

FORMULATION OF THEORETICAL FRAMEWORK OF FACTORS AFFECTING THE SUCCESS OF PUBLIC-PRIVATE PARTNERSHIP PROJECTS

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ABSTRACT

Projects related with Public-Private Partnership (PPP) in UAE has been accelerated over the years and it faces number of associated challenges as PPP in UAE has not yet matured enough. There are a lots of researches need to be conducted to overcome the challenges. It requires a framework which provide a concrete guide to all stakeholders in the PPP projects. Hence this paper is intended to address factors or parties that affecting the success of PPP project in the context of UAE. It gives an overview of infrastructure development that needs public-private partnership approach. Previous researchers had identified the success factors to PPP projects but these factors are subjected to moderating effect of the government environment especially its governance, transparency and trustworthy in implementing the PPP projects. Based on the available literature, this paper presented a proposed theoretical framework for PPP project in the context of UAE. This framework may benefits in overcoming challenges that are associated with the formulation of PPP. Further evaluation of the framework would be beneficial for both public and private sector.

Keywords

E-Government Services, Citizens' Satisfaction, UAE

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Introduction

Economic growth and development of a country is a matter of prime importance for the Government as well as residents of the country [1]. It is process, which involves utilization of existing factors of production as well as development of new factors of production so that people in the country may spend a prosperous life. [2] highlighted that economic development encompasses range of target actions and activities, which are carried out for improving the standard of living and well-being of the inhabitants of a specified area. Such actions improve quality of the life of people and may also assist in building local wealth. [3] added to this and argued that as the world has become a global village so economic development of a country is not relevant to itself rather it is matter of concern for many neighbouring and other associated countries. In the context of international trade and commerce, countries tend to trade with those countries that has favoured access to factors of production [4]. If the economy of a country will grow, it will have a positive impact on the lives of the people as people may more income that they can spend on obtaining basic and advance amenities of life. There are number of ways through which

economic development can be achieved. For instance, [3] argued that a country may diversify its economic activities and instead of putting more reliance on one or few sectors, start developing alternate sectors so that they can contribute towards the economic development of the country. A recent example of this is the Kingdom of Saudi Arabia (KSA). [4] highlighted that although KSA has rich oil and gas resources yet the Government has decided to shift the increased reliance on the oil and gas sector and focus on tourism industry and manufacturing. Another example of this is the case of India, which in terms of population, is one of largest countries of the world. [5] highlighted that Government of India is developing human resources of the country so that people with technical skills can work not only in the local market but also go abroad and serve other countries. The residents of India working abroad may send foreign remittances to India, which may enhance economic activities in the country. In the long-term, there will be enough economic activities in the country that Indians may not have to go abroad. Another way in which a country can develop itself is the development of infrastructure in the country. A recent and very pertinent example of this is the One Belt, One Road (OBOR) initiative of China. The project involves

development of a road and associated infrastructure, which may connect China to port of Gawadar (Gawadar, Pakistan). [6] analysed the benefits and implication of OBOR and suggested that this project can be regarded one of the most important projects of the recent time as through development of road and other associated infrastructure, OBOR would bring an economic revolution not only for China and partnering countries but also its trade-partners (North America and Europe) will benefit from this. [7] highlighted the case of public-private partnership and suggested that another way through which Government may use public-private partnership projects for fostering economic development in the country. This, not only help Government in managing economic development while keeping an eye on its meagre resources, it will also help Government in reaping benefits of the talent and expertise of private sector. Public-private partnership (PPP) has long been used in the past and the phenomenon is gaining momentum once again. [7] highlighted the key features of PPP and suggested that it is an agreement between a public-sector enterprise and a private-sector entity, which involves a long-term agreement between the two parties such that both mix their resources and work together on some task. PPP projects are beneficial for both Government and private-sector enterprise. The birth of the PPP concept adopted in UAE and in this research is usually linked to the Private Finance Initiative (PFI) introduced in the United Kingdom by the Conservative Government in the 1990s. It was announced in a scenario of recession to control fiscal policy, limit public sector spending and increase economic growth, and it was taken forward by the New Labour Government in [8]. In the United Kingdom, in UAE and in many other countries, there was a similar process leading to the introduction of PPP projects for private financing of infrastructure projects.

