Analyzing important work motivators for architects in the project delivery process

A Marisa\textsuperscript{1} and B Talarosha\textsuperscript{1}

\textsuperscript{1}Department of Architecture, Faculty of Engineering, Universitas Sumatera Utara, Indonesia

Email: amy@usu.ac.id

Abstract. People can be motivated when the right factor occurs in their work. As a result, they will work harder and deliver better performance. Being able to achieve optimum work performance is one of the ways to ensure professionals will remain competitive and survive in the construction industry. Thus, this study aims to analyze the most important factors that motivate architects to work in the project delivery process. The assessment of architects’ important work motivators was carried out using self-evaluation through a questionnaire survey. There were 131 completed and usable questionnaires received and used for data analysis. A relative importance index (RII) was adopted to rank the relative importance of the architect’s work motivation factors. The results revealed that having adequate resources in the process of delivering a project is the most important factor which motivates architects to work. The results can be used as a valuable feedback for the employers of consultant firms as well as the clients that seek to enhance the performance of their key design contributor by providing the appropriate work motivators which can motivate architects to achieve higher performance in building project delivery process.

1. Introduction

In this ever-changing world, every consultant firm wants to get the best from their key employees to help the firm survives in the industry. Having employees who are less motivated would be a major problem because these employees tend to give a minimum contribution to the firm. This problem probably is more frustrating for employers than losing the market or dealing with the capital problem. Because together with motivated employees, the firms can work and try harder to get into the market and minimize and solve the limited capital problem. But, without motivation, perhaps it would be difficult to achieve the firm’s goals. Because of motivation will always be the greatest challenge for every single firm which concerns to achieve goals that lead to the performance of the firm itself. Motivation is concerned with why people act and the reason they do the work [1]. Motivation can also be defined as the degree of effort an individual exerts to accomplish a task, and it shows up as an excitement about work [2]. Therefore, motivation can be defined as the willingness and the reason for the individuals to put efforts on their actions to obtain goals and satisfy unfulfilled personal needs. Individuals see motivation as an internal driving force within a person due to unfulfilled needs that will make the individual chooses between alternative forms of actions to achieve desired goals [3]. An individual who has motivation in work will give a high level of efforts to achieve organization goals [4]. Therefore, architects as individuals who play an important role in the consultant firms should be well motivated in every project because they will work best when they are motivated. Practicing good motivation is very important to determine the success of the firm. Therefore, architects who are highly...
motivated as an individual as well as a leader who know how to motivate their design teams will give an excellent contribution to the firm where they work for and will be able to perform their best to help the firm remains competitive within the industry.

Employees work to meet their own psychological needs and to achieve the organization’s goals [5, 6]. Therefore, the commitment must derive from the individuals’ or the employees’ wishes to support the organization goals. A need can be defined as strong desires to be satisfied that depend on individual economic conditions, social context, preferences, and other forces [7]. Previous studies tend to focus more on project managers’, contractors’ and construction workers’ motivation [8, 9, 10, 11]. Therefore, architects who are considered as important players in the construction industry also have needs that should be fulfilled to motivate them in their work and enable them to support the organization. Thus, the main objective of this study is to analyze and identify the most important work motivation factor by using the architects’ rating. Practically, the results are significant for the clients as well as the employers who seek to improve their architects’ motivation as their design contributors of the firms by providing them with the right factor which can increase their motivation level. Theoretically, the identified work motivator can be used for future studies which focus on architects’ motivation.

2. Work Motivators
Individuals can be motivated by a large amount of money they earn from their work; some may be motivated by a challenging task and a high level of recognition. Others may feel that a comfortable working condition is a motive for them to be motivated to work. This is because individuals have different needs, and they are different in their own ways [12]. Therefore, architects as individuals would have different needs that make them work harder. Several motivation factors have been acknowledged to be the motivators for professionals in the construction industry. The current study proposes sixteen work motivation factors. The following paragraphs explain each work motivators in this study.

