

# Identifying The Challenges And Recommendations For Managing Commercial Fit-Out Projects With Sustainable Requirements In The State Of Qatar

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**ABSTRACT:** *Timely delivery of a sound, cost-effective, well-managed fit-out project can positively impact the construction industry. At the ground level, a fit-out project in the construction industry is increasingly prevalent as commercial spaces are highly sought after in the post-Pandemic world due to the high demand and competition of modern businesses; however, it is confronted with challenges. This study examined the challenges associated with the fit-out projects in Qatar which are encountered by skilled workers, professionals, and managers. Using a researcher-based survey questionnaire, the study aimed to achieve these research objectives, namely: to determine the socio-demographic profile of the participants, to determine the challenges in managing commercial fit-out projects and their corresponding impacts, and lastly, to render possible solutions and recommendations to address the challenges. After analyzing the data, four (4) themes were drawn to include (1) challenges in terms of workers' knowledge, experience, and training, (2) challenges in the management, (3) challenges in the technical aspect, and (4) challenges in the physical/structural and sustainability aspects of the project. In conclusion, overall building functionality, aesthetics, acoustics, natural ventilation and lighting, and the clients' comfort should be considered as the success of building fit-outs depend much on the client's satisfaction.*

**KEY WORD:** *fit-out projects, construction industry, challenges in construction, construction in Qatar, challenges in fit-out projects*

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## I. INTRODUCTION AND LITERATURE REVIEW

The activities that make an interior space for a commercial tenant ready for occupation are referred to as "commercial fit-out projects." Instead of the landlord's construction company, a tenant's own contractor frequently handles fit-out work. Whether it is for new construction or converting an old tenant's place to make it suitable for prospective tenants to view before signing a lease, a contractor building an interior space for a commercial property landlord frequently creates it as a "white box" or "shell." Green interiors are a subset of green buildings that focus on resource conservation, occupant productivity, and effective resource use. Numerous green building standards and rating systems, including Leadership in Energy and Environmental Design (LEED), have emerged as a result of the growing interest in the idea of green building (Yudelson, 2008). These systems help customers, construction industry professionals, and government authorities embrace green building with confidence.

The Msheireb Downtown Doha (MDD) project, the first sustainable downtown regeneration project in history, aims to revitalize the old commercial district with a new architectural language that is both modern and inspired by traditional Qatari culture and architecture—its simplicity, proportion, light, space, ornament, layering, and adaptation to the climate. The Msheireb Downtown Doha skyscraper upholds the highest standards in green construction by utilizing the most recent sustainable technologies.

Based on the researcher's current duties and responsibilities as a Project Fit-out Manager, he manages handover and modifications of commercial/residential and retail units in coordination with commercial/residential and retail property management units and sales & leasing in line with company policies and stakeholders' expectations. Fit-out projects must comply with the following: (1) The first sustainable downtown redevelopment project, Msheireb Downtown Doha will feature one of the greatest concentrations of LEED (Leadership in Energy and Environmental Design) certified sustainable buildings. (2) Buildings are commonly aiming to be certified LEED Gold with a 32% energy reduction goal, while some structures are aiming for LEED Platinum.

The ultimate challenge for the researcher is the work related to managing fit-out projects with sustainability requirements in Qatar. Thus, this study aimed to identify what challenges are observed or experienced by labor workers. Furthermore, upon identifying the challenges, this study wanted to give recommendations on how to solve these challenges and if possible, mitigate the challenges.

## **1.2 Research Objectives**

The main goal of this study is to determine the challenges of managing commercial fit-out projects with sustainable requirements in Qatar.

Specifically, it sought to respond to the following:

1. What is the respondent's profile in terms of:
  - 1.1. Age,
  - 1.2. Educational Qualification,
  - 1.3. Nationality and Country of Residence, and
  - 1.4. Position in the Construction Project?
2. What are the challenges in managing commercial fit-out projects and their corresponding impacts?
3. Is there a significant difference in the challenges in managing the commercial fit-out project and corresponding impacts when the respondents are grouped according to profile?
4. What is the social contribution to the fit-out industry in Qatar and what possible solutions or action plans and recommendations to these challenges?

## **1.3 Research Methodology and Data Analysis**

The study used a quantitative method to attain greater knowledge and understanding of the challenges observed and perceived by the respondents on commercial fit-out projects in Qatar.

