves both quantitative research and qualitative coding. The outcomes showed that leaders are key actors in the development of a digital culture. They suggested to further studies that adopt a broader overview of the macro-organizational and strategic effects to understand how digital transformation is implemented across different organizations, communities, and teams.

Promsri (2019) study aimed to analyze digital leader characteristics from related digital leadership articles on the Internet and develop qualities of a digital leader model. The study adopted the content analysis of literature review method, by utilized Google as a search engine tool for data collection. Content analysis with the synthesis matrix methods with the congruence index of sources technique was employed. The results demonstrated that six characteristics of digital leaders met this criterion, which included digital knowledge and literacy, vision, customer focus, agility, risk-talking, and collaboration.

Klein (2020) conducted study aimed at sum up main characteristics of the leadership in the era of digital transformation, he applied content analysis of literature review as the method. The search process consisted of four stages: searching the literature, checking the sources according to their suitability, collecting data on the characteristics of digital driving, and finally classifying the features according to their similarity and popularity and calculating the frequencies. The results revealed twenty-three leader characteristics associated with digital business.

Imran et al. (2020) study aimed at examines the key competencies of organizational leadership for digital transformation. They used qualitative methods to collect and analyze

the data, by conducting interviews of ten digital transformation experts from two hardcore industrial organizations. The results showed that five main competencies of leaders that are critical for digital transformation of industrial organizations: digital vision, digital knowledge, failing fast, empowerment, and managing diverse teams. They recommend that future research includes more case organizations as well as interview participants.

Georgios et al. (2021) conducted a study aimed at understanding the digital competence of the directors of institutes of vocational training and schools of second change in Greece. They used randomly sample, of 115 directors of vocational training and 72 of schools of second change, using a questionnaire. The results revealed leaders who use more ICT in their administrative work have better digital skills. Besides, the attendance of training programs effects the digital competence of the managers and the degree to which they use ICT in the administration.

Agustriyana and Setyad (2021) study aimed at which a company's and or organization's digital transformation strategy affects leadership or even leadership affects the acceleration of digital transformation. They used a literacy and description approach. The literature review analysis showed leadership must be able to adapt to nine digital transformation strategies: Customer Understanding, Top-Line Growth, Touch Points, Transformation of Operational, Process Digitization, Worker Empowerment, System Performance Management, The Transformation of Business Model, Digital Business Modification.

Mutsuddi and Sinha (2021) study aimed at exploring the role of leadership skills for developing digital acumen in people working in information technology organizations. They used sequential mixed approach of both qualitative and quantitative methods, with a sample of employees working in information technology companies at NCR in Delhi. The results

indicated that variable championing leadership had played significant role in terms of influencing digital acumen.

Comments on Previous Studies (Gapping Table)

The commentary on previous studies includes a comparison between the current study and previous studies in terms of agreement and difference in the following topics: the objective of the study, the place of conduct of the study, the study curriculum, the sample of the study, and the study tool.

Table (2.1) explains what distinguishes the current study from previous studies.

Table (2.1). Gapping table

Study Title	Purpose	Sample and Sampling	Methodology
Afandi (2017). The Role of Strategic Leadership in Digital Transformation Process	To identify how and why organizational leaders succeed or fail in digital transformation	15 business leaders in Saudi Arabia.	The qualitative interview method.
Gap	**Previous study was limited to the views of Strategic leadership style, while our study specifically discussed the educational leadership styles (strategical, situational, and technological). The difference came in the study sample and the approach taken. The previous study adopted qualitative method, by interviewing 15 business leaders in Saudi Arabia. While our study followed a descriptive survey with a sample of private school management in Amman.**		
Sow and Aborbie, (2018). Impact of Leadership on Digital Transformation	To identify leadership styles that impacted the digital transformation of an organization.	Six information technology leaders from healthcare organizations in the Midwest (USA).	The qualitative interview method.
Gap	**Our study differs from the previous study because it specifically discussed the educational leadership styles, unlike Sow & Aborbie study, which discussed the leadership in general. In addition, previous study was presented in healthcare organizations, unlike our study, which is in educational organizations. Besides, our study used the descriptive survey method, while the previous study used the qualitative interview method.**		

Study Title	Purpose	Sample and Sampling	Methodology
Larjovuori et al. (2018). Leadership in the digital business transformation	To understanding of the role and focus of leadership in the context of digital business transformation.	46 interviews, with employees of organizations operating in the service sector (insurance, banking, consulting, real estate management, financial administration services, and retail)	The mixed approach that involves both qualitative and quantitative.
Gap	**Previous study agreed with our study in terms of discussing leadership and digital transformation, but our current study differs in the specifically presented in educational leadership styles. The difference came in the study sample and the approach taken. The previous study adopted a mixed approach of both qualitative and quantitative methods (questionnaires, interviews, participant observations, and group discussions), with employees of organizations operating in the service sector. While our study followed a descriptive survey with a sample of private school management in Amman.**		
Balyer and Öz, (2018). Academics' Views on Digital Transformation in Education Views	To determine academics' views on digital transformation in education in terms of program and management processes.	20 faculty members working at 9 different universities in the Department of Educational Sciences.	The qualitative interview method.
Gap	**Previous study was limited to the views of academics about digital transformation in education Perspectivess, while our study presented the role of educational leadership in leading digital transformation. The study sample also differed, as the previous study relied on the viewpoint of academics in universities, while our study relied on the viewpoints of administrators in private schools.**		
Sainger (2018). Leadership in Digital Age: A Study on the Role of Leader in this Era of Digital Transformation	To prove the importance of leaders' position and their decision making for organizational excellence in the digitally transformed world.	--------	The descriptive literacy method.
Gap	**Sainger's study differs from our study because it specifically discussed the leadership in general, unlike our study, which discussed the educational leadership styles. Also, it is differed in the methodology, where the Sainger's study used the descriptive literacy method, while this study used the descriptive survey method.**		

Study Title	Purpose	Sample and Sampling	Methodology
Sahyaja and Rao (2018). New Leadership in the Digital Era Conceptual Study on Emotional Dimensions in Relation with Intellectual Dimensions	To knows which leadership style among all suits the most for this digital era.	--------	The descriptive literacy method.
Gap	**Previous study was determined by the conceptual analysis of leadership in the digital era, while our study focused on the role of educational leadership styles in leading digital transformation. Also, it is differed in the methodology, where the previous study used the descriptive literacy method, while our study used the descriptive survey method.**		
Kazim (2019). Digital Transformation and Leadership Style: A Multiple Case Study	To identify the optimal leadership styles, characteristics, and traits that could enable the successful implementation of DT programmes in organisations headquartered in France.	Eight individuals were recruited for participation from medium and large enterprises in the hospitality, healthcare, pharmaceutical, and banking sectors in France.	The qualitative interview method.
Gap	**Kazim's study is agreed with our study in terms of discussing leadership styles and digital transformation, but our current study differs in the specifically presented in educational leadership styles. In addition, our current study used the descriptive survey method, while Kazim's study used the qualitative interview method. Besides, Kazim's study was presented in hospitality, healthcare, pharmaceutical, and banking sectors, unlike our current study, which is presented in educational sectors.**		
Cortellazzo et al. (2019). The Role of Leadership in a Digitalized World: A Review	To investigate how the debate on digital transformation and leadership has evolved in recent years.	--------	Mixed method approach, that involves both quantitative research and qualitative coding.
Gap	**The previous study is agreed with our study in terms of discussing the role of leadership in a Digitalized World, but our study differs in the specifically presented in educational leadership styles. But the difference came in the approach adopted of the study. The previous study adopted mixed method approach of both quantitative research and qualitative coding. While our study followed the descriptive survey.**		

Study Title	Purpose	Sample and Sampling	Methodology
April and Dalwai (2019). Leadership Styles Required to Lead Digital Transformation.	To inductively understand the changing leadership styles practiced, and operating transformations needed, leading (SAWM) organization.	22 participants	The qualitative interview method.
Gap	**The previous study agreed with our study in the idea of leadership styles required to lead digital transformation, but the difference in our study came in educational leadership styles. In addition, the difference came in the sample of the study and the approach adopted. The previous study adopted a qualitative interview with leaders of the South African Wealth Management organization. While our study followed the descriptive survey with administrative of Amman private schools.**		
Hendrasto et al. (2019). Leadership Theory in Digital Era: A Preliminary Investigation to Leadership in the Digital Startup.	To investigate the development of academic literature on leadership in the digital era.	--------	The bibliometric analysis and literature review method.
Gap	**This study differs from the previous study because it specifically discussed the educational leadership styles, unlike the previous study, which discussed the leadership Theory in general. Beside The difference is also in the methodology, where the previous study used the bibliometric analysis and literature review method, while our study used the descriptive survey method.**		
Promsri (2019). Developing Model of Digital Leadership for a Successful Digital Transformation	To analyse digital leader characteristics from related digital leadership articles on the Internet and develop qualities of a digital leader model.	--------	The content analysis of literature review method.
Gap	**Promsri's study was limited to the views of digital leadership style, while our study specifically discussed the educational leadership styles (strategical, situational, and technological). Besides, the difference is also in the methodology, where the Promsri's study used the content analysis of literature review method, while our study used the descriptive survey method.**		
Klein (2020). Leadership Characteristics in the Era of Digital Transformation.	To sum up main characteristics of the leadership in the era of digital transformation.	--------	The content analysis of literature review method.
Gap	**Klein's study was limited to discuss leadership Characteristics in the era of digital transformation, while our study presented the role of educational leadership in leading digital transformation. Besides, the difference is also in the methodology, where the Klein's study used the content analysis of literature review method, while our study used the descriptive survey method.**		

