

Inherent Characteristics of Libyan Construction Industry Managers

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Abstract

The purpose of this paper is to examine effective managers' Libyan construction industry. Every construction company, big or small, needs managers for the success of the projects they execute. The need for an improved manager skill in the construction industry is gaining recognition as an important issue and has recently attracted considerable attention. Managing project managers on any project requires good personal and professional needs. Therefore, manager skills become an important part in construction management because these have very important effects on performance. This paper uses quantitative approaches to examine the effectiveness of manager and its needs for the management of construction projects in the Libyan construction industry. The main objectives of this paper are to identify the needs of manager in the Libyan construction companies, and to investigate and suggest the necessary strategies required for construction manager in the Libyan construction companies. A postal questionnaire survey was administered to 150 managers in selected organizations and companies located in the eastern part of Libya between February and March 2014. Of the 150 questionnaires, only 138 were returned and analyzed, yielding a response rate of 92 percent. Data were analyzed statistically using the Statistical Package for Social Sciences (SPSS) software program (v. 15). Based on the results, this study confirmed that a manager with specific personal and professional needs will achieve effective management; as such, managers should put effort into acquiring these needs to discharge their responsibilities and tasks effectively. More specifically, it was found that the managers ranked "concise and rational" as the number one factor (RII=0.875) for arranging top priorities, with "Adherence to law/legality" ranked as the second personnel needs factors (RII=0.863). Meanwhile, "versatile" was considered as the first professional needs that the managers should have (RII=0.891), with "self-regulation" ranked as the second need (RII=0.831) as required by the respondents.

Keywords

Manager Needs, Personal, Professional, Construction Industry, Libya

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1. Introduction

Manager evolved as a professional practice distinct from design and construction in the early 1960's in response to the increasing complexities in the construction industry. Highly sophisticated construction systems had led to the specialization of both design and construction professionals. Additionally, increasing regulatory mandates, litigation and other risks created a need for a new professional to be an advocate for the Owner and bridge the gap between the

Owner, the Designer and the Contractor. Today, manager is well established, and recognized around the world as an indispensable profession.

Today's organizations and companies have a new or renewed interest in manager. Manager primarily focused on providing schedule and resource data to top management in the construction industries. The people in every industry and every country manage projects. However, the organizations and companies are recognizing that to be successful, they need to be conversant with and use modern manager.

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Individuals are realizing that to remain competitive, they must develop skills to become good project team members and managers. They also realize that many of the concepts of manager will help them in their everyday lives as they work with people and technology on a day-to-day basis (1).

For many construction projects the labor on the job has the largest impact on a project's success or failure. Assuming that a project is properly estimated, manpower, productivity, and coordination are critical factors that contribute to bottom line profitability. This paper generally defines project success as superior project performance with regard to the qualities of time, quality, and cost. All three of those qualities are subject to varying interpretations of satisfactions depending on if it is the client, manager/team, or the contractor (2). If properly estimated and ignoring change orders, materials and equipment are static constants on a construction project. Labor performance is solely based on productivity. The ability of the manager to properly motivate and direct the craftsman will determine the success of the labor on the job. This aspect of the project is the primary responsibility of the manager. Additionally, this individual is responsible for overseeing the construction of the entire project. More than anything else, the success of the project hinges on the performance and capabilities of these two key individuals. The relationship these two develop between themselves, clients, subcontractors, and suppliers largely affects the overall perception and reality of the project's success and/or failure. Also, being "the face" of the contractor, future working relationships with the owner are at stake. It is absolutely critical to identify personnel who are technically proficient, excellent communicators, effective managers, and good managers. In completing projects there are certain intangible characteristics that would be considered desirable (3). Among those would be the leadership and management skills possessed by every manager. While these requisite skills are not easily quantified, to a large degree these intangible assets determine the success or failure of a project. Project administration, whether by the manager, is not only the delegation of tasks, but it is also motivating those engaged in tasks to perform at the highest level possible.

In Libya, construction industry has played a very important role in contributing to the development of infrastructure and economic of our country. However, construction projects have always been a very important part of human civilization. The rapid technological developments of the last hundred years have resulted in a growing number of construction projects of enormously complex nature. The last decade has seen a steep rise in the quantity and complexity of construction projects in Libya as a result of spectacular economic development of the whole region.

