ANALYSIS OF FACTORS AFFECTING MOTIVATION IN PROJECTS: A CASE STUDY IN OIL AND GAS INDUSTRY IN THE SULTANATE OF OMAN

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ABSTRACT: Motivation is a key element for successful project execution. However, different people are motivated by various means in different sectors. Hence, this work aims to study, analyze and define the main motivational factors in project execution in the oil and gas industry. To achieve this, a dedicated survey is prepared and distributed among employees working in the oil and gas industry in Oman. To ensure diversifications and minimize biases, the survey is distributed randomly to people working in projects in different organizations in the oil and gas industry. Altogether, 86 respondents completed all the survey questions. The study revealed that, in general, external (extrinsic) factors have a significant motivational influence on employee performance in which money is considered as a powerful motivator. Moreover, task achievement is found to be the major intrinsic motivational factor influencing the employee's performance. The study also reveals that irrespective of years of experience, organizational type and the level at which employee works, lack of management support will have a significant influence in lowering team motivation in the Oil and gas project. The study can serve as a guideline for the Oil and gas industry to target the specific factor which helps enhance the level of motivation of a specific segment of employees.

Keywords: Motivation; Project management; Oil and gas industry; Extrinsic factors; Intrinsic factors.

تحليل العوامل المؤثرة على الدافع في تنفيذ المشاريع: دراسة حالة في صناعة النفط والغاز في سلطنة عمان

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الملخص: التحفيز هو عنصر أساسي لنجاح تنفيذ المشروع. بيد أن مختلف الناس تحركهم وسائل مختلفة في مختلف القطاعات. يهدف هذا العمل إلى دراسة وتحليل وتحديد العوامل المحفزة الرئيسية في تنفيذ المشاريع في صناعة النفط والغاز. وفي سبيل تحقيق ذلك تم إعداد دراسة استقصائية وتوزيعها على الموظفين العاملين في صناعة النفط والغاز في سلطنة عمان. ولضمان تنويع عينة الاختبار وتقليل التحيزات الشخصية إلى أدنى حد، وُزعت الدراسة الاستقصائية عشوائيا على عاملين في مشاريع تابعة لمنظمات مختلفة في صناعة النفط والغاز. أكمل 86 موظفاً جميع أسئلة الاستبيان. وكشفت الدراسة أن العوامل الخارجية تؤثر بشكل عام في أداء الموظفين بشكل تحفيزي كبير حيث تعتبر الأموال حافزاً قوياً. وعلاوة على ذلك، تبين أن إنجاز المهمة يشكل العامل التحفيزي الأساسي الرئيسي الذي يؤثر على أداء الموظف. وتكشف الدراسة أيضاً أنه بصرف النظر عن سنوات الخبرة، ونوع المنظمة المنفذة للمشروع، والمستوى الذي يعمل به الموظف، فإن نقص الدعم الإداري له تأثير كبير في خفض الحافز الجماعي في مشاريع النفط والغاز. ويمكن أن تكون الدراسة بمثابة دليل لصناعة النفط والغاز لاستهداف العوامل التي تساعد على تعزيز الحافز لدى شريحة معينة من الموظفين.

الكلمات المفتاحية: النفط والغاز؛ تحفيز الموظفين؛ إدارة المشاريع؛ عوامل داخلية؛ عوامل خارجية.

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1. INTRODUCTION

Every project manager would like to run a project that finishes with the desired quality standards, in the given time limit and within the predetermined budget such that it stands up to the end-users' expectations. Despite the much attention given to projects, it is claimed that most of the projects do not reach their objective. The majority of projects do fail for several reasons. These reasons can be due, but are not limited, to poor planning, poor execution, poor coordination, unclear scope of work, unqualified project manager, conflicts between team members, lack of motivation, etc. Therefore, the success of a project depends to a large extent on how to overcome and minimize the causes of failure. The responsibilities put on the shoulders of project managers, as well as on the organization handling the project, is thus huge and require them to develop special managerial skills, frameworks, policies, and procedures (Al-Hinai *et al.*, 2020).

In many projects, the failure rate is considered to be high. For example, at the end of the last century, The Standish Group found that 44% of information system projects are partially successful and about 40% were cancelled (Field, 1997). This leaves only 16% of the projects to be successful. One would expect that due to the increase in the use and the adaptation of project management tools and practices, the success rate will drastically improve. However, later figures released by The Standish Group is not much different. According to the 2014 CHAOS report, 31.1% of projects are cancelled before completion and 52.7% of projects face 189% cost overrun. The same scenario of higher failure rates in projects is not limited to the IT projects, but it is encountered by other types of projects (CHAOS report, 2015). Hence, many practitioners started to accept failure as unavoidable (McManus and Wood-Harper, 2003, Mahaney and Lederer, 2006). Nevertheless, such an attitude may have a further negative consequence on projects causing them to further exceed in-time, on-budget, or not finishing them according to the scope. The proper approach is, therefore, to strive and explore every possible way to increase the probability of project success rate.

Since running and conducting projects is at the end the result of individuals working together, personal motivation becomes one of the major pillars in the overall project success. Hence, acquiring the proper motivation process and rewards system for team members influences the project manager and his team to execute the project activities effectively and efficiently to meet project desires (Meredith, 2016). DeMarco and Lister (1999) conducted extensive surveys and game exercises to understand the reason for the project's failure. They concluded that the absence of motivation is a frequent reason. Thus, while project managers may possess the required technical skills to manage projects, lack of motivation may lead to poor performance (Germann, 2004). Further, Sansone and Harackiewicz (2000) defined motivation as the inner driver that stimulates and guides behaviour. While this definition may be debated as it limits it to inner drivers and ignores the outer drivers, yet one may conclude that the motivation process can be broken into three essentials (Nel *et al.*, 2001). These essentials are the motive, the behaviour and the goal. The motivation process starts with the motive that a person has, which in turn initiates certain actions or a series of activities. These activities or actions are what defines the behaviour of the individual and his means of achieving a certain desired output or in other words, the goal. Hence, the goal can be thought of as the end result of something initiated by a motive. Therefore, to increase the probability of success when conducting projects the project manager, as well as the organization, needs to ensure that the team members work harmoniously and every member of the team is able to fulfil his personal needs, interest, desires, and aspirations along with the objective of the project. A number of researchers pointed that at the absence of motivation, gifted individuals perform far less than their actual capabilities and they may be outperformed by ordinary motivated individuals (Germann, 2004; Bateman and Snell, 1999).