After the Second World War and with the international repercussion of the 1929 Great Depression in the United States, many Western countries tried to bring macroeconomic stability and reconstruction through increased government intervention in the economy, as well as through State production of goods and provision of services to the population. Between 1930s and 1980s, intervention received popular labels such as 'Welfare State', and 'Keynesian State' [9]. Over

the years this approach lost international strength in many developed and developing countries. It was criticized for not achieving efficiency in the delivery of services and for substantially increasing the resource and administrative burden on the State, which culminated in the global crisis of the 1980s [10]. In Middle East, there were strong pressures against State monopoly because in the 1980s many faced the end of military dictatorships and experienced a process of democratization. The fiscal crisis of the 1980s was intensified by increased demand from society for better social policies and for the allocation of public resources into services such as health and education, as well as by the need for investment in infrastructure to stimulate economic growth. This period was also characterized by rising unemployment and inflation rates [11]. The economic crisis occurred not only in Middle East, but also in Western developed countries, and highlighted the problems of State monopoly in the provision of infrastructure [12].

As a result, in the 1980s, the international scenario was influenced by neoliberal ideas in response to fiscal problems, aimed at budgetary control and downsizing of public service provision [12]. These ideas were mainly associated with the administration of Margaret Thatcher (1979) in the United Kingdom and of Ronald Reagan (1980) in the United States. One of the main neoliberal arguments was that market-oriented policy instruments based on private competition, as alternatives to State monopoly, increased efficiency, reduced costs and decreased the price of service provision [13]. Neoliberal policy responses involved measures to privatize government operations and to deregulate private economic enterprises [14], as well as devolution of activities from central to regional and local governments [15].

Several countries adopted neoliberal policy instruments involving private participation, such as the United States, Korea, the United Kingdom, Portugal, France, Australia, Sweden, New Zealand, and Canada. Considering that privatization started to receive numerous criticisms worldwide, especially in developing countries for failure to deliver effective results in some sectors, other policy instruments, based on competition in the form of contracting out, became increasingly adopted for delivery of infrastructure [16]. These more competitive types

of policy instruments are still currently adopted in several countries and are characterized by private parties entering into competitive bidding processes for the construction of infrastructure and/or for the provision of public services on behalf of the public sector, which still maintains ownership of assets [17]. Traditional contracting out, common concessions, and PPPs are examples of these types of policy instruments that followed privatizations with the advent of neoliberal ideas.

[17] highlighted the case of under-developed countries and suggested that Government does not have lots of financial resources and they cannot spend money on all sectors of the economy. A suitable solution is to involve private sector investors to finance the projects and help the Government in achieving its economic growth related targets. These projects are also beneficial for the private-sector enterprises. For instance, PPP may help private sector in getting support from Government in getting favoured access to raw materials and/or technology. Government may provide guarantees to some projects, which may help in improving the overall credit rating or market repute of the project. There are strong indications that the PPP instrument will be continuously selected as policy tool by governments at the federal, state and municipal levels due to its perceived benefits and the large number of projects being elaborated. In UAE, the PPP instrument is used for the provision of public services associated with infrastructure development with the participation of the private sector in the design, construction, financing and operation stages [18].

Effective infrastructure is being considered as an important aspect of every nation's economy towards realizing its full potential of becoming a developed nation. According to [18], effective infrastructure plays a major role in determining the success of the key sectors of every economy, and also the provision of effective infrastructure in housing, water, energy and transport which are critical in achieving improved standard of living and also helps towards poverty reduction [19]. The growing participation of the developing nations in the free market system and also their active participation in the world economy has necessitated the need for improved infrastructural facilities to enable a sustained economic development. However, it is a known fact that these nations cannot effectively cope with the

huge capital investments needed for the provision of these infrastructures [20].