2.1. High Salary
It is common that people are generally seeking for high salaried work. The amount of salary a firm offers to their workers is often to be the reason for the workers to stay or move to another firm which provides better salary or payment. Based on Maslow’s hierarchy of human needs, salary is one of the basic needs that should be fulfilled and considered as the psychological needs for the human to survive [13]. Previous researchers have proposed salary as one of the important work motivation factors among others [11, 14]. Therefore, sufficient salary is necessary to motivate the individual to work harder and put more effort into his or her work.

2.2. Bonus (Extra Payment)
Providing a bonus for the employees has been known can encourage a high level of performance. Unfortunately, most of the firms probably may not afford to offer high monetary incentives to motivate the broad base of employees [15]. Bonus can be defined as a form of economic motivation through incentive that is given to stimulate performance [1]. It is suggested that it is better to give an extra payment or bonus to the employees for their work with outstanding results and their abilities to accomplish challenging tasks [16]. Therefore, providing a bonus is one of the tangible rewards that is expected to motivate individuals to work even harder in performing their tasks to attain the project objectives.

2.3. Adequate freedom and tolerance in completing the project
In the process of completing the work, tolerance and freedom have been acknowledged by many researches for having an influence on the individual’s work motivation [17]. Although people in the higher management level have a different style to lead their employees, they need to understand that the employees need to have freedom within defined responsibilities in their work [18]. Thus architects
who are also employees in the consultant firms need to have sufficient freedom in their work to explore new ways to achieve the project objectives with consideration to the responsibilities that come with it.

2.4. Adequate resources for work completion (software, computer, etc)
The availability of the resources and equipment required are essential to ensure project completion. Architects must ensure that they have all the resources they need to do their jobs. The unavailability or inadequate of resources and equipment will result in difficulties to work and generate distractions, and later this may cause the architect to be demotivated. Clients or employers will not approve a demotivated architect to run the project. Therefore, to have high motivated employees, adequate equipment or tools that are needed by the employees to do their work should be available [19].

2.5. The work provides a challenging atmosphere
Based on the previous study, a motivator which represents intrinsic work conditions that can motivate the individuals’ performance, such as challenging tasks can also motivate behavior [20]. Individuals who have the orientation for learning enjoy challenges in their work and also pleased to be able to learn new skills [12]. Therefore, challenging work in the project can provide the excitement for an individual who prefers to do challenging tasks or work, architects who have a high level of need for more challenging work would love to challenge themselves to a certain level and prove they can tackle it and deliver optimum results.

2.6. Perks
Perks and incentives are other forms of tangible rewards that can be used to attract individuals to work harder and put more efforts into their work. In the construction industry, incentives have been acknowledged to affect project success and performance [21, 22]. Perks and other incentives that may be given for the employees can be in the form such as health insurance, fitness center membership, childcare, unpaid or paid sabbaticals, opportunity to work from home, etc. [23]

2.7. Adequate participation in decision making
In the project delivery process, the architect is faced with options and alternatives until the project is completed. Participation in decision making is defined as the action to share the decision with other people to achieve organizational objectives [24]. It is important to show support from people in the top management level, such as supervisors or employers to their subordinates by providing chances and encouraging them to participate in decision making [25]. Therefore, it is a good thing for the architects to have a project where their opinions are heard and considered to be used as an input in decision making associated with the project.

2.8. Old day security (pension)
Pension is one part of the total remuneration or compensation package for the employees. Pension is defined as a combination of retirement-related payments from various sources such as general and income-related state pension, and employment pension [26]. A pension can be considered as a form of reward, and an appreciation provides to retired employees for their working days and loyalty to the firms where they have worked.

2.9. The work provides variety and change
The work itself should be able to give a variety of assignments for the individuals. The task that requires a variety of activities can motivate individuals [14]. With the variety of assignments in the project performed by the architect will assist the architect in developing himself or herself as an individual and becoming a better-experienced worker. Individuals need constant stimulation and change in their work [27]. However, variety of tasks given to the individuals should always consider
their abilities to carry out the actions; if the tasks are given beyond the power of the individuals then probably this factor will not be working [28].

2.10. Good physical working environment project completion
Good physical working condition has been known for having motivational effects on individuals and help the individuals to be less dissatisfied with their work [29, 30, 31]. Good conditions for people to work deals with the satisfaction of those people for the level of lighting, the noise, the temperature, and the exposure control within their work environment [19].

