



# International Journal of Green Management & Business Studies

---

June 2022

Vol. 2, No. 1.

---



THE SCIENCE  
PUBLISHING HOUSE

ISSN 2771-1404

© 2022 The Science Publishing House

ISSN 2771-1404

International Journal of Green Management and Business Studies (IJGMBS) is a leading specialist reference resource of academic information and analysis on green management and business. It highlights cutting edge research, new concepts and theories, fresh practical ideas and initiatives that can be readily applied to understand business strategies of International companies, as well as the business strategies of foreign firms operating over the world.

IJGMBS Journal published in online version, our publisher is **The Science Publishing House in the USA** [www.scipubhouse.com](http://www.scipubhouse.com) . TSPH is an academic publisher of prestigiously peer-reviewed journals, covering many of academic disciplines.

### **Editor in Chief**

**Mohamed Nour Abd Elhakim**

Professor, Canadian University Dubai - **UAE**

Email: [mohamed.abdelhakim@tud.ac.ae](mailto:mohamed.abdelhakim@tud.ac.ae)

### **Editorial Board**

**Hatem Altaee**

Professor, Cihan University Sulaymaniyah – **Iraq**

Email: [hatm.hatf@sulicihan.edu.krd](mailto:hatm.hatf@sulicihan.edu.krd)

**Nabil Al- Sakka**

Associate Professor, Canadian International College – **Egypt**

Email: [nabil\\_ahmed@cic-cairo.com](mailto:nabil_ahmed@cic-cairo.com)

**Omar Ismael El-Sanjery**

Assistant Professor, Management and Science University (MSU) **Malaysia**

Email: [mar\\_ismael@msu.edu.my](mailto:mar_ismael@msu.edu.my)

## Contents

### **Management Development Post Strategic Partnership Jordan Telecom Group as a Case Study**

*Salem Khalaf Alateyyat* .....1-11

### **The Role of the Ruling Dimensions of Artificial Intelligence in Increasing the Efficiency of e-Learning Entrepreneurship**

Mohamed Albaz .....12-19

### **Impact of SMEs on Economic Development: A Systematic Review of Literature**

*Dr. Mohammed Abdulrazzaq Alaghbari* ..... 20-28

### **Review the Legal Perspective of The Child's Education Rights Based on the International Law**

*Abed Rzaij Aswad, Amr Mohamed Abdeldayem & Mahmoud Khalifa*.....29-40

### **Innovative FE Analysis to Investigate the Effect of Flexural Reinforcement on the Behavior of Beams**

*Ahmed A. Gouda Sayed , Ahmed H. Ali & Hamdy M. Mohamed* .....41- 52

### **Electronic Financial Disclosure level on the Commercial Bank Sector of Bahrain Bourse**

*Talal Al Alkawi & Basel J. A. Ali* .....53- 61

## Management Development Post Strategic Partnership Jordan Telecom Group as a Case Study

**Salem Khalaf Alateyyat**

*Applied Science University-Kingdom of Bahrain*

*Email: salem.alateyyat@asu.edu.bh*

*Article info.*

---

*Received: 20 April 2022   Revised: 30 April 2022   Accepted: 20 May 2022   Published: 1 June 2022*

*Correspondent Author: salem.alateyyat@asu.edu.bh*

---

### **Abstract:**

*This research aims at identifying the level of management development practices in the company 10 years after the successful partnership with the strategic partner. The research employed an instrument to measure management development dimensions in the company (skills, Organizational Learning, Relationships and Participation, Leadership and Supervision, and Management Development obstacles). The survey was distributed to the study sample (150) supervisors and managers, but only (124) valid questionnaires were analyzed. The study concluded that the company has a moderate level of management development ranging from about 71% for Skills, and leadership and supervision dimensions, to about 73% for Organizational Learning, and relationships and participation dimensions. In addition, the perceived management development obstacles according to obstacles dimensions scored at 71.6% with a moderate level as well. The study results show that there are no statistically significant differences in the attitudes of managers and supervisors towards management development dimensions due to demographic and organizational variables, with the exception of the variable of scientific specialization. The study found that there are differences in the attitudes of managers towards the relationships and participation dimension due to the scientific specialization variable, and the administrative sciences specializations got the largest average of the direction of managers towards relationships and participation. The study recommended the need to pay more attention to management development practices by concerned people, by adopting the latest development methods, managing and retaining local talents and competencies by providing necessary support and compensation schemes. The research also made suggestions regarding some future studies.*

**Keywords: Management Development, Strategic Partnership, Jordan Telecom Group**

## **1. Introduction**

The absence of continuous development of organization's capabilities means the inability to meet the needs and as a result inability to achieve planned goals, as well as the lack of growth means a beginning of the end of the life cycle, because any system if it is not maintained and developed it will be collapsed (Brown & Harvey, 2001)

The strategic partnership between Jordan Telecom Group and France Telecom started at the beginning of the year 2000 AD, the main objective of this partnership was to maximize the benefits for both partners. This partnership has led to the consolidation of France Telecom position in Jordan and even at the regional level, and for the Jordan Telecom Group, it gained many advantages by getting support and access to the latest technology and knowledge by France Telecom and experiences in the field of communications, business and project management, in addition, this partnership assumes that it will lead to the sharing of experience and knowledge, and as a result achieving management development.

## **2. Objectives of the study**

The objectives of the study can be explained in the following points:

- 1- Identifying the meaning of management development.
- 2- Identifying the level of management development in the Jordan Telecom Group in the period after the strategic partnership with the strategic partner France Telecom.
- 3- Identifying the interrelationship between the dimensions of management development.
- 4- Knowing the impact of demographic and organizational variables on the dimensions of management development.

## **3. Literature Review**

### **Management Development definition**

By reviewing the literature in the field of management development, the main essential components and features of this term is presented as follows:

- management development is one of the terms surrounded by ambiguity in a way that may not seem apparent. Development is not just an application of change as much as it is a continuation in the desired direction, and it has not yet gained the clarity that the term training or administrative education gained (Paauwe & Williams, 2001).
- It is a term that includes all different activities, methods and tools used to train managers, develop their knowledge and skills, and encourage them to learn, including education, training, and practical experience, in addition to evaluation and incentive systems that support the development process (Talbot, 1997).

- management development is a term that includes all organizational activities aimed at developing the manager's capabilities, including educational and training activities, performance evaluation, planning and career succession in addition to any activity aimed at career development (Knox & Gibb Stephen., 2001).
- It is a system of functional practices through which the organization aims to ensure the availability of competent and motivated managers and professionals to fill important and sensitive positions in a timely manner (Jansen et al., 2001).
- Management development is a complex process in which knowledge is acquired through training and education in addition to life and work experience (Suutari & Viitala, 2008).
- management development is defined as a systematic process aimed at ensuring the availability of competent managers at present and in the future in order to carry out organizational duties in the best manner, in addition to paying attention to current managers and giving them appropriate opportunities for growth and progress, emphasizing the importance of ensuring the opportunity for career succession and advancement as much as possible.

### **Importance of strategic partnership in Management Development**

Drucker (1995) indicates that a significant change has occurred in the way of managing organizations in business world, as the trend towards relationships based on partnership rather than ownership has increased (Inkpen, 2000), and many researchers indicate that strategic alliances have grown significantly over the past twenty-five years (Meier, 2010). In addition, (Farooqui, 2005) states that the past few years have witnessed a clear increase in the emergence of strategic alliances around the world, especially in the information technology sector. According to (Dacin et al., 2007) it is apparent that these strategic alliances has considerable benefits. Also, regardless of the reasons for establishing these alliances, organizations are constantly moving towards organizational cooperation with the aim of increasing and expanding organizational knowledge in a way that serves organizational interests efficiently and effectively (Mckenzie & Winkelen, 2006) because this kind of cooperation and partnership between organizations is considered one of the effective means to achieve administrative and organizational development through the exchange of experience and knowledge possessed by the participating parties.

Globalization is considered one of the main factors that could explain organization tendency towards cooperation through strategic alliances. As globalization has its advantages and disadvantages; starting with the openness of global markets and free trade agreements, and ending with increasing competitiveness at an international level, it becomes clear why organizations are eager to establish such alliances, because threats and risks have increased in a way that is difficult for a single organization to encounter, and opportunities as well. These opportunities and threats require a lot of energies and capabilities - which rarely be found in one single organization – on the other hand strategic alliances enable organizations to better exploit these opportunities and employ them in a way that maximizes benefits and profits for all involved partners. Strategic alliances are increased dramatically due to the intense competition and rapid change in the business world today (McSweeney-Feld et al., 2010). (Daft, 2004) indicates that these alliances and conglomerates have many contractual forms such as licensing agreements, supply agreements, in addition to joint ventures that include two independent organizations under a joint alliance that is mostly controlled by the main company.

There are many ways in which an organization can learn how to expand and implement business internationally; In addition to consulting companies and other sources of information, alliances and partnerships are considered among the best approaches for learning the nature of international work, because such partnerships require the exchange of information and experiences that both parties lack in a way that achieves a complementary and direct benefit. But despite the importance of such alliances in the success of international work, these relationships are considered sensitive and critical, especially when these partnerships combine two partners separated by a vast geographical distance.

### **Management Development.**

Management development is defined as a term that includes all various activities, methods and tools used to form managers, develop their knowledge and skills, and encourage them to learn, it could include education, training, and practical experience, in addition to evaluation and incentive systems that support the development process (Talbot, 1997). Management development in Jordan Telecom Group will be assessed through several components as mentioned with their procedural definitions (Qawasmeh, 2002):

1- Skills dimension, this main dimension contains some sub-dimensions as follows:

Vol. 2, No. 1. June 2022

- Time management: It is the managers' ability to manage meetings effectively, as well as the ability to prepare and schedule work plans, in addition to paying attention to time as a core resource.
- Performance appraisal: is the managers' ability to define performance standards, formulate goals for subordinates, and ensure that these standards are consistent with job duties.
- Job design and analysis: managers' ability to be aware of the current job titles in departments, and the ability to create new job titles and job descriptions for these titles, in addition to taking note of job requirements, objectives, efficiency and qualifications of their occupants, and the ability to apply renewable mechanisms when designing jobs such as rotation and Job enrichment.
- Designing training programs: is the ability of managers to formulate and update training programs in order to meet the emerging needs, in addition to emphasizing the comprehensiveness of these programs for all employees and their participation with managers in the process of designing training programs.

2- Leadership and supervision dimension, this main dimension contains some sub-dimensions as follows:

- Leadership and supervision: is the ability of managers to delegate authority, and prioritize work for themselves and their subordinates, in addition to the ability to assume responsibilities, make decisions and solve problems.

3- Organizational learning dimension, this main dimension contains some sub-dimensions as follows:

- Self-learning: it is the managers' ability to acquire knowledge and provide comprehensive training and education programs for all employees, and to move towards continuous performance development, in addition to encouraging individual learning.
- Response to changes: is the ability of managers to study business requirements in competitive environments, to exploit opportunities and avoid risks, in addition to anticipate changing environmental requirements.



- Knowledge exchange: It is the managers' ability to facilitate knowledge sharing, simulate skills, share information, learning from successful experiences conveyed by the strategic partner, and pay attention to knowledge integration and open dialogue.

4- Relationships and Participation dimension, this main dimension contains some sub-dimensions as follows:

- Relationships and Communication: It is the managers' ability to be friendly and professional in their relationships, and a positive spirit in resolving conflicts.
- Participation and cooperation: It is the managers' ability to enhance forms of cooperation between different departments, ask for help in work matters, as well as encourage subordinates to cooperate, exchange skills and experiences, and discuss work issues freely.
- Teamwork and trust: It is the managers' ability to develop teamwork and trust among the members of the organization by promoting the concept of work teams and exchanging leadership roles, and adopting incentives that are granted on the basis of team performance.

#### **4. Methodology**

This is a descriptive study aims at reporting the level of management development practices in the company by employing the instrument used by (Qawasmeh, 2002).

The study population consists of all managers and supervisors working in the Jordan Telecom Group (470) supervisors and managers. The study sample was (150) managers and supervisors. As stated in (Sekaran, 2003) that the sample size that is greater than (30) and less than (500) is the most appropriate for most research. All questionnaires that were distributed were retrieved, and (26) questionnaires were excluded due to lack of validity for the purposes of statistical analysis. The number of questionnaires that were subject to statistical analysis was (124), which represents (82.6%) of the total questionnaires that were distributed, and this percentage is considered acceptable to complete the research and analyze the results.

The validity of the study instrument was verified in order to ensure that the scale used in the study actually measures what should be measured, and that it contains the necessary items through which

Vol. 2, No. 1. June 2022

the variables of the current study can be measured. The instrument reviewed by faculty members in different universities, suggestions were made to make some modifications, and some of them were adopted.

The researcher calculated the Cronbach Alpha coefficient to ensure the reliability of the study instrument, and coherence between the paragraphs of the scale, and although the rules of measurement in the value to be obtained from the coefficient are not specified, but to obtain (Alpha  $\geq 0.6$ ) is considered acceptable in the administrative and human sciences in general (Sekaran, 2003). Table (1) shows the results of the reliability test.

**Table (1)**  
**The internal consistency reliability coefficient of the instrument dimensions**  
**(Cronbach's alpha scale)**

No.	Dimension	No. of items	Alpha value
1	Skills	17	0.905
2	Leadership and Supervision	4	0.814
3	Organizational Learning	10	0.894
4	Relationships and Participation	10	0.791
5	All Management Development Dimensions	41	0.951
6	Management Development obstacles	6	0.633

The indicators of Cronbach's alpha above indicate that the study instrument in general has a high stability coefficient and its ability to achieve the objectives of the study according to (Sekaran, 2003). It is evident from Table (4-5) that the coefficient of stability of each dimension of the study was not less than the coefficient of alpha of (0.633), which is an acceptable percentage indicating the interdependence and cohesion of the paragraphs of one dimension.

The Statistical Package for Social Sciences- (SPSS 17) program was used to analyze the primary data that it collected for the purposes of this study. As for the relative importance in this study, it was determined according to the following formula and according to the five-point scale for answer alternatives for each paragraph:

**Table (2)**  
**Importance levels**

Level	Score
Weak	1 – 2.33
Moderate	>2.33 – 3.66
High	>3.66

## 5. Results

### Demographics information

The percentage of males (96) people, was (77.4%), while the percentage of females (28) was (22.6%). The age group (31-40) and (41-50) are The highest in the sample are equal in number and the percentage of each of them is (33.1%), meaning that the two groups together constitute the majority of the study sample by (66.2%), the number of married people in the current sample is (87) (70.2%), while the percentage of unmarried people in the current sample is (29.8%), as for the educational qualification, (86) are holders of a bachelor’s degree at a rate of (69.4%), while (20.2%) are diploma holders. As for the scientific disciplines, the engineering major came in the first place, reaching (56.5%), followed by the administrative sciences. For the total experience in the company in the category of (11-15 years), represented (25.8%) of the sample. And for the span of supervision, the percentage of managers and supervisors who supervise (less than 10 people) was the largest.

The results showed that all Management Development Dimensions obtained averages that ranged between (3.55) and (3.60) with moderate relative importance for all dimensions. Also, the dimension of Management obstacles obtained an average of (3.51) and of moderate importance as well.

The results of the current study showed that there were no statistically significant differences in the attitudes of managers and supervisors towards the dimensions of Management Development (skills, leadership and supervision, organizational learning, relationships and participation) due to the following demographic and organizational variables: (gender, age, marital status, educational qualification, practical experience in the current department, the total practical experience, and the span of supervision), as for the scientific specialization the study showed that there were significant differences in the managers’ attitudes towards the dimension of relationships and participation represented in (relationships, communication, participation and cooperation, teamwork and trust) due to the variable of scientific specialization. Management science majors have the highest average score for managers' attitudes toward relationships and participation.

**Table (3)**  
**Demographic and organizational variables**

Variable	Category	Frequency	Percentage
Gender	Male	96	%77.4
	Female	28	%22.6
	Total	124	%100
Age	Or less 30	36	%29
	40-31	41	%33.1
	50-41	41	%33.1
	51 فأكثر	6	%4.8
	Total	124	%100
	Single	37	%29.8

Marital status	Married	87	%70.2
	Total	124	%100
Qualification	High school or less	6	%4.8
	Diploma	25	%20.2
	Bachelor	86	%69.4
	Post graduate	7	%5.6
specialization at university	Engineering	70	%56.5
	Administrative Sciences	33	%26.6
	other	21	%16.9
Experience in the current department	3 years or less	39	%31.5
	4-7	21	%16.9
	8-11	18	%14.5
	12 or more	46	%37.1
overall experience	5 years or less	39	%31.5
	6 - 10	11	%8.9
	11-15	32	%25.8
	16-20	20	%16.1
	21 or more	22	%17.7
The span of supervision	10 or less	105	%84.7
	20-11	12	%9.7
	30-21	2	%1.6
	40-31	1	%0.8
	41 or more	4	%3.2

**Table (4)**  
**Means of Management Development Dimensions**

No.	Dimension	Importance Level	Standard Deviation	Means
	Skills	Moderate	0.56	3.55

	Leadership and Supervision	Moderate	0.68	3.60
	Organizational Learning	Moderate	0.64	3.53
	Relationships and Participation	Moderate	0.74	3.56
	All Management Development Dimensions	Moderate	0.58	3.55
	Management Development obstacles	Moderate	0.58	3.51

## 6. Recommendations

In light of the findings of the study, the researcher makes the following recommendations:

1. The necessity of paying attention to the issue of management development by people in charge in business organizations, by following the latest development methods and approaches.
2. The need to pay attention to local competencies and work to nurture them and provide them with adequate support.
3. The need to conduct more in-depth studies that explore the issue of strategic partnership in a precise and detailed manner as an approach for management development.