A quantitative method is also employed to observe data that involved numerical quantification. This study aimed to determine the challenges affecting the construction stakeholder's management of commercial fit-out projects in Qatar, thus quantitative is more appropriate to use.

This study's target population was the project owners, design consultants, PMCs, and contractors working on fit-out projects with sustainability requirements in the State of Qatar. The researcher used the convenience sampling method since participants were selected based on availability and willingness to take part in the study.

The inclusion criteria for the respondents are: (i) The respondents must be either a project owner, design consultant, PMC, or contractor who is working on fit-out projects with sustainability requirements in Qatar. (ii) The respondents should be currently working at MDD or part of the MDD's sustainable downtown regeneration project. (iii) The survey participants must be able to read and understand English. (iv) The participants in the study should be eager to participate.

The exclusion criteria are: (i) Those who are project owners, design consultants, PMCs or contractors who are not working or do not have any experience in fit-out projects with sustainability requirements in Qatar. (ii) Target respondents who are not available during the data gathering schedule. (iii) Target respondents who are not working in MDD or part of its project. (iv) Those who are not willing to answer the research questionnaire.

A survey questionnaire was utilized to gather data and information for the study to be able to meet the study's goals. The purpose of the questionnaire is to gather information that will help with the research questions. Based on the researcher's expertise and the study's literature review, a research questionnaire is created. The survey questionnaire is divided into two (2) parts, the first part is used to identify the sociodemographic profile of the respondents, and the second part employs a 5-Point Likert Scale (1-Totally Disagree to 5-Totally Agree) which determined the knowledge and perspectives of the respondents towards the challenges in fit-out construction projects as indicated in the statement of indicators in the questionnaire containing 15 items answerable within 10-15 minutes.

The survey questionnaire was reviewed and evaluated and was certified by engineering professors before distribution. Since the purpose of the study is to determine the challenges in managing fit-out construction projects with sustainable requirements, primary and secondary data were used. Primary data came from the target respondents of the study, data were gathered using a survey questionnaire which was administered personally by the researcher. Before administering the questionnaire, the researcher asked for permission from the company (MDD) to survey this study, and a request letter was sent to the proper authorities. When permitted, the researcher personally handed out surveys to target respondents. Data collection was done by the researcher for two (2) weeks to gather more responses.

The secondary data came from journals, books, articles, theses, dissertations, conference papers, online references, and other research works. To gain a comprehensive understanding of the subject and use it in the analysis and discussion section, a literature review was made.

## **1.4 Findings and Interpretation**

This study aimed to determine the challenges of managing commercial fit-out projects with sustainable requirements. The researcher surveyed the chosen respondents of the study through an online platform in two weeks, overall, there were a total of 163 respondents who answered the survey. Based on the gathered data, the following findings were drawn:

1. Sociodemographic Profile of the Respondents. In terms of their age, most of the respondents were aged 36-45 years old (48.5%), earned a bachelor's degree (89.6%), are currently residing and working in Qatar (82.8%), and are Filipino (36%). The top-listed current role or position in the company is engineer (29.4%), and the majority of the respondents are working in the construction industry for 10 years and above (86.3%) and are working in a contractor company (73.9%). Most of the respondents know fit-out construction works (93.2%) while there 11 respondents do not have knowledge of this (6.8%). Many of them have experience in preparing it (81.4%) and the majority have also experienced implementing it (88.8%). Although a few of them do not know fit-out, they have answered the questions based on their opinion and what they see on-site.
2. In terms of the challenges, the study found four (4) themes arising from the respondents' responses and these are the following: (1) Challenges in terms of the workers' knowledge, experience, and training on fit-out projects; (2) Challenges in terms of managing fit-out projects; (3) Challenges in terms of the technical aspect of the project; and, the (4) Challenges in terms of the physical/structural and sustainability aspects of the project. A greater majority of the respondents agreed with the identified challenges that are listed in this study. Some of them expressed their disagreement as well in some of the challenges posted such as delay in the issuance of Building Completion Certificate due to noncompliance with Kahramaa, Civil Defense, Woqod, and upload of As-built Drawings in the Ministry of Portal, and unrealistic duration of the proposed work program due to non-consideration of long lead materials, permits, access to work or restriction to work.
3. All challenges are found to have impacts on the fit-out projects in terms of rendering a negative or positive reputation for the company and the managers of fit-out projects but more on negative impact if these challenges are not addressed. Hence, after data analysis, the study found solutions and recommendations for the challenges when grouped according to the four (4) types of challenges. These are among the solutions and recommendations, namely: (1) For the workers' knowledge, experience and training, it is best that the company gives periodic training to the workers to level up their awareness and skills; (2) For the management issues, it is recommended that the company must consider conducting stakeholders' and clients' consultation first before aiming at completing the project drawing and estimation of project cost and that necessary training should also be provided to workers and manager alike; (3) For the challenges on the technical aspect, the study recommended that the manager and the company must ensure that necessary certifications and permits must be secured first from the government in order to not delay the project; and, finally (4) For the physical/structural and sustainability aspects, the following should be critically considered, discussed and resolved: acoustics, involvement of natural light and natural ventilation, aesthetics, and the overall building functionality such that these considerations will prevent any delay in the delivery of the project outputs.