An environment that inspires cooperation, mutual trust, honesty, and gives a sense of belonging will be positively reflected in the team members' performance as they will tend to do their best when they are in an environment that makes them feel valued. To achieve this, it would require "motivation''. Therefore, the definition of motivation can be generalized to be the essential means for stimulating the energy and the enthusiasm of the team in order to accomplish project goals by providing satisfactions to the team needs, interest and aspirations (Khoshnevis and Tahmasebi, 2016; Hall *et al.*, 2009). It is worth emphasizing here that a highly motivated person would be encouraged to contribute his extreme efforts individually and as a team towards the effective performance of the project. Therefore, organizations must have the ability to identify and understand the motivational requirements for their employees as it is demonstrated that the higher the satisfaction of project team members' needs is, the greater the chances for successful project execution will be.

Oil and gas development projects usually require a huge investment and the risk in the project is often quite high (Kim and Choi, 2019). Similar to other parts of the world, the oil and gas industry in Sultanate of Oman is divided into three major sectors: upstream, midstream and downstream. The upstream sector includes exploration and productions of hydrocarbon fields by bringing the crude oil and natural gas from underground to the surface. Companies like Petroleum Development Oman (PDO), Occidental Oman (OXY), Oman Oil

Exploration and Production and Daleel Petroleum are an example of companies dealing with upstream industry. The midstream sector involves the transportation by either pipelines or other means of transportation of crude oil and gas from production sites (Upstream) to refineries (Downstream), an example of companies working in midstream companies is Oman Gas Company (OGC). Finally, the downstream sector deals with the refinement of petroleum crude oil and the processing and purification of raw natural gas, which is done by companies like ORPIC, Oman Oil Refineries and Petroleum Industries Company. The oil and gas industry is still considered to be the major contributor to the GDP in many countries, especially in the Middle East and the Sultanate of Oman depends heavily on it. This is reflected by the huge ongoing investments in this industry. These huge investments are usually associated with many ageing fields or newly discovered ones. This results in continuous project execution to ensure the sustainability of oil and gas production. This, on the other hand, increases the overall cost of production. Moreover, the falling oil price is putting further pressure on the shoulders of oil and gas companies as it lowers their margin of profit in contrast to the increase in cost.

While projects in the oil and gas industry have to continue, attention is now more serious than ever to ensure that these projects are successfully implemented and executed to meet the desired outcomes while meeting the on-budget and within-time constraint or at least minimize the deviations. Thus, the main objective of this study is to tackle a major pillar that affects project success. Specifically, the study is aiming to address two main research questions as shown below:

1. To determine the motivational factors that mainly affect employee's performance in projects related to the oil and gas industry in the Sultanate of Oman.
2. To examine the effect of motivational categories on team motivation during various project phases.

The focus of this study is to look at both, the intrinsic factors that can be monitored and analyzed by the organization and the extrinsic factors that can be influenced by it through the support and enforcements of the senior management. While one may argue that organizations have less degree of influence over the personal variables, however, understanding how these personal variables (intrinsic motivators) and how they emerge with time will enable senior management to better understand and organize the work-related motivational factors and accordingly their reward systems.

2. THE NEED FOR MOTIVATION

Effective management of projects is crucial to the sustainability of organizations (Kanagarajoo *et al.*, 2019) and employee motivation plays a crucial role in managing project effectively (van der Kolk *et al.*, 2019). Motivation is an essential element for stimulating the energy and enthusiasm of employee's performance towards the achievement of the project's goals. According to Lawal and Okhankhuele (2014), motivation is a method that starts with a physiological deficit or need that activates a behaviour or a drive aiming at a goal encouragement. Hence, they divide motivation into three interlinked elements, needs, drives and incentives. In practice, motivation helps to energize employees to work. Therefore, finding appropriate techniques to fulfil employees' desires and needs is considered the key to a successful motivation process. The main challenge lays in the fact that each individual has different needs, wants and desires (Tabassi *et al.*, 2011). In this sense, there may be many motivation sources that can affect the employee's performance. Yet, these sources cannot be generalized as what motivate workers differs accordingly. Taylor (1903) who is voted the most influential in the field of management science, long stated that what motivates an individual employee today, may not motivate him tomorrow because human needs are limitless. Further to that, according to Maslow (1943) "A person tries to satisfy the most important need first. When the need is satisfied, it will stop being a motivator and the person will then try to satisfy the next most important need" (Kotler *et al.*, 2018).

Motivation is, therefore, an essential key element to enhance productivity in the workplace (Asproni, 2004). A highly motivated employee puts more effort and energy towards the achievement of the project and the organizational goals by providing better performance. Well-motivated employees are usually results-oriented people in which they look forward to alternative methods to perform the assigned tasks while improving their performance. Therefore, employees should be motivated to bring high-quality service in an efficient way. Achieving this will have a better effect on project progress and success, which in turn can be reflected on the employee's performance and achievement (Nchorbuno, 2011).

It is of utmost importance to understand that the motivation sources do not rely only on external sources but also can be internal sources. Based on psychological theories that concentrate mainly on human's/employee's needs, motivation source can be classified into two types. Intrinsic sources are in-built in the employee himself and as well between the employee and the job. These make the employee creative, enthusiastic, find work pleasurable, want to face challenges, and achieve something. Therefore, intrinsic motivation happens when an individual finds, or more precisely perceives, the activity itself interesting, enthusiastic, pleasant, and hence it derives spontaneous satisfaction (Herzberg, 1987). Different theories related to motivation discussed intrinsic motivation through content theories that may be found in Maslow (1943), Alderfer's (1972), Herzberg *et al.*

(1959), etc. The second sources are extrinsic sources that come externally from outside the job itself. For example, the employer, the working environment, and other encouragements and incentives including salary, promotion, awards, and benefits, which in return increases employers' level of commitment to work (Lawal and Okhankhuele, 2014) or even punishments that may lead to having a certain behaviour not to be repeated (Skinner, 1969). Theories discussing such extrinsic factors are categorized under process theories and such theories that can be found in Adams (1963), Locke (1968), Vroom (1964), etc. Nevertheless, the two factors, intrinsic and extrinsic, cannot be separated as a number of studies showed intrinsic factors have an influence on the extrinsic factors (Dolfi and Andrews, 2007; Lee-Kelly and Leong, 2003; Mueller and Turner, 2009, Kooij *et al.*, 2010).

There are indeed numerous studies and literature over the past seven decades on how can team members be motivated at their jobs such as Dwivedula and Bredillet (2010), Sharp *et al.* (2009), Hall *et al.* (2009), Nicholson (2003), Pinder (1998), Heimovics and Brown (1976), and Labor Relations Institute (1946). The early survey study conducted by Labor Relations Institute (1946) revealed 10 motivators for employees working in the industry. These factors are appreciation over achieved work goals, sympathy over personal problems, good salaries, interesting work, loyalty to employees, job security, promotion, working conditions, feeling in control of things and tactful disciplining. Later studies indicated that salaries and appreciation over achieved work goals are ranked to be the top motivators (Keller, 1978; Kovach, 1987, 1995; Wiley, 1997; Fisher and Xue Ya Yuan, 1998; Baddoo *et al.*, 2006). However, the study conducted by Ferratt and Short (1986) who studied the needs of an insurance company employees identified five central needs out of which none of these needs is related to good salaries. Similarly, Beecham *et al.* (2008) reviewed 92 papers that studied the motivational factors for software engineers. Accordingly, they were able to identify the seven most common motivators for these software engineers and none of these motivators is related to good salaries.