## References

- Brown, D., & Harvey, D. (2001). *An Experiential Approach To Organization Development* (Seventh). Prentice-hall.
- Dacin, M. T., Oliver, Roy, C., & Jean Paul. (2007). The Legitimacy Of Strategic Alliances: An Institutional Perspective. *Strategic Management Journal*, 28, 169–187.
- Daft, R. L. (2004). *Organization theory and Design* (8th ed.).
- Farooqui, S. (2005). *Information and communication technology use and productivity*. [http://www.statistics.gov.uk/articles/economic\\_trends/ET625\\_Farooqui.pdf](http://www.statistics.gov.uk/articles/economic_trends/ET625_Farooqui.pdf)
- Inkpen, A. C. (2000). Learning Through Joint Ventures: A Framework Of Knowledge Acquisition. *Journal of Management Studies*, 37(7), 1019–1043.
- Jansen, paul, Velde, & Mandy and Mul, W. (2001). A typology of Management development. *Journal of Management Development*, 20(2), 106–120.
- Knox, L., & Gibb Stephen. (2001). Sector level analysis of Management Development The case of Scottish local authorities. *Journal of Management Development*, 20(8), 714–728.
- Mckenzie, J., & Winkelen, C. van. (2006). Creating successful partnerships: the importance of sharing knowledge. *Journal of General Management*, 31(4), 45–61.
- McSweeney-Feld, M. H., Discenza, S., Feis, & L.2010.Strategic, G. (2010). Alliances and Customer Impact: A Case Study Of Community Hospitals. *Journal of Business and Economics Research*, 8(9), 13–22.
- Meier, M. (2010). Knowledge Management in Strategic Alliances: A Review of Empirical

Vol. 2, No. 1. June 2022

Evidence. *International Journal Of Management Reviews*, 13(1), 1–23.

Paauwe, J., & Williams, R. (2001). Seven Key issues for management development. *Journal of Management Development*, 20(2), 90–105.

Qawasmeh, F. (2002). The Role of Strategic Partner in Management Development. Jordan Telecom Company as a case study. In *Yarmouk University*.

Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach* (Fourth). John Wiley and Sons Inc.

Suutari, V., & Viitala, R. (2008). Management development of senior executives Methods and their effectiveness. *Personnel Review*, 37(4), 375–392.

Talbot, C. (1997). Paradoxes of management development trends and Tensions. *Career Development International*, 2(3), 119–146.

## **The Role of the Ruling Dimensions of Artificial Intelligence in Increasing the Efficiency of e-Learning Entrepreneurship**

**Mohamed Albaz**

*Lecturer, Business Administration Department  
Faculty of Commerce, Suez Canal University, Egypt  
Mohamed\_albaz@commerce.suez.edu.eg  
ORCID 0000-0001-6207-5700*

*Article info.*

---

*Received: 15 April 2022   Revised: 25 April 2022   Accepted: 20 May 2022   Published: 1 June 2022  
Correspondent Author: Mohamed\_albaz@commerce.suez.edu.eg*

---

### **Abstract:**

*Purpose: The main purpose of the research is to achieve E-learning in university education through the strategic role of Artificial Intelligence (AI) in order to bring about development of university educational systems and continue to maximize competitiveness at the local, regional and global levels. Practical implications: Universities and specialized ministries seek to adopt leadership in e-learning to achieve the ability to in-depth thinking and data analysis in the light of the Sustainable Development Strategy. Originality/Value: It is necessary to move towards adopting artificial intelligence applications in university education to greatly enhance human capabilities and contributions. E-learning. A research article covering the framework of achieving university E-learning. Results: The dimensions of artificial intelligence have a strategic and pivotal role in building Technological Educational Programs and curricula that achieve the highest performance rates for human resources.*

*Keywords: Artificial Intelligence, E-Learning, Entrepr-eneurship, University Education.*

**JEL classification: M1**

## 1. INTRODUCTION

The international economy has witnessed rapid changes and major challenges as a result of technological developments and huge rates of innovative and creative thinking. Due to the increasing intensity of competition that threatens many organizations, the trend towards adopting technological entrepreneurship has begun, which is a process of developing existing business through the creation of new products, services and activities, In addition to new competitive situations and independent projects to enhance the spirit of creativity and initiative for employees and enhance the organization's ability to develop, survive and continue in the business world (Elia & Margherita, 2018)..

Artificial intelligence has become an umbrella term for applications that perform complex tasks that in the past required human input such as communicating with customers over the Internet, AI is more about the ability to think critically and analyze data more than it has to do with a particular form or function, the term is often used interchangeably with its sub-domains, which include machine learning and deep learning. However, there are differences.. For example, machine learning focuses on creating systems that learn or improve their performance based on the data you consume. It is important to note that although all machine learning is AI, not all AI is machine learning (Oracle, n.d.)

Over time, AI has only been present in science fiction, sometimes highlighting the potential benefits of artificial intelligence to humanity and its human aspects, and at other times highlighting the expected negative aspects of it., In the current years, artificial intelligence has become a reality, not a fantasy, and it no longer occupies a place in the world of popular culture only, but rather a major shift in artificial intelligence.

In the past years, the world has witnessed a scientific revolution and a broad technological renaissance, as organizations in general and higher education organizations in particular face many challenges and changes in the business environment, and with the maximization of the role of the knowledge and technological economy, organizations began to give great attention to planning goals, which are considered one of the most important factors for the success of organizations (Harrison, 2009).

The main purpose of this research is to discuss the role of artificial intelligence dimensions to achieve E-Learning for the University Education system. Hence, we formulate some sub-questions for this study as follows: (1) what is the concept of Artificial Intelligence? (2) What are the requirements for achieving University E-learning?.

### 1. Literature Review

In this article, scientific interest is growing in the idea that artificial intelligence (AI) and machine learning can take over traditional people tasks and take on different practical roles in business organizations, while reshaping current organizational processes, Where AI can solve the most difficult challenges in innovation management. Providing higher quality, greater efficiency and



better results from human experts that affect the company's long-term survival and competitiveness development (Haefner et al., 2021)

Within the framework of the higher education sector's adoption of artificial intelligence applications, one of the studies confirmed that the artificial intelligence system has the nature of human intelligence that can provide knowledge and information automatically to create smart applications to facilitate problem solving such as problem solving, speech recognition and learning. Preliminary, observation, data collection (interviews), data verification and conclusion. It has been shown that artificial intelligence in universities has a positive and negative impact on the relationship of intelligence to learning when it is conducted outside traditional learning (Bali et al., 2022).

While another study confirmed the extent to which the dimensions of artificial intelligence are used to address educational and educational issues in a variety of ways, artificial intelligence in education (AIEd) opens new opportunities, possibilities and challenges in educational practices. , where AI is used to represent knowledge models and direct cognitive learning, and AI is used to enable learning. , it is crucial to stress that AI for education is not just about implementing AI technology; That is, it is an integration of the educational, social, cultural and economic dimensions during the technology application processes (Ouyang & Jiao, 2021).

In this paper, and by standing on the general situation of economic, social and educational development, the overall improvement of the level of professional education and the quality of teaching has become an important measure to face the new round of technological revolution and industrial change. The current study confirmed the status of the educational system in Japan and abroad by analyzing the strengths and weaknesses of the main technology of virtual reality and the prevailing devices, identifying the main technology, determining functional requirements, performance requirements, and requirements related to the development and operation of the education platform system, while identifying the concepts of development and operational characteristics. ., Higher professional institutions are thinking innovatively about how to implement teaching reform, many interactive online learning platforms have emerged using multimedia computer technology and network technology (Jiang, 2021).

Another study examined the importance of using organizational learning in building modern information technology networks capable of developing performance levels in the organization. The study also highlighted that learning as a main source plays a crucial role in developing and strengthening integrative relationships between individuals in various departments. One of the most important results of the study is that organizational learning It has a positive impact on organizational performance. The study also showed that learning plays a crucial role in learning networks, as it is a source of knowledge for workers to develop performance (Skerlavaj et al., 2010).

Another study dealt with the strategic role of learning in developing performance rates and enhancing creativity and innovation. The study also aimed to improve and develop the capabilities of workers to achieve the highest levels of progress and ability to continue through reliance on organizational learning. The high level of innovation of employees had an influential role in increasing the competitiveness of business organizations (Alegre & R.Chiva, 2013).

The state is currently adopting the development of strategic plans in order to support research organizations and government and private sectors to reach technological leadership, by opening channels of communication between research units in ministries and various sectors to benefit from the outputs of scientific research and preparing a technological infrastructure for the development of technological pioneering projects with the qualification of human resources, with holding international protocols with Japan and China to transfer the experience of Technological Entrepreneurship (“Report of the Ministry of Higher Education and Scientific Research,” 2017).

## **2. International University Models**

E-learning presents a modern image that differs from the previous images and methods for the development and development of human resources that lead to increasing the efficiency of entrepreneurship and excellence in universities in light of the technological revolution of artificial intelligence applications. Hence, the relationship between the dimensions of artificial intelligence and the efficiency of E-learning Entrepreneurship can be analyzed as follows:

The study of the University of Kent aims to use human resources as a plan to ensure the existence of a culture of excellence to achieve the highest levels of the university's entrepreneurial efficiency and to follow a comprehensive approach to developing the organization of human resources to raise the university's technological performance rates. One of the results of the study is the development of the university's organizational units through attention to information systems, strategic planning, excellence management and training for employees with the application of continuous development mechanisms (Strategic Plan of Kent university, 2012).

While the American Harvard University aims to use the latest scientific and technological means in developing teaching methods and scientific research, and the university focused on strengthening scientific research centers to provide educational services. While the most important aspects of entrepreneurship and excellence at the British Brunel University can be clarified, it is the provision of free scholarships of about 6 million pounds annually, the establishment of training programs in the labor market to prepare specialists, and the opening of a center for employment and services for university graduates. The university invests more than 400 million pounds in the field of education and technological development.

## **3. Methodology**

This study was planned with a combination of information, understanding and experience to achieve its objective. This research design is to enhance the university e-learning model. This strategy provides importance to the information as it focuses on previous research and literature review of artificial intelligence applications and e-learning mechanisms. Moreover, this exploration composition addresses the dimensions of artificial intelligence in university education under the sustainable development strategy. In this study, the proposal of a model for artificial intelligence as a tool to achieve E-learning requires a realistic vision. Similarly, since studies on AI applications in the current era are limited, the proposed model for this study can be validated in future research.

And The study also relied on the deductive approach during the theoretical part of the study, which depends on some secondary data related to the topic of the role of the governing dimensions of artificial intelligence in increasing the efficiency of E-learning, and the researcher will obtain this data through the researcher’s readings and compilations of books, magazines, local and international scientific periodicals and benefit from the websites The information network of the Internet to collect information on research topics.

**4. The Relationship Between (AI) and E- Learning Entrepreneurship**

One of the studies confirmed that entrepreneurship is one of the driving forces behind economic development regionally and internationally, as entrepreneurship in business organizations is based on the high-tech field in the commercial areas of California (America) and (Britain). A high-tech economy in California (America) is more than (Britain), and the extent of the positive impact of technological entrepreneurship (creating job opportunities / effective uses of market resources / knowledge marketing) in developing entrepreneurship and innovation, which achieves the development of the economy in the dynamic regional environments of companies, has become clear (Qian & Zhao, 2018).

The study (Agulles & Prats, 2011) was concerned with the learning processes for workers in business organizations to achieve professional development, and to identify the modern scientific and practical practices and methods to achieve pioneering excellence, as the results of the study showed that the use of learning processes has a positive impact on developing the behaviors of the culture of individuals in business organizations and that the learning processes lead To increase the knowledge of individuals, which leads to the achievement of techno-logical development.

In the past decades, artificial intelligence (AI) has achieved great success through a set of general techniques for solving real-world software. Employing the latest Artificial Intelligence (AI) technologies in today's e-learning systems can provide personalized, adaptive and intelligent services to both students and teachers (Wen & Lin, 2008).

**5. A proposed Plan to Increase the Efficiency of E-learning Entrepreneurship in the Light of the Role of (AI)**

In light of the theoretical framework and models of international universities, the proposed framework for increasing E-Learning Entrepreneurship can be clarified in light of the role of Artificial Intelligence as shown in Table No. (1) as follows:

Table No. (1)

A proposed plan to increase E-Learning Entrepreneurship in the University Education Sector

1	Strategy vision	To transform universities into sustainable smart universities whose goal is to spread and enhance techno-logical programs in the education sector so that they become advanced universities
2	Strategy message	Universities seek to maximize their role in bringing about intellectual development among their students and researchers, to support the processes of

		creativity, Technological Innovation and administrative Empowerment of Human Resources.
3	strategy objective	Improving the efficiency of E-Learning Entrepreneurship in light of the role of Artificial Intelligence and increasing the capacity of human resources to face future challenges.
4	Elements of strategy implementation and success	1- Supportive administrative leaders. 2- Flexible organizational structures. 3- Modern technological structure. 4- Specialized and equipped training centres. 5- Alliances with universities, specialized bodies, and international houses of expertise. 6- A budget earmarked for financing.
5	Strategy implementation procedures	1 - Conducting continuous survey studies to find out what is new about the educational sector. 2- Preparing accurate and flexible strategic plans. 3- The presence of administrative leaders who believe in the idea of sustainable development and openness to the outside world. 4- Encouraging teamwork. 5- Providing the supporting financial and technological requirements. 6- Supporting the necessary techno-logical processes and means in the field of technological training for human cadres. 7- Concluding twinning agreements with many international universities. 8- Providing the appropriate organizational climate to encourage employees to think pioneering. 9- At least semi-annual follow-up.
6	Time schedule	The university leaders meet to set a proposed timetable for implementing the strategy, provided that the capabilities of universities are taken into consideration before defining the timetable for implementing the strategy to ensure its success.

**Source:** prepared by the researcher.

In light of the above, the researcher presents some recommendations for increasing the efficiency of E-Learning Entrepreneurship, as follows:

1. The administrative leadership's interest in preparing Technological and Entrepreneurial human resources.
2. Preparing a complete vision and Technological Strategic plans with an economic and knowledge dimension.

3. Establishing Technological Strategic Alliances with the regional and international technological sectors.
4. Opening Technological Entrepreneurship training centres to attract human resources.
5. The state's adoption of entrepreneurial investment activities.
6. Designing a smart integrated curriculum based on Entrepreneurship, Social and Industrial Intelligence.

## **6. Conclusion**

This article focuses on the most important strategic topics in the current era, which are Artificial Intelligence and its role in achieving the efficiency of E-Learning by applying it to the University Sector.

This article reveals the adoption of the governing dimensions of Artificial Intelligence, which are (Machine Learning / Deep Learning / Data Analysis) and its role in improving the performance of E-Learning systems and programs, with reference to some International Models to benefit from in the future in order to achieve Sustainable Development for Human Resources (HR).

E-learning is one of the means that support the educational process in order to shift from traditional systems to innovative systems based on technology, where the latest methods are used in the fields of technological education based on electronic systems, programs and internet networks. The rapid developments in the field of technology have led to the emergence of new patterns of learning and education, which further consolidated the concept of individual or self-Education, in light of the role of the dimensions of Artificial Intelligence. Educational Entrepreneurship Strategies are based on identifying opportunities and strategic solutions and how to prepare new investment projects and achieve the highest efficiency rates for the performance of Human Resources and Electronic Systems.

## **References**

Agulles, R., & Prats, M. J. (2011). Learning in practice: What organizational and management literature can contribute to professional and occupational development. *IESE Business School*, 938.

Alegre, J., & R.Chiva, R. (2013). Linking Entre Premeurial Orientation and Firm Performance: The Role of Organizational Learning Capability and Innovation Performance. *Journal of Small Business Management, Wwww.SSRN.Com, 51*, 491– 507.

*Artificial Intelligence (AI) from Oracle.* (n.d.). Oracle. Retrieved June 17, 2022, from <https://www.oracle.com/ae-ar/artificial-intelligence/>

Bali, M., Kumalasan, M., & Yunilasari, D. (2022). Artificial Intelligence in Higher Education: Perspicacity Relation between Educators and Students. *Journal of Innovation Educational and Cultural Research, 3*(2).