Governments primarily face an ever-increasing need to find sufficient financing to develop and maintain infrastructure required to support growing populations. Traditionally, this has been the reason for the private sector participation in resolving the infrastructure challenges facing the public sector which was originally initiated under the banner of privatization and subsequently Public Private Partnerships (PPP) [20].

Literature Review

Like many other countries of the world, UAE Government is also trying to benefit from PPP. It has developed a separate department that is responsible of taking care of the PPP issues. UAE Government (2018) set out an agenda for developing a sustainable and competitive economy by working on knowledge, expertise and diversity. In order to do so, it has decided to integrate the efforts of Government and private sector as well as pool funds, human capital and technologies so that above mentioned targets can be achieved. It also aimed to involve private sector so that efficient and economic products and services can be achieved. In addition to these, UAE Government (2018) highlighted many other advantages that it can obtain from PPP projects. These advantages include attracting investment in these projects from local, regional and foreign investors. Further to this, these projects may also help UAE Government in cost saving as only those private sector enterprises will be involved in these projects who use competitive bidding for these projects and may use innovative technologies for reaping such benefits. This would also lead to more job creation and increase in level of income of the residents of UAE.

In 2017, UAE Cabinet issued a resolution, which set out detailed procedures through which, federal and private sector enterprises can develop PPP. This also extended number of services that may be covered under PPP projects. In addition to this, Government of Dubai enacted Law Number 22 of 2015. The focus of this law was to set-up a regulatory framework for governing the PPP projects. The main thrust of this law was to foster investment in PPP by encouraging private sector entities to invest in the diverse projects and become a contributor in economic development of emirates. The law sets out that both public and

private sector entities may initiate development of such projects. The contract between the parties should clearly set out the conditions of the project including feasibility of the project, the economic benefit that may arise from the project, financial benefits of the project, technological requirements and benefit and social benefits that a person may obtain from such projects. Based on this, one may start any form of the PPP. The possible options or PPP forms, which can be used in this regard include service contracts, management contracts, leasing contracts, concession contracts, build, operate, transfer (BOT), build, own, operate, transfer (BOOT) and build, own, operate (BOO). UAE Government has started PPP projects in different field including PPP in education, infrastructure, waste-management and service. As part of these projects, Government has invited private sector to support Government in different projects. For instance, in case of PPP in education sector, UAE Government invited private sector for professional services for curriculum design. Likewise, Abu Dhabi Government also invited 3rd party contractors for educational and administrative supervision of kindergarten and primary schools. The underlying purpose of this is to increase the quality of the educational services offered in these schools. Likewise, UAE also initiated projects in the area of infrastructure development. These projects were focused on mobilizing private sector and use their expertise and financial resources for reducing carbon footprint. The existing and anticipated PPP infrastructure projects include 3 utility scale renewable photovoltaic solar technology, Abu Dhabi's Masdar solar and wind projects, Dubai's Roads and Transport Authority projects and Route 2020 project. Likewise, UAE is working on PPP in waste-management. As a part of this project, Bee'ah, a Sharjah-based private company will recycle waste and offer environmental solutions to different Government department. Likewise, another private sector entity, Masdar will partner with Bee'ah for development of a state-of-the-art plant for conversion of waste in to energy. The main aim of this project is to achieve zero waste-to-landfill target by 2020.

The formulation of the Public Private Partnership Projects has not been an easy task and involved various complex aspects, which have been essential to be evaluated before and after the projects formations. One of the most important