The high uncertainty and high demand nature of the projects' environment resulted in a highly pressurized environment for project managers and project team members to work in. There exist at least three areas of pressure in the project environment, the uncertainty in projects, the extreme need for integration, and the frequent occurring urgencies (Turner and Mueller, 2003). This made it very clear that people working in projects must possess special characteristics that may not necessarily be required in people working in, for example, classical line departments. While some may argue that the project environment itself cause project team members to be self-motivated (Verma, 1996), others argue that this is an oversimplification as it underlines the focus to how project team members can be motivated rather than what motivates them (Seiler *et al.*, 2012). This may partly explain why there are fewer literature addressing the factors that motivate project team members (Tampoe and Thurloway, 1993; Sharp *et al.*, 2009).

Tampoe and Thurloway (1993) conducted a study to identify the motives for project managers and team members working in IT and R&D organizations. Accordingly, they identified five motives, recognition for achievement, mutuality, authority and control, ability to use their own creativity, and belonging. Verma (1996) advocated eight motivational factors for project managers including the project culture, reward system, work itself, environment, previous success, feeling confident about the work, and competition. The list for possible motivators for project managers was later increased to contain other factors such as career development, receiving positive feedback, contribution to the organization, etc. (Linberg, 1999; Mak and Sockel, 2001). Mahaney and Lederer (2006) investigated the effect of intrinsic and extrinsic rewards on information system projects success. Their study revealed that intrinsic rewards leads to client satisfaction and maintain quality whereas extrinsic rewards affect the implementation success (on-time and within budget). Further, Seiler *et al.* (2012) developed an integrated model aimed at measuring the factors influencing project managers' motivation. In their model, they defined motivational dimensions containing 47 items. An empirical study showed that project managers are motivated by a mixture of instinct and extrinsic factors along with specified needed support from the organization.

Khan and Jalbani (2009) studied the effect of the cash and non-cash reward compensation system for employees working at Pakistan Petroleum Limited Company. Their analyses were done based on a survey and a number of interviews with 60 employees. The employees are from different management level at the company. Their finding showed that lower-level employees are motivated more by cash rewards and less by non-cash rewards. However, the effect is vice-versa for the upper management level employees, who give much less attention to the cash rewards. As for the middle management level, the results indicated that cash and non-cash rewards are equally important. In this work, cash rewards are considered as an extrinsic motivator while non-cash rewards are considered as intrinsic motivators.

In short, while Herzberg (1987) advocated that workers could be motivated by using intrinsic and extrinsic rewards, careful study of the literature suggests that the effect of intrinsic and extrinsic rewards is not as conclusive. Many studies, as the above-discussed ones, showed that different workers will be motivated by different means in different organizations. They further revealed that the needs and motivators might differ according to the nature of the work and type of organization. Actually, the effect may not only depend on the organization, but it may change as the years of experience and/or the held

position changes. Nevertheless, as a failure in projects can have a catastrophic effect, all possible stimuli in project success must be considered. Therefore, understanding how intrinsic and extrinsic rewards affect project success is very crucial. One may not emphasize enough that satisfying the needs, wants and desires of workers running projects are of great importance to any successful organization. Giving the employees and workers what makes them feel more connected and appreciated within the organization, either physiological or psychological, increases the chances of team members working in more harmony as well as having better understanding and appreciation of the organization's goals and policies. It can also enhance the overall productivity and may lead to a reduction in for example absenteeism and turnovers.

3. RESEARCH METHODOLOGY AND DATA COLLECTION

In light of the above literature, studies followed different approaches and each has focused on a different scope. The results from these studies were collected using different means. Some were based on conducting surveys, and others used structured and/or unstructured feedbacks via interviews or written responses. Some studies focused on motivational factors related to a specific group of professionals, while others were more general. Nevertheless, these researches share many common motivators. Therefore, this research aims to identify the motivational factors and study their effects on employees working in the oil and gas industry in Oman and the possible impact on project execution. To achieve this aim, experts from industry and academia held a number of meetings and brainstorm sessions discussing this matter. The reason for using brainstorming techniques is due to the fact that it is one of the most effective techniques for creative problem solving and resolve biases among participants to reach consensus (Piya *et al.*, 2019). Further, related motivational factors collected from the above studies as well as other cited ones were summarized in Table 1. Thereafter, the table with an initial suggestion from the authors to cluster the collected factors into motivational categories was presented to the experts for revision and further discussions. The final decision was made to divide the motivational factors into intrinsic and extrinsic factors and then cluster them into subgroups or categories under each motivational type, as shown in Table 2. During the allocation of factors to categories, factors with similar meaning were merged together and others were reformulated such that a consistent formulation is achieved under each category. Subsequently, five motivational categories were defined under intrinsic motivational type and six categories under extrinsic motivational type as shown in table 2. By following this approach, we were able to identify relevant motivational factors and reduce redundancies while forming more balanced and proper category clusters for them.

Accordingly, four research questions were identified for this study. These questions are:

1- How do the intrinsic and extrinsic motivations affect performance?
2- How do different intrinsic motivational categories affect performance?
3- How do different extrinsic motivational categories affect performance?
4- How do different motivational categories affect team motivation during various project phases?

Furthermore, it was agreed that the design variables for this study are:

1- Gender
2- Organization type; upstream, midstream or downstream
3- Years of experience
4- Position

As a result, it was concluded that this study will seek to understand the following:

- Is there a difference between intrinsic and extrinsic motivation in the performance of the employees?
- Which extrinsic motivation reward has more effect on the performance of the employees?
- Which intrinsic motivation reward has more effect on the performance of the employees?
- How do various design variables affect motivation?
- How does the motivation influence the team members' performance level at the various project phases?

In order to conduct this study and find out the level of motivation and its impact on employees and their organization, an initial online questionnaire survey with mainly multiple-choice format was developed.

In designing the questionnaire, an approach similar to Hwang *et al.* (2015), which is the widely used approach by project management researches, is followed. Once the questionnaire was designed, the second set of meetings with several experts on project execution from oil industrial companies were conducted. The experts, in accordance with people from academia, were consulted to review the questionnaire and provide feedback. Consequently, the comments provided by them were used to redesign and modify the questions and to improve the overall format of the questionnaire.