Elia, G., & Margherita, A. (2018). *Maturity of Crowd venturing for Corporate Entrepreneurship ,Kelly School of* (pp. 271-283,). Kelly School of Business ,Indiana University . [www.sciencedirect.com](http://www.sciencedirect.com)

Haefner, N., J., W., Parida, V., & Gassmann, O. (2021). Artificial intelligence and innovation management: A review, framework, and research agenda. *International Journal of Technolo-Gical Forecasting & Social Change, Available Online : Wwww.Elsevier.Com /Locate/Techfore, 162*, 2– 10.

Vol. 2, No. 1. June 2022

- Harrison, R. (2009). Learning Development. In *United Kingdom* (5th ed., p. 67).
- Jiang, L. (2021). *Virtual Reality Action Interactive Teaching Artificial Intelligence Education System* (Vols. 2021, ID 5553211, pp. 1–11). <https://doi.org/10.1155/2021/5553211>
- Ouyang, F., & Jiao, P. (2021). Artificial intelligence in education: The three paradigms. *Computers and Education: Artificial Intelligence*, 2, 2–6. <https://doi.org/10.1016/j.caei.2021.100002>
- Qian, H., & Zhao, C. (2018). *Space-Time Analysis of High Technology Entrepreneur-ship: A Comparison of California and New England*. 111–119. [www.sciencedirect.com/science/journal/01436228](http://www.sciencedirect.com/science/journal/01436228)
- Report of the Ministry of Higher Education and Scientific Research. (2017). In *Scientific Research and Technology*. <http://portal.mohe.gov.eg>
- Skerlavaj, M., Dimovski, V., & Desouza, K. (2010). Patterns and Structures of intra - Organizational Learning Network within a knowledge-intensive organization. *Journal of Information Technology, Available Online: Wwww.Ssrn.Com*, 25, 189–204.
- University, K. (2012). Division of Human Resources. Strategic Plan for Culture of Excellence. In *Kent State University, Strategic Plan (2012:2017)*. [www.Kent.edu/hr.strategic.plan](http://www.Kent.edu/hr.strategic.plan).
- Wen, D., & Lin, F. (2008, July 15). Ways and Means of Employing AI Technology in E-Learning Systems. *IEEE International Conference on Advanced Learning Technologies*. <https://doi.org/10.1109/ICALT.2008.4562109>

# **Impact of SMEs on Economic Development: A Systematic Review of Literature**

Dr. Mohammed Abdulrazzaq Alaghbari

*College of Administrative Sciences, Applied Science University, Kingdom of Bahrain*

*mohammed.alaghbari@asu.edu.bh*

*Article info.*

---

*Received: 15 April 2022    Revised: 25 April 2022    Accepted: 20 May 2022    Published: 1 June 2022*

*Correspondent Author: mohammed.alaghbari@asu.edu.bh*

---

## **Abstract**

*SMEs are considered the driving force of the country's economic growth via the entrepreneurship process. SMEs also impact economic development based on various aspects such as competitive market orientation, employment generation, capacity building and technology innovation. Therefore, using a systematic review approach, the current study will investigate the SME's impact on developing economies. The systematic review will adopt database searches based on keywords, authorship, citations, titles, journal lists, and topmost enterprises in the context of Bahrain. The review will be analyzed using various database tools such as EDS, Scopus and Web of Science to collect sample of n=8 peer reviewed journals published between 2018 to 2022. The findings shows that SME's plays an essential role in economic development through capacity development, technological innovation, employment creation and competitive orientation.*

**Keywords:** Economic Development, SMEs, Capacity building, Technology innovation.

## **Introduction**

Enterprises development is a significant part of the business economic development via the entrepreneurship process (Guerrero et al., 2021). Entrepreneurship has been a driving force of economic restructuring, decentralization and movement towards a market economy (Varga et al., 2021). Besides, Small and Medium Enterprises (SMEs) are considered a significant factor in developing the country's economy (Muthuraman et al., 2020). The majority of the SMEs are small and subsistence firms; however, there are very few small businesses that can reach medium-sized enterprises, which further few of them have the potential to develop into large-sized enterprises based on the entrepreneurs and establisher of these enterprises.

SMEs, are essential important element of the economy, also significantly impact the country's economic development (Surya et al., 2021). The impulsion of economic growth is the development of SMEs because these small and medium enterprises are deliberated as more flexible than large-sized enterprises in a competitive environment. Recent studies found that an important share in production infrastructure related to works, goods and services of market economies has been employed mainly by SMEs, as demonstrated by gross domestic product size (Petrunenko et al., 2021). The countries with economies in change are presently developing SMEs in the framework of providing support in financing activities, implementation of significant laws and regulations



Vol. 2, No. 1. June 2022

and ensuring the involvement in developmental programs by leading global organizations. The business development concept is to make an individual with the required information and knowledge, which is vital for constructing the enterprise and developing entrepreneurial skills.

SMEs represent the central part of business companies in the country's economic development and enhance the market economies' competitiveness. However, the revolution in the global business, such as the open innovation model, internationalization, fiscal policies, networking and mass customization, impact all other countries. Therefore, SMEs confront a competitive environment because of globalization and innovative technologies, including the developing role of CSR in the processes and inter-firm collaboration (Sroka & Szántó, 2018). Moreover, SMEs face various problems and challenges compared to large enterprises (Iqbal et al., 2018). There are various factors of SMEs that greatly influence the economic development (Surya et al., 2021); such as competitive market orientation, capacity building, and employment generation (Muthuraman et al., 2020) and innovative technological performance (Tehseen et al., 2019). Considering the aims, the objectives of the current research is to investigate the role of SME's in economic development and what an antecedents of economic development which are influenced through SME's creation.

## Literature Review

According to (Portes & Böröcz, 1988), the structuralist theory argues that private enterprises should be considered a significant part of global economic development that assists in minimizing labour costs and input, indirectly enhancing the competitive market of large enterprises. Another labour supply theory proposed by (Pedersen, 1998) argues that SMEs growth is recognized in response to the high unemployment rate and performs as employees' solution who cannot be engaged in the economic concepts have presented that when employments increase in SMEs, economic development is probable to rationalize as SMEs drive to search employments in the private enterprises (Matsongoni & Mutambara, 2018).

Define the SMEs concept; there is no proper definition for Small and Medium Enterprises (SMEs) because there are no constant criteria for the number of employees, capital amount, fixed capital investment, revenues, technology and market share. The differences among SMEs are mainly investigated from industry to industry and country to country based on studies (Gherghina et al., 2020).

Considering the concerns related to economic growth, (Muthuraman et al., 2020) claimed that SMEs play a significant role in this process of economic development because these organizations produce the foundation of economic development for global countries. (Šebestová' & Sroka, 2020) argued that SMEs are considered the driving force of the country's economic growth and also one of the implements to accomplish SDGs. On the other hand, (Hernita et al., 2021) proposed that SMEs mainly contribute to the modernization and diversification of the global economy because it influences the reserve turnover growth and the formation of the customer market in circumstances of limited assets and economic decline.

SMEs are competent to rapidly implement changes in customer demand, thus ensuring the required balance in the customer market, reported (Lu, 2018). Another finding of (Tambunan, 2019) found that private entrepreneurship and small businesses play a significant role in addressing the unemployment issues by providing new job opportunities. There are various benefits that the



SMEs to develop the economy, such as economic contribution to productivities of goods and services and the formation of employment at comparatively low-cost assets. For instance, (Oláh et al., 2019) claimed that Small and Medium Enterprises (SMEs) are a tool for minimizing the income disparities and enhancing the association among the country's economy's social, economic and geographic sectors and providing employment by 68.1% in Poland. In other words, SMEs are considered a major socioeconomic and economic development vehicle, as reported by (Šebestová & Sroka, 2020).

Abu-Aisheh (2018) studied the impact of small enterprises on economic growth and revealed positive influences on entrepreneurship and economic development. The study's findings showed that the share of small enterprises positively influences the output of the businesses and is responsible for better performance. In addition, (Melwani, 2018) investigated the significance of separate enterprises for economic growth. The findings revealed that changes in the business market encourage private and small enterprises and are a tool to increase economic development. The findings of Sigala (2018) on the developing economies of countries proposed that entrepreneurship has evolved as a vital factor in economic organizations. Contrary to this, (Dvouletý et al., 2018) studied the role of entrepreneurship in economic development. The study's findings revealed that entrepreneurship levels, such as SMEs, positively influence economic development.

Other findings of (Tirmizi, 2022) highlighted the fact that enterprises assist in producing new employments for the nationals and therefore facilitate economic growth. Additionally, (Bonito et al., 2017) found the interconnectivity between enterprises and economic development. (Surya et al., 2021) studied economic growth and the impact of government policies and strategies on the developing productivity of Small and Medium Enterprises (SMEs). The study's findings revealed that business asset support, government policies and HR capacity positively influence SMEs development by 97.6% of the determination coefficient.

Various scholars and investigators have recently made major efforts to reduce the challenges of measurement concerns by constructing capacity-building measures. In light of the capacity-building definition by (Park et al., 2022), the study has focused more on the ability of enterprises to build, integrate and reconfigure the internal proficiencies. Nevertheless, there is limited literature on the internal competencies to integrate and develop the external proficiencies. The strategic management theory demonstrates that the organizations practice alliances to obtain technology innovation, build capacity, and develop core business undertakings, as reported by (Khurana et al., 2021).

(Ikupolati et al., 2017) investigated SMEs as a major source of capacity building by accessing SMEs' human resources, innovativeness and technology and found that SMEs' operatives are mainly vital to capacity building. Another finding of the same study demonstrated that most respondents (91.9%) approved that SMEs are mainly the source of capacity building. The study also recommended that employees and entrepreneurs be trained in innovative technology that can increase the productive capacity building of SMEs, leading to employment generation.

According to (Yaskun, 2021), entrepreneurship recognizes the market opportunities and the market positioning are demonstrated as consumer-led practice. The findings of (Hai et al., 2021) found that the market positioning needs the organizations to observe instantly altering consumer demands and requirements, recognize the influence of these alterations on the customer satisfaction, and increase the innovation achievement and competitive advantages of the enterprises. (Movrianda et al., 2022) claimed that to understand the current and future customers' needs is critical for the enterprises to incentive the innovation culture in the firms; therefore, it must be required to

Vol. 2, No. 1. June 2022

constantly enhance and develop the products and services that need consumer needs and requirements.

Contrary to this, the competitive market includes operative monitoring of inclusive current and potential competitors in the business market and accumulates competitive intelligence to identify competitors' approaches, as reported by (Ksa, 2021). According to (Rincon et al., 2022), the main purpose of market-oriented enterprises is to remain intent on the activities of competitors and reflect this as a concept source for innovative product development. The better consideration of competitive market orientation may often minimize the decline of innovative products.

The study by (Muthuraman et al., 2020) revealed that the potential of SMEs is to produce employment and, therefore, minimize the joblessness in the country's economy. The contribution of employment within small businesses has mainly focused on the policy regulators at all economic levels. (Quaye & Mensah, 2018) analyzed the database of 99 countries and revealed that small enterprises having less than 100 workforces and more than ten years older organizations have the broad total employment share and employment generation capability along with the initial small enterprises participating in employment generation.

The study's empirical findings revealed that Small and Medium Enterprises (SMEs) play a significant role in employment generation, reduction of unemployment and economic development. The huge benefit of SMEs is employment potential with low-cost resources. The SMEs having intense work greatly influence their employment. SMEs with extreme workload intensity produce more employment with low asset costs compared to large enterprises. According to (Sarmah et al., 2021), it is significant for the developing economies with a high rate of unemployment to generate employment in SMEs.:

Innovation is "any idea, practise or object perceived to be new by an individual or other unit of adoption" (Rogers, 1995). Consequently, the innovation can be inside-oriented under being used by the operations internal to businesses or externally focused on the consumers external to the organization, stated by (Gherghina et al., 2020). According to (Zeb et al., 2021), there are four categories of innovations in businesses: process, product, organizational, and marketing.

Innovation can be referred to as radical innovation associated with innovativeness, while incremental innovation is linked to the development of current advances (Aljanabi, 2017). The main aim of driving an organization is to revolutionize and enhance its competitiveness in target markets to get enhanced business performance (Gherghina et al., 2020). Hence, the organizational innovation must be evaluated by the impact on the market position, that is, its innovative performance through technology, as reported by (Tehseen et al., 2019). According to (Aljanabi, 2017), technological innovation is often demonstrated by the patents' number attained by the enterprises. Most SMEs are not determined the patentable innovations because most technological innovations are incremental; therefore, they face various challenges in terms of innovation.

(Surya et al., 2021) studied open innovation, economic growth and the impact of government policies and strategies on developing the productivity of Small and Medium Enterprises (SMEs). The study's findings revealed that economic development associated with technological innovations enhances the economic enterprises' productivity and increases social welfare. Te business asset support, government policies, and HR capacity positively influence SME development by 97.6% of the determination coefficient.

## **Research Methodology**

The current study uses a deductive approach to review previous literature related to SMEs and economic development. The current study is based on a narrative approach to literature review proposed by (Denyer & Tranfield, 2009). A narrative review of the previous literature has been used to analyze the current knowledge comprehensively, and critically and come up with an objective analysis of the current knowledge (Ramdani et al., 2021).

The narrative review aims to define the capacity building, competitive market orientation, employment generation, and technology innovation in the Small and Medium Enterprises (SMEs) research and evaluate the research prospects to improve the current knowledge. A narrative review of literature provides critical evaluation for the development of a theoretical model by gathering, critiquing and summarizing existing literature published in journals.

The current study will use search keywords based on the terms SMEs, technological innovation, competitive market orientation, employment generation and capacity building using Google Scholar which publications are filtered using articles from 2018 and onwards. Moreover, journal lists have been evaluated based on ranking and the number of articles for each journal as findings are proposed using a sample of n=8 articles published in various journals.

## **The Finding**

(Malesios et al., 2018) conducted a study to investigate the impact of social, environmental and operational practices of SMEs on financial Performance where primary data was gathered using quantitative research methods from the dataset derived from 119 British, French and Indian firms. Data gathered was analyzed using regression analysis. Findings show that social, environmental and operational practices reported highly significant covariates. (Abisuga-Oyekunlea et al., 2021) conducted a study to investigate the role of SMEs in poverty reduction and sustainable employment using a systematic review of studies conducted in Sub Sahara in Africa. Findings show that SMEs play an essential role in employing the majority of the citizens contributing to sustainable employment. (Rota et al., 2019) conducted a study to investigate the impact of SMEs on employment in the EU-28 region. Using quantitative research methods, the proposed study used panel data from the 2005 to 2016 period. The findings of the study show no significant relationship between SMEs and employment in Eu-28 countries. (Gherghina et al., 2020) conducted a study to investigate the impact of SME investments and innovation on the territorial economic growth of Romania. Using quantitative research methods, panel data was analyzed from the period 2009 to 2017 and data was analyzed using log–log-linear regressions. Findings show that SMEs have no significant statistical impact on turnover but have a significant statistical impact on territorial economic growth. (Al-Haddad et al., 2019) conducted a study to investigate the impact of SMEs on unemployment in an emerging country. Primary data was gathered using questionnaires from SMEs comprised of Marble manufacturers and analyzed using SPSS. Findings show that there is a positive relationship between SMEs and unemployment reduction. (Chege & Wang, 2020) conducted a study to investigate the role of technology innovation in job creation through small businesses in developing countries. Findings were proposed based upon the narrative literature review on technology innovation by SMEs and its role. Findings of the study suggest that Technological innovation aided by SMEs has a significant impact on employment creation which positively affects economic development. (Abdelhamid & Sposato, 2020) conducted a study to

Vol. 2, No. 1. June 2022

investigate the role of SMEs' organizational learning policies and their implications on workforce agility using qualitative research where semi-structural interviews of various HR managers in SMEs in Dubai were conducted. Findings show that organizational learning practices in SMEs promote workforce agility through capacity development of the workforce. (Rashidirad & Salimian, 2020) conducted a study to investigate the relationship between different dynamic capabilities, competitive strategies and SMEs' value sources. Using quantitative research methods, primary data was gathered using a survey which was distributed amongst 441 UK-based SMEs. Research findings suggest that sensing, learning, integrating and coordinating capabilities play a significant role in SMEs' value creation, and competitive strategy mediates the impact of dynamic capabilities on value creation.

### **Discussion and Conclusion**

In a nutshell, evidence from the narrative review of literature (Abisuga-Oyekunlea et al., 2021); (Rota et al., 2019); (Gherghina et al., 2020); (Al-Haddad et al., 2019); (Chege & Wang, 2020); (Abdelhamid & Sposato, 2020); (Rashidirad & Salimian, 2020) suggests significant impact of SME's in promoting economic development in various spheres of development indicator whether its building innovative capability amongst the workforce, providing employment opportunities for local population, increase in productivity and improve competitive orientation of economy. All these factors have subsequently contributed in improving the standard of living in terms of social and economic realm. SME's plays a vital role in decreasing income inequalities impeding from concentration of wealth through widespread equal distribution of income and wealth. Regardless of the level of economic growth, SMEs are vital for social and economic order in terms of numerical and job creation capacity.