Study Title	Purpose	Sample and Sampling	Methodology
Imran et al. (2020). Leadership Competencies for Digital Transformation: Evidence from Multiple Cases	To identify the key leadership competencies for digital transformation	Ten digital transformation experts from two hardcore industrial organizations.	The qualitative interview method.
Gap	**Our study differs from the previous study because it specifically discussed the role of educational leadership styles in leading digital transformation, unlike the previous study, which discussed the leadership competencies for digital transformation. In addition, the difference came in the sample of the study and the approach adopted. The previous study adopted a qualitative interview with digital transformation experts from two hardcore industrial organizations. While our study followed the descriptive survey with administrative of Amman private schools.**		
Georgios et al. (2021). Educational leadership and digital competence: a quantitative study with directors of lifelong learning institutions in Greece for educational leadership in secondary special education schools in Greece	To investigate the digital competence of the directors of institutes of vocational training and schools of second change in Greece.	115 directors of vocational training and 72 of schools of second change	The descriptive survey method.
Gap	**The previous study is agreed with our study in terms of discussing educational leadership and digital transformation. Also, the similarity in adopting the descriptive survey methodology. But the difference came in the sample of the study. The sample of the previous study consisted of directors of vocational training and schools of second change. While the sample of our study consist of administrative of Amman private schools.**		
Agustriyana and Setyadi (2021). The Influence of Digital Transformation on Leadership	To extent to which a company's and or organization's digital transformation strategy affects leadership or even leadership affects the acceleration of digital transformation.	--------	The descriptive literacy method.
Gap	**The previous study focused on the impact of digital transformation on leadership, using descriptive literacy method. In contrast, our study focused on the role of educational leadership styles in leading digital transformation, using descriptive survey method.**		

Study Title	Purpose	Sample and Sampling	Methodology
Mutsuddi & Sinha (2021). Role of Leadership Skills for Developing Digital Acumen in Information Technology Employees	To explore the role of leadership skills for developing digital acumen in people working in information technology organizations.	210 respondents working in software development positions in reputed information technology companies in the NCR of Delhi.	The mixed approach that involves both qualitative and quantitative.
Gap	**The previous study agreed with our study in terms of discussing the role of leadership in influencing digitization, however, it focused on the role of leadership skills in developing digital acumen, while our study focused on the role of educational leadership styles in driving digital transformation. In addition, the difference came in the study sample and the approach taken. The previous study adopted a mixed approach of both qualitative and quantitative methods, with a sample of workers in IT companies at NCR in Delhi. while our study followed a descriptive survey with a sample of private school management in Amman.**		

Benefits from previous studies

Our study benefited from previous studies in forming a good background on the theoretical framework of the study, and knowledge of its topics to be addressed. It also benefited from it in emphasizing its problem, in preparing the study tool and dividing its axes, in addition to benefiting from it in interpreting and discussing the results and reviewing the statistical methods used.

By reviewing previous studies, it is noted that they dealt with leadership styles as a general concept (characteristics, traits) that affects digital transformation. In addition, the methodology used in the previous studies varied, most of the studies (Agustriyana, D. & Setyadi, A., 2021; Georgios et al., 2021; Hendrasto et al., 2019; Klein, 2020; Promsri, 2019; Sahyaja & Rao, 2018; Sainger, 2018) adopted the descriptive method, and some of them (Afandi, 2017; April & Dalwai, 2019; Balyer & Öz, 2018; Imran et al., 2020; Kazim, 2019; Sow & Aborbie, 2018) adopted the qualitative interview methodology, while (Cortellazzo et al., 2019; Larjovuori et al., 2018; Mutsuddi & Sinha, 2021) adopted the mix quantitative and qualitative approach.

On the other hand, most of previous studies were applied to non-educational sectors and organizations. Previous research findings indicated that successful digital transformation is linked to management and leadership philosophy.

How unique is this study?

As for the purpose of the study, this study is characterized as being one of the first studies dealing with educational leadership styles (Situational, Strategic, and Technology) and its role in leading the digital transformation effectiveness in schools; within the limits of the researcher's knowledge. Moreover, **this study sample** is unique in studying the variables from the educational sector, Private schools in Amman, Jordan.

Chapter Three

Methodology and procedures

This chapter describes the research's methodology, the study population, and sample, as well as the instruments utilised in the study and the methodologies used to derive indications of validity and reliability. Additionally, it offered an explanation of the statistical processes used to analyse data.

Study Design

The methodology of this study adopted quantitative approach. It followed a quantitative descriptive method to measure the degree of applying educational leadership styles, as well as to determine the level of employment of digital transformation. As for identifying the role of style in leading the transformation, the quantitative impact method was used, while the quantitative correlational method used to predict the level of implementation of transformation**.**

Population

The study population consisted of all educational administrators' levels (department director, assistant principal, floor supervisor) in Amman private schools, in University District, for the Academic year 2021/2022, with a total number (650), according to the website of the Special Education Department of the Ministry of Education.

Participation

A stratified random sample was selected from the study population, and it was distributed according to Gender, Age, Management Experience, and Qualification. Table (3.1) shows details of demographical distribution of the sample.

Table (3.1). Demographical distribution of the sample

Variable	Category	Number	Percentage
Gender	Male	80	32%
	Female	170	68%
	Total	**250**	**100%**
Age	(21-30) years	44	17%
	(31-40) years	98	40%
	(41-50) years	76	30%
	More than 50 years	32	13%
	Total	**250**	**100%**
Administrative Experience	(2-5) years	94	38%
	(6-10) years	56	22%
	more than 10 years	100	40%
	Total	**250**	**100%**
Qualification	Bachelor	84	34%
	Higher Diploma	54	21%
	Postgraduate	112	45%
	Total	**250**	**100%**

Participants was chosen based on random sampling after calculating the sample size using Krejcie and Morgan (1970) table. The minimal required sample size was (242) participants, and the total number of obtained participants were (250).

Study Instruments

To answer the study questions, the researcher used the theoretical literature and relevant previous studies and build a questionnaire on the role of educational leadership styles in leading digital transformation. The five-scale questionnaire consisted of three main parts, as follows:

Part One: Participant demographical data and consist of the following:

- Gender: Male or Female
- Age: (21-30) years; (31-40) years, (41-50) years, more than 50 years
- Management Experience: (2-5) years, (6-10) years, more than 10 years
- Qualifications: Bachelor, Diploma, Postgraduate

Part Two: This part was developed by the researcher for this study to investigate the educational leadership styles, after careful review of relevant literatures, such as: (Afandi, 2017; ALDhuhli et al., 2021; Canaan, 2019). Based on this a 43-items survey (Appendix (1) shows the instrument in its final form) was constructed covering three leadership styles:

- Situational leadership: 13 items
- Strategy leadership: 15 items
- Technology leadership: 15 items

Part Three: This part was developed by the researcher for this study to investigate the Levels of implementation of digital transformation requirements, after careful review of relevant literatures, such as: (Almufeez et al., 2021; Dobrolyubova, 2021; Zaoui & Souissi, 2020). Based on this a 40-items survey (Appendix (1) shows the instrument in its final form) was constructed covering digital transformation requirements:

- Input: 10 items
- Process: 14 items
- Output: 16 items

Instruments Validity

The content validity was assured by presenting the questionnaire to (5) experts of specialists in educational administration in Jordanian universities for arbitration and verification of its comprehensiveness, the integrity of its paragraphs, and the extent to which the paragraphs belong to its fields, and their comments and notes have been taken into consideration for improvements and amendments (Appendix (2) explained their names and information).

Then, the questionnaire was `tested on five school administrators, (Appendix (3) shows their names). who indicated that all questionnaire items were very clear, and they didn't face difficulties while completing the survey.

Moreover, the instrument has been applied to a pilot sample of 30 administrators from outside the sample to rationing the study instrument and to check its validity to the application on the original sample group. The values of the specific correlation parameters have been calculated for the internal and constructive validity check.

Construction validity:

To verify the construction validity of the study instrument, the researcher calculated Pearson's correlation factor between the questionnaire domains of the instrument as a whole. Table (3.2) shows the construction validity of the study instrument.

Table (3.2). Construction validity of the study instrument.

Domains		Pearson correlation**	Sig.*	Number
Educational leadership styles	Situational Leadership	0.86	0.001	30
	Strategic Leadership	0.88	0.000	30
	Technology Leadership	0.8**6**	0.041	30
Digital Transformation	Input	0.81	0.020	30
	Process	0.95	0.009	30
	Output	0.94	0.000	30

***Correlation is significant at the 0.05 level (2-tailed).**

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

It is noticed from the results in table (3.2), that a high correlation coefficient and statistically significant between the applying of educational leadership styles domains with the total instrument of the study. As the domains of applying educational leadership styles ranged between (0.86 - 0.88), and statistically related significant. This means that there is a high degree of construction validity in the items of the instrument and acceptable for application to this study.

Moreover, it is noticed a high correlation coefficient and statistically significant between the digital transformation level domains with the total instrument of the study. As the domains of level of digital transformation ranged between (0.81 - 0.95) and statistically related significant. That making the instrument characterized by high constructive validity and acceptable for application to this study.

Internal validity:

To verify the internal validity of the study instrument, the researcher calculated Pearson's correlation factor between the item and the domain to which it belongs. Tables (3.3) and (3.4) shows the values of correlation coefficients.

Table (3.3). Internal validity of the study instrument of the degree of applying educational leadership styles.

Situational Leadership			Strategic Leadership			Technological Leadership		
N. of items	Pearson Correlation*	Sig.**	N. of items	Pearson Correlation*	Sig.**	N. of items	Pearson Correlation*	Sig.**
1	0.580	0.007	14	0.625	0.000	29	0.613	0.001
2	0.591	0.001	15	0.759	0.000	30	0.610	0.001
3	0.519	0.003	16	0.768	0.000	31	0.604	0.002
4	0.543	0.014	17	0.764	0.000	32	0.703	0.000
5	0.759	0.000	18	0.675	0.025	33	0.562	0.001
6	0.699	0.001	19	0.734	0.001	34	0.616	0.000
7	0.616	0.001	20	0.605	0.009	35	0.709	0.000
8	0.652	0.001	21	0.635	0.003	36	0.616	0.004
9	0.498	0.005	22	0.674	0.001	37	0.577	0.004
10	0.693	0.001	23	0.736	0.001	38	0.793	0.000
11	0.587	0.000	24	0.656	0.013	39	0.594	0.010
12	0.712	0.000	25	0.657	0.001	40	0.865	0.000
13	0.478	0.008	26	0.637	0.001	41	0.654	0.001
			27	0.799	0.001	42	0.526	0.003
			28	0.502	0.005	43	0.448	0.013

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

****Correlation is significant at the 0.05 level (2-tailed).**

It is noticed from the results in table (3.3) that the correlation coefficients between the items of the (Situational Leadership) domain ranged between (0.478 - 0.759) with the domain. In addition, the correlation coefficients for the items of the (Strategic Leadership) domain ranged between (0.502 - 0.799) with the domain. Moreover, the correlation coefficients the items of the (Technological Leadership) domain ranged between (0.448 - 0.865) with the domain.