2.11. Project Contribution Lead to Employees’ Retention and Firm’s Survival
Every firm need to retain their key employees to be able to survive in the industry filled with competition and constant changes. It requires retention policies and strategies with consideration of the employees’ real expectations to retain the talented staff [32]. The way to manage employees toward the employees’ retention is not an easy task for the management [33, 34]. The contributions that are given by employees, whether it is small or big, needs to be appreciated. Thus, retaining the employees for their contributions and efforts is another form of appreciation from the employers to their employees other than monetary that can motivate them to work as well as giving a chance for the firm’s survival.

2.12. Recognition
Recognition is a non-monetary reward as an appreciation that is given to selected individuals because of their high level of accomplishment [16]. Individuals that are highly educated and have steady jobs perceive non-monetary rewards such as recognition as a far greater motive than monetary rewards [35]. Therefore, architects as leaders in design team strive to gain recognition from people in the top management level that their contributions are important and vital to organization success.

2.13. The work gives an opportunity for power and influence
Motivation and power are so closely linked that it can be said there is power in a motivated person [36]. The ability to lead and influence others if used properly will be the most desirable human qualities because it can release human energies, empower people and focus all of their efforts in the same direction [37]. Therefore, for certain individuals who love to have power in their work, the ability to influence others can motivate them to work.

2.14. Little or no work distractions in the project completion
The distractions in the workplace may cause the architects to be distracted and unable to focus in their work, and further more it may lead to the inability to deliver optimum result and cause a delay in the project completion as the worst result. Distractions in the workplace can be defined as a phenomenon that occurs in human surroundings, which are caused by several factors such as stress, poor appraisals, noise, new policies, and anxiety [38]. Therefore, the process of the project completion that runs smoothly without any distractions will ensure the objectives of the project can be achieved.

2.15. Praise
Praise is important, especially to motivate individuals in learning to improve to generate better performances [39, 40]. When the recipient believes that there is a positive relationship between effort and ability, the praise that is given based on efforts can be motivational [41]. Therefore, it is important to consider giving praise according to the individuals’ needs, in appropriate situations to make effective praise resulted in motivational effects to the individuals.

2.16. Feeling Valued
Feeling valued is defined as the feeling of usefulness or worth to someone [42]. The individuals’ thriving at work describe as the individuals who have the feeling of valued and are being energized
because of what they do in their work is valued by others [43]. This implies that individuals with the feelings of valued have positive affective responses, and they are the ones who thrive at work because of what they do are valued by others. Therefore, they are more motivated in their work and more energetic, which can improve work performance.

3. Methodology
A quantitative approach is used to obtain objective in this study. Collecting data is carried out through a survey by using an instrument or questionnaire. The instrument in this study has three sections. The first section aims to gather information on the respondents’ profile. The second section aims to identify the most important work motivators from the architects’ perceptions; this section consists of sixteen questions using the Likert’s scale adopted from the previous study in ascending order starting from 1 (not important) to 5 (extremely important) [44]. The last section aims to obtain respondents’ comments regarding work motivation factors. Architects who are registered with the Indonesian Institute of Architect (IAI) of North Sumatera were chosen as the respondents of the study. A total of 131 completed questionnaires were used for analysis. Data analysis used in this study includes descriptive statistics and the use of Relative Importance Index (RII).

\[ \text{RII} = \frac{5(n5)+4(n4)+3(n3)+2(n2)+n1}{5(n1+n2+n3+n4+n5)} \times 100 \]  

(1)

The Relative Importance Index (RII) used to analyze and rank architects’ work motivation factors based on the respondents’ perceptions. The formula for relative importance index is shown in equation (1). Starting from n1 which is the number of respondents who selected 1 (not important), n2 is the number of respondents who selected 2 (less important), n3 is the number of respondents who selected 3 (moderately important), n4 is the number of respondents who selected 4 (important), and n5 is the number of respondents who selected 5 (extremely important).