The future of Libya is what Libyan is building today, and the Libyan goals along with other means and resources will allow the nation to determine the future of the country. Despite this, commercial and residential construction work in Libya is increasing rapidly to meet the growing needs of the population and to keep up with global development. For Libya to progress in terms of construction, project construction must be studied carefully and prepared well in order to get the best results, and to help in moving in the right direction to establish the future goals.

For a company to be successful and have steady organizational growth, the most important cause is good and successful manager. Construction companies must provide high quality manager. Any countries economy relies on their construction industry to be their backbone and it is also vital to a countries infrastructure. However the construction industry faces a lot of problems. Some examples include: economic, high fragmentation, low productivity, lack of standards, poor quality and instability. Thus, this study will mainly focus on the assessing the most important attributes as personalities manager should have in order to have a smooth and successful development of construction project within the Libyan construction industry.

Construction projects have specified objectives. Typically those objectives relate to meeting or exceeding project expectations relating to time, cost, and quality. Critical in meeting or exceeding project expectations are the managerial personnel assigned to the project. Most construction projects have a manager. The dialogue and communication between these two key project personnel will, to a large degree, dictate the direction in which the project will proceed and what objectives will be of more importance to the client. Managers who are actively communicating and not only solving, but anticipating, problems more effectively bring a project in on time, on schedule, and of superior quality. As the primary conduit for communication from the client to all project partners both the manager need to consistently communicate, resolve, and anticipate issues that arise during the construction process. The failure to do so will result in a project of inferior status.

Project success or failure is also contingent upon effective manager by the success manager. Due to the itinerant and transient nature of the construction process, as well as the hierarchical structure, it is important that both of these individuals understand and effectively implement their various talents and skills in an appropriate manner. It is observed that there has been very little research completed with regard to manager desired attributes within him-self, within each other, and toward their corporate environment. A better understanding of central manager skills required of

managers would benefit education training and development programs in the construction industry.

2. Successful Construction Projects

Ultimately the aim of both positions is a successful construction project. There are many definitions of project success, but simply put every project's success hinges on each party having some consideration in the process. The client must feel they received an appropriate product for their expense and the contractor must feel they were adequately compensated for services rendered. When both sides can walk away mutually satisfied that both those objectives have been met the project was ultimately successful. Success may not be readily apparent and the ultimate project goals may take years to be manifested, but ultimate realization of satisfactory consideration for services rendered or project delivery will lead to the eventual perception of success or failure. It is best to adopt a sufficiently broad definition of project success (4). As opposed to a sporting event, success or failure in a construction project is often much less clear. Different parties usually end up with certain positives and negatives associated with the project although over time many of the process related objections (over-budget & over-schedule) will fade in light of the quality of the product. Near term project success largely hinges on the ability of the constructor to establish and communicate successful project objectives to the client. Many times project success also hinges on contract type. There are many generalities with regard to contract types, but we would loosely group them as design/bid/build or design/build. The contractual basis is established pre-design or post-design. Depending on the contract type the contractor may or may not be acting as an agent for the owner. This is described in general terms as the difference between a vendor relationship and an agency relationship. A vendor's objective is to provide minimal acceptable levels of service. A vendor's selection is largely based on price and his primary objective is to minimize services expended to meet a minimal level of service. An agent is charged with rendering services that are consistent with professional practice and that are in the owner's best interest (5).

Researchers have grouped project success factors into five categories. These include human-related factors, project-related factors, project procedures, project management actions, and external environment (6). Two of the five categories relate to managers and superintendents. Related to these five categorical determinants of project success are "critical success factors" that impact project performance. These success factors include personnel, communication,

trouble-shooting, client acceptance, client consultation, planning effort, project team motivation, goal commitment, and technical capability (7, 8). All of these critical success factors are significantly impacted and/or accomplished through the manager. The individuals serve to function as a team in the previously mentioned alliance to complete a successful construction project.

3. Theoretical Framework

Figure 1: Conceptual Model of the relationships between manager needs and the effective manager.

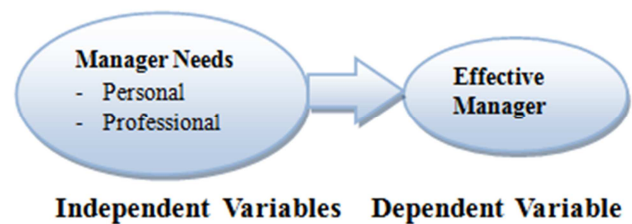


Figure 1. The Conceptual Framework.