problems pertains to the process of tendering which is often criticized in the projects' formations such as the biased tender processes or un-favouring the parties etc. because of which it remains significant to understand the effectiveness and efficiency of Tendering Process. However, significant issues in tendering process include *high transactions costs, lack of transparency and lengthy durations* [19]. Moreover the capabilities of the private sector for the formulation of the PPP also play a key role. Because of the capabilities of the private sector the projects can be completed in a successful manner while lack of capabilities can lead towards hurdles. Private sector requires being prepared processes that are **transparent** and **trustworthy** [20]. On the other hand the government structure also plays a significant role when it comes to the PPP formulation as the inappropriate government structure can create problems for the PPP. [21] argued that **governance** is one of the key challenges in the PPP. Involvement of a private-sector entity in the project may lead to loss of control different activities. There are chances that private-sector entity manipulates things for their own benefits. This may create problem for the public-sector entity and may jeopardise economic growth related challenges. Likewise, [22] suggested that in PPP, both public and private sector entities trust on each other. A breach of trust by either party may lead to lots of friction between the parties and may create problems between the parties. This may create problem related to development of infrastructure development. Moreover, [23] added that PPP may also involve transparency related to different activities so that stakeholders may get an idea of what is going-on in the project. This requires an analysis of the situation so that all problems can be resolved[24] highlighted that despite the wide coverage of studies on critical success factors, the success criteria for PPP projects in developing and developed economies have received little or no attention in the mainstream literature.

Implementation of PPP in UAE

United Arab Emirates (UAE) occupies an important position in the Middle Eastern region of Asia. It is a federal sovereign state in Western Asia and is situated at the southeast end of Arabian Peninsula at the Arabian Gulf. The country has its borders with Oman (on the Eastern

side) and Saudi Arabia (on the Southern side). UAE also shares maritime borders with Iran (on the North) and Qatar (West). UAE is a federation of seven emirates, which comprises of Abu Dhabi, Ajman, Dubai, Fujairah,

Ras Al-Khaimah, Sharjah and Umm al-Quwain.

An absolute monarch governs each of these emirates yet together these emirates and these emirates join together to become UAE where Federal Supreme Council governs the later. Since the formulation and development of PPP in UAE accelerated, there are number of associated challenges that arise. The phenomenon of PPP in UAE has not yet matured enough and it needs a lots of research in this area. To start with, there is a dire need of a framework, which may determine who PPP should be developed. The development and evaluation of this framework would provide a concrete advice to the stakeholders of the forthcoming PPP projects and they can benefit from such knowledge, as it would help them prepare in overcoming challenges that are associated with the formulation of PPP. Further to this, in the context of UAE, one also has to test, evaluate and develop a framework, which determines the success criteria of the formation of PPP. An evaluation of constraints, challenges and prospects of the PPP would help would be beneficial for both public and private sector as the parties would come to know the factors that they should work on so as to capitalize them and the factors that should be worked on so as to overcome those. An understanding of these would help in bringing richer economic prosperity in the UAE without much reliance on the public sector and through involvement of private sector entities in to it. [25] suggested that PPP in UAE is not a very new phenomenon and there are not a lots of projects in the area, however, over the period of time, this number is increasing which requires an understanding of various facets of the project so that one can ensure the success of these factors. They carried out research focusing on the critical success and failure factors related to PPP in UAE. They argued that since little is known about the process and dynamics of PPP in UAE context so one should carry out research in this regard. They further argued that this issue will continue to remain focus of researcher as it would take sometime to mature the research in this area. They further argued that as macro-environment especially political and social landscape of UAE is

changing so one should expect that new developments in the area so new research in the area of PPP is vital [25] further argued that owing to the nature of the research issue, an in-depth as well as large scale research project needs to be carried out so as to understand the dynamics of research in this area. The findings of their research highlighted that if PPP would receive political support from the Government then it would help PPP in flourishing. Moreover, they also highlighted that since PPP are not very common in UAE so private sector does not have lots of information about it. So, this limited knowledge puts a constraint on the ability of these PPP. Further to this, [26] argued that during the last decade, there is a deep penetration of PPP projects in UAE. The focus of most of these projects was on the development of infrastructure in the UAE. However, there is a little known about the key success factors related to the infrastructure projects in the UAE. They conducted in-depth interviews for experts related to the infrastructure project as well as key personnels who were involved in the establishment of PPP projects in UAE. The focus of these interviews was on evaluation of key success factors that were linked with PPP infrastructure projects of UAE. Based on their research project, they urged that a continuous evaluation of different aspects of the PPP is needed so as to understand the PPP projects in more detail. Such an analysis would enhance the understanding of PPP related to infrastructure development in UAE.