The internal consistency of the questionnaire is tested by calculating the Cronbach’s Alpha coefficient. Cronbach’s alpha coefficient obtained in this study is 0.803 ($\alpha = 0.803$). The coefficient shows a good internal consistency, which means that all items or questions in the instrument are good and reliable in identifying architect performance [45]. The Cronbach alpha coefficient which is achieving 0.8 is considered very good and preferable [46]. The coefficient obtained also indicates an acceptable measure of the questionnaire’s reliability.

4. Results and Discussion
One hundred thirty one architects participated in this study. Most of the respondents are male (87.8%), and 12.2% of them are female. One hundred seventeen of the respondents have a bachelor degree (89.3%), 13 respondents have a master degree (9.9%), and one of them has a doctorate degree (0.8%). The respondents mostly have worked in the construction industry between five to fifteen years (67.2%). Majority of them have completed twenty to forty projects (83.2%). Most of these respondents work in private firms (95.4%). These firms mostly have been established for eleven to fifteen years (61.8%). The results of RII values and rank of architects’ work motivators can be seen in Table 1.

| Rank | Work motivators                                                                 | RII  |
|------|---------------------------------------------------------------------------------|------|
| 1    | Adequate resources for work completion (software, computer, etc)                  | 88.55|
| 2    | Good physical working environment for project completion                           | 87.79|
| 3    | Adequate freedom and tolerance in completing project                             | 82.59|
| 4    | The work provides variety and change                                             | 82.29|
| 5    | Old day security (pension)                                                       | 80.31|
| 6    | High Salary                                                                      | 80.00|
This study focuses on obtaining the most important work motivators for architects in project delivery process based on the collective perceptions of architects. Based on the results in Table 1, architects acknowledge factor number four; adequate resources for work completion such as software, computers, and other important tools as the most important work motivator for them as reflected in the cumulative average RII value of 88.55. The result implies that architects perceive this factor as an extremely important one for their motivation. Because in terms of its importance level, RII value weighted between 80 to 100 implies an extremely important factors [47]. The results of this study confirm the findings in previous study that a workplace should provide support services and facilities for the employees that suit the employees’ tasks [48]. Therefore, providing necessary resources and services appropriate for architects’ needs to complete their tasks is very important for architects’ motivation, which means that the unavailability of certain resources needed to carry out a task will result in demotivating architects in project delivery process.

Having a good physical working environment for completion of the project is the second most important work motivator from the architects’ perspectives as shown with cumulative average RII value of 87.79. A good physical working condition is important to make the individuals stand for long hours working, they are willing to work in a longer time because they like their working environments. The working environment should be comfortable for architects to work in the process of delivering a project. When the physical working environment is not safe, it might negatively affect the individuals’ perceptions and demotivated them to work [8]. Therefore, architects perceive this factor as very important for their motivation because having a good physical working environment is fundamental for them when completing the project. Because in construction projects, one of the important factors to ensure high performance is having a favorable working condition for the project team [49].

The third most important work motivator is adequate freedom and tolerance in completing a project with cumulative average RII value of 82.59. Architects as other employees have certain emotions and feelings. The result in this study implies that architects have greater needs for freedom and tolerance in completing the project than the needs to obtain a certain amount of money as shown in Table 1 where high salary ranked in the sixth place. This is possible because architects are creative individuals who feel the need to have an adequate level of freedom in completing their designs. The individuals should feel that their work provides the freedom to implement their skills and complete the tasks [18]. Therefore, architects should be given a certain level of freedom to complete their duties in the project delivery process.

Three factors with low average RII values are praise, little or no work distractions in the project completion, and the work gives opportunity for power and influence. The results imply that architects do not really perceive these factors as an important which can drive them to work harder in project delivery process. Therefore, they tend to see these factors are not crucial for their work motivation. The results in Table 1 suggest that praise is a factor ranked in number fourteen. Praise is a form of an intangible reward given to the employees for their efforts and achievement. Based on previous studies, praise has been known to have an effect on the individuals’ motivation [40, 41]. However, architects tend to view praise as a not so important factor for their work motivation as what can be seen in the result praise has a relative importance value of 69.92.
Little or no work distraction in the project completion is the second lowest factor chosen by architects which can motivate them in project delivery process with a relative importance value of 69.01. In the project delivery process, sometimes having work distraction is unavoidable. This is mainly because there are many individuals with different background and needs who involve in the project and there are many works involve in the process of delivering a project. Distraction is generally experienced by an individual which can be caused by noise, stress, anxiety, temperature, workspace environment, and other person [38]. Therefore, work distractions such as conflict of interest between the project participants as well as site-related distractions can be experienced by the architects in the process of delivering the project without necessarily impact on their work motivation.