4. Research Methodology

Data for this study was obtained through structured questionnaire. All the manager needs factors were rated on a five-point Likert scale, 1 to 5 representing Not Very Important, Not Important, Moderately Important, Important, Very Important, respectively. These Likert scales are used in the questionnaire survey because it provides a wider choice of alternatives for the respondents (9). The questionnaire was carried out by getting feedback from various ranged construction projects and companies in Libya. The target respondents were Company Directors, Managers, Executives and Administrative. Of 150 distributed questionnaires, one hundred and thirty eight (138) useable questionnaires (92 % response rate) were received and analyzed. The feedback was obtained in a month time which started 3 February 2014 and ended on 4 March 2014. After all the raw data obtained, the data were then used as input and analyzed with the software Statistical Package for the Social Sciences (SPSS). The respondents characteristics involved in this study can be shown in Table 1. Analysis was conducted to rank the Factors based on the average score. Finally, Relative Importance Index (RII) was used to determine the personal and professional manager needs for the effective manager. The most important factors influencing manager needs was further analyzed using the 'relative importance index' as adopted by (10); The 5-point Likert scale was converted to relative importance index for each factor, which made it possible to cross-compare the relative importance of each of the factors as perceived by the respondents. The relative

importance index was formulated using the following statistical expression (11):

$$\text{Relative importance index (RII)} = \frac{4n_1 + 3n_2 + 2n_3 + 1n_4 + 0n_5}{4N}$$

$$(0 \leq \text{RII} \leq 1)$$

Where N = Total number of respondent, 4= highest weighted score (0, 1, 2, 3, 4) on scale of agreement (whereas n1 = number of respondents for Not Very important, n2= respondents for Not Important, n3= respondents for moderately important, n4=respondents for Important and n5 = respondents for Very important.

Table 1. Presents the respondents' characteristics.

Factors	Frequency	Percentage
Designation in the company		
Director	38	27.5%
Manager	25	18.1%
Executive	39	28.3%
Administrative	36	26.1%
Experiences		
1 – 5 years	66	47.8%
6 – 10 years	46	33.3%
11 – 15 years	16	11.6%
More than 20 years	10	7.2%
Strategy management system		
ISO 9000	9	6.5%
TQM (Total quality management)	10	7.2%
TPM (Total project management)	22	15.9%
Conventional System	97	70.3%
Education		
Bachelor's	66	47.8%
Master's	22	15.9%
Doctorate's	2	1.4%
Others Specify (Higher Diploma)	48	34.8%

5. Results and Discussion

This section presents the findings of the study and is divided into two parts. The first one describes the manager personal needs for the manager. The second part analyzes the findings of the manager professional needs.

5.1. Manager Personal Needs

Table (2) presents the results for the manager personal needs of managers who participated in this study. Majority of the respondents ranked concise and rational as the number one factor (RII=0.875). Adherence to law/legality was chosen as the next factor (RII=0.863) followed by Adherence to personal Moral Code as the third personal factor needed by the manager (RII=0.861). The rest of the factors are shown in Table (2).

Table 2. Ranking of the personal items of the manager needs.

Personal Items	RII
Adherence to law/legality	0.863
Social/moral sensitivity	0.686
Adherence to personal Moral Code	0.861
Integrity	0.621
Impartiality	0.734
Team player	0.701
Dynamic	0.812
Concise and rational	0.875
Courteous	0.621
Maturity	0.811
Open minded	0.821
Specific	0.837
Intuitive	0.532
Diplomatic/discreet	0.76
Creative	0.646
Ethnocentrism	0.543
Parochialism	0.544

5.2. Manager Professional Needs

Table (3) clearly illustrates that the overwhelming majority of the respondents believe that versatile is the first professional trait that the managers should have (RII=0.891), followed by self-regulation (RII=0.831), motivation which ranked third (RII=0.821), and procedural which ranked fourth. The fifth factor that was considered as an important professional factor in the construction projects in Libya was receptive to alternative solutions/suggestions.

Table 3. Ranking of the professional needs of managers.