Owing to the discussion carried out above in the background section as well as in the problem statement, is it argued that it is important that one should carry out research in the area of PPP with reference to the infrastructure development in the UAE. The findings would be beneficial, not only for UAE but also for other countries as these findings would guide public and private sector firms in developing feasible PPP projects. Where public sector would understand its role, private would also be vigilant in discharging its responsibility related to the project. Further to this, drawing on the work of [27], it is important to understand the *influence of the contextual factors to the success of PPP*. For instance, it is a matter of paramount importance that in PPP, one should balance the needs and requirements of both public and private sector organizations. Building trust, transparency and by providing a strong

governance system may lead to this. These three factors may bring openness in the relationship and would also help in the development of a viable project that would meet its time, cost and quality targets. Having these three factors in mind, both public and private sector would be inclined towards the development of PPP projects, which would lead to economic prosperity in the UAE. Likewise, understanding the key factors that one public and private sector should ensure during the formation of PPP. With an understanding of factors related to the formation of PPP infrastructure and analysis of the key success factors related to the formation of PPP, public sector will be able to attract more investment of the private sector and at the same time, private sector will have more confidence on the public sector and will facilitate investment of private sector in the PPP infrastructure project in the UAE. As the PPP in infrastructure development in the UAE is not new so it is important that one should understand the critical factors that are related to the success of the PPP projects as this is important for increasing the competitiveness of the government projects as well as simultaneously enhancing performance of the private sector. It is possible that UAE's PPP in infrastructure development may learn lessons from similar projects in other countries or the ones that were carried in the past in the UAE, however, these models need to be tested so as to develop a robust model that can be tried and tested.

Conceptual Research Framework

The success of the infrastructure development is a core perspective for the development of a society. Developed and modern roads and health and education places of a country are a sign of civilized nation. Moreover, this also indicates that the government of this country is concerned with the nation of this country. The development of infrastructure depends on the public-private partnership projects' [28]. PPP projects are such indicators which attract the international investors in the form of shareholding or in the form of foreign direct investment. FDI is more appealing for UAE because of successful PPP projects in the country. In last few years the concept of public-private partnership projects is becoming more renowned due to its great contribution to the economic development of the country.

The direct relationship of the formulating factors of PPP with the success factors of infrastructure may be influenced by introducing trust, transparency, and governance as a moderator. Although in recent studies this relationship is not studied till yet this is the newness of the current research that moderating role of trust and transparency and governance is analysed. Due to the business hub of UAE, it is necessary to analyse the role of key success factors of public-private partnerships and their impact on the infrastructure. Trust adheres to the good governance for the financial success of the project. PPP projects are such where trust may be spontaneous or generated. Any business has trust and transparency as a success factor same as the infrastructure development. General public relies on the state for better buildings, roads and transport so, it is the responsibility of government that to build the trust of the public development of the infrastructure should be ensured. By following the above-described reasons and logic of the study conduction a well-developed conceptual framework of the study is presented.

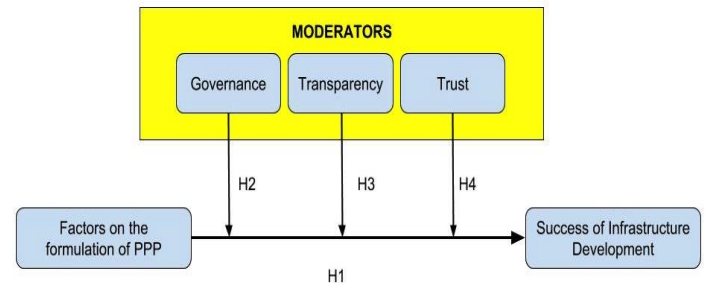


Figure 1: Combined Framework Model

Hypothesis

According to the earlier literature view and the above mentioned framework, the hypothesis are:

Formulation of PPP and the Success of Infrastructure Development

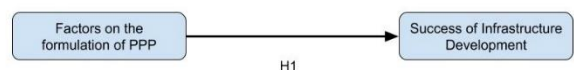


Figure 2: Hypothesis 1 Relationship

H₁: Fulfilment of public-private partnership formulation criteria would have a significant positive impact on the success of infrastructure development.