All values are high and statistically significant. This means that there is a high degree of internal consistency in the items of the instrument.

Table (3.4). Internal validity of the study instrument of the level of Digital Transformation .

Inputs			Processes			Outputs		
N. of items	Pearson Correlation*	Sig.**	N. of items	Pearson Correlation*	Sig.**	N. of items	Pearson Correlation*	Sig.**
44	0.742	0.002	54	0.780	0.000	68	0.817	0.001
45	0.660	0.002	55	0.814	0.000	69	0.659	0.001
46	0.696	0.001	56	0.554	0.001	70	0.794	0.000
47	0.792	0.004	57	0.470	0.009	71	0.715	0.001
48	0.805	0.000	58	0.704	0.001	72	0.777	0.000
49	0.805	0.000	59	0.693	0.001	73	0.704	0.000
50	0.410	0.024	60	0.723	0.001	74	0.687	0.000
51	0.761	0.001	61	0.741	0.001	75	0.679	0.001
52	0.798	0.000	62	0.855	0.000	76	0.687	0.001
53	0.781	0.001	63	0.662	0.000	77	0.741	0.002
			64	0.607	0.001	78	0.000	0.001
			65	0.772	0.001	79	0.679	0.000
			66	0.860	0.001	80	0.664	0.001
			67	0.913	0.001	81	0.771	0.001
						82	0.853	0.000
						83	0.581	0.005

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

****Correlation is significant at the 0.05 level (2-tailed).**

It is noticed from the results in table (3.4) that the correlation coefficients between the items of the (Inputs) domain ranged between (0.410 - 0.798) with the domain. In addition, the correlation coefficients the items of the (Processes) domain ranged between (0.470 - 0.913) with the domain. Moreover, the correlation coefficients the items of the (Outputs) domain ranged between (0.581 - 0.853) with the domain.

All values are high and statistically significant. This means that there is a high degree of internal consistency in the paragraphs of the instrument.

Instruments Reliability

Calculating partial and overall reliability using the internal consistency method according to Cronbach's alpha equation, by applied the instrument to the pilot study. Table (3.5) shows results.

Table (3.5). Cronbach's Alpha of All instrument items.

Domain		Cronbach's Alpha*	N. of Items
Educational Leadership Styles	Situational Leadership	0.84	13
	Strategic Leadership	0.91	15
	Technology Leadership	0.88	14
	Total	**0.94**	**43**
Digital Transformation	Input	0.90	10
	Process	0.93	14
	Output	0.94	16
	Total	**0.97**	**40**

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

It is noted from the findings in the table (3.5) that the value of the internal consistency stabilization factor for degree of applying educational leadership styles instrument as a whole using the Cronbach's alpha equation was (0.94), and the values for consistency factors in the areas ranged from (0.84 - 0.91), and these values confirm the suitability for the purposes of the current study.

Moreover, the value of the internal consistency stabilization factor for Digital Transformation level instrument as a whole using the Cronbach's alpha equation was (0.97), and the values for consistency factors in the areas ranged from (0.90 - 0.94), and these values indicate significant correlation in study instrument, making it applicable.

Instrument Grading System:

The researcher adopted five-Likert scale for the study instrument, setting five levels of the degree of applying educational leadership and the digital transformation levels in Amman private schools: in the University District, from the administrative' Perspectives. The five-Likert scale interpretation as follow:

- **5:** Always happens
- **4:** happens often
- **3:** happens sometimes
- **2:** happens rarely
- **1:** doesn't happen

The grading system was created by calculating 5 Likert scale mode (5-1= 4) and divide it on the five levels of the grading system (4/5=0.80), then adding the result to the minimal to the five levels to give the following grading system:

- **Unavailable** from: (1.00 –1.80)
- **Rarely Available** from: (1.81 – 2.60)
- **Sometimes Available** from: (2.61 –3.40)
- **Often Available** from: (3.41 –4.20)
- **Always Available** from: (4.21 –5.00)

The criterion adopted to judge the style of educational leadership applied by administrators in the Amman private schools: in the university District from the administrative' perspectives:

Table (3.6). Intervals and style of educational leadership applied.

Intervals	style of educational leadership applied
1.00 –1.49	Not applied
1.50 - 1.99	Situational
2.00 - 2.49	Technology
2.50 - 2.99	Strategic,
3.00 - 3.49	Technology-Situational
3.50 - 3.99	Strategic -Situational
4.00 - 4.49	Strategic -Technology
4.50 – 5.00	Strategic -Technology-Situational

The previous criterion was adopted based on the calculation of the total means averages of educational leadership styles (situational, strategic, technology) for each sample member and based on the results, the prevailing leadership style of each sample member was judged and the relationship between composite styles.

Strategic leadership got the highest mean, followed by technology leadership, and finally Situational leadership from an administrative perspectives for degree of applying leadership styles in Amman privet schools.

The grading system was created by calculating 5 Likert scale mode (5-1= 4) and divide it on the eight levels of the grading system (4/8=0.50), then adding the result to the minimal to the eight levels to give the grading system, Table (3.6) shows the results.

Accordingly, administrators apply several styles of educational leadership, which are descending as follows: leadership style (situational- strategic-technology), leadership style (strategic-technology), leadership style (strategic-situational), leadership style (technology-situational), strategic leadership style, technology leadership style, situational leadership style, and finally non-application of any styles of leadership.

Moreover, to judge the level of implemented digital transformation by administrators in the Amman private schools: in the university District from the administrative' perspectives, the next criterion adopted:

Table (3.7). Intervals and level of implemented digital transformation.

Intervals	level of implemented digital transformation
1.00 –1.49	Not Implemented
1.50 - 1.99	Output
2.00 - 2.49	Process
2.50 - 2.99	Input
3.00 - 3.49	Process-Output
3.50 - 3.99	Input-Output
4.00 - 4.49	Input-Process
4.50 – 5.00	Input-Process-Output

The previous criterion was adopted based on the calculation of the total means averages of digital transformation levels (inputs, processes, outputs) for each sample member and based on the results, the prevailing level of implemented digital transformation of each sample member was judged and the relationship between composite levels.

The grading system was created by calculating 5 Likert scale mode (5-1= 4) and divide it on the eight levels of the grading system (4/8=0.50), then adding the result to the minimal to the eight levels to give the grading system, Table (3.7) shows the results.

Accordingly, administrators implement several levels of digital transformation, which are descending as follows: (Input-Process-Output) level, (Input-Process) level, (Input-Output) level, (Process-Output) level, Input level, Process level, Output level, and finally non-implemented of any levels of digital transformation.

Data analysis (Processing data)

1- Correlation coefficients for calculating the reliability and validity of the study instrument.

2- Frequencies, percentages, means, and standard deviations used to measure the degree of applying educational leadership styles and the level of implementation of digital transformation.

3- Multivariate analysis of variance (MANOVA) test used to measure the role of educational leadership styles in leading the digital transformation.

4- Linear regression used to measure the degree to which educational leadership styles predict the level of digital transformation implementation**.**

Study Procedures

1- Review of educational literature and previous studies.

2- Determining the sample and population of the study.

3- Preparing and constructing a study instrument (questionnaire).

4- Check the validity and reliability of the instrument.

5- Applying the instrument in the field, collecting data, coding it, and then processing it.

6- Data was processed and analysed through SPSS program.

7- Coming up with the results of the study.

8- Discussing the results and writing recommendations.

Chapter Four

Findings and Results

This chapter summarised the study's findings by responding to the study's specified study questions, and the following is a summary of the study's findings.

4.1- The findings of the degree to which private school administrators in Amman apply educational leadership styles.

The overall level of educational leadership styles applied by private school administrators in Amman from an administrative perspectives are often available (mean = 4.12, std. = 0.66), Strategic-Technology leadership was the style applied of leadership by private school administrators in Amman from an administrative Perspectives. Strategic leadership got the highest mean (4.16), followed by technology leadership (mean = 4.12), and finally Situational leadership came last with the lowest mean (4.09). Table (4.1) shows the results of means, standard deviations and ranks for the estimates of private school administrators for degree of applying leadership styles from an administrative perspectives.

Table (4.1). Means, standard deviations and ranks for the estimates of private school administrators for degree of applying leadership styles from an administrative perspectives.

N.	Rank	Domain (Leadership Style)	Mean	Std. Deviation	Availability Degree*
2	1	Strategic Leadership	4.16	0.69	Often Available
3	2	Technology Leadership	4.12	0.72	Often Available
1	3	Situational Leadership	4.09	0.72	Often Available
Degree of applying leadership styles			**4.12**	**0.76**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying leadership styles, as shown in the following tables ((4.2), (4.3), (4.4)):

Situational leadership Style

The availability level of Situational leadership style applied by private school administrators in Amman from an administrative perspectives is often available (mean = 4.09, Std. = 0.72). Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying Situational leadership style, Table (4.2) shows the results.

Table (4.2). Means, standard deviations and ranks for the estimates of private school administrators for applying Situational leadership style, in descending order.