In summary, SMEs are considered an important element of the economy and significantly impact the country's economic development. The proposed study aimed to investigate the antecedents of SME's influencing economic development using narrative approach to literature. Evidence from the findings suggests SMEs plays an essential role in economic development through competitive market orientation, capacity building, employment and innovative technology in SMEs significantly impact economic growth. In a nutshell, SME development authority must provide inductive environment to promote ease of doing business to promote diversification in economic activities through various financing options.

### **References**

- Abdelhamid, M., & Sposato, M. (2020). The role of organisational learning in creating an agile workforce in Dubai. *International Journal of Work Organisation and Emotion*.
- Aljanabi, A. R. (2017). The mediating role of absorptive capacity on the relationship between entrepreneurial orientation and technological innovation capabilities. *International Journal of Entrepreneurial Behavior & Research*.
- Abisuga-Oyekunlea, A., O., Patrab, S. K., & Muchiec, M. (2021). SMEs in sustainable development: Their role in poverty reduction and employment generation in sub-Saharan Africa. *African Journal of Science*.
- Bonito, J. D., Daantos, F. J., Mateo, J. C., & Rosete, M. A. (2017). Do entrepreneurship and

- economic growth affect poverty, income inequality and economic development? *Review of Integrative Business & Economics Research*, 33–43.
- Chege, S. M., & Wang, D. (2020). Information technology innovation and its impact on job creation by SMEs in developing countries: an analysis of the literature review. *Technology Analysis & Strategic Management*.
- Denyer, D., & Tranfield, D. (2009). *Producing a systematic review*.
- Dvouletý, O., Gordievskaya, A., & Procházka, D. A. (2018). Investigating the relationship between entrepreneurship and regional development: Case of developing countries. *Journal of Global Entrepreneurship Research*, 1–9.
- Gherghina, Ş C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, 347.
- Guerrero, M., Liñán, F., & Cáceres-Carrasco, F. R. (2021). *The influence of ecosystems on the entrepreneurship process: a comparison across developed and developing economies*. Small Business Economics.
- Hai, H., Xuan, N., Thao, T., & Hien, P. (2021). The effects of strategy and market orientation on the performance of Vietnamese startups. *Management Science Letters*.
- Hernita, H., Surya, B., Perwira, I., Abubakar, H., & Idris, M. (2021). *Economic business sustainability and strengthening human resource capacity based on increasing the productivity of small and medium enterprises (SMES)*.
- Ikupolati, A. O., Medubi, R. D., Obafunmi, M. O., Adeyeye, M. M., & Oni, E. (2017). Small and medium enterprises (SMEs) as a source of human capacity building in Nigeria. *Journal of Small Business and Entrepreneurship, Development*, 35–42.
- Iqbal, M., Kazmi, S. H., Manzoor, A., Soomrani, A. R., Butt, S. H., & Shaikh, K. A. (2018). A study of big data for business growth in SMEs: Opportunities & challenges. *International Conference on Computing, Mathematics and Engineering Technologies, iCoMET*, 1–7.
- Khurana, S., Haleem, A., Luthra, S., & Mannan, B. (2021). Evaluating critical factors to implement sustainable oriented innovation practices: An analysis of micro, small, and medium manufacturing enterprises. *Journal of Cleaner Production*, 125377.
- Ksa, N. M. (2021). Market orientation and corporate performance of small and medium-sized enterprises in Saudi Arabia. In *Marketing* (pp. 66–77).
- Al-Haddad, L., S., S., M., Ali, I., Alam, R., Khuong, N. v., & Khanh, T. H. (2019). The Role of Small and Medium Enterprises (SMEs) in Employment Generation and Economic Growth: A Study of Marble Industry in Emerging Economy. *International Journal of Financial Research*.
- Lu, L. (2018). Promoting SME finance in the context of the fintech revolution: A case study of the UK's practice and regulation. *Banking and Finance Law Review*, 317–343.
- Malesios, C., Skouloudis, A., Dey, P. K., Abdelaziz, F. B., Kantartzis, A., & Evangelinos, K. (2018). Impact of small- and medium-sized enterprises sustainability practices and performance on economic growth from a managerial perspective: Modeling considerations and empirical analysis results. *Business Strategy and Environment*.
- Matsongoni, H., & Mutambara, E. (2018). An assessment of informal SMEs' potential in an African economy – theoretical and conceptual framework. In *Public and Municipal Finance* (pp. 1–13).
- Melwani, R. (2018). *Entrepreneurship development and economic development: A literature analysis*.
- Movrianda, H., Shar, A., & Arisandi, D. (2022). Increasing Marketing Performance through

Vol. 2, No. 1. June 2022

- Development of Market Orientation and Entrepreneurship Orientation (A Study on the Participation of Micro, Small and Medium Enterprises (MSMEs) in Bengkulu Province). *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 10862–10874.
- Muthuraman, S., Haziazi, M. A., Veerasamy, R., & Yahyaei, N. A. (2020). Economic Development through Small & Medium. *3rd International Conference on Business*.
- Oláh, J., Virglerova, Z., Popp, J., Klietkova, J., & Kovács, S. (2019). The assessment of non-financial risk sources of SMES in the V4 countries and Serbia. *Sustainability*, 4806.
- Park, Y., Chung, Y., & Son, H. (2022). Configurational paths for SMEs' innovation: focusing on information resources, absorptive capacity, and government support. *Technology Analysis & Strategic Management*, 1–14.
- Pedersen, P. O. (1998). *The Role of Small Enterprises and Small Towns in the Developing Countries*. Center for Development Research.
- Petrunenko, I., Khmarska, I., & Tkachenko, T. (2021). *The Importance of Small and Medium Enterprises in the Economic Development of Eastern Europe*.
- Portes, A., & Böröcz, J. (1988). The informal sector under capitalism and state socialism: a preliminary comparison. In *Social Justice* (pp. 17–28).
- Quaye, D., & Mensah, I. (2018). Marketing innovation and sustainable competitive advantage of manufacturing SMEs in Ghana. In *Management Decision*.
- Ramdani, B., Raja, S., & Kayumova, M. (2021). *Digital innovation in SMEs: a systematic review*. Information Technology for Development.
- Rashidirad, M., & Salimian, H. (2020). *SMEs' dynamic capabilities and value creation: the mediating role of competitive strategy*. *European Business Review*.
- Rincon, M. L., Diaz, M. L., & Puente, R. C. (2022). Is entrepreneurship enough to achieve superior performance in SMEs in emerging countries? Multiple mediation of market orientation and marketing capabilities. *Journal of Entrepreneurship in Emerging Economies*.
- Rogers, E. (1995). *Diffusion of Innovation*. Free Press.
- Rota, L. J., Pamić, R. K., Mirkovi, M., & Dobrila, J. (2019). Contributions of small and medium enterprises to employment in the European Union countries. In *Economic research - Ekonomska istraživanja*.
- Sarmah, A., Saikia, B., & Tripathi, D. (2021). Can unemployment be answered by Micro Small and Medium Enterprises? *Evidences from Assam*. *Indian Growth and Development Review*.
- Šebestová, J., & Sroka, W. (2020). Sustainable development goals and SMEs decisions: Czech Republic vs. Poland. *Journal of Eastern European and Central Asian Research*, 39–50.
- Sroka, W., & Szántó, R. (2018). Corporate social responsibility and business ethics in controversial sectors: Analysis of research results. *Journal of Entrepreneurship, Management and Innovation*, 111–126.
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation*.
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 1–15.
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & Ramayah, T. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*.

- Tirmizi, S. R. (2022). Effect of Strategic Complexity on Entrepreneurial Orientations of Small and Medium-Size Enterprises in Pakistan. *Indian Journal of Economics and Business*.
- Varga, J., W., & Szántó, R. (2021). Defining the Economic Role and Benefits of Micro, Small and Medium-sized Enterprises in the 21st Century with a Systematic Review of the Literature. *Acta Polytechnica Hungarica*, 18(11), 209–228.
- Yaskun, M. (2021). The Role of Entrepreneurship Orientation and Market Orientation on Product Innovation and Business Performance at SMEs Restaurants in Lamongan. *Enrichment: Journal of Management*, 360–365.
- Zeb, A., Akbar, F., Hussain, K., Safi, A., Rabnawaz, M., & Zeb, F. (2021). The competing value framework model of organizational culture, innovation and performance. *Business Process Management Journal*.



## Review the Legal Perspective of The Child's Education Rights Based on the International Law

Abed Rzaij Aswad\*

College of Law and Political Science. The University of Anbar. Iraq  
abd712006@uoanbar.edu.iq

Amr Mohamed Abdeldayem

International School of Management, Paris , France  
Email: Amrodayem@yahoo.com

Mahmoud Khalifa

College of Administrative Sciences, Applied Science University (ASU), Kingdom of Bahrain.  
Mahmoud.khalifa@asu.edu.bh

---

Received: 15 April 2022   Revised: 25 April 2022   Accepted: 20 May 2022   Published: 1 June 2022  
Correspondent Author: abd712006@uoanbar.edu.iq

---

### Abstract

*Legal challenges to child education create barriers to assisting abused children and their families. The purpose of this study was to describe legal challenges to child education. A qualitative study was conducted to explore the legal challenges. Individual interviews with about 20 people. Grounded theory methodology was used to develop categorical themes that reflected experiences and challenges. Three themes emerged from the data: legal challenges create complex dilemmas for education rights. Also, it has a common denominator with the legislative decree. The Islamic Shariah has taken great care of human life, particularly children. The Shariah system has introduced many legislations that preserve children's rights, including their right to education, reform and education. Thus, this study is faced with a considerable amount of primary legislation in the child's life to preserve it and its development, and from this I chose to address it (the rights of the child in education and education in the legal and legal perspective. It focused on the essential legislative dimensions that preserve children's rights to education and read the following international law.*

**Keywords:** Child Rights, Law, Sharia, Education, International Law



## **Introduction**

The United Nations Convention on the Rights of the Child ('the UNCRC' or 'the Convention') provides the most comprehensive statement of children's rights to education (Verhellen, 1993). Even though scholarship about the human rights of children is scattered in a variety of paradigms, research tracks, disciplines and schools of thought (Hanson, 2012); (Wynen et al., 2013). Islamic law (Shariah) has paid great attention to children because they are the next generation who will lead the nation and know the extent of the progress of nations and peoples by taking care of this promising segment. This segment of society needs more care and attention than other segments of society. Ignorance and homelessness. So this research came under the title (Children's rights in education from the legal perspective and international law (Duquette, 1997). To show that Islamic Sharia paid great attention to this segment, as caring for and caring for the child is a preventive, precautionary and educational method to prevent the formation of crime in society so that this child does not fall prey to crime and criminals. This research consisted of an introduction, a preface, two chapters, and a conclusion. The first topic dealt with the right of the orphan child to education from the legal perspective and international law. In the second topic, she dealt with the child's rights in education from a legal standpoint and international law.

## **Literature Review**

The origin of the term "right" is conformity and approval, as is the agreement of the door in its right to its rotation on integrity (van Bueren, 2021). As for the terminologically, the jurists of Sharia defined it as: ((what a man deserves)) and he criticized this definition, as it is ambiguous due to the generality of a word, and that the entitlement contained in the description depends on the purpose of the right, and this depends on the knowledge of the entitlement, so the role is required. And it came in Sharh Al-Manar: "The truth is an expression of what exists from every aspect, an existence that there is no doubt about, and from it this religion is true, i.e., existing in itself is a form and meaning. Fixed interest for the individual or for the community, or for both, as determined by the wise legislator." As for the definition of the right according to the jurists of positive law, it was defined by Dr. Abdul Razzaq Al-Sanhouri and Dahmed Heshmat Abu Steit as: ((a material or moral interest that is protected by the law. The right does not arise if the law does not approve it)). Second: Defining the child in Islamic Sharia and international treaties.

child language:

The child, with the breaking of the tibia and its tightening, is the smallest of everything, for the smallest of people is a child, and the smallest of the beasts is a child, and the youngest of the clouds is a child. The night when the first darkness falls to him is a child, and the child is the darkness itself. The word "baby" is derived from infantile, meaning softness, for the newborn, has infantilism and softness until it was said that the child is the newborn as long as it is soft or smooth. In the language, the word "child" refers to the individual, the group, the male and the female, and the source is childhood.

The jurisprudence books have indicated that the infancy stage is that stage that begins with the formation of the fetus in the mother's womb and ends with puberty.

Puberty may be by sign, or by age, and signs of puberty in the female are menstruation, wet dreams and the pregnancy, and in the male—definition of the child in the United Nations Convention on

Vol. 2, No. 1. June 2022

the Rights of the Child of 1989. The United Nations Convention on the Rights of the Child of 1989 is the first international document that defines the child clearly and explicitly, as this convention applies only to those certified to describe the child.

According to the text of (Article 1) of the Convention, a child means (that is, every human being under the age of eighteen unless he reaches the age of majority before that following the law applicable to him). The first topic: the right of the child to education in the legal perspective and international law the first requirement: the upbringing and discipline of the child Islamic education means the maintenance and righteousness of man and his correction from its inception to its end, under the teachings and directives of Islamic Sharia. Since the child is a creature unable to know what benefits or harms him and does not distinguish between good things from others, Islam has made the right of the child to his parents and those in charge of his upbringing per the principles of Islamic Sharia in beliefs, worship, behavior and morals.

### **Research Methodology**

The current study uses a deductive approach to review previous educational literature. The present study is based on several authors' narrative approaches to the literature review. A narrative review of the previous literature has been used to analyze the current knowledge comprehensively and critically and come up with an objective analysis of the current command (Ramdani et al., 2021). A narrative review of literature provides critical evaluation for developing a theoretical model by gathering, critiquing and summarizing existing literature published in journals.

A qualitative study was conducted to explore the legal challenges—individual interviews about 20 people. Grounded theory methodology was used to develop categorical themes that reflected experiences and challenges.

### **Findings**

Parents and educators must teach children from a young age to pronounce the word monotheism ((there is no god but God and Muhammad is the Messenger of God)) and make them understand its meaning when they grow up: There is no god but God. Ibn al-Qayyim, may Allah have mercy on him, said: ((If it is time for them to speak, i.e. children, let them teach there is no god but God and Muhammad is the Messenger of God, and let the first thing that reaches their ears be the knowledge of God Almighty above (Abdeldayem et al., 2021).

That is because the belief in God Almighty and his knowledge of the primary principles of religion is the basis for reforming the child, and the angel of his moral upbringing and correcting his crookedness, so every action that comes from him is weighed according to the scale of Islam.

If the child reaches the age of seven, the educator must teach him to pray, and if he reaches ten, he must beat him for it in case he refuses to perform it.

2- Umar bin Abi Salama said: (I was a boy in the lap of the Messenger of God, may God bless him and grant him peace, and my hand was rambling on the plate, so the Messenger of God, may God's prayers and peace be upon him, said to me: "Boy, name God, and eat with your right hand, and all that is next to you." This is still my taste afterwards. Imam al-Nawawi, may God have mercy on him, said: ((In this hadith there is an explanation of three Sunnahs of eating, namely: naming, eating with the right hand, and the third eating from what follows it, because eating it from the place of its owner's hand is bad ten and leaving chivalry.

3- On the authority of Rafi' bin Amr al-Ghafari, who said: I was a boy throwing our palm trees, or he said: The palm trees of the Ansar, so the Prophet, may God bless him and grant him peace, brought it and said: "Oh boy." I eat, he said: ((Do not throw the palm trees, and everything that falls on their bottoms)). Then he wiped my head and said: ((O Allah, fill his stomach)).

This hadith indicates what the Messenger, may God's prayers and peace be upon him, was keen on teaching this boy great etiquette, which is not trespassing and corrupting people's money. That is, I am not tampering. Rather, what prompted me to this action was hunger, so the Prophet, peace and blessings be upon him, and other members of his ummah explained the ruling on this jurisprudential issue, as he said to him: ((Do not throw palms, and everything that falls on their bottoms)) because throwing palms and trees may spoil the rest of the fruits, and for this he was forbidden. about throwing.

4- On the authority of Sahl bin Saad, may God be pleased with him, he said: ((The Prophet, peace and blessings be upon him, was brought a cup and drank from it, and on his right a boy, the youngest of the people, and the old men on his left, and he said: "Boy, do you permit me to give him the old men.") He said: What By my grace, I would have preferred someone to you, O Messenger of God, so I gave it to him." This hadith contains a set of moral etiquette that the Prophet, may God bless him and grant him peace, brought up his companions, may God be pleased with them, including: that he enacts the right to be safe in the dispensing of drink and food, and what happened in their course. Aisha, may God be pleased with her, narrated: ((The Prophet, may God bless him and grant him peace, liked the time in his shoes, his feet, his purification, and in all his affairs)).