Factor number thirteen which is the work gives an opportunity for power and influence has been chosen as the lowest work motivator by the architects with a relative importance value of 60.31 and rank in number sixteen. The result suggests that architects do not need to have the ability to convince and dictate other individuals who involve in the project to follow their ways. Because instead of showing power and influence to others, activities in the project delivery process require more good interaction among the project team where individuals involved in the project understand each others’ needs and responsibilities [49].

In previous studies, high salary mostly perceived as an important factor which motivates employees to work harder. The finding in the study does not correspond with the previous studies and has shown that there are other factors that ranked higher than having a high salary. Work motivation in previous studies has always been linked with having more money and salary [14, 35, 50]. However, the findings of this study confirm that people who are in the middle or on the top management level tend to choose other motivators than having more money [11]. Similarly, architects who tend to have position in the middle or on top management of the firms do not feel by having a high salary will effectively give them more motivation in their work. This is possibly because individuals who have a higher position in the level of management have already earned the amount of money they need from their work. Therefore, they perceive other factors, such as having adequate resources and comfortable working conditions as more important for their motivation.

5. Conclusion

The present study aimed to identify the work motivators that are important for architects in the project delivery process. The study employed the Relative Importance Index (RII) formula to obtain values and rank work motivation factors from the collective perceptions of the architects. Sixteen factors were identified and formed as questions in the second section of the instrument in the study. Next, these work motivators were ranked according to their importance. Adequate resources for work completion (software, computer, etc.), good physical working environment for completion of project and adequate freedom and tolerance in completing the project are the top three factors chosen by the architects which can motivate them to work harder in the project delivery process. The factors in the bottom three are praise, little or no work distractions in the project completion, and the work gives an opportunity for power and influence.

The findings in the study have theoretical and practical implications. Theoretically, the findings highlight several extremely important factors for architects’ motivation which can be used as a base of literature in future studies to identify the impact of these motivation factors to architects’ performance in project delivery process. Practically, the findings provide valuable feedback for the clients as well as the employers of consultant firms who seek to enhance the performance of their key design contributors by providing the right motives that suit to their motivation. The study demonstrates that high salary or money is not the only thing that has motivation value and has proven that there are other factors ranked higher than money or a high salary. Therefore, the employers and clients in the construction industry should shift their thoughts from giving more money to gain benefit from their architects. Because money itself is not enough to motivate architects, providing them with necessary resources or tools for completing their work and good physical working environment turn out to be much more important for architects in project delivery process.
Several limitations can be found in the study. First, this paper proposed sixteen work motivation factors which mostly relate to reward factors and working conditions factors. Future studies should identify other factors which can serve as motivators for architects in the project delivery process, such as factors which relate to the project participants or project team members who work together with architects. Second, this study relies upon the use of Relative Importance Index formula to analyze the relative important of work motivators for architects in the project delivery process. Future researchers can use different approach or method to improve the results by identifying other existing factors which can motivate architects through interviews which can then be followed by a questionnaire survey. Third, this study is carried out in Indonesia; it is interesting to see the comparison in future studies whether architects in other developing countries perceive similar factors to motivate them in the project delivery process.