Items N.	Rank	Item	Mean	Std. Deviation	Availability Level*
13	1	Flexible in applying rules and regulations considering different situations when evaluating employees.	4.27	0.89	Always Available
7	2	Sets educational goals considering changing school needs.	4.26	0.94	Always Available
10	3	Considers the situation's circumstances when evaluating.	4.23	0.84	Always Available
1	4	Makes educational decisions according to different situations.	4.22	0.89	Always Available
9	5	Realistic educational goals according to situations.	4.19	0.88	Often Available
11	6	Motivates employees to be perseverant and to be initiative to achieve the highest level of performance.	4.18	1.08	Often Available
2	7	Considers the situation when making administrative decisions	4.17	0.90	Often Available
4	8	Analyses multiple alternatives before making decisions.	4.11	0.96	Often Available
8	9	When he set goals, he considers integrity and inclusivity according to multiple situations.	4.08	0.98	Often Available
12	10	Uses different evaluation methods to accommodate the varying situations	4.05	1.03	Often Available
3	11	Avoids typical decisions and ready-made solutions.	3.87	1.14	Often Available
6	12	Sets educational goals according to different situations conjunction with the involvement of relevant employees.	3.84	1.06	Often Available
5	13	Asks stakeholders for involvement in decision-making in different situations.	3.68	1.19	Often Available
Situational Leadership Style			**4.09**	**0.72**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

From table (4.2), it is noted that the calculation means of items ranged from (4.27 – 3.68), and the availability level ranged from often available to always available. Item N. (7): (Flexible in applying rules and regulations considering different situations when evaluating employees) came in first place, with a high mean (4.27) and Std. (0.89), with availability level was Always Available. While item N. (5): (Asks stakeholders for involvement in decision-making in different situations), in last place, came with a lowest mean (3.68) and Std. (1.19), with availability level was often available.

Strategic leadership Style

The availability level of Strategic leadership style applied by private school administrators in Amman from an administrative perspectives is often available (mean = 4.16, Std. = 0.69). Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying Strategic leadership style, Table (4.3) shows the results.

Table (4.3). Means, standard deviations and ranks for the estimates of private school administrators for applying Strategic leadership style, in descending order.

Items N.	Rank	Item	Mean	Std. Deviation	Availability Level*
18	1	Sets timeframes to complete school's work and tasks.	4.39	0.79	Always Available
14	2	Wants to change the current situation to a better one.	4.35	0.82	Always Available
23	3	Reorders work priorities to achieve strategic goals.	4.27	0.87	Always Available
19	4	Assigns work tasks to employees in accordance with their abilities and specialities.	4.25	0.83	Always Available
20	5	Develops an annual operation plan with specific performance indicators to implement the strategic plan.	4.19	0.90	Often Available
26	6	Encourages employees to face challenging problems.	4.18	0.92	Often Available
27	7	Works with employees in taking advantage of opportunities that help to achieve school's success	4.17	0.98	Often Available
17	8	Considers clarifying the school's vision and mission to its employees.	4.15	0.96	Often Available

25	9	Make use of evaluation results in improving the strategic plans.	4.14	0.86	Often Available
24	10	Follow up with the implementation of strategic goals.	4.14	0.90	Often Available
21	11	Establishes active communication channels with employees.	4.13	1.02	Often Available
15	12	Can identify critical factors in the work environment.	4.10	0.94	Often Available
22	13	Contributes to the identification of work's strategic goals.	4.09	0.99	Often Available
16	14	Can find out all strategic alternatives in my work field.	4.02	0.94	Often Available
28	15	Asks for community engagement in developing the school's strategic plan and goals.	3.80	1.16	Often Available
Strategic Leadership Style			**4.16**	**0.69**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available**.

From table (4.3), it is noted that the calculation means of items ranged from (4.39– 3.80), and the availability level ranged from often available to always available. Item N. (18): (Sets timeframes to complete school's work and tasks) came in first place, with a high mean (4.39) and Std. (0.79), availability level was always available. While item N. (28): (Asks for community engagement in developing the school's strategic plan and goals), in last place, came with a lowest mean (3.80) and Std. (1.16), availability level was often available.

Technology leadership Style

As for the availability level of Technology leadership style applying by private school administrators in Amman from an administrative perspectives is often available (Mean = 4.12, Std. = 0.72). Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying Technology leadership style, Table (4.4) shows the results.

Table (4.4). Means, standard deviations and ranks for the estimates of private school administrators for applying Technology leadership style, in descending order.

Items N.	Rank	Item	Mean	Std. Deviation	Availability Level*
33	1	Uses electronic means of communication to interact with employees.	4.40	0.62	Always Available
34	2	Encourages the use of electronic means of communication to interact with those involved in the educational process (both inside and outside the school).	4.20	0.84	Often Available
32	3	Participates in identifying best practices regarding the use of technology in education	4.18	0.94	Often Available
30	4	Involves employees in developing a plan to use and apply technology in the school.	4.17	0.91	Often Available
29	5	Uses technology in daily schoolwork.	4.17	1.00	Often Available
43	6	Spreads the distinguished experiences in using technology among employees.	4.16	1.03	Often Available
37	7	Provides professional training programs to develop employees' skills in technology related issues.	4.14	0.96	Often Available
40	8	Assesses the suitability of professional development programs for the needs of teachers and their ability to employ technology in them.	4.12	0.98	Often Available
39	9	Uses technology as a criterion in assessing the performance of school's staff.	4.10	1.01	Often Available
41	10	Works to upgrade the technology (hardware and software) at school.	4.07	0.99	Often Available
36	11	Encourage the use of technology taking into consideration the individual differences between students.	4.06	1.02	Often Available
35	12	Educates (teachers and students) on issues related to the use of technology.	4.03	1.01	Often Available
42	13	Constantly assesses satisfaction of (staff, students, parents) about the technological services available at the school.	4.02	1.07	Often Available
38	14	Evaluates technology-based administrative systems	4.01	1.00	Often Available
31	15	Aligns the school's technological plan and the plans prepared by the Ministry of Education.	3.95	1.08	Often Available
Technology Leadership Style			**4.12**	**0.72**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

From table (4.4), it is noted that the calculation means of items ranged from (4.40 – 3.95), and the availability level ranged from often available to always available. Item N. (33): (Uses electronic means of communication to interact with employees) came in first place, with a

high mean (4.40) and Std. = (0.72), availability level was always available. While item N. (31): (Aligns the school's technological plan and the plans prepared by the Ministry of Education), in last place, came with a lowest mean (3.95) and Std. = (1.08), availability level was often available.

Calculation frequencies extracted for of the total means averages of educational leadership styles (situational, strategic, technology) for the estimates of private school administrators. Figure (4.1) shows the percentages of degree of applying educational leadership styles by private school administrators in Amman from an administrative perspectives.

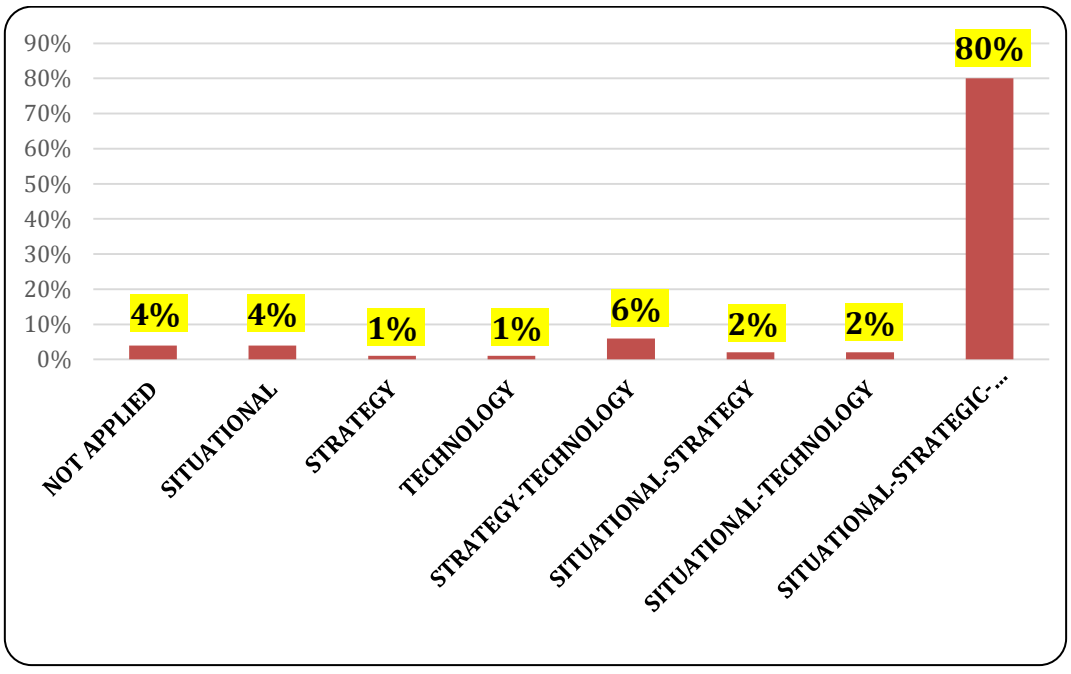

Fig. (4.1) Percentages of applying educational leadership styles.

Fig. (4.1) shows that: the (Situational-Strategy-Technology) leadership style is the dominant style for private school administrators in Amman, which got the highest percentage (80%). Followed by (Strategic- Technology) leadership style (6%). The percentage of non-applied of educational leadership styles by private school administrators in Amman is equal to percentage of applying the (Situational leadership) style (4%). The percentages of

applying (Situational- Technology) and (Situational- Strategic) leadership styles were also equal (2%). Finally, the lowest percentage (1%) belong to applying (Strategy) and (Technology) Leadership Styles by private school administrators in Amman.\

4.2- The findings of the level of employment of private school administrators in Amman for the requirements of digital transformation.

The overall level of Digital Transformation implementation by private school administrators in Amman from an administrative perspectives are often available (mean = 3.93, std. = 0.83), Input - Output was the level of implemented digital transformation by private school administrators in Amman from an administrative Perspectives. Output domain got the highest mean (3.98), followed by Inputs domain (mean = 3.90), and finally Process domain with the lowest mean (3.89). Table (4.5) shows the results.

Table (4.5). Means, standard deviations and ranks for the estimates of private school administrators for the digital transformation level.