The final questionnaire consists of two sections, A and B. Section A targets the demographic information about the respondent including gender, years of experience, workplace, work area, a position held and the organization type they are working for. Section A is carefully designed to address and fulfil a number of aims. It is used at the beginning as a qualifying part to determine whether the respondent is a qualified participant or not. In addition, the different questions in this section include the design variables of this

study and accordingly they help in categorizing the collected data from Section B and understand how, for example, gender, years of experience affects motivation. Further, this demographic information helps us to avoid making wrong or unrealistic interpretations from the collected data, and hence, avoid making inaccurate causal statements that may be associated with descriptive research. Section B consists of mainly multi-choice questions. These multi-choice questions aim to measure the effect of intrinsic and extrinsic motivation in project execution in the oil and gas industry in Oman and answer the research questions.

The questionnaire was made available and distributed via survey monkey website and app (an online survey-distribution service). Accordingly, e-mail invitations with the link for the questionnaire were sent to employees working in different oil and gas projects in Oman. Furthermore, to enhance and increase the respondent rate, the link was made available and sent through social communication media to random practitioners working in the oil and gas industry in Oman. The later medium was found to be the most convenient to reach the targeted participants and have them participate. From a total of 304 invitations that were sent via emails and social media, 71 were not valid emails and contact numbers.

4. DISCUSSION OF RESULTS AND FINDINGS

4.1. Analysis and Validations of Collected Data

The total number of respondents who completed the survey and cross the qualifying check part is 86 respondents. Thus, the response rate is 36.9%. According to Shih and Fan (2007), in the meta-analysis, the average response rate in web-surveys is 19%. Hence, the achieved response rate in this study is above that average which reduces the probability for systematic biases due to non-response. Of the 86 respondents, 69 are male and 16 are female with various years of experience, a likely representation of gender working in projects in the oil and gas industry in Oman. The majority of respondents, forming about (48%) of the sample size, have 5-15 years of experience followed by (18%) of the sample size having 0-5 years of experience. The remaining 20 % of the respondents have more than 15 years' experience. Out of 86 respondents, around 73% hold non-managerial position, and the rest hold a managerial position in various Oil and gas companies in Oman. This finding supports the actual environment of projects, as projects need more technical staff than managerial staff.

Table 1: Overview of motivational factors cited from literature.

Reference	Considered motivational factors
Ferratt and Short (1986)	Need for guidance; social needs; esteem needs; achievement needs; power needs
Herzberg (1987)	Company policy and administration; Supervision; Relation with supervisor/Relationship with peers/Personal life (interpersonal relationships); Work condition; Salary; Relationship with subordinates; Status; Security; Achievement; Recognition for achievement; Work itself; Responsibility; Advancement; Growth
Keller (1978); Kovach (1987) Kovach (1995);	A full appreciation of work done; tactful disciplining; personal loyalty to employees; good wages; project reward
Fisher and Xue Ya Yuan(1998)	System; promotional; growth in the organization; sympathetic understanding on personal problems; job security; good working conditions; feeling of being on things; interesting work; competition
Verma (1996)	Supervision; project culture/environment; reward system competition; work content; previous success; self-belief
Linberg (1999); Mak and Sockel (2001)	Receiving positive feedback; autonomy; belonging and making a contribution to the entire system; career development
Wiley (1997); Baddoo *et al.* (2006)	Wages and rewards
Mahaney and Lederer (2006)	Favourable annual performance appraisals; Project completion celebration; Job security; Technical training; Flexible work schedule; Job promotion; Financial bonus; Newer technology (PC or laptop); Time off; Choice of future assignment; Opportunity to work at home; Private office space; Pride; Sense of contribution to organization; Public praise
Beecham *et al.* (2008)	Need to identify with the task; clear goals; working on identifiable pieces of work; tasks variety; a clear career path; Personal interest and understanding the task; job satisfaction
Tampoe and Thurloway (1993); Sharp *et al.* (2009);	Recognition; bounded power mutuality/belongings; creative autonomy
Amin *et al.* (2010)	Individual Rewards/ Group Rewards/ Tangible Extrinsic Rewards/ Intangible Extrinsic Rewards; Altruism; Courtesy; Conscientiousness; Civic virtue; Sportsmanship
Rony and Suki (2017)	Employee Extrinsic Reward (promotions and benefits, work location, and working conditions); Internal communication; Training and Development; Leadership; Employee Intrinsic Reward (receiving positive values for doing meaningful works)

Table 2: Summary of intrinsic and extrinsic motivational categories and sub-motivational factors.

Motivational Type	Motivational Category	Motivational Factor
Intrinsic	Freedom to initiate	Being able to initiate important decisions
		Being able to initiate control measure when needed
		Having the ability to use their own creativity
		Being able to take a time off when needed
	Pleasure/Enjoyment/Fun	Having a good relationship with team members and superiors
		Being able to have fun when implementing given tasks and enjoy the moment
		Having a fair competitive atmosphere
		Having a personal interest in the assigned task
		Feeling satisfied when performing the task
	Task challenges	Assigned to challenging tasks/projects
		Being able to identify and understand given/assigned tasks
		Having clear task/project goals/scope
		Assigned to a variety of tasks
	Task achievement	Being recognized for achievements
		Being involved during project completion celebration
		Feeling proud when completing tasks
		Being recognized for previous achievement and success
		Being treated as a professional as a result of personal achievements
	Others	Receiving non-materialistic rewards
		Having good relationships with superiors, peers and subordinates
		Other non-mentioned intrinsic means of motivation
Extrinsic	Engagement to company policy	Being able to engage in making policy for the company
		Being able to participate in making important decisions
		Being able to suggest the future assignment
		Being able to influence the roles of team members
		Being able to contribute to the organization administration
	Rewards	Receiving materialistic rewards
		Receiving rewards based on performance
		Having a clear promotional system based on performance
		Having a group incentive reward system
		Having an individual incentive reward system
		Receiving rewards as recognition for achievement
	Training and development	Having a clear career and promotional paths
		Receiving technical and nontechnical training
		Having the opportunity for advancement and growth in the company
		Receiving proper guidance and supervision
	Work environment	Having an appreciation of work done
		Having job security
		Having necessary support and understanding of personal problems
		Working with coherent team members
		Being part of a team who works in an act of altruism
		Being treated with courtesy and good humour
		Having good working conditions
		Availability of needed space and new technologies (office, PC)
		Having flexible work schedules
		Having the opportunity to work from home
		Receiving necessary resources (financial, personnel, material, etc.) and support from management to complete the work
	Salary/wages	Receiving a good salary
		Receiving good monthly/quarterly/yearly bonuses
	other	Having a good internal communication system
		Receiving a favourable annual performance appraisals
		Receiving public praise
		Other non-mentioned extrinsic means of motivation

Oman, being an oil producer country, depends heavily on oil production as the main contributor to its GDP. Especially, stakes are high in projects related to the exploration and extraction of oil and gas. When validating the sample size, we find that (85%) of respondents are from employees working in an upstream organization as compared to 6% and 9% of responses from midstream and downstream organizations, respectively. Therefore, this higher response rate from upstream organizations' employees is expected due to the bigger size of this sector compared with the other two sectors. Further, analysis of collected responses revealed that the majority of respondents, about (60%), are working in main offices

while the remaining 40% are based in sites or desert areas.