Including that the youngster's permission must be sought in matters in which he has a right, such as if he is the one on the right and on the left who are better or older than him. Al-Ruhaibani said: If he drinks milk or something else, it is prescribed for him to hand the right hand, even if it is small or cuddly, and he seeks his permission to give him the larger one.

Taking care of the child, raising him in a good manner, and disciplining him with Islamic etiquette is one of the greatest duties of parents that the true religion imposes on them. Parents neglecting their children and neglecting their upbringing is a sin that deserves punishment.

Imam Al-Ghazali, may God have mercy on him, says: ((Know that the path in the sport of boys is one of the most important and confirmed matters. The good and his knowledge was brought up on him and he was happy in this world and the hereafter. His parents shared in his reward and every teacher and polite to him, and if evil returns and neglects the neglect of beasts is wretched and perished. The burden is on the neck of the guardian over him and the guardian of him)) And thus Islam guaranteed the right of the child to discipline and education in faith until he grows up The child is righteous as God Almighty wants, so he fulfills the rights of God, people, and himself. Thus, people live in a virtuous and conservative society in which they are secure in their lives, blood, money, and honor because his upbringing on obedience to God Almighty and carrying out his commands gives him piety, and piety is the way to security and prosperity in this world and the hereafter.

The second requirement: Show love and tenderness to the child

Islam is concerned with the child's health and physical and mental formation, as well as the child's feelings and emotional and psychological structure.

Experiences and observations have confirmed that the only hope for the child and the source of his joy and activity is the kindness and tenderness of the parents. .

Kindness, tenderness and the need for love are among the basic needs of the child. Love serves as emotional nourishment for the child. He who received little love in his early years will continue to

Vol. 2, No. 1. June 2022

thirst for more of this nourishment. Because, as many psychologists and educators say, an adult man is the first five years old, the child does not change much after the sixth year of life (), which shows us the importance of this right in a sound, correct, balanced and tolerant upbringing.

Islamic law preceded psychology and sociology in defining this right for children. The Messenger, may God bless him and grant him peace, used to treat children with all kindness, compassion, tenderness and kindness. He kissed them, wiped their heads, played with them, carried them on his honorable back. On the authority of Asma bint Umays, she said: When Jaafar and his companions were injured, I went to the Messenger of God, may God bless him and grant him peace, and she had tanned forty manna, and she kneaded my dough and It must be taken into account not to exaggerate the love and tenderness with children, since true Islam observes balance and moderation in all its legislations and directives (Zukan & Aldulaimi, 2020).

Excessive love leads to the child growing up spoiled, weak and unable to take responsibility in the future (), love is not by giving the child all the money and necessities he wants, but love is a feeling that the child feels from the tone of voice, the paper of dealing and good style as we learned from our Messenger prophet Muhammad peace be upon him.

And since everything has a middle limit, if it increases it turns into its opposite, so love also has a limit that it must not exceed or decrease. That is, we must love and sympathize with our children without exaggeration or negligence. Excessive love generates a spoiled child unable to assume responsibility, disrupts the development of a normal personality, and paves the way for bad manners and immorality. As for negligence, it is the key to delinquency, crime, and delinquency. The child is deprived of love and tenderness, looting nervous anxiety that destroys the feeling of safety and stability within his family first and then his community (Aldulaimi, 2019).

The Messenger, may God's prayers and peace be upon him, refers to the father beating his son if he reaches the age of ten, and he does not perform the prayer, and that is in his saying, peace and blessings be upon him: ((Instruct your children to pray for seven, and beat them for it for ten)).

And the peace and blessings of God be upon him. His kindness and love for his two grandsons, Al-Hasan and Al-Hussein - may God be pleased with them both - does not prevent him from raising them with a degree of necessary severity when they take two dates from the charity dates. Each of them raises his dates to his mouth, and the Prophet, may God bless him and grant him peace, denies that to them in relentless denial. And he extends his honorable hand to both of them and takes out these two dates before the saliva dissolves them while saying: Kikh Kkh: They are from the dates of charity that are not permissible for Muhammad or the family of Muhammad

The third requirement: is child support.

The scholars unanimously agreed that the child's maintenance is on his father, so if his father is insolvent or dead, it is obligatory on his money if he has money.

The care and guarantee of the child is originally obligatory on the relatives and relatives, so he is in the custody of his mother if his father is incapacitated or deceased, and his expenditure is on the relatives and rich relatives if he does not have money according to the order of inheritance, but if he loses both parents, their relatives replace the parents and this guarantee It is established for them by the rule of Sharia. If he does not have relatives or if he has, but they are poor and powerless like him, then his expense is from the Muslims' treasury because the fine is sheep, and if the child dies and he has money and he has no one of the heirs, then his money is for the Muslims' treasury.

Evidence for this is the saying of the Prophet, peace and blessings be upon him: ((Whoever left money, it will be for his heirs, and whoever left both, it will be with us)). But if the child does not have money or rich relatives, and the bayt al-mal does not spend on it for any reason, then in that case his spending will be on the rich Muslims who know his condition, because leaving spending on him is his destruction, so spending on him becomes an obligation of sufficiency, if he does it. Some fell sin on others. As for the social solidarity of the child at the state level, it is in the case of the family's inability with its members, as Omar, Othman and Ali, may God be pleased with them, did in allocating a gift for each newborn, which is one hundred dirhams. He helps him make his breastfeeding and spending from the treasury. Then, when he grows up, he will lead him with other children (Abdeldayem et al., 2021)

And the child should not be burdened with money that he can afford, and Islam has warned against that, so Othman bin Affan, may God be pleased with him, warned of that when he assumed the caliphate, he said: "Do not burden boys with earning, for when you cost them to earn, they will steal, and do not burden a nation without a profession of earning, for when you You cost her that, she earned her relief, and pardon, when God pardoned you (Jameel et al., 2022).

The fourth requirement: the causes and treatment of child delinquency

The factors and reasons that lead to the delinquency of the child, his deviation, the corruption of his morals and his poor upbringing in this sinful society, the bitter reality, and the perverted life are many, including:

Section one: the economic factor:

The calamity of poverty that befalls the young while they are in the prime of life and the beginning of life if they do not find complete care that raises their level, and complete aid that covers their need. Undoubtedly, this will lead them to deviation, and gradually lead them towards criminality, rather they will become a tool of demolition and sabotage of the nation's entity and tearing apart. To her unit, and to create chaos among her children in the future (Abdeldayem & al Dulaimi, 2020).

Rather, it may reach to change their religion under the guise of extending economic aid from the missionary movements, if they lose the care of the family and the Muslim state that sponsors them and is responsible for ensuring them, so that they deviate from the path and follow the path of delinquency and criminality, for the child who does not find enough food at home. He does not see anyone who gives him what he uses in the language of living and the reasons for life. He looks at what is around him and finds poverty, effort and deprivation, so he will resort to leaving the house in search of reasons and in pursuit of sustenance. The hands of evil and crime will seize him, and the aura of evil and deviation surrounds him, and he will grow up in society as a criminal. And be a danger to the soul, money and honor (Aldulaimi, 2016).

Research and statistics have proven the relationship between poverty and crime and that poverty is the incubator environment for corruption, due to the human's love for money.

The Almighty said ((and you love money very much)) and one of the researchers in Egypt studied the impact of the economic aspect on crime, and he found that 35% of delinquent juveniles are poor and 18% of them are well-off.

And he, may God's prayers and peace be upon him, used to seek refuge in God from poverty, rather he combined it with poverty, so he, may God's blessings and peace be upon him, said: "Oh God, I seek refuge in you from unbelief and poverty."

. Islam, with its just legislation, laid foundations and ways to combat poverty, established the right to a decent life for every human being, and put in place legislation that would make every individual the minimum amount of housing, a restaurant and clothing, and a practical approach to

Vol. 2, No. 1. June 2022

eradicating poverty once and for all, such as securing ways of working for every citizen. If we apply these provisions, we will eliminate the most important causes of crime, homelessness and loss, and we will finally eliminate all manifestations of poverty, misery and deprivation (Abdeldayem & Aldulaimi, 2020)

#### Section Two: Conflict and Family Discord:

One of the main factors in the delinquency of the child is the intensification of the conflict between the mother and the father, and this discord between the woman and her husband may lead to the children leaving the infested house, to search for companions and places in which to spend their time. Deviation will bring them down to the worst morals and the ugliest of customs. Indeed, their deviation will be confirmed, their criminality will be realized and they will become a tool of danger and calamity for the country and the people. Statistics in all countries indicate that a percentage ranging between 60% and 80% of juvenile criminals who do not have a cohesive family, including the loss of both parents or one of them, separation and deprivation of kindness, the absence of the father or the mother and his lack of care and care, the misbehavior of the parents, or the encouragement of the child by his parents or one of them on the path of corruption and Islam was able to find a solution to this problem by choosing the right family And that is nothing but a realization of affection, love and understanding, and the use of methods of reform between spouses to solve these problems (Abdeldayem et al., 2021)

The fifth requirement: the right of the child to mercy, tenderness and good treatment in international conventions and agreements.

International conventions and conventions on human rights in general, and the child in particular, refer to the child's need for good treatment, love and understanding, especially in his early years, as well as the prohibition of abuse, neglect and violence against him, especially the female child. The child needs love, tenderness, joy and kindness, and the Declaration of the Rights of the Child stipulates in the sixth principle, saying: "The child needs to enjoy a harmonious personality that is fully open to love and understanding. Tenderness, moral and material security, and it is not permissible, except in exceptional circumstances, to separate a young child from his mother.

The family is the natural environment for the care of the child, and no other party or institution can compensate for it, and a balanced and healthy personality stems from an atmosphere dominated and governed by love, understanding and affection ().

As for the 1989 Convention on the Rights of the Child, it stipulates the right of the child to care and care for the child from the parents or guardians. Article 19 defines the following: "States Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of violence or abuse. Physical or mental harm or abuse, neglect, negligent treatment, maltreatment and exploitation, including sexual abuse, while in the care of the parent(s), legal guardian, or other person who cares for the child.

To this end, such preventive measures should include, as appropriate, effective procedures for establishing social programs for the provision of necessary support to the child and for those who have the care of the child, as well as for other forms of prevention, and for the identification, reporting, referral, investigation, treatment and follow-up of such child abuse And also to intervene in the judiciary as necessary).

Article 19 of the Convention seeks to give the child the broadest possible range of protection

against any kind of domestic violence or other forms of violence. It specifically addresses the duty of Governments to protect children against neglect and abuse by parents or other persons in their care.

The World Health Organization has reported that approximately 40 million children under the age of fourteen worldwide suffer from abuse and neglect and need health and social care.

Statistics in Russia indicated that about 2 million children under the age of 14 are subjected to physical abuse by their parents annually, and that the equivalent of 15% of them die as a result of assault, in addition to the suicide of (2000) children annually.

Article (16) of the 1989 Convention on the Rights of the Child states: "No arbitrary or unlawful interference with a child may take place in his private life, family, home or correspondence, nor any unlawful attack on his honor or reputation, and the child has the right to be protected by law from such This exposure or prejudice)).

Article 37/A of the Convention states, "No child shall be subjected to torture or other cruel, inhuman or degrading treatment or punishment."

Article 39 of the Convention stipulates that "a child who is exposed to one or more of these cases has the right to physical and psychological rehabilitation and social reintegration."

### **The Right of the Child to Education in International Conventions and Treaties.**

Education is of great importance in protecting man from several dangers, such as deviation from sound behaviors that develop his physical, mental and spiritual capabilities that make civilization and civilization, and that bring him prosperity, happiness, progress and prosperity for humanity in general. Science is a light that dispels the darkness of ignorance and illiteracy and protects societies from the danger of wars and epidemics And disasters in all their forms, and education with these great benefits that accompany it must be available to man as a basic right for him since childhood, so the international community, states and international and specialized international organizations have made good efforts in order to make education available in all its forms to children (Verhellen, 2000). .

The Universal Declaration of Human Rights emphasized the necessity of educating children and ensuring this right for them. Article (26), paragraph (1) of it states: "Everyone has the right to education, and education in its early and basic stages, at least, must be free. Education is for all on the basis of competence. Education must be directed towards the full development of the human personality and greater respect for human rights and fundamental freedoms. Education must promote understanding, tolerance and friendship among all peoples, races and religions, and support the efforts of the United Nations for peacekeeping (Feng et al., 2012).

The seventh principle of the Declaration of the Rights of the Child of 1959 states: "The child has the right to education, provided that education is free and compulsory, at least in its early stages, in a manner that raises his culture, develops his abilities, his appreciation of matters and his sense of moral and social responsibility, so that He becomes a useful member of society, and the supreme interest of the child is the guiding principle for those responsible for his education and guidance, especially his parents (Nwazuoke & Igwe, 2016).

It is noted on the first paragraph of the principle that it made education a right for the child and a duty of society, and in order for it to be like that, it must be free and compulsory, and the connection of these two conditions is clear because the second cannot be achieved without the availability of the first. As for the second paragraph of the same principle brings back to the subjective minds that the child's personality should enjoy, which makes his supreme interest the reference he is comfortable with in all educational and guidance processes. Given that the family has been



Vol. 2, No. 1. June 2022

recognized as a primary source of care, education must also be a basis under Parental responsibility.

The right of the child to education was established and confirmed by Articles 13 and 14 of the International Convention on Economic, Social and Cultural Rights, but with more detail. Article (13) of the Convention is not only respecting the desire of parents and guardians to choose the type of education, but also choosing schools for their children other than public schools, but the state will not leave that to the parents' desire in an absolute manner, but rather restricts this to the minimum educational standards that may be imposed or approved by the state. This agreement does not leave the parents absolutely free to choose the type of education and schools, but rather guarantees the child's right to the education available in the country where he lives. Article (14) of the Convention affirmed the obligations of the states parties that have not yet reached the realization of making primary education compulsory and free by approving the plan to ensure that this is achieved within a reasonable time. Within a reasonable number of years to be determined in the said plan.

However, what is stipulated in Article (15) is important, especially in the information age and technology revolution. The States Parties have recognized the right of every individual to participate in cultural life and to enjoy the benefits of scientific progress and its applications. Since the capabilities of the various states fall short of realizing this right alone(), the second paragraph of the same article contains a text that includes "the commitment of the states parties to the current agreement to respect the indispensable freedom for scientific research and creative activity, and the parties to the agreement acknowledged the benefits that It is achieved by encouraging and developing international contacts and cooperation in the scientific and cultural fields.

If we turn to the Convention on the Rights of the Child of 1989, we find that it specified the foundations for regulating the exercise of the right to education. Article (28) stipulates the following:

(1) States Parties shall recognize the right of the child to education, and to achieve this right progressively and on the basis of equal opportunities, they shall, in particular:

(a) Making primary education compulsory and available to all.

b- It encourages the development of various forms of secondary education, whether general or vocational, and makes it available and available to all children, and takes appropriate measures such as introducing free education and providing financial assistance when needed.

c- Making higher education, by various appropriate means, available to all on the basis of abilities.

D- Making educational and professional information and guidelines available and accessible to all children.

c- Take measures to encourage regular attendance at schools and reduce study rates.

2 - States Parties shall take all appropriate measures to ensure that school discipline is administered in a manner consistent with the human dignity of the child and in conformity with this Convention.

2. The States Parties to this Agreement shall promote and encourage international cooperation in matters related to education, in particular with the aim of contributing to the eradication of ignorance and illiteracy throughout the world and facilitating access to scientific and technical knowledge and modern educational means. In particular, the needs of developing countries shall be taken into account in this regard." This article establishes the right of all children to education without any discrimination.

This agreement not only establishes the right of the child, but rather sets out a set of goals for the



education of the child stipulated in Article 29 of the Convention, which are as follows:

(1) To develop the child's personality, talents, and mental and physical abilities to their fullest potential.

2- Develop respect for human rights, fundamental freedoms and reprehensible principles

## **Discussion and Conclusion**

The conclusion came with the most prominent results of the research and recommendations, asking God Almighty to grant success and payment and to make this work purely for his honorable face and to place it in the balance of my good deeds, my parents and all Muslims that He is All-Hearing and Responsible. The reasons that certain children do not or cannot attend, or do not stay in school, are varied. However, they are often connected to poverty and broader forms of social exclusion. The educational experiences of Roma children in Europe serve as a key example of this and the Committee frequently identifies them as a group that is unjustly excluded (Lundy & McEvoy, 2011). Exclusion and the breach of the right to access to education come in a number of guises, one of which is the hidden or additional costs of supposedly 'free' education. After the end of this research, I would like to summarize some of the results that I reached, which are as follows:

1- Islam was concerned with providing care for all individuals, especially the children segment, and it played a prominent role in deepening the concept of care at all levels, psychological, educational, financial and other, as it nurtured it with kindness, charity, doing good, helping him, making him happy and preserving his dignity.