Items N.	Rank	Digital Transformation Levels	Mean	Std. Deviation	Availability Level*
3	1	Output	3.98	0.84	Often Available
1	2	Input	3.90	0.86	Often Available
2	3	Process	3.89	0.90	Often Available
Digital Transformation implementation level			**3.93**	**0.83**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

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Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for digital transformation level, Tables ((4.6), (4.7), (4.8)) shows the results.

Inputs level

The availability level of Inputs level for Digital Transformation implementation applied by private school administrators in Amman from an administrative perspectives was often available (mean = 3.90, Std. = 0.86). Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying Inputs level for Digital Transformation implementation, Table (4.6) shows the results.

Table (4.6). Means, standard deviations and ranks for the estimates of private school administrators for applying Inputs level for Digital Transformation implementation, in descending order.

Items N.	Rank	Item	Mean	Std. Deviation	Availability Level*
53	1	Identifies the mechanism of monitoring, following up, and system assessment	4.01	1.12	Often Available
45	2	Work to develop the school's goals to keep pace with digital transformations	3.98	0.99	Often Available
44	3	Adopts the school's digital transformation strategy	3.94	1.04	Often Available
46	4	Puts plans for curricular and extracurricular activities to keep pace with digital transformation	3.93	1.08	Often Available
48	5	Identifies current and future needs of human resources for the use of digital technologies	3.89	1.11	Often Available
51	6	Gets rid of all forms of bureaucracy that hinder all development and change processes	3.88	1.09	Often Available
47	7	Develops the school's organizational structure to accommodate digital transformation	3.87	1.08	Often Available
50	8	Sets budge to achieve the goals of digital transformation implementation	3.86	1.17	Often Available
52	9	Sets the policy of digital transformation, manage it, and identify responsibilities.	3.82	1.16	Often Available
49	10	Identifies current and future needs of material resources for the use of digital technologies	3.78	1.21	Often Available
Inputs			**3.90**	**0.86**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

From table (4.6), it is noted that the calculation means of items ranged from (4.01 – 3.78). Item N. (53): (Identifies the mechanism of monitoring, following up, and system assessment)

came in first place, with a high mean (4.01) and Std. (1.12), availability level was often available. While item N. (49): (Identifies current and future needs of material resources for the use of digital technologies), in last place, came with a lowest mean (3.78) and Std. (1.21), availability level was often available.

P*rocesses level*

The availability level of Processes level for Digital Transformation implementation applied by private school administrators in Amman from an administrative perspectives was often available (mean = 3.88, Std = 0.90). Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying Processes level for Digital Transformation implementation, Table (4.7) shows the results.

Table (4.7). Means, standard deviations and ranks for the estimates of private school administrators for applying Process level for Digital Transformation implementation, in descending order.

Items N.	Rank	Item	Mean	Std. Deviation	Availability Level*
65	1	Providing databases of students and employees.	4.24	0.94	Always Available
57	2	Employing technology in daily schoolwork	4.10	1.04	Often Available
58	3	Preparing training courses and workshops to enhance employees' technical skills.	4.04	1.03	Often Available
54	4	Senior management supports of the digital transformation program.	4.02	1.04	Often Available
59	5	Attracts highly skilled experts in digitisation to transfer their expertise to others.	3.99	1.07	Often Available
66	6	Utilizing data in decision-making.	3.98	1.03	Often Available
55	7	Uses of a clear system to collect and manipulate data.	3.97	1.05	Often Available
64	8	Building a networked communication system that connects all administrative levels and school staff.	3.89	1.14	Often Available
56	9	Empowering administrators with management skills of digital transformation environment.	3.86	1.09	Often Available
61	10	Provides suitable atmosphere for digital transformation	3.84	1.09	Often Available
67	11	Providing the necessary equipment for digital transformation	3.83	1.18	Often Available

62	12	Provides training workshops on the importance of digital transformation for employees, students, and parents	3.66	1.22	Often Available
60	13	Preparing training courses for students to keep up with the digital transformation.	3.54	1.28	Often Available
63	14	Engages the outside community with school's activities to spread the culture of digital transformation	3.52	1.28	Often Available
Processes			**3.89**	**0.90**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

From table (4.7), it is noted that the calculation means of items ranged from (4.24 – 3.52), and the availability level ranged from often available to always available. Item N. (65): (Providing databases of students and employees) came in first place, with a high mean (4.26) and Std. (0.94), with availability level was always available. While item N. (63): (Engages the outside community with school's activities to spread the culture of digital transformation), in last place, came with a lowest mean (3.52) and Std. (0.90), with availability level was often available.

Outputs level

The availability level of Outputs level for Digital Transformation implementation applied by private school administrators in Amman from an administrative perspectives was often available (mean = 4.05, Std. = 0.84). Calculation means, standard deviations and ranks were extracted for the estimates of private school administrators on each of the questionnaire items for applying Outputs level for Digital Transformation implementation, Table (4.8) shows the results.

Table (4.8). Means, standard deviations and ranks for the estimates of private school administrators for applying Outputs level for Digital Transformation implementation, in descending order.

Items N.	Rank	Item	Mean	Std. Deviation	Availability Level*
83	1	Increasing the number of students enrolled in the school.	4.20	1.02	Often Available
76	2	Parents participation in using digital technologies and the school's educational platform.	4.12	0.95	Often Available
79	3	Providing performance reports to students and parents via the school's platform	4.12	1.09	Often Available
81	4	Availability of follow-up and administrative monitoring system.	4.10	1.06	Often Available
69	5	Fast network communication with school.	4.09	1.01	Often Available
75	6	Improvement of electronic communication and interaction between school, home, and community institutions.	4.08	0.92	Often Available
82	7	Achieve the competitive advantage for the school	4.08	1.10	Often Available
71	8	Developing the digital skills of school staff and acquiring new skills.	4.06	1.02	Often Available
74	9	Providing an electronic learning environment that meets the needs of students, teachers, and parents.	4.01	1.03	Often Available
73	10	Students acquire digital technology skills in the educational process.	4.00	1.05	Often Available
68	11	Availability of modern software needed in administrative and follow ups processes.	3.98	1.08	Often Available
70	12	Use of modern ICT systems to facilitate employees access to information and resources necessary to achieve the school's goals.	3.96	1.10	Often Available
72	13	Providing digital learning resources linked to curricula.	3.93	1.06	Often Available
77	14	Use of information security software to protect databases and networks.	3.78	1.35	Often Available
80	15	Submission of suggestions and complaints via e-mail	3.67	1.27	Often Available
78	16	Availability of a digital media library for employees and students	3.58	1.27	Often Available
Outputs			**3.98**	**0.84**	**Often Available**

*** (1.00 –1.80) Unavailable, (1.81 – 2.60) Rarely available, (2.61 –3.40) Sometimes Available, (3.41 –4.20) Often Available, (4.21 –5.00) Always Available.**

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From table (4.8), it is noted that the calculation means of items ranged from (4.20 – 3.58). Item N. (83): (Increasing the number of students enrolled in the school) came in first place, with a high mean (4.20) and Std. (1.02), availability level was often available. While item

N. (78): (Availability of a digital media library for employees and students), in last place, came with a lowest mean (3.58) and Std. (1.27), availability level was often available.

Calculation frequencies extracted for of the total means averages of digital transformation level (inputs, processes, outputs) for the estimates of private school administrators. Figure (4.2) shows the percentages of implemented level of digital transformation by private schools' administrators in Amman.

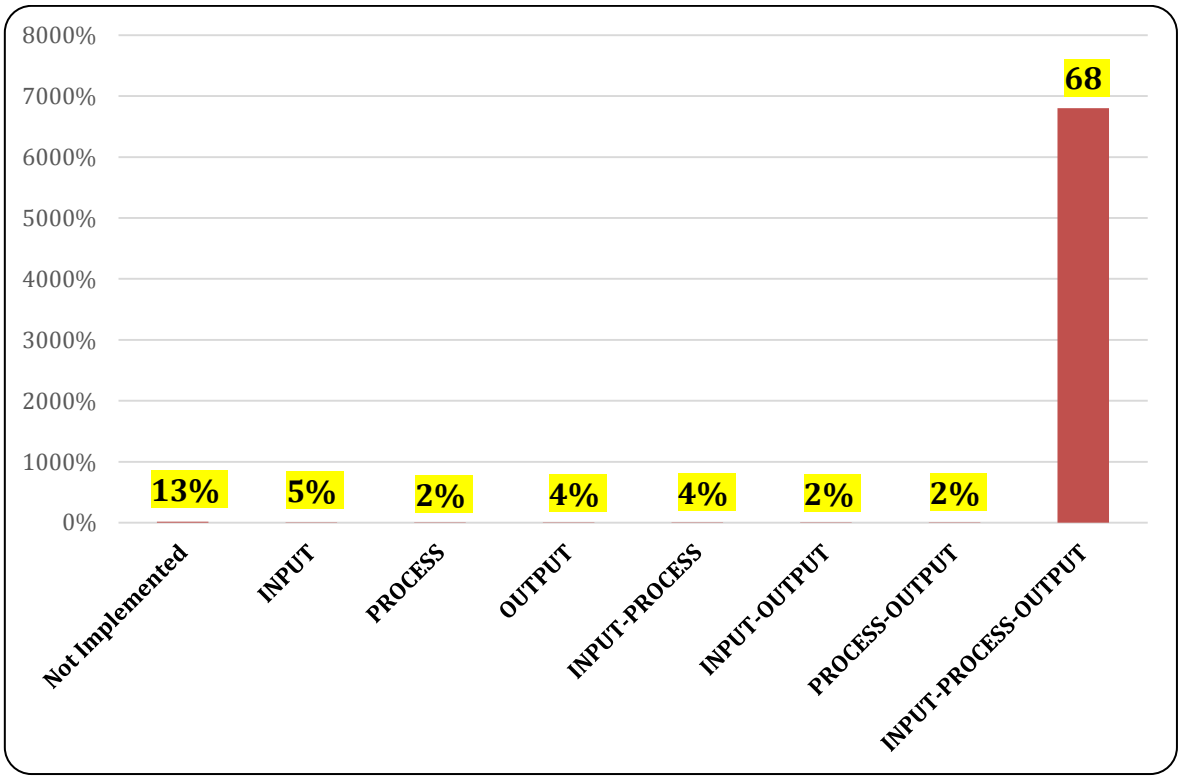

Fig. (4.2) Percentages of applying Digital Transformation.