4.2. Effects of Intrinsic and Extrinsic Motivation

As stated in previous sections, there are two main means of motivation. Intrinsic, which are related to the work itself such that it provides a sense of pleasure, inventive, enthusiasm, challenge and/or achievement. The second one is extrinsic means that comes from outside the actual conducted work like salary, promotion, benefits, and increased commitment. In general, the collected statistics, as shown in Fig. 1, revealed that 60% of respondents believe that extrinsic factors or means have the major influence on their performance as compared to 40% who are motivated intrinsically.

Furthermore, as shown in Fig. 1, employees' response coincides with the identified intrinsic and extrinsic factors' categories that affect employee's motivation on the project execution. Very few respondents identify other factors, apart from the four intrinsic and five extrinsic categories that motivate them. Out of 86 respondents, 46% of respondent selected "Task achievement" suggesting that it is the major intrinsic factors that affect employee motivation in the oil and gas industry. Surprisingly, "freedom to initiate" received the least preferred choice (13%) as factors of motivation among the four identified categories. This may be due to the reason that the nature of the project in the oil and gas industry is generally complex. Therefore, the employee may hesitate to take new initiative due to the fear of backlash if their initiative fails. Task achievement is followed by "Task Challenges" and "Work Pleasure" accounting 22% and 15%, respectively.

Similarly, in terms of extrinsic factor, "Salary" stands out with 44% of respondent suggesting it as a major influencer of motivation. The finding is consistent with Monteiro *et al.*, (2015), which has shown that the individuals' motivational orientation is associated with their attitude towards money. "Salary" is then followed by "Work Environment", "Training and Development", and "Participation in Policy Making" accounting 18%, 16%, 12% and 7%, respectively. This confirms that salary is still the most powerful extrinsic factor to get employees to do more of what they do.

Further, the respondents were requested to identify the influential factor that lowers the motivation of the project team. The results obtained are as shown in Fig. 2. All together five factors were identified, out of which 51% respondent pointed out that missing management supports is the most influential factor leading to a decrease in team motivation. 20% of respondents selected conflict between team members followed by lack of rewarding system (16%). Failing to achieve projects goals and work nature has the lowest rating among identified factors with 6% and 7%, respectively. From the observation, it is clear that extrinsic factors belonging to "work environment" and "rewards" categories have more effect in lowing team motivation. This highlights the importance of extrinsic factors when it comes to motivation. Results also suggest that while people are motivated more by salary as suggested in Fig. 1, however, the absence of this motivational factor does not necessarily lower the team motivation. Nonetheless, definitely, it will not increase the level of motivation as well.

4.3. Effects of Design Variables on Motivation

Results in section 4.2 do not take into account the effect of various design variables in the analysis of motivation. Certainly, the design variables of for example years of employee experience on work will influence the factor that affects motivation. It is agreed that the motivator is a dynamic factor, which changes with the increase in the employee experience and position (Shekhar *et al.*, 2013). According to Maslow hierarchy of need, a human being first tries to satisfy a physiological need. Once this need is satisfied, other higher-level needs in the hierarchy dominate as a motivator until it reaches self-actualization. Therefore, to analyze such effect, next, the survey results are segregated based on the various design variables considered in this study and then analyzed to draw conclusions.

The effect of years of experience on intrinsic and extrinsic categories that affect motivation is presented in the form of a stacked bar chart in Fig. 3. The chart clearly shows that employees were attracted more by extrinsic motivators at the beginning of their career. The percentage of employee motivated by extrinsic motivator decreases as he/she gains experience and progresses in their career. As the employee matures (> 15 years of experience), the extrinsic motivator is replaced with the intrinsic motivator to motivate them in the project. As shown in the figure, there is a sudden jump in the percentage of respondents who are in favour of an intrinsic motivator in this category of employee.

Tables 3 and 4 presents the overall survey results obtained by segregating the data based on all the design variables considered except "Gender". This is due to the fact that the number of females who took part in the survey was very less (less than one third) as compared to their male counterparts. Note that the %age figure in the tables is rounded up or rounded down depending on the decimal value. The following information can be extracted from Table 3.

- Task achievement is of major importance as an intrinsic motivator in the initial year of working in the oil and gas project. As the employee gets more experience, pleasure achieved from the job and challenges involved in the task will be the main motivator. Freedom to take initiatives is more important to the people who are working in a non-managerial position as compared to the manager. This may be due to the reason that as a manager, the position itself entitle them with the ability to take initiatives.

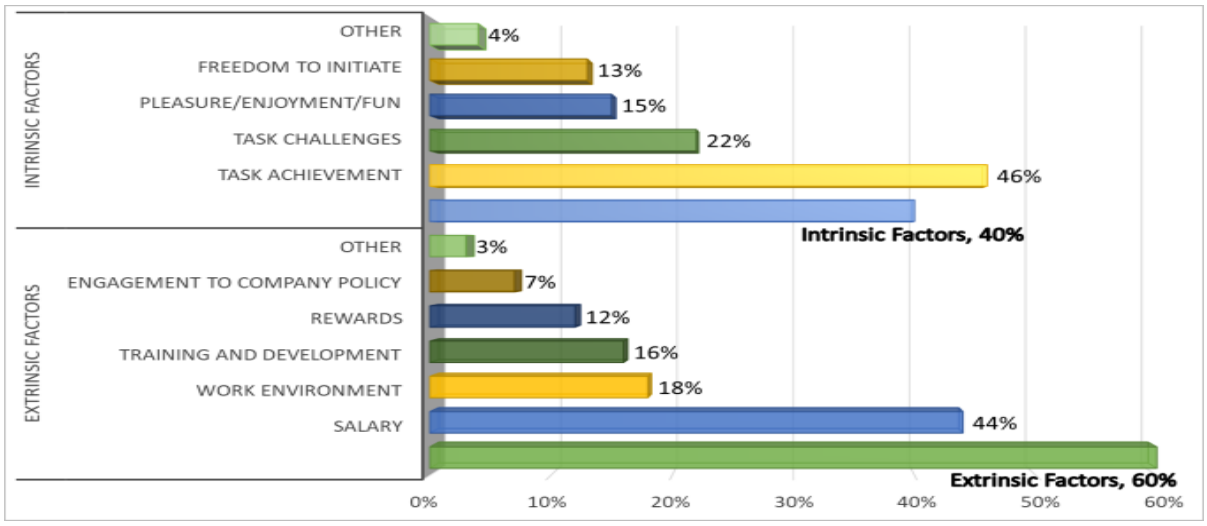

Figure 1. Main intrinsic and extrinsic motivational categories and their importance allotment as preferred by oil and gas industries employees.