2- Sharia preserves the right of the child to be preserved, maintained and brought up.

4- Today's orphan is a man tomorrow, and when he sees good care and perfect care from us, he will improve the protection and care of other orphans in the future.

5- The Messenger of God, peace and blessings be upon him, comforted the children and wiped their heads.

6- The one who raises the child must be merciful and kind

7- Child neglect is a serious factor in the child's psychological deviation, especially if he is found in a corrupt environment, and do not look at him with kindness, mercy and love.

8- One of the reasons for a child's deviation is the need for money. Economic conditions play an important role in the formation of the causes of crime, due to the absence of necessities that satisfy his needs such as food, clothing and housing, all of which is a key factor in the formation of criminal behavior.

9- If the child does not find care and supervision, he may fall prey to the hands of bad companions who adorn him the path of badness, deviation and criminality, because the youngster is a social being who lives in society and mixes with children in school, the street, or work.

10- Research and statistics have proven the relationship between poverty and crime, and that poverty is the incubator environment for crime.

11- International conventions dealt with the rights of the child in education, but they did not give him the right as granted by Islam.

### **Recommendations**

1- Taking care of the children's side is real care,

2- Developing and raising the spiritual aspect in the hearts of these children and raising them in faith since childhood, and establishing mosques near their place of residence and residence.

## References

- Abdeldayem, M. M., & al Dulaimi, S. H. (2020). Trends of global fintech education practices and the gcc perspective. *International Journal of Advanced Science and Technology*, 29(3), 7150–7163.
- Abdeldayem, M. M., & Aldulaimi, S. H. (2020). Trends and opportunities of artificial intelligence in human resource management: Aspirations for public sector in Bahrain. *International Journal of Scientific and Technology Research*, 9(1), 3867–3871.
- Abdeldayem, M. M., Aldulaimi, S. H., & Alazzawi, A. (2021). Sustainable Leadership and Academic Excellence: Arab Culture Perspective. *2021 Sustainable Leadership and Academic Excellence International Conference, SLAE*, 33–37. <https://doi.org/10.1109/SLAE54202.2021.9686814>
- Aldulaimi, S. H. (2016). Fundamental Islamic perspective of work ethics. *Journal of Islamic Accounting and Business Research*, 7(1), 59–76. <https://doi.org/10.1108/JIABR-02-2014-0006>
- Aldulaimi, S. H. (2019). Leadership concept and constructs in Arabic philosophy. *Journal of Economic Cooperation and Development*, 40(2), 193–210.
- Duquette, D. N. (1997). Developing a Child Advocacy Law Clinic: A Law School Clinical Legal Education Opportunity. *U. Mich. JL Reform*, 31, 1.
- Feng, J. Y., Chen, Y. W., Fetzner, S., Feng, M. C., & Lin, C. L. (2012). Ethical and legal challenges of mandated child abuse reporters. *Children and Youth Services Review*, 34(1), 276–280.
- Hanson, G. H. (2012). *The Rise of Middle Kingdoms: Emerging Economies in Global Trade*. <https://doi.org/10.3386/W17961>
- Jameel, A. S., Kareem, M. A., Aldulaimi, S. H., Muttar, A. K., & Ahmad, A. R. (2022). The Acceptance of E-Learning Service in a Higher Education Context. *Lecture Notes in Networks and Systems*, 299, 255–264. [https://doi.org/10.1007/978-3-030-82616-1\\_23](https://doi.org/10.1007/978-3-030-82616-1_23)
- Lundy, L., & McEvoy, L. (2011). Children’s rights and research processes: Assisting children to (in)formed views: <Http://Dx.Doi.Org/10.1177/0907568211409078>, 19(1), 129–144. <https://doi.org/10.1177/0907568211409078>
- Nwazuoke, A. N., & Igwe, C. A. (2016). Worst forms of child labour in Nigeria: An appraisal of international and local legal Regimes. *Beijing L. Rev*, 7, 69.
- Ramdani, B., Raja, S., & Kayumova, M. (2021). *Digital innovation in SMEs: a systematic review*. Information Technology for Development.
- van Bueren, G. (2021). The international law on the rights of the child. In *The International Law on the Rights of the Child*. In *Brill Nijhoff*.
- Verhellen, E. (1993). Children’s Rights and Education: A Three-track Legally Binding Imperative. *School Psychology International*, 14(3), 199–208. <https://doi.org/10.1111/j.1467-8527.2006.00334.x>
- Verhellen, E. (2000). Convention on the rights of the child: background, motivation, strategies, main themes. *Gent University*.
- Wynen, J., op de Beeck, S., & Hondeghem, A. (2013). Interorganizational mobility within the U.S. federal government: Examining the effect of individual and organizational factors. *Public Administration Review*, 73(6), 869–881. <https://doi.org/10.1111/PUAR.12113>

Zukan, S., & Aldulaimi, S. H. (2020). The influence of grade expectation and student motivation for academic performance (2020. *International Journal of Scientific and Technology Research*, 9(1), 4405–4410.

## Innovative FE Analysis to Investigate the Effect of Flexural Reinforcement on the Behaviour of Beams

Ahmed A. Gouda Sayed

Dept. of Civil Engineering, Helwan University, Egypt  
Ahmed.Atef@m-eng.helwn.edu.eg

Ahmed H. Ali

Dept. of Civil Engineering, Helwan University, Egypt  
Ahmed.Ali@usherbrooke.ca

Hamdy M. Mohamed

College of Engineering, Applied Science University (ASU), Kingdom of Bahrain  
Hamdy.Mohamed@asu.edu.bh

---

Received: 22 April 2022    Revised: 28 April 2022    Accepted: 20 May 2022    Published: 1 June 2022  
Correspondent Author: Hamdy.Mohamed@asu.edu.bh

---

### Abstract

*In this investigation, three circular beams reinforced with GFRP bars were modeled using nonlinear finite element program, ATENA 3D. The parameter adopted by the current study was the longitudinal reinforcement ratio (1.5, 2.5, and 3.5%). The numerical analysis results were verified by comparing them against the experimental results of these tested beams. The reinforced concrete beams were modeled in a three-dimension space, taking into account the material nonlinearity of concrete, the elastic-plastic behavior of concrete and the elastic behaviour of the GFRP bars. The analysis included tracing the load-deformation response of beams in addition to the strains in the GFRP bars. The numerical investigation showed a good representation of the experimental results.*

**Keywords:** Concrete, Beam, GFRP, Experiment, Circular, Bars, FEM

## **1. Introduction**

Circular beams reinforced with either steel or glass fiber reinforced polymer (GFRP) have many advantages over the, conventional, rectangular beams. Such as, circular beams have the same flexural and shear stiffnesses in all the directions, circular beams have better aesthetic shape. Nevertheless, rectangular beams reinforced with steel bars have been under investigation from many researchers (Collins & Kuchma, 1999) (Rebeiz et al., 2001). Which is to some degree the same case for the rectangular beams reinforced with FRP bars (Jang et al., 2009) (Tureyen & Frosch, 2002).. In terms of the shear behaviour of the circular beams, especially the ones reinforced with FRP bars, there is few or no research conducted, at all, to study that behaviour, other than the articles published by the writers presented in the current study.

Finite element (FE) analysis to explore the behaviour of reinforced-concrete (RC) elements is a good alternative to the studies that are being done in the lab. Finite element (FE) analysis is another way to look at the behaviour of many structural members, such as beams, slabs, walls, and columns. Numerical studies, when compared to experimental studies in the labs, would save money, space, and time that can be used to pursue more research areas.

## **2. Research Objectives**

The aim of the current study is to investigate the behaviour of circular beams reinforced with GFRP bars, experimentally and numerically using Atena 3D, FE program. The studied parameter will be the longitudinal reinforcement ratio.

## **3. Experimental Program**

### **Properties of Materials**

Figure one shows the configuration of the beams in addition to the sand-coated GFRP bars that were used to reinforce the beams. All the reinforcement were provided by Pultral Inc. . (Inc, 2018). All the beams were reinforced with No. 6 GFRP bars. The properties, of this bar, are reported in Table 1. The Guaranteed tensile strength was calculated based on the recommendations of ACI 440.1R-15 standard for FRP material (“Guide for the Design and Construction of Concrete Reinforced with FRP Bars,” 2015)..

All the beams were cast using ready mixed concrete. The beams were all cast at the same day, to try to minimize any variation in the concrete properties, between the beams. The targeted compressive-strength was 36 megapascal (MPa), the actual one, for each beam, was calculated at the day of testing by using the recommendations of the Canadian standard CSA/S806-12 (S806-12, 2012). Table 2 has the concrete properties of each beam.

### **Beams' configuration**

Three full-scale circular beams were built. All the beams were designed using the Canadian standard CSA/S806-12 specifications (S806-12, 2012). The beams had a 500-mm diameter and 3000-mm length. The clear cover was kept equal to 40-mm in all the directions. The beam's definition had two symbols, "BG" to account for the reinforcement type (GFRP bars), the second is a number for the flexural reinforcement ratio.

### **Test setup**

The different components of the test setup are shown at Fig. 2. The shear load was applied to the beams using 1000 kN hydraulic actuator connected to a spreader beam. The load from the actuator was divided into two-point loads as shown in the figure. Computerized displacement control system at a rate equal to 0.6mm/min was used to generate the applied shear force. Each beam was simply supported at two locations that were 300-mm away from the edges of the beam. To ensure equal distribution of the shear stresses, rubber strips were provided where necessary, such as between the beam's surface and the steel supports.

### **Instrumentations**

Several instruments were used to capture the behaviour of the beams. For the compressive strain in the concrete, three 60-mm strain gauges were fixed on the surface of beam at the mid span at three different locations (D, D/8, and D/4). The diagonal concrete strains at the shear span were also observed using three strain gauges (S1, S2, and S3) as shown in Fig. 1. For the GFRP bars, 6-mm strain gauges were placed at the bar at the extreme tension side. Three LVDTs were used to capture the mid and shear spans deflections.

### **Main findings of the experimental phase**

All the beams failed in diagonal shear failure mode. Increasing the reinforcement ratio would result in lower strain values in the GFRP bars, causing fewer cracks in the beams and increasing the shear capacity of those beams in terms of un-cracked concrete and aggregate interlock. Increasing the flexural reinforcement ratio by 66 and 133% enhanced the shear capacity of the circular beams by 6 and 32%, respectively. The strains in the GFRP bars as well as the concrete surface improved to some extent. The decrease in the ultimate captured compressive strains on the concrete surface was 12 and 18%, respectively. As shown in Table 2, the maximum measured deflection for BG1.5 was greater than that of BG2.5, which was greater than that of the beam reinforced with the highest reinforcement ratio (BG3.5). The deformability of the beams was reduced, significantly, by 23 and 29%, respectively.

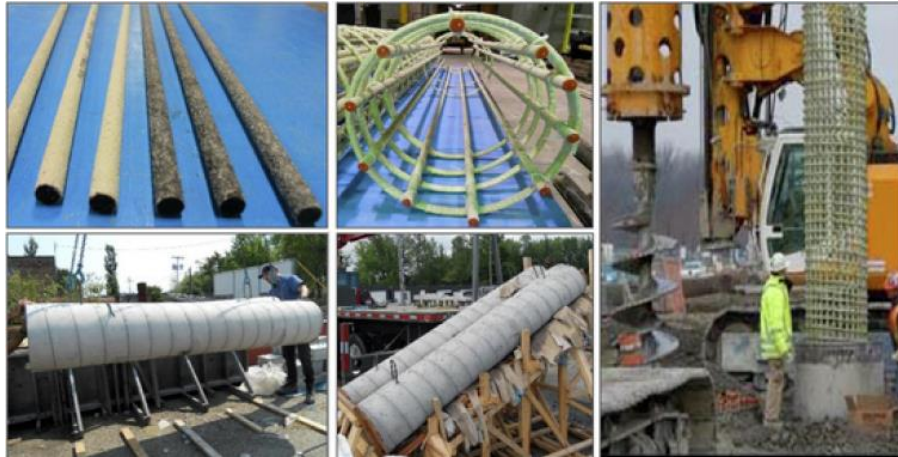


Fig. 1. Beams' configuration

Table 1: GFRP bar's properties

Diameter (mm)	Cross-Sectional Area (mm <sup>2</sup> )	Strength* (MPa)	Modulus of Elasticity (GPa)	Strain (μ $\epsilon$ )
20 (#6)	285	1105	63.7 ± 2.5	1730

\*Guaranteed tensile strength: Average value – 3 x standard deviation (ACI 440.1R-15)

Table 2: Beams' details

Beam ID	$f'_c$ (MPa)	Reinforcement ratio %	Failure Load (kN)	Ultimate Shear Load $V_{exp}$ (kN)	Strain (μ $\epsilon$ )		Deflection (mm)	FE Model Shear Load (kN)
					Bars	Concrete		
					$\epsilon_u$	$\epsilon_{cu}$		
BG1.5	38.1	1.5	457	229	4340	2000	15.1	222
BG2.5	38.1	2.5	489	245	3325	1752	11.6	241
BG3.5	38.1	3.5	603	301	3802	1644	10.7	295
$V_{exp}/V_{Model}$			--	--	--	--	--	<b>1.02</b>
<b>S.D (%)</b>			--	--	--	--	--	<b>0.47</b>
<b>COV (%)</b>			--	--	--	--	--	<b>0.5</b>



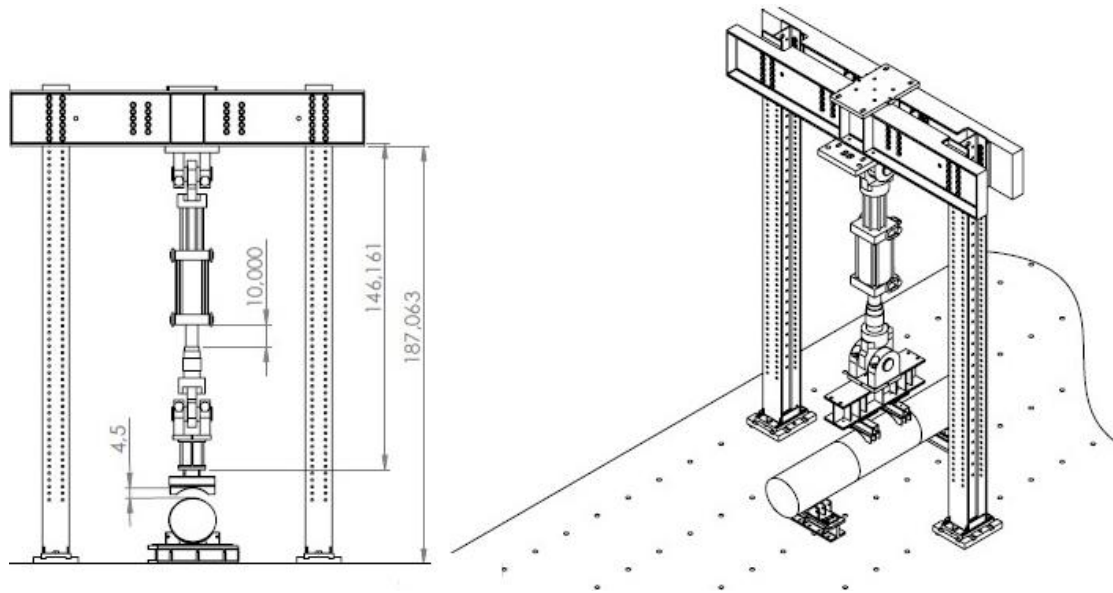


Fig. 2. Beams' setup

To simulate the shear behaviour of the circular concrete beams, the software package ATENA (Cervenka et al., 2013) was used. Modeling has to take into account a variety of aspects, including model size, elements' types, material characteristics, mesh sensitivity and generation, loading circumstances, and boundary types. The next sections briefly detail the elements employed in the current work to replicate concrete, as well as the reinforcing and boundary conditions.

### Concrete

The finite-element programme uses a variety of elements to simulate the influence of the concrete material. CC3DNonLinCementitious2, a built-in fracture-plastic constitutive model, was used to simulate the influence of concrete. The fracture model uses the Rankine failure criterion, while the plastic failure surface is determined using the Men trety-Willam failure surface (Cervenka et al., 2013). To simulate cracking, crushing, and fracture mechanics in concrete, these fracture-plastic models were combined into one model. This model takes into account crushing, nonlinearity, plasticity, and cracking in the x, y, and z directions.

### Reinforcement

The reinforcing bars were modelled using a truss element (CCIsoTruss) having transition degrees of freedom in the x, y, and z directions at the element's nodes. Using the mechanical parameters listed in Table 1, a perfectly linear elastic stress-strain curve for the GFRP reinforcement was created.



### **Bond model**

In the current study, the bond-slip relationship is given for unconfined concrete. This relationship has an ascending branch that is roughly parabolic in shape, a linear descending section, and eventually a horizontal plateau where the slip continues to grow at a constant bond stress.