Items Professional	RII
Self-regulation	0.831
Time conscious/constraints	0.705
Const conscious	0.726
Environmental sensitivity/awareness	0.799
Ethical judgment	0.734
Attention to details	0.781
Thoroughness	0.722
Elicit approval	0.781
Prioritize	0.699
Safety awareness& Quality	0.686
Project focus	0.67
Procedural	0.811
Predictive	0.779
Adaptability	0.725
Motivation	0.821
Problem solving	0.751
Versatile	0.891

6. Conclusions and Recommendations

6.1. Conclusion

Manager is one of the key interpersonal roles managers play in their organizations. This study confirmed that manager with specific personal and professional needs will manage to effective management; as such managers should put effort to acquire these needs to discharge their responsibilities and

tasks effectively. The study finding has shown that all managers surveyed basically agreed that adherence to law/legality is one of the most crucial personal needs that should be acquired to become an effective manager in the construction industry. On the other hand, attention to details was found to be the most important professional needs for an effective manager. These indicate that managers need to perform under a structural boundary as against to the unstructured, self-actualization kind of environment. Thus it is important that manager in the construction industry tries to acquire the relevant personal and professional needs to face the challenges in the industry. The challenge is then for manager to take a serious approach and some in-depth study on their organizational strength and weakness in the area of human resource and processes in order for their employees to flourish. The most effective approach is goal-setting, as it is based on the premise that intentions shape actions. If work goals are specific, and even though it is difficult, if they are accompanied by feedback on how well one is doing, manager's performance is usually enhanced.

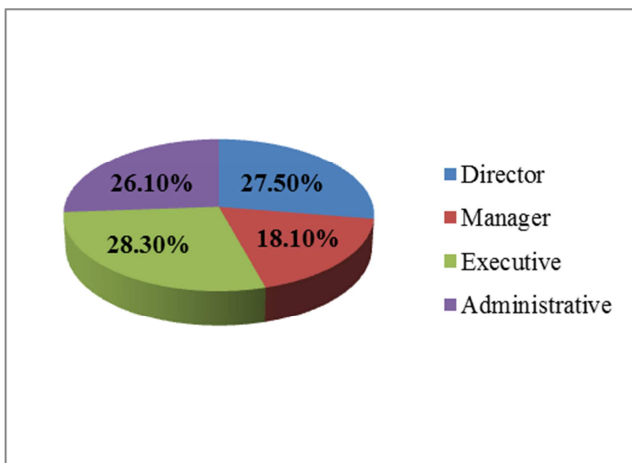


Figure 2.a. Designation of respondents in their companies.

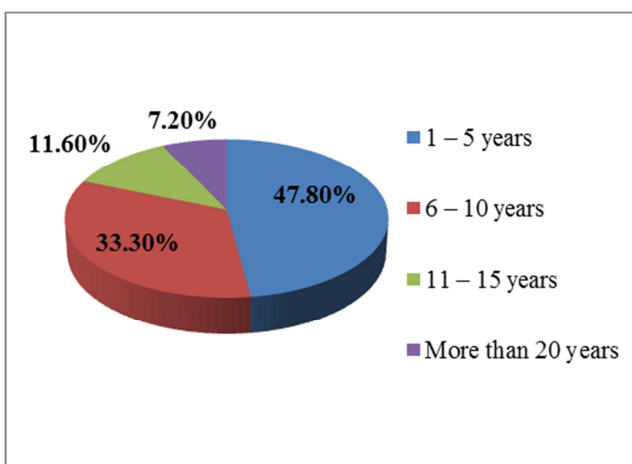


Figure 2.b. Percentage of experience distribution based on company.

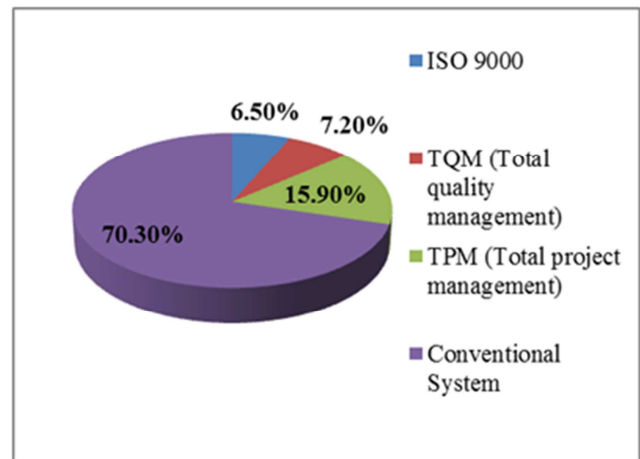


Figure 2.c. Strategy management system of companies.