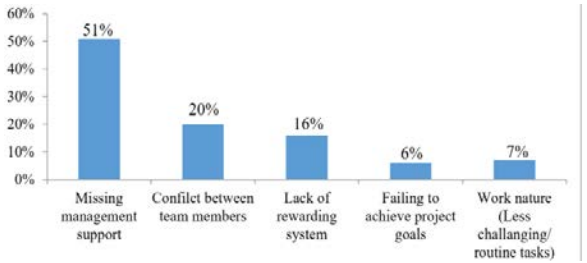

Figure 2. The most influential factors that lower the team motivation in projects.

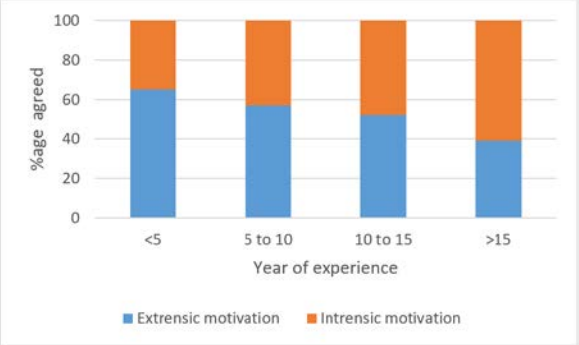

Figure 3. Effect of experience on motivation.

- In the initial years, salary dominates the factor as an extrinsic motivator. However, rather than salary, it is a reward system and Training, and self-development which is important as they mature. Further, a pleasant work environment dominates the extrinsic motivation landscape for those who are working in the midstream section of the Oil and Gas industry. In this case, the percentage of the participants who are motivated by "Work Environment" related factors is three times higher than those who are motivated by "Salary" related factors.
- The result shows that employee enjoys engaging themselves in the administrative position (for eg. developing company policy and procedure) when they were somewhere in the middle of their years of experience. However, even in this case, very few employees prefer this role to motivate them. Rather than upstream and downstream, this role is lucrative for the employee who works in the midstream section of the oil and gas industry and is more preferred by the employee working in the managerial position.

The above results are in consistence with Maslow theory in which employees try to satisfy the most important needs first and these can be accomplished by having a satisfactory monetary value and rewards.

When the monetary need is satisfied, then the employee will try to satisfy the next need located in the Maslow hierarchy such as self-esteem and self-development. Both intrinsic and extrinsic motivators are important to help the managers to motivate their team to put all their effort toward the achievement of projects goal.

Similarly, Table 4 shows the effect of design variables on other factors related to motivation. The following information can be extracted from the table.

- Interestingly, for all design variables, missing management support is found to be the major factor that will significantly lower employee motivation except when the employee is highly matured (i.e., who has a work experience of more than 15 years). In this case, the employee will be less motivated towards work if it is not challenging and the work is of routine nature.
- The survey results show that employees themselves or their counterpart working at the same level is the person who can have the main influence on motivation, irrespective of the design variables. This is then followed by the manager. This is due to the reason that the employee will have interaction mainly with their counterpart or with the manager. Stakeholders have hardly any role to play to motivate employees towards work.

- The results show that motivation is important at the initial phase and the buildup phase of a project. However, it does not mean that motivation is not needed at the final closing phase. In general, out of three phases, most of the participants felt that it is mainly needed at the buildup phase of the project.

Moreover, it was found from the survey result that the level of motivation of most of the employees working in the oil and gas sector in Oman is medium. Around 46% of the survey participant agreed to this view. The combined percentages of high and very high levels indicate that 32 % of employees are well motivated by their organizations while 21 % of employees are demotivated. A very low level of motivation has been found in employees that have 0-5 years of experience. On the other hand, a very high level of motivation is found with highly experienced employees.

Table 3: Effect of design variables on intrinsic and extrinsic motivation.

Design Variable	Intrinsic Motivation (%)				Extrinsic Motivation (%)				
	Task Achievement	Freedom to Initiate	Task Challenge	Pleasure	Salary	Reward	Training and Development	Engagement in Company Policy	Work Environment
Years of Experience									
0-5	50%	11%	28%	11%	55%	22%	6%	0%	17%
5-10	48%	17%	20%	15%	42%	10%	21%	8%	19%
10-15	49%	11%	26%	14%	51%	14%	9%	6%	20%
15+	0%	0%	33%	67%	0%	34%	66%	0%	0%
Position									
Managerial	43%	4%	30%	22%	39%	9%	22%	13%	17%
Non-managerial	47%	18%	21%	14%	45%	15%	16%	5%	19%
Organization Type									
Upstream	49%	15%	23%	12%	45%	15%	19%	7%	14%
Midstream	0%	20%	40%	40%	20%	0%	0%	20%	60%
Downstream	50%	0%	12.5%	12.5%	50%	0%	12.5%	0%	37.5%

Table 4: Effect of design variables on other factors of motivation.

Design Variable	Factor that lowers motivation (%)					People who have a major influence on motivation (%)				Phase at which motivation has a major influence (%)		
	Missing management support	Conflict between members	Lack of rewarding system	Failing to achieve project goal	Work nature	Employee	Manager	Senior manager	Stakeholders	Initial phase	Buildup phase	Closing phase
Years of Experience												
0-5	50%	33%	11%	6%	0%	50%	44%	0%	6%	50%	33%	17%
5-10	51%	15%	21%	9%	4%	37%	40%	23%	0%	33%	54%	13%
10-15	49%	29%	11%	3%	9%	46%	34%	14%	6%	49%	37%	14%
15+	33%	0%	0%	0%	67%	67%	33%	0%	0%	33%	33%	34%
Position												
Managerial	65%	13%	17%	4%	0%	43%	35%	17%	4%	39%	52%	9%
Non-managerial	46%	23%	15%	6%	10%	42%	37%	19%	2%	40%	44%	16%
Organization Type												
Upstream	47%	19%	18%	7%	8%	44%	35%	18%	3%	41%	45%	14%
Midstream	60%	20%	20%	0%	0%	20%	60%	20%	0%	40%	40%	20%
Downstream	75%	25%	0%	0%	0%	37.5%	37.5%	25%	0%	25%	62.5%	12.5%

5. MANAGERIAL IMPLICATIONS AND LIMITATIONS

The study identified the motivational factors and then clustered these factors into categories that belong to intrinsic and extrinsic motivational types. The study shows the there are various extrinsic and intrinsic factors that affect the employee's level of motivation at different phases, working experiences and positions. Therefore, the result of this study can be used by the concerned authority and project managers to tailor the motivational factor that suits the need of the individual employee. This will have a significant positive impact on employee's satisfaction, as well as organizational goals. The rate at which employees being motivated in their organization can be improved by focusing more to mitigate the factors that lower team motivation like improving management support, managing the conflict and apply the rewarding system in the organization. Therefore, every organization should incorporate motivational packages and incentives in its corporate policies and plans in order to enable its implementation without interruptions to their business. It is recommended that a consistent study and assessment of individual organization needs to be carried out in order to know what motivates their employees and how motivation can affect their

performance. According to the results, the manager can develop the necessary action plan and then implemented it to ensure a comfortable environment that encourages employees to get their maximum efforts towards high performances and ensure efficient and effective project execution.