## **II. CONCLUSION**

Based on the findings, the following conclusions were drawn:

1. The construction industry in Qatar has seen prevalent projects such as fit-out projects, as many have started reviving their businesses in this post-Pandemic era. However, challenges are a direct impact of this global phenomenon whereby constructing some projects depend upon some factors such as workers' knowledge, experience and training, management issues, technical aspect, and the physical or structural and sustainability aspects of the commercial fit-out projects.

The workers' knowledge of fit-out projects, their experiences, and pieces of training will render either a positive or negative impact on the target delivery of the project, the cost of the project, the satisfaction of the clients, and the compliance certificate from the government. It must be noted that from the data analysis, incompetent workers and their lack of knowledge, insufficient pieces of training, and knowledge of construction materials needed for the fit-out project may cause the delay of the project. In addition, workers' lack of training and experience may affect the quality of the project's output; and, therefore may have a rippling effect such as a negative impact on the project managers as well as the company that won the construction bid.

2. Impact of the Challenges to Managing Construction Fit-out Projects

Some of the challenges that are pointing to the sustainability designs are considered harder than other issues about managing fit-out construction works since there are requirements that are hard to attain during the design and construction phase. These issues may also lead to delays in the turnover of the building or space. Complications arise in the fit-out project due to a lack of proper organization such as assigning incompetent workers to create a fit-out project and lack of awareness of materials that are available in the market. It is the project manager's job to coordinate all the relevant trades to work together toward the completion date. Thus, it is necessary to appoint a person who is skilled and trained enough to handle fit-out construction works with sustainable requirements.

- A. Impact of Challenges on Management of Fit-out Projects

The manager's limited training and handling of this specific project may cause a negative impact on the project itself. Data from the study revealed that respondents agreed with their observation of

the project's unrealistic cost, duration, and process. Adding to this challenge is that there is no proper consultation and coordination with the end user/client/stakeholder, representative, and consultant of the fit-out project deliverables and the upfront payment of deposit before the fit-out project can begin.

These challenges can provide critical management issues in that the overall completion target of the project can be affected if these issues are not resolved at the management level. The success of any project such as fit-out depends upon the lessening if not eradicating managerial problems encountered when processing fit-out projects. Similar to the impact of the workers' knowledge on the delivery of the construction project, proper management of the required papers or documents, compliance certificates for sustainability, and human resource management (in terms of workers' training and experience) can entail the success of the fit-out project and thereby, bring leverage to the company's economic standing and reputation in the construction industry. The better the service it can deliver, the higher the profitability aspect and the more projects the company can look forward to and work on and thereby preventing forms of economic losses in both the company and the country itself.

**B. Impact of the Challenges on the Technical Aspect of the Fit-Out Project**

In terms of the impact of the challenges observed, felt, and perceived based on the technical aspect of the fit-out project, the study found that project design and drawings must not be delayed nor incomplete as it can bring other problems such as entailing new costs of materials needed to be purchased, delay of the compliance certifications from the government, and create negative company image to the clients. The clients expect the timely delivery of the outputs since they are paying for the services of the company and the company in turn must manage the project effectively and achieve its target results.

**C. Impact of the Challenges on the Physical, Structural, and Sustainability Aspects of the Fit-out Projects**

All areas in the construction of fit-out in buildings, malls, and other identified spaces must ensure that the physical, structural, and sustainability aspects are considered before actual work. When there is a slight issue in any of the identified areas mentioned, it can impact the whole fit-out project- from the management to the company and the clients themselves. Following the required sustainability specifications such as the greening of the physical space, and the user's usability aspect- ventilation, acoustic, spacing, building aesthetics, and other considerations, the project can achieve its target systematically, timely, and successfully. Finally, the company will be able to build its strong positive name in the construction industry as well as add positive features to the professionals' and the labor workers' vitae as they produce quality and timely project outputs.