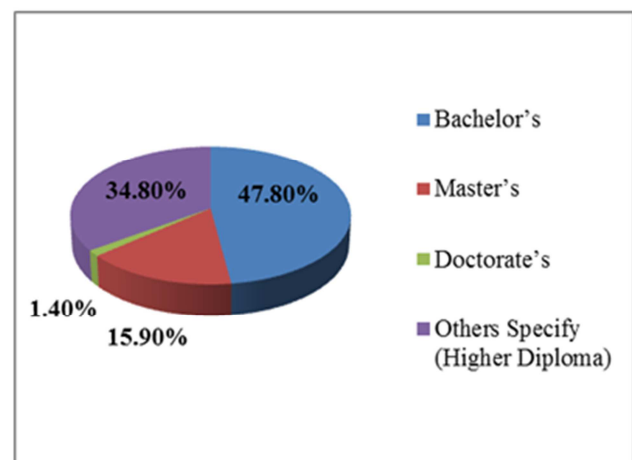


Figure 2.d. Educational background of the respondents.

6.2. Recommendations for Further Study

Based on this study the following recommendations are made as follows:

1. Comprehensive understanding of project manager needs for both professional and personal needs is the crucial point.
2. Further studies on evaluating each role of a project manager in the Libyan construction industry are needed to build up a competent, effective, and successful project manager.
3. Identify the problems or barriers that prevent the project manager from performing their roles better.
4. The current study adopted multiple sources of data and included the local project managers for the study. In future research, because the Libyan construction industry has several foreign companies which significantly influence their practices in the Libyan construction sector, including the foreign project managers in the study is strongly recommended.
5. The area of research with regard to effective project

manager is relatively new in Libya; thus, it would be interesting to focus the study on all listed companies either public or private including all sizes: small, medium and large.

References

- [1] Arti J. Jari, Pankaj, P. Bhangale (2013) "To Study Critical Factors Necessary for a Successful Construction Project" *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*. ISSN: 2278-3075, Volume-2, Issue-5, April 2013.
- [2] Ashley, David B., Clive S. Lurie, and Edward J. Jaselskis. (1987). "Determinants of Construction Project Success." *Project Management Journal*, Volume XVIII(2), 35- 45.
- [3] Murphy, David C., Bruce N. Baker, and Dalmar Fisher. (1974). "Determinants of Project Success". Springfield, VA: National Technical Information Services, September 15.
- [4] Griffith, Andrew F., Edward Gibson Jr., Michele R. Hamilton, Aniello L. Tortora, and Charles T. Wilson. (1999). "Project Success Index For Capital Facility Construction Projects." *Journal of Performance Constructed Facilities*, Volume 13(1), 39-45.
- [5] Kluenker, Charles H. (1996). "The Construction Manager as Project Integrator." *Journal of Management in Engineering*, March/April, 17-20.
- [6] Chan, Albert P.C., David Scott, and Ada P.L. Chan. (2004). "Factors Affecting the Success of a Construction Project." *Journal of Construction Engineering and Management*, Vol. 130(1), 153-155.
- [7] Taneja,S. January-june (2011). Critical Success Factors And Success Criteria of Project Management. In : "bi-annual Of IMS Ghaziabad" Vol 8 No.1,pp.13-23
- [8] Ganesh, L. and Mehta A. (2010).Critical Success Factors For Successful enterprise Resource Planning Implementation. In : "International Journal Of Business, Management And Social Sciences" , Vol. 1 No.1, pp. 65-78.
- [9] Cooper, R., Schindler, S., 2005. *Business Research Methods*, ninth ed. McGraw-Hill, Boston.
- [10] Kometa, S.T., Olomolaiye, P.O., and Harris, F.C. (1994). Attributes of UK construction clients influencing project consultants' performance. *Construction Management and Economics*, 12, 433-43.
- [11] Lim, E.C., & Alum, J., (1995). Construction productivity: issues encountered by contractors in Singapore. *International Journal of Project Management*, 13 (1), 51-58.
- [12] Kothari, C.R. (1990). *Research Methodology: Methods and Techniques*. 2nd edition, New Age International Publishers, India.
- [13] Sekaran, U. (2006). *Research methods for business: A skill building approach*. New York: John Wiley & Sons, Inc.
- [14] Norusis, M.J. (1993), *SPSS for Windows: Base System User's Guide Release 6.0*, SPSS Inc., Chicago, IL.
- [15] Norusis, M.J. (1994), *SPSS Professional Statistics 6.1*, SPSS Inc., Chicago, IL.