### **Model's geometry**

As illustrated in Figure 3, the whole length of the circular beam was modelled, as were ring plates to suit the circular geometry at the loading and support points. The primary function, of the ringed plates, was to distribute and transfer stresses to the various elements of the circular concrete beam. A tetra element (CCIsoTetra) with three translation degrees of freedom in the x, y, and z dimensions was used at each node to mimic those plates. The plates were also built of a linear-elastic material with a Poisson's ratio of 0.3 and a modulus of elasticity of 200 GPa. By modelling the support in this way, a roller was created. Constraints were applied to a single line of nodes on the plate in the UX and UY directions, with constant values of 0. To replicate the loading locations in the experimental programme, the force P is delivered across sections of the loading plates

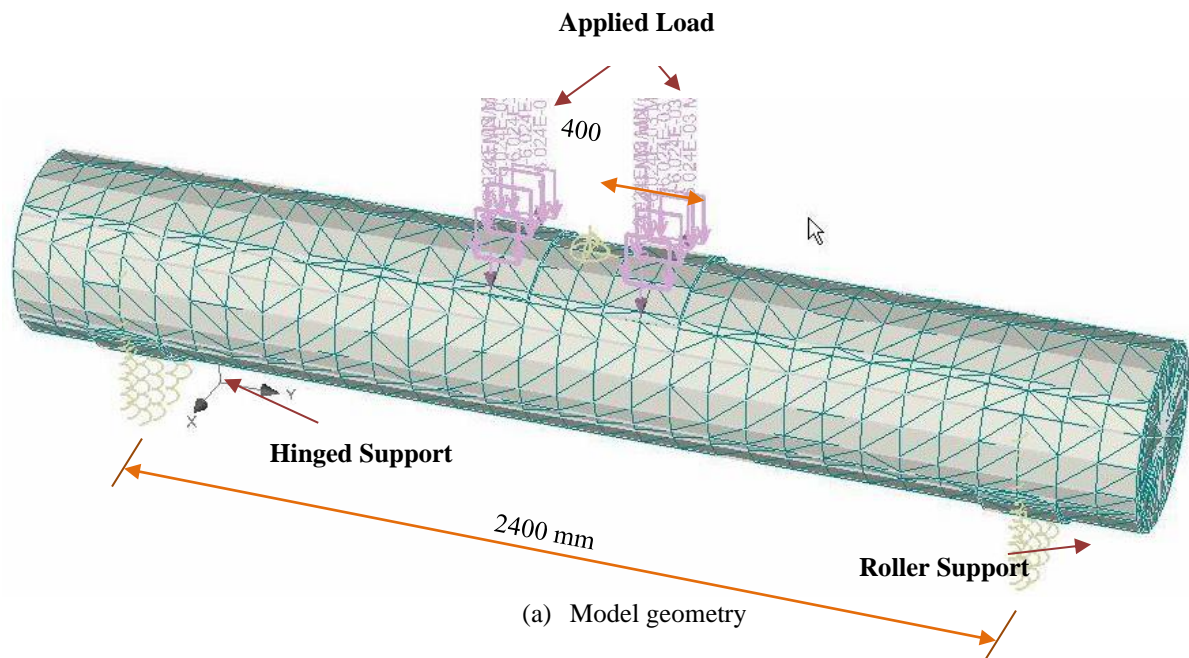
### **Results**

The findings of the developed FEM were compared to the experimental results of the circular RC beams that were tested. All specimens were used in the FE model's verification process (BG-1.5, BG-2.5, BG-3.5). The load-deflection curve, tensile strains in the FRP bars, and failure loads were all included in the comparison. The results show that the model correctly anticipated the shear response both before and after cracking, as well as between cracking and failure.

Figure 4 shows the, experimental and numerical, cracking pattern for one of the beams. The figure clearly shows the good mimic of the model to the beams tested experimentally in the lab.

The load-deflection curves for the experimental and FEM results of the beams are shown in Figure 5. The FE model was able to predict the load-deflection response of the experimental data with a high degree of accuracy, as can be observed. This holds true for both uncracked and cracked stages of the process. In addition, the model was able to predict the stiffness loss after breaking.

The GFRP longitudinal-bar strains measured in the FEM and the strains obtained experimentally are in good agreement, as illustrated in Figure 6. The longitudinal reinforcing rods were only slightly strained until the concrete section cracked. After cracking, the strains in FEM and experimental curves diverged virtually linearly with increasing load up to failure, compared to the pre-cracking ones. Table 2 shows that the shear-load predicted by the FE model was within 3% of the one observed experimentally. The average value for the experimental shear strength to the predicted one ( $V_{exp}/V_{model}$ ) for the beams is 1.02, with a standard deviation of 0.47 percent.



(b) Model geometry

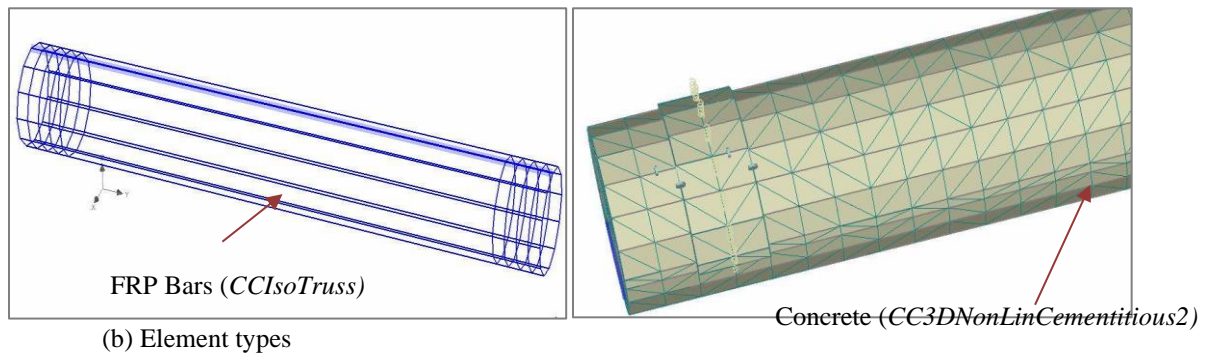


Figure 3: Model's geometry

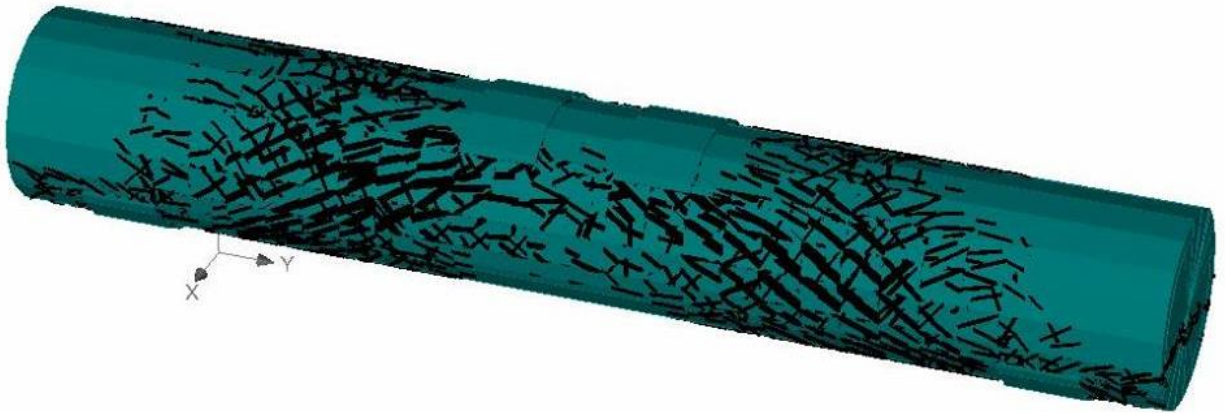
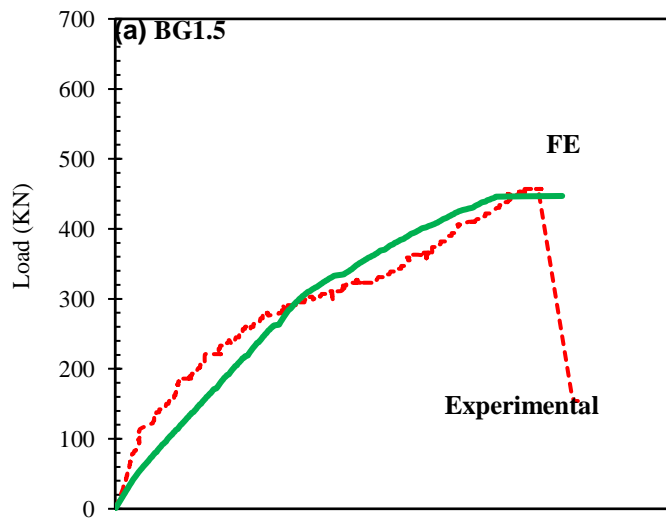
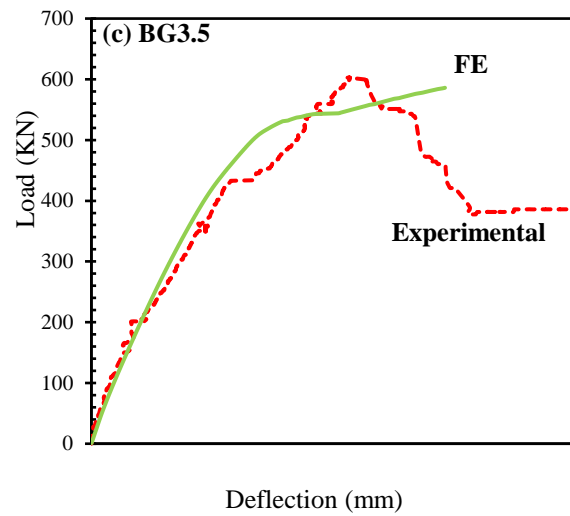
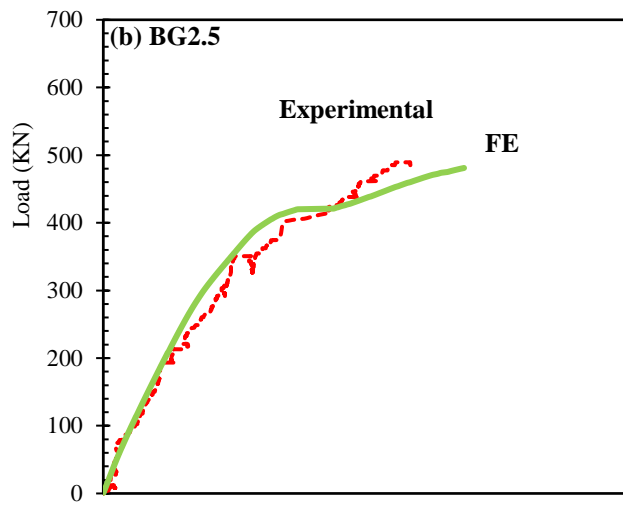
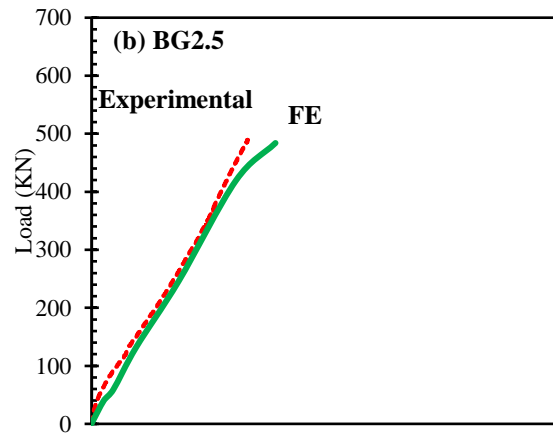
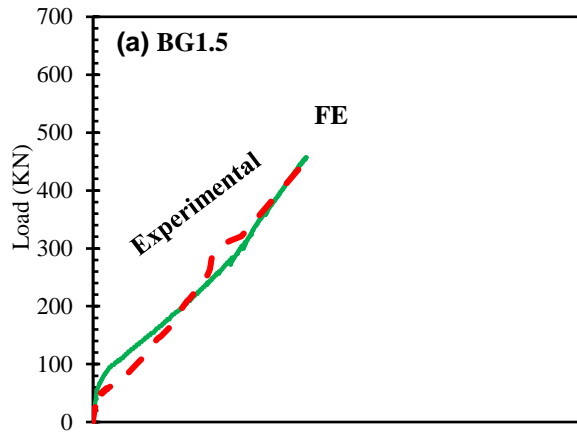


Figure 4: Cracking patterns







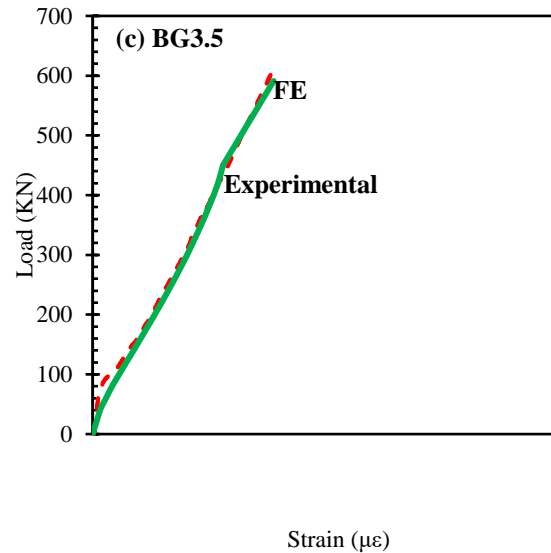


Figure 6: Load-strain relationship for the longitudinal-reinforcement

#### 4. Conclusion

The behaviour of beams reinforced longitudinally with GFRP bars and subjected to pure shear force was examined. The following are the study's principal conclusions.

- 1- Diagonal tension failure, was the failure mode for all the beams.
- 2- The flexural reinforcement ratio has a great impact on the behaviour of the beams. Increasing the flexural reinforcement ratio by 66 and 133% enhanced the shear capacity of the circular beams by 6 and 32%, respectively.
- 3- The FE beams were able to accurately replicate the experimentally tested beams' characteristics in terms of cracking patterns, load-deflection relationship, load-strain relationship for reinforcing bars, and carrying load-capacity.
- 4- The average value of the shear capacity obtained experimentally to the shear strength obtained by the FE model, ( $V_{exp}/V_{Model}$ ), is "  $1.02 \pm 0.01$  " with 0.5 percent COV.

## 5- Acknowledge

The authors would like to thank the technical staff of the structural laboratory at the University of Sherbrooke's Department of Civil Engineering. The authors would like to express their heartfelt gratitude to Pultrall Inc. for donating GFRP materials

## 5. References

- Cervenka, V., Jendele, L., & Cervenka, J. (2013). *ATENA Program Documentation Part 1: Theory*. Cervenka Consulting Ltd.
- Collins, M. P., & Kuchma, D. (1999). How safe are our large, lightly reinforced concrete beams, slabs, and footings? *ACI Structural Journal*, 96(4), 482–491.
- Guide for the design and construction of concrete reinforced with FRP bars. (2015). In *American Concrete Institute (ACI) Committee 440*.
- Inc, P. (2018). *Composite Reinforcing Rods Technical Data Sheet*.
- Jang, H. S., Kim, M. S., Cho, J. M., & Kim, C. H. (2009). Concrete shear strength of beams reinforced with FRP bars according to flexural reinforcement ratio and shear span to depth ratio. In *FRPRCS-9*.
- Rebeiz, K., Fente, J., & Frabizzio, M. A. (2001). Effect of variables on shear strength of concrete beams. *Journal of Materials in Civil Engineering*, 13(6), 467–470.
- S806-12, C. A. N. /C. S. A. (2012). *Design and Construction of Building Components with Fibre-Reinforced Polymers*. Canadian Standards Association, Rexdale.
- Tureyen, A. K., & Frosch, R. J. (2002). Shear tests of FRP-reinforced concrete beams without stirrups. *ACI Struct. J*, 99(4), 427–434.

## **Electronic Financial Disclosure level on the Commercial Bank Sector of Bahrain Bourse**

***Talal Al Alkawi***

Associate Professor, Accounting and Finance Department,  
Applied Science University, Kingdom of Bahrain.  
Email: [talal.alalkawi@asu.edu.bh](mailto:talal.alalkawi@asu.edu.bh),

***Basel J. A. Ali***

Assistant professor, Accounting and Finance Department,  
Applied Science University, Kingdom of Bahrain.  
Email: [basel.ali@asu.edu.bh](mailto:basel.ali@asu.edu.bh)

---

*Received: 22 April 2022    Revised: 28 April 2022    Accepted: 20 May 2022    Published: 1 June 2022*  
*Correspondent Author: Hamdy.Mohamed@asu.edu.bh*

---

### **Abstract**

This paper investigates electronic financial disclosure in the banking industry of all commercial banks listed on the Bahrain bourse. A checklist was developed to assess the amount of electronic financial disclosure in Bahraini commercial banks. The sample size comprised of 8 commercial banks listed on the Bahrain bourse's financial sector from 2016 to 2021. According to the statistical analysis, the total amount of electronic financial disclosure varies from bank to bank. According to this survey, commercial banks listed on the Bahrain Bourse achieve a level of financial electronic disclosure of 76 percent. This paper should be especially relevant to bank managements in order to improve their electronic financial disclosure level by considering strategical policies, to provide good opportunities for banks in the Kingdom of Bahrain to improve their competitions, and to serve as a guide for academics in the banking sector in Bahrain.