3. There is a significant difference in the challenges in managing the commercial fit-out project and corresponding impacts when the respondents were grouped according to profile.

According to Espinase (2017), a fit-out project is the design and completion of a shell space, which is a blank floor area enclosed by walls, with the internal partitioning, floor, ceiling, mechanical, electrical, and environmental requirements of its users. For any fit-out project to be successfully carried out, the workers must have enough knowledge of the scope of work, including the materials needed and the time frame of the project to deliver the output efficiently. More than 50% of the respondents said one of the challenges in the fit-out project is having incompetent workers assigned to creating fit-out projects; thus, putting the project on a delayed output delivery. It is the management's responsibility then, to ensure that workers have the necessary knowledge of and enough training in Fit-out projects to refrain from any delay of the project.

The social contribution to the fit-out industry in Qatar and possible solutions or action plans and recommendations to these challenges are planning, hiring skilled and competent manpower based on the discussion on the impacts and challenges. These impacts are truly valuable and need to be considered, wastage of money and time is non-negotiable, it must be eliminated.

4. Construction management can be advised to establish a solid and thorough project schedule at the beginning of every project, track the project's advancement every day, and compare it to the timetable for intended progress. This makes it possible for managers to identify delays early on and determine whether additional resources are needed for the project to be completed on time or whether the delivery date will alter.
5. For the team to create reasonable expectations & retain the construction project's reputation, it is crucial to keep the clients informed through consultations at every level of the process.

6. Planning is essential for achieving any objective. Interior fit-outs should be prepared ahead of time and then subtract from the projected budget. Different fit-outs necessitate a separate budget, but the management could always plan ahead of time and know what the needed materials are so that the work will not be hampered. Finally, overall building functionality plus clients' comfortability should be considered as the success of building fit-outs depends much on the client's satisfaction.