Governance

After studying a vast level literature, second hypothesis of the study is formalized.

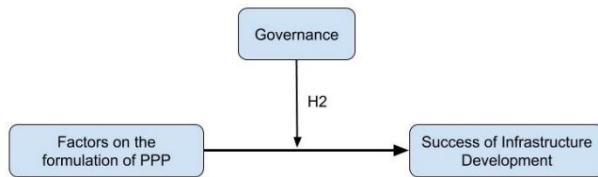


Figure 3: Hypothesis 2 Relationship

H₂: Governance positively moderates the relationship between public-private partnership formulation criteria and success of infrastructure development.

Transparency

By searching various studies it was observed that the role of transparency as a moderator is not studied. Therefore, the next hypothesis of the study is formalized to check the role of transparency as moderator.

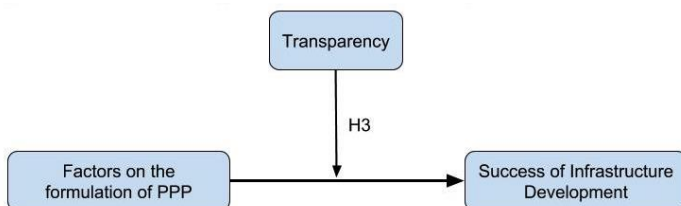


Figure 4: Hypothesis 3 Relationship

H₃: Transparency positively moderates the relationship between public-private partnership formulation criteria and success of infrastructure development.

Trust

The next proposition of the study is formalized on the base of information and knowledge obtained from the previous literature.

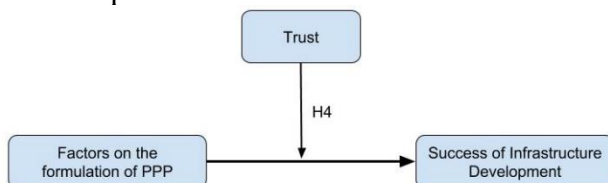


Figure 5: Hypothesis 4 Relationship

H₄: Trust positively moderates the relationship between public-private partnership formulation criteria and success of infrastructure development.

Conclusion

Like many other countries of the world, UAE Government is also trying to benefit from PPP. It

has developed a separate department that is responsible of taking care of the PPP issues. UAE Government (2018) set out an agenda for developing a sustainable and competitive economy by working on knowledge, expertise and diversity. In order to do so, it has decided to integrate the efforts of Government and private sector as well as pool funds, human capital and technologies so that above mentioned targets can be achieved. This paper presented a theoretical perspectives of relevant literature on the Public-Private Partnership topic. It started with an account of need and success of infrastructure development, which was followed by the public-private partnership. This was followed by identification and evaluation of factors that one should consider at the time of formulation of public-private-partnership. Based on the available literature, this paper presented a proposed theoretical framework for PPP project in the context of UAE. The theoretical framework and the hypothesis arrieds was discussed accordingly. In addition to this, the researcher also presented theoretical literature on governance, transparency, and trust. This framework may benefits in overcoming challenges that are associated with the formulation of PPP. Further evaluation of the framework would be beneficial for both public and private sector.

References

- [1] Leigh, N. G., & Blakely, E. J. (2016). Planning local economic development: Theory and practice: SAGE publications.
- [2] North, D. C. (2012). Understanding the process of economic change Worlds of Capitalism (pp. 107-120): Routledge.
- [3] Panayotou, T. (2016). Economic growth and the environment. The environment in anthropology, 140-148.
- [4] Porter, M. E. (2011). Competitive advantage of nations: creating and sustaining superior performance (Vol. 2): Simon and Schuster.
- [5] Adetola, A., Goulding, J., & Liyanage, C. (2011). Collaborative Engagement Approaches for Delivering Sustainable Infrastructure Projects in the AEC Sector:. International Journal of Construction Supply Chain Management 1-24.