Fig. (4.2) shows that: the (Input-Process-Output) is the dominant level for private schools' administrators in Amman, which got the highest percentage (68%). The percentage of non-implemented of digital transformation by private schools' administrators in Amman is (13%). Followed by percentage of implemented (Input-Process) (4%), which is equal to percentage of implemented (Output) (4%). While the percentage of implemented (Input) is (5%). Finally, the percentages of implemented (Process) and (Input-Output) and (Process-

Output) were also equal (2%), which is the lowest percentages of implemented by administrators in Amman private schools.

4.3- The findings of the role of educational leadership styles of Amman private school principals in leading the digital transformation.

Table (4.9) shows that there is a role for strategic leadership and technology leadership in leading the digital transformation in general from an administrative perspectives in Amman private schools. That the calculated value F of Strategic leadership (4.030) at significance level (0.008) and the technology leadership calculated value F (48.267) at significance level (0.000). And these values are statistically significant at ($\alpha \leq 0.05$). As well as the table shows that there is not statistically significant for Situational leadership, which the calculated value F (1.444) at significance level (0.232).

To show the significance of statistical differences, Multivariate analysis of variance (MANOVA) test was used for sub-domains on metrics, and table (4.9) shows the results.

Table (4.9). MANOVA results on the role of educational leadership styles of Amman private school administrators in leading the digital transformation.

Effect		Value	F	df	Error df	Sig.
Intercept	Pillai's Trace	.070	4.711[b]	3.000	244.000	.003
	Wilks' Lambda	.930	4.711[b]	3.000	244.000	.003
	Hotelling's Trace	.076	4.711[b]	3.000	244.000	.003
	Roy's Largest Root	.076	4.711[b]	3.000	244.000	.003
Situational Leadership	Pillai's Trace	.023	1.444[b]	3.000	244.000	.232
	Wilks' Lambda	.977	1.444[b]	3.000	244.000	.232
	Hotelling's Trace	.023	1.444[b]	3.000	244.000	.232
	Roy's Largest Root	.023	1.444[b]	3.000	244.000	.232
Strategic Leadership	Pillai's Trace	.061	4.030[b]	3.000	244.000	.008
	Wilks' Lambda	.939	4.030[b]	3.000	244.000	.008
	Hotelling's Trace	.065	4.030[b]	3.000	244.000	.008
	Roy's Largest Root	.065	4.030[b]	3.000	244.000	.008

Technology Leadership	Pillai's Trace	.436	48.267[b]	3.000	244.000	.000
	Wilks' Lambda	.564	48.267[b]	3.000	244.000	.000
	Hotelling's Trace	.774	48.267[b]	3.000	244.000	.000
	Roy's Largest Root	.774	48.267[b]	3.000	244.000	.000

***Correlation is significant at the 0.05 level**

Moreover, Table (4.10) shows the role of leadership styles at each level of digital transformation based on the responses of the study members.

Table (4.10). Results of MANOVA analysis in on the role of educational leadership styles of Amman private school administrators in the digital transformation components.

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.*
Situational Leadership	Input	.020	1	.020	.045	.831
	Process	.198	1	.198	.918	.339
	Output	.168	1	.168	.882	.349
Strategic Leadership	Input	.049	1	.049	.109	.742
	Process	1.031	1	1.031	4.793	.030
	Output	1.827	1	1.827	9.597	.002
Technology Leadership	Input	30.033	1	30.033	66.748	.000
	Process	19.634	1	19.634	91.270	.000
	Output	21.406	1	21.406	112.425	.000
Error	Input	85.041	246	.450		
	Process	40.658	246	.215		
	Output	35.986	246	.190		
Total	Input	3256.139	250			
	Process	3125.267	250			
	Output	300.039	250			
Corrected Total	Input	174.935	249			
	Process	139.919	249			
	Output	130.305	249			

***Correlation is significant at the 0.05 level.**

Table (4.10) shows:

1. There are no statistically significant differences between the three levels of digital transformation implementation (inputs, processes, outputs) due to situational leadership, with the statistical value (f) of the three levels: (0.045) (0.918) (0.882) and the level of indication (0.831) (0.339) (0.349), respectively.
2. There is a statistically significant impact on individual estimates at two levels of digital transformation implementation (Process, Output) due to Strategic leadership style, with the statistical value of the (f) test: (4.793) (3,597) and the semantic level (0.030) (0.002), respectively. However, there is no statistically significant effect at the statistical indication level ($\alpha \leq 0.05$) of individual estimates at the level of digital transformation implementation (Input) due to Strategic leadership style, with the statistical value of the (f) test: (0.109) and the level of significance (0.742).
3. There is a statistically significant effect on individual estimates at all levels of digital transformation implementation (Input, Process, Output) due to the technology leadership style, with the statistical value of (F): (66,748) (91.748) (112,425) and the level of significance (0.000) (0.000) (0.000), respectively.
4.

4.4- The findings of predict the styles of educational leadership of private schools' administrators in Amman at the level of their application of digital transformation.

By conducting Multiple Regression analysis by (Stepwise) to measure the impact of educational leadership styles (Situational leadership, Strategic leadership, Technology leadership) of private school administrators in Amman at the level of their implementation of digital transformation from an administrative perspectives, it is clear that there are positive

and statistically significant high correlation coefficients at ($\alpha \leq 0.05$) between variables, as the value of the (R) correlation factor has reached (0.729). Table (4.11) shows results.

Table (4.11). Multiple regression coefficients by using (Stepwise analysis) of the educational leadership styles of private schools' administrators in Amman at the level of their implementation of digital transformation.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729[a]	.532	.524	.9073

a. Predictors: (Constant), Technology Leadership, Situational Leadership, Strategic Leadership
b. Dependent Variable: level implementation of digital transformation

From table (4.11), it is noted that the value of the interpreted contrast ratio (R^2= 0.532), which means that 53.2% of the variation in the level of digital transformation can be explained by the predictors involved: (Situational Leadership, Strategic Leadership, Technology Leadership) together.

Table (4.12) shows ANOVA analysis of Multiple Regression coefficients of the impact of the educational leadership styles of private school's administrators in Amman at the level of their implementation of digital transformation.

Table (4.12). ANOVA analysis of Linear Regression coefficients of the impact of the educational leadership styles of private schools' administrators in Amman at the level of their implementation of digital transformation.

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	176.743	3	58.914	71.568	.000[b]
	Residual	155.584	247	.823		
	Total	332.326	249			

a. Dependent Variable: Digital Transformation implementation level
b. Predictors: (Constant), Technology Leadership, Situational Leadership, Strategic Leadership

The previous table (4.12) shows a statistically significant impact on the educational leadership styles of private school administrators in Amman at the level of their implementation of the digital transformation, confirming the morale of this effect the calculated value (F) of the total impact model, which was (71.568) at an indicative level (0.000) and is considered to be significant at ($\alpha \leq 0.05$).

In addition to the above, predicted equation by table (4.13):

Table (4.13). Predicted Equation of implementation level of digital transformation.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		β	Std. Error	Beta		
1	(Constant)	2.331-	.461		-5.050	.000
	Situational Leadership	.092	.170	.046	.542	.588
	Strategic Leadership	.158	.192	.076	.822	.412
	Technological Leadership	1.254	.174	.631	7.220	.000

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

Table (4.13) shows that technology leadership has a statistically significant impact on the implementation level of digital transformation, with a ß value (1.254), and the value of the T test (7.220), indicating that the increase or change of a single standard unit in Technology Leadership is offset by an increase or change of (0.631) standard units in the implementation level of digital transformation.

Moreover, table (4.13) shows that Situational leadership and Strategic Leadership have no statistically significant impact on the implementation level of digital transformation at the indication level ($\alpha \leq 0.05$), and the values of the T test (0.542) (0.822) and statistical indication (0.588) (0.412), respectively.

Based on the above, the predicted equation is as follows:

$$y = 0.631\ (LS1) - 2.331$$

y = implementation level of digital transformation

(LS1) = Technology leadership style

Example:

The applying degree of Technology leadership style (4.16), we can predict the implementation level of digital transformation as follows:

$$Y = 0.631\ (4.16) - 2.331$$

$$= 2.624 – 2.331$$

$$= 0.294$$

Chapter Five

Discussion and Recommendations

This chapter includes discussion of the study results and recommendations for future improvements. Research questions and drawn conclusions are discussed separately.

5.1- Discussion and Conclusions related to the degree of applying educational leadership styles of private school administrators in Amman.

Conclusion 5.1-1:

The overall degree of application of educational leadership styles are often available by private school administrators in Amman from an administrative Perspectives

The researcher explains this conclusion by the conviction of the study sample members and their awareness of the educational leadership styles needed to improve educational programs and keep up with the challenges in the field of education, and that has been mentioned by (Alzawahrah, 2021). Having school administrators' styles of educational leadership due to their excellence in advanced scientific and administrative qualifications and receiving multiple and appropriate field training courses that enabled them to employ self-skills, humanity, technical and administrative in the educational leadership adequately and effectively. Besides that, the number of years of experience for school administrators in the field of education that influenced their knowledge and increased their practices for the leadership skills needed to maintain the sustainability of the teaching and learning process.

This conclusion agrees with the conclusion of the (Alghadhour, 2020) study, which showed that the Leadership Styles of Schools Principals in Kuwaiti public schools were of medium level, as they scored a mean 3.62. This study is also consistent with the study of (Alzawahrah, 2021) which also showed that the degree of school principals' appreciation of

educational leadership from the point of view of teachers in Jordan came at a high degree. However, it disagrees with the result of the (A'ashour & Alkhateeb, 2018; Awais, 2021) studies where the democratic leadership style is the most common style of school principals.

Conclusion 5.1-2:

The degree of application of Situational leadership style is often available by private school administrators in Amman from an administrative Perspectives.