### **BIBLIOGRAPHY**

- [11]. Akadiri, P.O., Chinyio, E.A., & Olomalaiye, P.O. (2012). Design of a Sustainable Building: A Conceptual Framework for Implementing Sustainability in the Building Sector. *Buildings*, 2:126-152.
- [2]. Alsulaiti, A. A., & Kerbache, L. (2020). Analysis of critical delay factors in construction projects with a focus on Qatar. *International Journal of Business and Economics Research*, 9(3), 130-139.
- [3]. Bagchi, A., Kodur, V.K.R., & Mousavi, S. (2008). Review of post-earthquake fire hazard to building structures. *Can. J. Civil Eng.*, 35, 689–698.
- [4]. Bainbridge, D.A. (2004). Sustainable building as appropriate technology. In *Building without Borders: Sustainable Construction for the Global Village*; Kennedy, J., Ed.; New Society Publishers: Gabriola Island, Canada, 55–84.
- [5]. Bener, A. (2017). Health status and working condition of migrant workers: Major public health problems. *International Journal of Preventive Medicine*, 8.
- [6]. Carroon, J. (2010). *Sustainable Preservation: Greening Existing Buildings*. John Wiley & Sons.
- [7]. De Bel-Air, F. (2014). Demography, migration, and labor market in Qatar.
- [8]. Edwards, B (1998). *Green Buildings Pay*. E & FN Spon, London
- [9]. Edwards, B. (2006) Benefits of green offices in the UK: Analysis from examples built in the 1990s. *Sustain. Dev.*, 14, 190–204
- [10]. Egbelakin, T., Ogunmakinde, O. E., Teshich, B., & Omotayo, T. (2021). Managing Fast-Track Construction Project in Qatar: Challenges and Opportunities. *Buildings*, 11(12), 640.
- [11]. Espinase, J. (2017). The Ultimate Guide to Fit Out Construction Steps. Ellcad Premiere Construction Corp. <https://ellcad.com.ph/blog/ultimate-guide-fit-out-construction-steps/>
- [12]. Facts About Migrant Workers In Qatar. Facts About Migrant Workers in Qatar - The Borgen Project
- [13]. FAST FACTS: How big is the Filipino community in Qatar? (rappler.com)
- [14]. Gatley, N. (n.d.). What is sustainable construction and why is it important? British Assessment Bureau. <https://www.british-assessment.co.uk/insights/what-is-sustainable-construction-and-why-is-it-important/>
- [15]. Green Leigh, N. L. & Patterson, L.M. (2006) Deconstructing to Redevelop. *Journal of the American Planning Association*, 71(2):217-225.
- [16]. Gou, Z. (2016). Green building for office interiors: challenges and opportunities. *Facilities*. <https://doi.org/10.1108/F-04-2015-0022>
- [17]. Hoskara, E. (2007). Ülkesel Kosullara Uygun Sürdürülebilir Yapım İçin Stratejik Yönetim Modeli, (Doktora Tezi). İstanbul Teknik Üniversitesi Fen Bilimleri Enstitüsü, İstanbul.
- [18]. HKU Architecture. (2002). *Sustainable Architecture and Building Design*, Report. Hongkong.
- [19]. Humphrey, S. (2017). Qatar construction market outlook 2017–2030. Plateau Group Inc.: Crossville, TN, USA.
- [20]. John, G., Clements-Croome, D., and Jeronimidis, G. (2005). Sustainable building solutions: A review of lessons from natural world. *Build. Environ.*, 40:319–328.
- [21]. Kamrava, M. (2012). Migrant labor in the Persian Gulf (p. 7). Z. Babar (Ed.). London: Hurst.
- [22]. Khaled, S. M. & Gray, R. (2019). Depression in migrant workers and nationals of Qatar: An exploratory cross-cultural study. *International Journal of Social Psychiatry*, 65(5), 354-367.
- [23]. Lehtiranta, L. (2015). Managing end-user experience in office fit-out projects. *Procedia Economics and Finance*, 21:571 – 577.
- [24]. Msheireb Downtown Doha Smart City (2021). <https://www.msheireb.com/msheireb-downtown-doha/about-msheireb-downtown-doha/distinction/smart-city/>
- [25]. Oral, G.K., Yener, A.K., & Bayazit, N.T. (2004). Building envelope design with the objective to ensure thermal, visual, and acoustic comfort conditions. *J. Build. Environ.*, 39:281–287.
- [26]. Ortiz, O., Castells, F., and Sonnemann, G. (2009). Sustainability in the construction industry: A review of recent developments based on LCA Constr. *Build. Mater.*, 23:28–39.
- [27]. Ortiz, O., Pasqualino, J.C., and Castells, F. (2010). Environmental performance of construction waste: Comparing three scenarios from a case study in Catalonia, Spain. *Waste Manag.*, 30, 646–654.
- [28]. Planning and Statistics Authority. (2018). Planning and statistics authority. Doha, Qatar. [https://www.mdps.gov.qa/en/statistics/Statistical%20Releases/Social/LaborForce/2018/Q3/LF\\_Q3\\_2018\\_AE.pdf](https://www.mdps.gov.qa/en/statistics/Statistical%20Releases/Social/LaborForce/2018/Q3/LF_Q3_2018_AE.pdf)
- [29]. Sev, A. (2009). How can the construction industry contribute to sustainable development? A conceptual framework. *Sustain. Dev.*, 17:161–173.
- [30]. Shen, L. Y., Yao, H. and Griffith, A. (2006) Improving environmental performance by means of empowerment of contractors, *Management of Environmental Quality: An International Journal*, 17(3):242-257.
- [31]. SILA group (2022). Challenges Faced in Interior Fit-outs and Solve Them. <https://silagroup.co.in/blog/challenges-faced-in-interior-fit-outs-and-how-to-solve-them>
- [32]. Thakkar, A. (2020). Challenges faced by Turnkey Interior Fitout industry. LinkedIn. <https://www.linkedin.com/pulse/challenges-faced-turnkey-interior-fitout-industry-ashish-thakkar>
- [33]. The Crown Estate (n.d.). Sustainability Fit Out Guide Offices. [www.thecrownestate.co.uk](http://www.thecrownestate.co.uk)
- [34]. Townsend, A. K. (1997). New options for the construction industry. *In Business*, 19(5):12-14.
- [35]. USGBC (2014). *Green Building Facts*. U.S. Green Building Council.
- [36]. Yilmaz, M. & Bakis, A. (2015). Sustainability in Construction Sector. *Procedia - Social and Behavioral Sciences*, 195:2253 – 2262.
- [37]. Yudelson, J. (2008). *The Green Building Revolution*. Washington, Island Press.
- [38]. Zerkin, A. J. (2006). Mainstreaming high performance building in New York City: A comprehensive roadmap for removing barriers. *Technology in Society*, 28:137-155.