**Keywords:** Electronic Financial Disclosure, Commercial Bank.

### **1. INTRODUCTION**

This research aims to contribute to the banking industry by establishing the levels of disclosure of electronic financial disclosure (EFD) for both Islamic banking and conventional banking. Previous studies linked by different scholars from different countries including the Kingdom of Bahrain have increasingly raised the need for more information disclosure through EFD, the most important of these incentives being the need for the development of an appropriate institutional and regulatory framework for



commercial banks. Additionally, it would improve and promote timely, accurate, and trustworthy information for investors.

External and internal influences on banks such as foreign investment, globalization, international capital markets, international accounting firms, and multinational organizations are due to internal influences such as socio-cultural, national economic development levels, local capital markets, and accounting professional bodies (Al-Sartawi, 2018); (Kiliç, 2016); (Musleh Al-Sartawi, 2016).

Banks have a significant and vital part in the economic system (al Nawaiseh et al., 2021); (Alawamleh et al., 2021); (Ali & Oudat, 2021); (Alrabei et al., 2022); (Harban et al., 2021); (Wang et al., 2021). Furthermore, research has demonstrated that information technology plays an important role in financial disclosure (Ali & Oudat, 2021); (Alkhodary et al., 2022); (Jawabreh, Jahmani, et al., 2022); (Jawabreh, Shniekat, et al., 2022). The importance of this research stems from the banking sector's requirement for complete information through EFD. As a result, financial disclosure in banks must be made properly and thoroughly (Siueia et al., 2019). This would further strengthen and improve the efficiency with which banks operate as a key factor in economies and a clear source of comprehensive development. This research seeks to assess the extent of the levels for commercial banks by evaluating the levels of EFD disclosure. Furthermore, this research adds to the accounting literature in terms of the influence of EFD modifications on investors, regulators, auditors, and the media, as well as on various other aspects, with the hope of contributing in the development of a checklist for banking system operations.

The present study's results are therefore intended to fill a gap in the existing literature and contribute to a better understanding and acceptance of electronic financial disclosure in the banking industry. As a consequence of the fast expansion in the number of investors and shareholders in the financial markets, the demand for publishing financial statements to satisfy shareholders has grown. Furthermore, the disclosure of earnings information by major corporations must be fair; it should be broadcast publicly and concurrently to investors through the internet (Aljawder & Sarea, 2016). Adopting online financial disclosure improves the productivity of businesses and attracts investors from all around the globe. Furthermore, EFD assists those who need to get information about firms through the internet. Users may effortlessly access the internet at any time, from any location, and acquire useful information at a low cost.

## **2- Review of the Literature**

Recently, there have been far too many academics looking into the amount to which corporations throughout the globe are disclosing financial data electronically. Researchers wanted to look at the impact of several variables (such as size, financial performance, liquidity, risks, shareholders, and so on) on EFD enterprises. A recent research (Sarea et al., 2021) assessed the amount of disclosure of Islamic banking in Bahrain using web-based disclosure. The web-based disclosure approach was used to calculate the amount of "the degree of web-based disclosure." The research revealed that the total amount of web-based disclosure was 73.3 percent. The regression findings revealed a "positive link between the independent factors (firm size, age, and profitability) and the extent of web-based disclosure."

A similar research (Aronmwan et al., 2018) examines the online financial disclosure practices of Nigerian public sector enterprises. To do this, a cross-sectional study approach was used, with data collected from 27 states over a one-year period. Furthermore, the data show that wealth and political competitiveness have strong positive connections with online financial disclosure in Nigeria, but state size has a significant but negative link. Furthermore, the age of the state has a negligible link with online financial disclosure. Another research discovered that firms give complete information only when their performance is good, but when they have negative news, they strive to keep their shares from being undervalued. It is assumed that managers seek to indicate that they are maximizing disclosure wealth and are efficient (Al-Sartawi, 2018). The regression results indicated that the amount of financial disclosure on the internet in Nigerian states is still insufficient. According to the research, the degree of literacy and the capacity of states to create wealth are important determinants of e-financial reporting across states.

Electronically revealed information may raise the value and amount of information given, allowing investors to analyze the true performance of organizations. studies by (Sun et al., 2019)

The Kingdom of Bahrain, as a member of the Gulf Cooperation Council (GCC), is regarded as a commercial banking center (AlNatiei, 2022). The Kingdom of Bahrain is asking for economic diversification, aiming to go beyond their oil-based economy by luring investors and global firms. The economic vision 2030 aims to improve the social

and legal settings, enticing more investors by supporting new electronic financial disclosure systems.

### **3- Electronic Financial Disclosure**

Several GCC-based research has addressed a variety of EFD-related banking sector challenges. For example, the adoption of EFD to disseminate company information is a recent phenomenon, and a number of studies analyze its potential implications (Sarea et al., 2018). According to (Al-Motrafi, 2008), the researcher evaluated the level of EFD use by Saudi public firms (113 companies) and the effect of eight particular variables on attitudes toward financial disclosure. According to the report, 95 (84 percent) of the organizations have their own websites, however just 51 (45 percent) are utilizing EFD. In addition, according to the conclusions of the study, none of these businesses has full financial data. In addition, the study reveals that the firm's size and the stock market are the primary elements that influence the quantity of corporate information presented. In addition, a research by (Blouin et al., 2018) examined the disclosure procedures of 3,217 organizations and found that voluntary web publication of the IRS Form 990 is substantially connected with donations, regardless of other characteristics such as age, size, and fundraising expenditures. In addition, fundraising is obviously tied to the performance metrics presented in the 990 filings, notably the program expenditures-to-total-expenses ratio. Therefore, nonprofits should carefully consider voluntarily disclosing their Form 990 results on their websites when it reflects well and work to improve their financial performance if online disclosure would reflect negatively on the organization. The most significant finding of the most recent study (Al-fehani et al., 2021) is that the average voluntary disclosure rate for banks in the commercial banking sector in Bahrain Bourse has reached 58 percent, which is greater than any previously analyzed studies.

### **4- Voluntary Disclosure:**

Lack of complete information on the company's actions has put shareholders at danger of manipulated results, as seen recently in escalating examples of scandals, frauds, suspension, and even delisting (Musyoka, 2017). One of the major issues influencing the principal-agent interaction has been identified as information asymmetry. Because of their position in overseeing the firm's affairs, management is thought to be well-versed in the

company. The principals or owners rely on the revealed information to understand how the business is operating, especially its primary goal of wealth maximization. The primary goal of the disclosure is to tell the investor / owner and analysts about the firm's quality and worth. The organizations feel that interaction with agents is a useful way to monitor actions, and that this contact is best conducted through the sharing of appropriate information. Conflicts of interest exist between two parties, according to agency theory: outsiders and insiders. Larger companies are more prone to have these conflicts (Mohammad & Monirul, 2012). This implies that the benefit of releasing knowledge is proportionately bigger. Managers (insiders) must typically be trustworthy to the shareholders (outsiders) by lowering agency costs by sharing more information about the firm (Al-fehani et al., 2021); (Ali & Oudat, 2021).

Many businesses opt to voluntarily provide substantial financial and non-financial information to investors and other stakeholders via yearly financial reports. These disclosures are meant to give helpful information about the company's performance and to convey management decisions. However, various factors have been found that might alter the level of voluntary disclosures, which has piqued the researchers' interest. Several factors have been discovered that may have an impact on the level of voluntary disclosures (Benton et al., 2022).

## **5- Methodology and Design of Research**

### **5.1 Sample Selection:**

The present study's empirical analysis is based on a population that includes all of the listed banks on the Bahrain market in 2021. The needed statistics, however, were obtained from 7 commercial banks out of 8 banks listed on the Bahrain market throughout the time (2012-2021). The bank was omitted from the analysis because its website was not operational. Furthermore, the researchers gathered data for this study by visiting the websites of banks and the Bahrain Bourse.

### **5.2 Measuring E-financial disclosure:**

For the current investigation, the researchers employed a checklist developed by (Al-fehani et al., 2021); (Musleh Al-Sartawi, 2016); (Sarea et al., 2018). consisting of 70 elements used to calculate the EFD as a result, the EFD index is binary, meaning that if a bank reported an item on the checklist, it earned a score of 1, and if the bank did not report

an item, it received a score of 0. As a result, the Index for each bank was computed by dividing the bank's total earned points by the bank's entire maximum potential score.

## 6- Research Findings

The amount of EFD is computed, as previously indicated, by dividing each bank's total score by the maximum possible scores. The Financial Accounting Standards Board (FASB) defined the two parts of financial reporting in 2000 as the content and presentation of information provided by businesses' websites. As a result of the chosen index, the maximum score of the EFD was 70 items, which included reporting and presentation content dimensions.

According to Table 1, the level of EFD in Bahraini commercial banks was 76 percent. This might be due to the differences in characteristics and regulation between commercial banks and other financial institutions listed on the Bahrain Bourse. Overall, the study determined that commercial banks' electronic financial disclosure level is a fairly good level of reporting, and this level will rise as commercial banks work hard to improve their electronic financial disclosure level by considering strategical policies, to provide banks in the Kingdom of Bahrain with good opportunities to improve their competitions, and to serve as a guide for academics in Bahrain's banking sector.

**Table (1)**

**Level of electronic financial disclosure**

Bank Type	N.	FED		Independent Samples Test	
		Mean	S. D	t-value	Sig.
Commercial	70	.7577	.187341	1.445	0.076*

\* Difference is significant at 0.01 level.

## 7- Conclusions and Suggestions for Further Study

The goal of this study was to look into and report on the extent and company characteristics that influence EFD practices among commercial banks in the Kingdom of Bahrain. This study fills a significant gap in the literature, as there are only a few studies that look at EFD from this perspective. The paper raises awareness about EFD, which decision makers

may find useful. From 2012 to 2021, data was gathered from the websites of seven banks listed on Bahrain's stock exchanges. A checklist from (Al-fehani et al., 2021); (Musleh Al-Sartawi, 2016); (Sarea et al., 2018) was used to calculate the overall level of EFD.

Because little research has been conducted on the relationship between EFD and commercial bank performance in the Kingdom of Bahrain, it is intriguing to investigate this relationship from this perspective. As a result, the study objectives can be reduced to research questions. What is the level of EFD by commercial banks listed on the bourse of the Kingdom of Bahrain?

The index looked at the size of the websites as well as the level of financial disclosure available online. The total level of EFD in commercial banks in Bahrain is 76 percent, according to this study, while the average voluntary disclosure rate for banks in the commercial banking sector in Bahrain Bourse is (58 percent), which is higher than all studies evaluated in other GCC countries.

According to this study, commercial banks use the internet to increase their exposure and financial information availability. Furthermore, to promote uniformity in commercial bank disclosure, both regulatory and professional bodies should collaborate to provide a template for EFD and improve their electronic financial disclosure level by considering strategical policies, giving banks in the Kingdom of Bahrain good opportunities to compete, and serving as a guide for academics in the banking sector in Bahrain.

### **References:**

- al Nawaiseh, K. H., Abd-alkareem Al Shibly, M. H., Alawamleh, H. A., Abbas, K. M., Orabi, T. G. A., & Ali, B. J. (2021). Dimensions of Corporate Governance and Organizational Learning: An Empirical Study. *Journal of Management Information and Decision Sciences*, 24, 1–11.
- Alawamleh, H. A., ALShibly, M. H. A. -a, Tommalieh, A. F. A., Al-Qaryouti, M. Q. H., & Ali, B. J. (2021). The Challenges, Barriers And Advantages Of Management Information System Development. *Comprehensive Review. Academy of Strategic Management Journal*, 20(5), 1–8.
- Al-fehani, N., Al-Alkawi, T., AlDolaimi, S., & Fajer Bin, S. (2021). The Effect of Voluntary Disclosure on the Financial Performance of Commercial Banks Sector on Bahrain Bourse: An Empirical Study. *Information Sciences Letters*, 10(1), 111–127.
- Ali, B. J., & Oudat, M. S. (2021). Accounting Information System And Financial Sustainability Of Commercial And Islamic Banks: A Review Of The Literature. *Journal of Management Information & Decision Sciences*, 24(5), 1–17.
- Aljawder, N., & Sarea, A. (2016). *Determinations of internet financial reporting: evidence form Bahrain bourse.*



- Alkhodary, D., Abu-ALSondos, I. A., Ali, B. J., Shehadeh, M., & Salhab, H. A. (2022). Visitor Management System Design and Implementation during the Covid-19 Pandemic. *Information Sciences Letters*, 11(04).
- Al-Motrafi, K. A. (2008). *Internet financial reporting in Saudi Arabia: users' perceptions and disclosures*. Aston University.
- AlNatiei, H. (2022). Determinants of Debt Collection Management of the Financial Institutions in the Kingdom of Bahrain. *IKSP Journal of Innovative Writings*, 2(2), 20–30.
- Alrabiei, A. M., Al-Othman, L. N., Al-Dalabih, F. A., Taber, T. A., & Ali, B. J. (2022). The Impact of Mobile Payment on the Financial Inclusion Rates. *Information Sciences Letters*, 11(4), 1033–1044.
- Al-Sartawi, A. M. M. (2018). Online financial disclosure, board characteristics and performance of Islamic banks. *Journal of Economic Cooperation & Development*, 39(3), 93–114.
- Aronmwan, E., Asiriwuwa, O., Aronmwan, E. J., & Asiriwuwa, O. (2018). Online financial disclosures in the Nigerian public sector. *Journal of Perspectives on Financing and Regional Development*, 5(4), 257–270.
- Benton, R. A., Cobb, J. A., & Werner, T. (2022). Firm partisan positioning, polarization, and risk communication: Examining voluntary disclosures on COVID-19. *Strategic management journal*, 43(4), 697–723.
- Blouin, M. C., Lee, R. L., & Erickson, G. S. (2018). The impact of online financial disclosure and donations in nonprofits. *Journal of Nonprofit & Public Sector Marketing*, 30(3), 251–266.
- Harban, F. J. M. J., Ali, B. J. A., & Oudat, M. S. (2021). The Effect of Financial Risks on the Financial Performance of Banks listed on Bahrain Bourse: An Empirical Study. *Information Sciences Letters*, 10(S1), 71–89.
- Jawabreh, O., Jahmani, A., Shukri, M. B., & Ali, B. J. A. (2022). Evaluation of The Contents of the Five Stars Hotel Website and Customer Orientation. *Information Sciences Letters*, 11(4), 1077–1085.
- Jawabreh, O., Shniekat, N., Saleh, M. M. A., & Ali, B. J. A. (2022). The Strategic Deployment of Information Systems Attributes and Financial Performance in The Hospitality Industry. *Information Sciences Letters*, 11.
- Kiliç, M. (2016). Online corporate social responsibility (CSR) disclosure in the banking industry: Evidence from Turkey. *International Journal of Bank Marketing*.
- Mohammad, N., & Monirul, A. (2012). The voluntary disclosure of internet financial disclosure (EFD) in an emerging economy: a case of digital Bangladesh. *J. Asia Bus. Stud*, 6(1), 17–42.
- Musleh Al-Sartawi, A. (2016). Measuring the level of online financial disclosure in the Gulf Cooperation Council Countries. *Corporate Ownership & Control Journal*, 14(1).
- Musyoka, M. N. (2017). *Effect of voluntary disclosure on financial performance of firms listed at Nairobi Securities Exchange*. Kca University.
- Sarea, A. M., Khalid, A., Shamsuddin, A. B., Hawaldar, I., & Hossen, Z. (2021). Online financial reporting disclosure in Islamic banking: evidence from Bahrain. *International Journal of Economics and Business Research*, 22(4), 311–327.
- Sarea, A. M., Musleh Al-Sartawi, A., & Khalid, A. A. (2018). Electronic financial disclosure: Islamic banking vs conventional banking in GCC. *Conference on E-Business, e-Services and e-Society*.

- Siueia, T. T., Wang, J., & Deladem, T. G. (2019). Corporate Social Responsibility and financial performance: A comparative study in the Sub-Saharan Africa banking sector. *Journal of Cleaner Production*, 226, 658–668.
- Sun, Y., Fang, S., & Hwang, Y. (2019). Investigating privacy and information disclosure behavior in social electronic commerce. *Sustainability*, 11(12), 3311.
- Wang, F., Chen, W., Fakieh, B., & Ali, B. J. (2021). *Stock price analysis based on the research of multiple linear regression macroeconomic variables*. Applied Mathematics and Nonlinear Sciences.