The researcher explains this conclusion by the fact that Situational theory depends on the skills of the leader and the requirements of the situation in which he act as a leader, and the leader must pay attention to the needs of staff and be flexible at work taking into account the different situations of the staff, as well as good cooperation that will affect the behaviour of staff as subordinates and the work climate, and that has been mentioned by (Meier, 2016; Ruslan et al., 2020).

This conclusion agrees with the conclusions of (Canaan, 2019) study, which showed that the degree of applying situational leadership by principals is moderate as perceived by teachers.

Conclusion 5.1-3:

The degree of application of Strategic leadership is often available by private school administrators in Amman from an administrative Perspectives.

The researcher explains this conclusion by the high conviction of administrators that a strategy should be formed to move forward and implement the required changes in the situation of educational change amidst globalizations, and that has been mentioned by (Ariratana & Deeboonmee, 2014; Mahdi & Almsafir, 2014). In addition, the educational process cannot be effective unless there is wise leadership working to achieve educational

goals in accordance with visions and future aspirations considering the material and human potential of the educational institution.

This conclusion agrees with the conclusions of (Ariratana & Deeboonmee, 2014; Mahdi & Almsafir, 2014; Özer & Tınaztepe, 2014) studies, which showed that the availability level of practicing of Strategic leadership style is high among school administrators.

Conclusion 5.1-4:

The degree of application of Technology leadership style is often available by private school administrators in Amman from administrative perspectives.

The researcher explains this conclusion by practicing of school administrators in technology and its use in the school management system is an urgent necessity to raise, improve and develop administrative performance. The new role of the headmaster within the requirements of modern school management has significant responsibilities requiring special skills to manage and lead technology as well as to lead change, which has become based in many respects on the technology factor.

This conclusion agrees with the conclusions of (Dr. Alzamil and Al-Balawi, 2021) study, which showed that degree of activation of the leaders of private schools for electronic leadership is high as perceived by teachers.

Conclusion 5.1-5:

The style of Strategic-Technology leadership is the dominant leadership style in practice private school administrators in Amman from an administrative Perspectives.

The researcher explains this conclusion that a leader is an essential element of success and development, not technology; he is the organization's primary driver for working within a clear and purposeful strategy. This conclusion agrees with the results of (AlHaroon and Barakat, 2019) study that revealed the most important requirements for digital

transformation are: building a digital strategy that embraces a culture of change and development, the availability of educational expertise that possesses the skills to use new technologies related to digital transformation, as well as the role of educational leadership in managing digital transformation from time, effort and cost.

Conclusion 5.1-6:

The most applied style of Educational Leadership by private school administrators in Amman is Strategic leadership followed by Technology leadership and finally Situational leadership from an administrative Perspectives.

This conclusion may be due to the high conviction of administrators that most organizations nowadays need a leader who has sufficient knowledge and skills to run the organization under the world of digitization. As a result of rapid changes in the school environment, school leaders and principals must create strategic awareness and vital renewed processes, and strategies cannot be formulated and implemented to achieve their goals without highly qualified strategic leaders working to bring about fundamental strategic change in the educational institution, and that has been mentioned by (Promsri, 2019; Zaoui & Souissi, 2020).

However, it disagrees with the result of the (A'ashour & Alkhateeb, 2018; Awais, 2021) studies where the democratic leadership style is the most common style of school principals.

5.2- Discussion and Conclusions related to the level of digital transformation implementation of private school administrators in Amman.

Conclusion 5.2-1:

The overall results showed that the implementation digital transformation is often available by private school administrators in Amman from an administrative Perspectives.

This conclusion can be related to the conviction of the study sample members and their awareness of digital transformation, which is an evolutionary process that takes advantage of digital technologies and capabilities to keep up with the changing competitive field and the evolving requirements of the learning process, and that has been mentioned by (Georgios et al., 2021; Morakanyane et al., 2020).

The researcher explains this result by affecting all elements of the educational process with technological developments, in addition to the experience gained by administrators during the COVID-19 Epidemic and the transformation of distance education, which led to the development of digital learning environments, and increased operational efficiency of administrative services to meet the changing needs of education and achieve competitive advantage. This finding is consistent with studies (Gyang, 2020; Kagoya, 2020; Lee & Han, 2021; Mhlanga & Moloi, 2020) on the impact of the Covid-19 pandemic on accelerating the digital transformation of education globally.

Conclusion 5.2-2:

The Inputs level for implementing the digital transformation is often available by private school administrators in Amman from an administrative Perspectives.

This conclusion can be related to the fact that inputs are necessary to initiate the digital transformation process, which includes all the elements that provide the education system with the materials needed to achieve educational goals. Inputs include (leadership, material and human resources, daily homework, planning and educational procedures), and that has been mentioned by (Georgios et al., 2021; Paper & Devlin, 2019).

Conclusion 5.2-3:

The Processes level for implementing the digital transformation is often available by private school administrators in Amman from an administrative Perspectives

This conclusion can be related to the fact that the processes are a set of procedures and strategies, as well as the mutual and interactive relationships between the inputs of the system (data management, training and capacity-building, communication, and development plans), to transform the system's inputs into outputs (achieving educational objectives), and that has been mentioned by (Georgios et al., 2021; Morakanyane et al., 2020).

Conclusion 5.2-4:

The Outputs level for implementing the digital transformation is often available by private school administrators in Amman from an administrative Perspectives.

This conclusion can be related to the realization by administrators that outputs are indicators of success or failure in the organization and include results and services resulting from digital transformation that improve the situation, revenues and ensure sustainability in the education system, and that has been mentioned by (Georgios et al., 2021; Paper & Devlin, 2019).

Conclusion 5.2-5:

Inputs - Outputs is the level of implemented digital transformation by private school administrators in Amman from an administrative Perspectives.

The researcher explains this finding to the novelty of the concept of digital transformation in educational institutions, in schools in particular, as well as the multiplicity of steps and stages of digital transformation in educational institutions, requiring a range of leadership skills capable of smoothly activating digital transformation. Zaoui and Souissi (2020) indicated in their study that there are many concepts used to refer to the process of digital

transformation (stages, phases, steps, roadmap) leading to a lack of clarity in the steps required in activating digital transformation.

Conclusion 5.2-6:

The most applied level of digital transformation implemented by private school administrators in Amman is Outputs followed by Inputs and finally Processes from an administrative Perspectives.

The researcher explains this conclusion because of the ambiguity of the culture of digital transformation and its techniques for educational workers. Although the Covid-19 pandemic contributed to the dissemination of ICT in the educational system to become an integral part of the daily life of the school environment, the digital transformation system of educational institutions still lacked the knowledge infrastructure of all elements of the educational process, and that has been mentioned by Abdul Khair (2021).

5.3- Discussion and Conclusions related to the role of educational leadership styles of private school administrators in Amman in leading digital transformation.

Conclusion 5.3-1:

There is a role for Strategic leadership and Technology leadership styles in leading digital transformation private school administrators in Amman from an administrative perspective.

The researcher explains that this conclusion may be due to the fact that successful digital transformation includes digital strategies to guide leaders' efforts and generate new valuable proposals. Strategic leadership and Technology leadership are contemporary trends in management science and educational leadership. Strategic leadership and Technology leadership are effective key aspects that can keep pace with the change and challenges facing the education sector, which is the main aim of applying digital transformation.

Porfírio et al. (2021) asserted that leadership roles involving information technology and strategic planning have different positive impacts on the organization, through their contribution to improve their competitiveness through market differentiation.

This finding is consistent with studies (Sebastian et al., 2020; Yokoi et al., 2019), that successful digital transformation involves digital strategies to guide leaders' efforts and generate new value propositions.

Conclusion 5.3 -2:

There is no role for Situational leadership style in leading digital transformation in private schools in Amman from an administrative perspective.

This conclusion can be related to the awareness and knowledge of the study sample members of Situational leadership skills, which aim to deal with the situation as required by that situation, and the environmental conditions surrounding it, and that has been mentioned by (Meier, 2016; Ruslan et al., 2020).

This finding disagrees with (Porfírio et al., 2021; Yokoi et al., 2019) studies, that Situational, Strategic and Electronic leadership plays a crucial role in activating digital transformation in organizations.

5.4- Discussion and Conclusions related to the possibility of educational leadership styles of private school administrators in Amman to predict the level of their implementation of digital transformation.

Conclusion 5.4-1:

Technology leadership style can predict the level of implementation of digital transformation of private school administrators in Amman from an administrative perspective, by using next equation:

$$y = 0.631\ (LS1) - 2.331$$

y = implementation level of digital transformation

(LS1) = Technology leadership

The researcher explains this conclusion because of the role of technological leadership in all areas of digital transformation (inputs, processes, outputs), and this result is due to the fact that electronic leadership is a recent trend of contemporary leadership trends consistent with the nature and requirements of the times. According to Wu et al. (2019) study, various institutions, including education, seek to shift from traditional leadership styles and to introduce this trend of "Technology leadership" to speed up the achievement of their educational objectives and accuracy in achieving the quality of education, and that has been mentioned by Ravesteyn and Ongena (2019).

Štemberger et al. (2019) conducted a study aimed to discover successful organizational patterns in managing the digital transformation, and the results showed that the most successful identified pattern is the business–IT partnership approach, where top management and the IT department are responsible for the digital transformation.

Conclusion 5.4-2:

Strategic leadership and Situational leadership styles can't predict the level of implementation of digital transformation of private school administrators in Amman from an administrative perspective.

This conclusion relates to the fact that situational leadership has played no role in all domains of digital transformation (inputs, processes, outputs), while strategic leadership has not played a role in one domain of digital transformation (input), due to the reality of the culture of digital transformation in educational institutions; schools in particular. Sharaf (2019) study indicated that digital transformation is still limited to introducing technology into education through the use of some computers or tablets, which does not reflect digital transformation in its integrated sense, covering all aspects of the educational process. And she asserted for the role of educational leaders in spreading and consolidating the institutional culture of digital transformation by acquiring many skills and competences for those in charge of the educational process to manage and educate.