In this research work, the data were collected only from employees working in the oil and gas industries in Oman. Therefore, the analysis and the interpretation of the data may not be applicable to the oil and gas industries in other parts of the world. More research is needed and data needs to be collected from various countries with significant project activities in oil and gas industries is necessary to generalize the research outcome.

6. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

The main objective of this study is to define and evaluate the effect of motivation on project execution for oil and gas employees in the Sultanate of Oman. For the purpose, the study was carried out mainly based on the literature review and questionnaire survey. Altogether 86 participants took part in the survey. These participants are working at various oil and gas companies and at different levels in the Sultanate of Oman. It can be figured out from the result that there is a significant relationship between motivation and employees' performance. The survey results revealed that extrinsic factors are the most influential factor to motivate the employee in their work. Salary is found to be the powerful extrinsic motivator for most of the employees. On the other hand, task achievement and challenge in the work are found to be the major intrinsic motivation factors influencing the employee's performance. The study also analyzed the effect of various design variables on motivation. The results show that irrespective of years of experience, position and organizational type, missing support from the management is found to have a major impact in lowering employees motivation. The result also revealed that motivation is mainly needed during the initial and buildup phase of project execution. As a future research direction, this finding can be considered as a hypothesis that can be expanded to verify up to what extent this is valid and answer why motivation is more important at these phases. Furthermore, the employee himself and their counterpart are found to be the main person who can increase the level of employee's motivation at the workplace. Most of the workers working in the oil and gas project in Oman seems to have a medium level of motivation at work. This is especially true for those employees who have very few years of working experience. Further to this, it will be an interesting extension to anchor the motivational factors and examine how they are related to achieving the project scope and meeting the project schedule while maintaining the project budget.

Many research articles can be found in literature dedicated to measuring the maturity level of an organization to adopt and use project management tools. However, the scientific literature is still lacking the development of a solid framework capable of measuring the maturity level of the motivation system of the organization. Hence, a possible extension of studies concerned about the motivation of employees should consider this direction. Such frameworks can be more comprehensive by targeting the different needs of employees during the different phases of the project execution as well as their years of experience and containing a number of related key performance indicators (KPI). Moreover, recently Piya *et al.*, (2020) have identified various factors and their inter-relationships that affect agility level in the oil and gas supply chain. Some of the identified factors of agility will have an impact on employee motivation. Therefore, the research can be extended to identify the factors of agility and their level of impact on motivating employees in the oil and gas project.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest as regards this article.

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REFERENCES

Adams, J.S. (1963). Toward an understanding of equity. Journal of Abnormal and Social Psychology, 67, 422–436.

Alderfer, C.P. (1972). Existence, Relatedness, and Growth; Human Needs in Organizational Settings. Free Press, New York.

Al-Hinai, N., Abusharkh, E., Al-Shamli, A., & Summad, E. (2020). An Innovative Framework To Measure The Maturity Level of Core Soft Skills and Competencies (SSCM) Needed by Project Managers in Oil and Gas Industry, 10th Annual International Conference on Industrial Engineering and Operations Management, Dubai, UAE, pp. 2597-2604 .

Amin, A., Hassan, M. F. B., Ariffin, M. B. M. (2010). Framework of intrinsic and extrinsic motivators of knowledge sharing: A case of training institutes of an oil and gas company in Malaysia, 2010 International Symposium on Information Technology, Kuala Lumpur, 1428-1432.

Asproni, G. (2004). Motivation, teamwork, and agile development. Agile Times, 4(1), 8-15.

Baddoo, N., Hall, T., Jagielska, D., (2006). Software developer motivation in a high maturity company: a case study. Journal of Software Process Improvement and Practice, 11(3), 219–228.

Bateman, T.S., Snell, S., (1999). Management—Building Competitive Advantage 4th ed. McGraw-Hill, Boston.

Beecham, S., Baddoo, N., Hall, T., Robinson, H., Sharp, H., (2008). Motivation in software engineering: a systematic literature review. *Information and Software Technology*, 50(9–10), 860–878.

CHAOS report (2014). The Standish Group Report. Project Smart, https://www.projectsmart.co.uk /whitepapers/chaos-report.pdf (last accessed on Nov. 13, 2019).

CHAOS report (2015), The Standish Group International, https://standishgroup.com/sample_ research_files/CHAOSReport2015-Final.pdf (last accessed on Nov. 13, 2019).

DeMarco, T., Lister, T., (1999). Peopleware: Productive Projects and Teams 2nd ed. Dorset House, New York.

Dolfi, J., Andrews, E.J., (2007). The subliminal characteristics of project managers: an exploratory study of optimism overcoming challenge in the project management work environment. International Journal of Project Management, 25, 674–682.

Dwivedula, R., Bredillet, C.N., (2010). Profiling work motivation of project workers. International Journal of Project Management, 28, 158–165.

Ferratt, T.W., Short, L.E., (1986). Are information systems people different: an investigation of motivational differences. *Management Information Systems Quarterly*, 10(4), 377–387.

Field, T. (1997). When bad things happen to good projects. CIO, 11(2), 54–62.

Fisher, C.D., Xue Ya Yuan, A., (1998). What motivates employees? A comparison of US and Chinese responses. *The International Journal of Human Resource Management*, 9(3), 516–528.

Germann, M., (2004). Influence of project managers on the motivational factors of a project team. Paper Presented at the 13th International Conference on Management of Technology IAMOT, Washington, DC. April.

Hall, T., Baddoo, N., Beecham, S., Robinson, H., Sharp, H., (2009). A systematic review of theory use in studies investigating the motivations of software engineers. ACM Transactions on Software Engineering and Methodology, 18(3), 48–77.

Heimovics, R., Brown, F.G., (1976). Municipal employee behavior as an exchange process. Midwest Review of Public Administration, 10(4), 201–215.

Herzberg, F. (1987). One more time: How do you motivate employees?. Harvard Business Review 65(5), 109–120.

Herzberg, F., Mausner, B., Snyderman, B.B., (1959). The Motivation to Work. John Wiley, New York.

Hwang, B. G., Zhao, X., & Ong, S. Y. (2015). Value management in Singaporean building projects: Implementation status, critical success factors, and risk factors. *Journal of management in engineering*, *31*(6), 1-10.

Kanagarajoo, M. V., Fulford, R., & Standing, C. (2019). The contribution of social media to project management. *International Journal of Productivity and Performance Management*.

Keller, A.E., (1978). Personnel positioning. Infosystems, 25(6), 50.