- [6] Aerts, G., Dooms, M., & Haezendonck, E. (2017). Knowledge transfers and project-based learning in large scale infrastructure development projects: an exploratory and comparative ex-post analysis. *International Journal of Project Management*, 35(3), 224-240.
- [7] Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: what is the trigger? *Organization studies*, 25(3), 415-443.
- [8] Aguilera, R. V., Judge, W. Q., & Terjesen, S. A. (2018). Corporate governance deviance. *Academy of Management Review*, 43(1), 87-109.
- [9] Akintoye, A. (2006). Public Private Partnerships for Sustainable Development of Infrastructure in Developing Countries. Paper presented at the International Conference on the Built Environment Ota.
- [10] Al-Saadi, R., & Abdou, A. (2016). Factors critical for the success of public-private partnerships in UAE infrastructure projects: experts' perception. *International Journal of Construction Management*, 16(3), 234-248.
- [11] Albareda, L., Lozano, J. M., & Ysa, T. (2007). Public policies on corporate social responsibility: The role of governments in Europe. *Journal of Business Ethics*, 74(4), 391-407.
- [12] Albassam, B. A. (2015). Economic diversification in Saudi Arabia: Myth or reality? *Resources Policy*, 44, 112-117.
- [13] Ali, M. Y., & Watts, A. (2009). Subsidence history, gravity anomalies and flexure of the United Arab Emirates (UAE) foreland basin. *GeoArabia*, 14(2), 17-44.
- [14] Ameyaw, E. E., & Chan, A. P. (2015). Evaluation and ranking of risk factors in public-private partnership water supply projects in developing countries using fuzzy synthetic evaluation approach. *Expert Systems with Applications*, 42(12), 5102-5116.
- [15] Avison, D. E., Lau, F., Myers, M. D., & Nielsen, P. A. (1999). Action research. *Communications of the ACM*, 42(1), 94-97.
- [16] Bam, K. (1992). *Research methods for business and management*.
- [17] Barns, S., Cosgrave, E., Acuto, M., & McNeill, D. (2017). Digital infrastructures and urban governance. *Urban Policy and research*, 35(1), 20-31.
- [18] Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13(4), 544-559.
- [19] Benítez-Ávila, C., Hartmann, A., Dewulf, G., & Henseler, J. (2018). Interplay of relational and contractual governance in public-private partnerships: The mediating role of relational norms, trust and partners' contribution. *International Journal of Project Management*, 36(3), 429-443.
- [20] Bennett, C. J., & Raab, C. D. (2017). *The governance of privacy: Policy instruments in global perspective*: Routledge.
- [21] Bhattacharyay, B. N. (2009). *Infrastructure Development for ASEAN Economic Integration*. Retrieved from Manila
- [22] Biesta, G., & Burbules, N. (2003). *Pragmatism and educational research. Philosophy, theory, and educational research*: Lanham, MD: Rowman & Littlefield.
- [23] Bloomfield, P. (2006). The Challenging Business of Long-Term Public-Private Partnerships: Reflections on Local Experience. *Public administration review*, 66(3), 400-411.
- [24] Bollinger, L., Bogmans, C., Chappin, E., Dijkema, G., Huibregtse, J., Maas, N., . . . de Wit, S. (2014). Climate adaptation of interconnected infrastructures: a framework for supporting governance. *Regional Environmental Change*, 14(3), 919-931.
- [25] Börzel, T. A., & Risse, T. (2005). *Public-private partnerships: Effective and legitimate tools of international governance* (pp. 195-216): University of Toronto Press Toronto, Ontario, Canada.

- [26] Bovaird, T. (2004). Public-private partnerships: from contested concepts to prevalent practice. *International review of administrative sciences*, 70(2), 199-215.
- [27] Brabers, T. (2018). The role of trust in public-private partnership effectiveness. A supply chain security case study. Open Universiteit Nederland.
- [28] Bradford, N. (2003). Public-private partnership? Shifting paradigms of economic governance in Ontario. *Canadian Journal of Political Science/Revue canadienne de science politique*, 36(5), 1005-1033.