Recommendations (Practical solutions)

In the light of the above-mentioned conclusions, this study recommends the following:

1. The Directorate of Special Education is developing strategic alternatives and a technological roadmap that will help achieve digital transformation in private schools.
2. Develop training programs for all administrators in private schools to enable them to have the strategic and technological leadership skills needed to lead digital transformation.

3. Provide most recent technology and digital tools, which helps school administrators employ their leadership skills in leading the digital transformation.
4. Spreading the culture of work achieved for the digital transformation between schools and their employees.
5. Diagnosis of regulatory constraints in the implementation of digital transformation programs.
6. Promote a culture of digital transformation among community members and engage them in training programs that support digital transformation.

Recommendation for future research:

- Further studies on educational leadership styles needed to lead digital transformation with another population and study sample (governmental schools, for example).
- Comparative studies may explore study variables in different educational institutions such as educational leadership styles in governmental and private schools.
- Continuous research studies may be conducted on regular time frames (every three years, for example) to assess the level of implementation of digital transformation in governmental or private Jordanian schools.

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Appendices

Appendix (1)

The following questionnaire aims to identify the role of educational leadership patterns in leading the digital transformation in private schools in Amman from the point of view of administrators.

Part 1: Demographic information	
1	Gender
Male	
Female	
2	Age
(21-30) years	
(31-40) years	
(41-50) years	
More than 50 years	
3	Administrative Experience
(2-5) years	
(6-10) years	
more than 10 years	
4	Qualification
Bachelor	
Diploma	
Postgraduate	

Domain		always happens	happens often	happens sometimes	happens rarely	doesn't happen
Educational Leadership Styles: Based on your administrative experience in the work field, to what extent does the headmaster apply the following leadership styles:						
Situational Leadership: The leader should use the most suitable leadership style that can be changed depending on the situation, considering the factors that may affect the choice of the style in each situation.						
1	Makes educational decisions according to different situations.					
2	Considers the situation when making administrative decisions					
3	Avoids typical decisions and ready-made solutions.					
4	Analyses multiple alternatives before making decisions.					
5	Asks employees for involvement in decision-making in different situations					
6	Sets educational goals according to different situations conjunction with the involvement of relevant employees.					
7	Sets educational goals considering changing school needs.					
8	When he set goals, he considers integrity and inclusivity according to multiple situations.					
9	Realistic educational goals according to situations.					
10	Considers the situation’s circumstances when evaluating.					
11	Motivates employees to be perseverant and to be initiative to achieve the highest level of performance.					
12	Uses different evaluation methods to accommodate the varying situations					
13	Flexible in applying rules and regulations considering different situations when evaluating employees.					
Strategic Leadership: Leader's ability to express and communicate the strategic vision of the academic organisation, motivate the team, and impose the required changes towards achieving the vision.						
14	Wants to change the current situation to a better one.					

15	Can identify critical factors in the work environment.					
16	Can find out all strategic alternatives in my work field.					
17	Considers clarifying the school's vision and mission to its employees.					
18	Sets timeframes to complete school's work and tasks.					
19	Assigns work tasks to employees in accordance with their abilities and specialities.					
20	Develops an annual operation plan with specific performance indicators to implement the strategic plan.					
21	Establishes active communication channels with employees.					
22	Contributes to the identification of work's strategic goals.					
23	Reorders work priorities to achieve strategic goals.					
24	Follow up with the implementation of strategic goals.					
25	Make use of evaluation results in improving the strategic plans.					
26	Encourages employees to face challenging problems.					
27	Works with employees in taking advantage of opportunities that help to achieve school's success					
28	Asks for community engagement in developing the school's strategic plan and goals.					
Technology Leadership: Promote the effective use of technology in teaching and learning.						
29	Uses technology in daily schoolwork.					
30	Involves employees in developing a plan to use and apply technology in the school.					
31	Aligns the school's technological plan and the plans prepared by the Ministry of Education.					
32	Participates in identifying best practices regarding the use of technology in education					
33	Uses electronic means of communication to interact with employees.					

34	Encourages the use of electronic means of communication to interact with those involved in the educational process (both inside and outside the school).					
35	Educates (teachers and students) on issues related to the use of technology.					
36	Encourage the use of technology taking into consideration the individual differences between students.					
37	Provides professional training programs to develop employees' skills in technology related issues.					
38	Evaluates technology-based administrative systems					
39	Uses technology as a criterion in assessing the performance of school's staff.					
40	Assesses the suitability of professional development programs for the needs of teachers and their ability to employ technology in them.					
41	Works to upgrade the technology (hardware and software) at school.					
42	Constantly assesses satisfaction of (staff, students, parents) about the technological services available at the school.					
43	Spreads the distinguished experiences in using technology among employees.					
Implementation of digital transformation: The process of employing digital technologies in schools to modify currently existing, or creating new products, processes, and regulations to satisfy the demands of the changing educational market. This includes inputs, processes, and outputs.						
Inputs: Prepare components of the education system (leadership, physical and human resources, daily schoolwork, planning and educational procedures) to begin the digital transformation process.						
44	Adopts the school's digital transformation strategy					
45	Work to develop the school's goals to keep pace with digital transformations					
46	Puts plans for curricular and extracurricular activities to keep pace with digital transformation					
47	Develops the school's organizational structure to accommodate digital transformation					
48	Identifies current and future needs of human resources for the use of digital technologies					

49	Identifies current and future needs of material resources for the use of digital technologies					
50	Sets budge to achieve the goals of digital transformation implementation					
51	Gets rid of all forms of bureaucracy that hinder all development and change processes					
52	Sets the policy of digital transformation, manage it, and identify responsibilities.					
53	Identifies the mechanism of monitoring, following up, and system assessment					
Processes: The process of employing components of the educational system for digital technologies, and the mechanism of their interaction.						
54	Senior management supports of the digital transformation program.					
55	Uses of a clear system to collect and manipulate data.					
56	Empowering administrators with management skills of digital transformation environment.					
57	Employing technology in daily schoolwork					
58	Preparing training courses and workshops to enhance employees' technical skills.					
59	Attracts highly skilled experts in digitisation to transfer their expertise to others.					
60	Preparing training courses for students to keep up with the digital transformation.					
61	Provides suitable atmosphere for digital transformation					
62	Provides training workshops on the importance of digital transformation for employees, students, and parents					
63	Engages the outside community with school's activities to spread the culture of digital transformation					
64	Building a networked communication system that connects all administrative levels and school staff.					
65	Providing databases of students and employees.					
66	Utilizing data in decision-making.					
67	Providing the necessary equipment for digital transformation					

Outputs: Outcomes and services resulting from digital transformation in the education system.						
68	Availability of modern software needed in administrative and follow ups processes.					
69	Fast network communication with school.					
70	Use of modern ICT systems to facilitate employees access to information and resources necessary to achieve the school's goals.					
71	Developing the digital skills of school staff and acquiring new skills.					
72	Providing digital learning resources linked to curricula.					
73	Students acquire digital technology skills in the educational process.					
74	Providing an electronic learning environment that meets the needs of students, teachers, and parents.					
75	Improvement of electronic communication and interaction between school, home, and community institutions.					
76	Parents participation in using digital technologies and the school's educational platform.					
77	Use of information security software to protect databases and networks.					
78	Availability of a digital media library for employees and students					
79	Providing performance reports to students and parents via the school’s platform					
80	Submission of suggestions and complaints via e-mail					
81	Availability of follow-up and administrative monitoring system.					
82	Achieve the competitive advantage for the school					
83	Increasing the number of students enrolled in the school.					

Appendix (2)

List of reviewers

N.	Name	Rank	Specialization	University
1	Prof. Dr. Hussein Bara	Professor Doctor	Educational Administration	Mutah University
2	Prof. Dr. Ahmed Badh	Professor Doctor	Educational Administration	Balqa Applied University
3	Dr. Leila Abu Ala	Associate Professor	Educational Administration	Middle East University
4	Dr. Khawla Aliwa	Assistant Professor	Educational Administration	Middle East University
5	Dr. Mohamed Mustafa	Assistant Professor	Educational Administration	Amman Arab University

Appendix (3)

List of reviewers from school administrators

N.	Name
1	Balqees Al-Btoush
2	Ghanim Al-Ayasrah
3	Ibrahim AlQdah
4	Noor Qassim
5	Ruba Hilal

Appendix (4)

The researcher's mission facilitation letter

جـامـعـة الـشـرق الأوسـط
MEU MIDDLE EAST UNIVERSITY
Amman - Jordan

مكتب رئيس الجامعة
Office of the President

الرقم، د ر/خ/1185
التاريخ، 2022/3/5

معالي الأستاذ الدكتور وجيه موسى عويس المحترم
وزير التربية والتعليم

تحية طيبة وبعد،

فتهديكم جامعة الشرق الأوسط أطيب التحيات وأصدق الأمنيات، وحيث إنّ المسؤولية المجتمعية قيمة أساسية في تحقيق رسالة الجامعة ورؤيتها، وبهدف تعزيز وترسيخ أسس التعاون المشترك الذي يُسهم في تأدية الجامعة إلتزامها نحو خدمة المجتمع المحلي وتنميته، يرجى التكرم بالموافقة على تقديم التسهيلات الممكنة للطالبة **حنان احمد كمال عوض الله** ورقمها الجامعي (**402010103**) المسجلة في برنامج ماجستير **الإدارة والقيادة التربوية / كلية العلوم التربوية**؛ والتي تتولى القيام بتوزيع استبانات في المدارس الخاصة في محافظة عمان ؛ لاستكمال رسالتها الجامعية والموسومة بعنوان" **دور أنماط القيادة التربوية في قيادة التحول الرقمي في المدارس الخاصة في عمان : وجهات نظر الإداريين** "، علما أنّ المعلومات التي ستحصل عليها ستبقى سرية ولن تُستخدم إلاّ لأغراض البحث العلمي.

شاكرين لكم حسن تعاونكم واهتمامكم.

وتفضلوا بقبول فائق الاحترام والتقدير...

رئيسة الجامعة

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