Khan, B. A., Jalbani, A. A., (2009). Effect of Compensation System on Employee Motivation: A Case Study of Pakistan Petroleum Limited. Journal of Independent Studies and Research – MSSE, 7(2), 121 – 130.

Khoshnevis, H, Tahmasebi, A. (2016). The Motivation System in a Governmental Organization. Procedia - Social and Behavioral Sciences, 230, 212 – 218.

Kim, S. T., & Choi, B. (2019). Price risk management and capital structure of oil and gas project companies: Difference between upstream and downstream industries. *Energy Economics*, *83*, 361-374.

Kooij, D., DeLange, A.H., Jansen, P.G.W., Kanfer, R., Dikkers, J.S., (2010). Age and work-related motives: results of a meta-analysis. Journal of Organizational Behavior, 31(8), 1111–1136.

Kotler, P., Armstrong, G., Opresnik, M. O. (2018). *Principles of Marketing*, 17th Edition. Pearson Education.

Kovach, K.A., (1987). What motivates employees? Workers and supervisors give different answers. *Business Horizons*, 30(5), 58–65.

Kovach, K.A., (1995). Employee motivation. Addressing a crucial factor in your organization's performance. *Employment Relations Today*, 22(2), 93–105.

Labor Relations Institute, (1946). Do you know your workers' wants?. *Foremen Facts* IX, 21, 1–3.

Lawal, A. L., Okhankhuele, O. T. (2014). The Effect of Motivation on Project Execution in Nigeria: A case study of Bayelsa Plastic Industry, Yenagoa, Baylesa State, Nigeria. *British Journal of Applied Science & Technology*, 4(21), 2985-3002.

Lee-Kelly, L., Leong, K.L., (2003). Turner's five functions of project-based management and situational leadership in IT services projects. *International Journal of Project Management*, 21,

583–591.

Linberg, K.R., (1999). Software developer perceptions about software project failure: a case study. *The Journal of Systems and Software*, 49(2), 177–192.

Locke, E.A., (1968). Towards a theory of task motivation and incentives. Organizational Behavior and Human Performance, 3, 157–189.

Mahaney, R. C., Lederer, A. L., (2006). The effect of intrinsic and extrinsic rewards for developers on information systems project success. *Project Management Journal*, 37(4), 42-54.

Mak, B.L., Sockel, H., (2001). A confirmatory factor analysis of IS employee motivation and retention. *Information & Management*, 38(5), 265–276.

Maslow, A.H., (1943). A theory of human motivation. Psychological Review, 50, 370–396.

McManus, J., Wood-Harper, T. (2003). Information systems project management: The price of failure. Management Services, 47(5), 16–19.

Meredith, M. (2016). Project Management -A Managerial Approach. Asia: Wiley Plus learning Space, John Wiley & Sons (Asia) Pte Ltd.

Monteiro, D. L. C., Peñaloza, V., Pinto, F. R., Coria, M. D. C. D., & Calderón, L. M. O. (2015). Attitudes towards money and motivational orientation to work in Brazilian young workers. Contaduría y administración, 60(1), 11-30.

Mueller, R., Turner, R., (2009). Leadership competency profiles of successful project managers. *International Journal of Project Management*, 28(5), 437–448.

Nchorbuno, D. A. (2011). The Role of Motivation on Employee Performance in the Public Sector: A Case Study of the University for Development Studies-Wa Campus, (Doctoral dissertation).

Nel, P.S., Gerber, P.D., Van Dyk, P.S., Haasbroek, G.D., Schultz, H.B., Sono, T., Werner, A., (2001). Human Resources Management 5th ed. Oxford University Press, Cape Town, South Africa.

Nicholson, N., (2003). How to motivate your problem people. Harvard Business Review, 81, 56–67.

Pinder, C.C., (1998). Work Motivation and Organizational Behavior. Prentice Hall, Upper Saddle River, NJ.

Piya, S., Shamsuzzoha, A., & Khadem, M. (2019). An approach for analysing supply chain complexity drivers through interpretive structural modelling. *International Journal of Logistics Research and Applications*, 1-26.

Piya, S., Shamsuzzoha, A., Khadem, M., & Al-Hinai, N. (2020). Identification of Critical Factors and Their Interrelationships to Design Agile Supply Chain: Special Focus to Oil and Gas Industries. *Global Journal of Flexible Systems Management*, 21(3), 263-281.

Rony, N. I., Suki, N. M., (2017). Modelling the Relationships between Internal Marketing Factors and Employee Job Satisfaction in Oil and Gas Industry. *Asian Social Science*, 13(3), 135-144.

Sansone, C., Harackiewicz, J., (2000). Intrinsic and Extrinsic Motivation — the Search for optimal Motivation and Performance. Academic Press, San Diego, CA.

Seiler, S., Lent, B., Pinkowska, M., & Pinazza, M. (2012). An integrated model of factors influencing project managers' motivation—Findings from a Swiss Survey. *International Journal of Project Management*, 30(1), 60-72.

Sekhar, C., Patwardhan, M., & Singh, R. K. (2013). A literature review on motivation. *Global Business Perspectives*, 1(4), 471-487.

Sharp, H., Baddoo, N., Beecham, S., Hall, T., Robinson, H., (2009). Models of motivation in software engineering. *Information and Software Technology*, 51(1), 219–233.

Shih, T.-H., Fan, X., (2007). Response rates and mode preferences in web-mail mixed-mode surveys: a meta-analysis. *International Journal of Internet Science*, 2(1), 59–82.

Skinner, B.F., (1969). Contingencies of Reinforcement: A Theoretical Analysis. Prentice-Hall, Englewood Cliffs, NJ.

Tabassi, A. A., Ramli, M., Abu Bakar A. H. (2011). Training, motivation and teamwork improvement: The case of construction firms. *African Journal of Business Management*, 5(14), 5627-5636.

Tampoe, M., Thurloway, L., (1993). Project management: the use and abuse of techniques and teams (reflections from a motivation and environment study). *International Journal of Project Management*, 11(4), 245–250.

Taylor, F.W. (1903), Shop Management (New York, NY: American Society of Mechanical Engineers), OCLC 2365572. Project Gutenberg.

Turner, J.R., Mueller, R., (2003). On the nature of the project as a temporary organization. *International Journal of Project Management*, 21, 1–8.

van der Kolk, B., van Veen-Dirks, P. M., & ter Bogt, H. J. (2019). The impact of management control on employee motivation and performance in the public sector. *European Accounting Review*, *28*(5), 901-928.

Verma, V.K., (1996). Human Resource Skills for the Project Manager: The Human Aspects of Project Management, Volume Two. Project Management Institute, Upper Darby, PA.

Vroom, V.H., (1964). Work and Motivation. John Wiley & Sons, New York.

Wiley, C., (1997). What motivates employees according to over 40 years of motivation surveys. *International Journal of Manpower*, 18(3), 263–288