**Acknowledgement**
The authors sincerely appreciate the financial support from Universitas Sumatera Utara (Talenta No: 4167/UN5.1.R/PPM/2019, 1 April 2019)

**References**
[1] Darrington J W and Howell G A 2011 Motivation and incentives in relational contracts. *J. Financial Management of Property and Construction* **16** 1 pp 42-51
[2] Scarborough N M 2012 *Effective Small Business Management: An Intrepreneurial Approach* (New Jersey: Prentice Hall)
[3] Marisa A and Yusof N 2012 Motivation among the managers in construction companies *Int. J. Social, Behavioral, Educational, Economic, Business and Industrial Engineering* **6** 2 pp 169-173
[4] Chang K C, Sheu T S, Klein G and Jiang J J 2010 User commitment and collaboration: motivational antecedents and project performance *Inf. and Software Tech.* **52** 6 pp 672-679
[5] Robbins S P and Judge T A *Organizational Behavior* thirteenth ed (New Jersey: Prentice Hall)
[6] Rizal M, Idrus M S, Djumahir and Mintarti R 2014 Effect of compensation on motivation, organizational commitment and employee performance (studies at local revenue management in Kendari City) *Int. J. Business and Mngt. Invention* **3** 2 pp 64-79
[7] Gomes O 2011 The hierarchy of human needs and their social valuation *Int. J. Social Economics* **38** 3 pp 237-259
[8] Gallstedt M 2003 Working conditions in projects: perceptions of stress and motivation among project team members and project managers *Int. J. of Project Management* **21** pp 449-455
[9] Clarke N 2010 Projects are emotional: how project managers’ emotional awareness can influence decisions and behaviours in projects *Int. J. Managing Projects in Business* **3** 4 pp 604 - 624
[10] Dwivedula R and Bredillet C N 2010 Profiling work motivation of project workers. *Int. J. Project Management* **28** 2 pp 158-165
[11] Marisa A. and Yusof N 2014 critical factors that motivate the managers in construction companies to work *Int. J. of Academic Research* **6** 2 pp 17-22
[12] Lazenby S 2008 How to motivate employees: what research is telling us *Public Management* **90** 8 pp 22-25.
[13] Kreitner R 2003 *Organizational Behavior* (New York: McGraw Hill)
[14] Yang F 2011 Work, motivation and personal characteristics: an in-depth study of six organizations in Ningbo *Chinese Management Studies* **5** 3 pp 272 - 297
[15] Katzenbach J R 2003 *Why Pride Matters More Than Money* (New York: Crown Business)
[16] Milne P 2007 Motivation, incentives and organisational culture. *J. Knowledge Management* **11** 6 pp 28-38
[17] Oyedele L O 2010 Sustaining architects’ and engineers’ motivation in design firms: an investigation of critical success factors *Engineering, Construction and Architectural Management Volume* **17** 2 pp 180-196
[18] Dwivedula R, Bredillet C N and Ruiz P 2007 Internal and external motivation factors in virtual and collocated project environments: a principal component investigation
[19] Johnson D 2005 25 ways to motivate employees and power profits ISHN 39 5 pp 1-3
[20] Gitosudarno I and Sudita I N 2000 Perilaku Keorganisasian (Yogyakarta: BPFE)
[21] Rose T and Manley K 2010 Client recommendations for financial incentives on construction projects Engineering, Construction and Architectural Management 17 3 pp 252-267
[22] Meng X and Gallagher B 2012 The impact of incentive mechanisms on project performance Int. J. Project Management 30 3 pp 352-362
[23] 2008 Feeling valued is the best motivation: perks and pay incentives cannot beat feeling needed Human Resource Management International Digest 16 3 pp 28-31
[24] Scott-Ladd B and Marshall V 2004 Participation in decision making: a matter of context? Leadership and Organization Development J. 25 8 pp 646-662
[25] Arshadi N 2010 Basic need satisfaction, work motivation, and job performance in an industrial company in Iran Procedia - Social and Behavioral Sciences 5 pp 1267-1272
[26] Danzer A M and Dolton P J 2012 Total reward and pensions in the uk in the public and private sectors Labour Economics 19 4 pp 584-594
[27] Ritchie S and Martin P 1999 Motivation Management (Great Britain: Gower)
[28] Chappell D and Willis A 2005 The Architect in Practice 9th ed (Great Britain: Blackwell Publishing)
[29] Herzberg F 2003 One More Time: How Do You Motivate Employees (Boston: Harvard Business School Press)
[30] Robbins S P 2001 Perilaku Organisasi edisi delapan (Jakarta: PT. Prenhallindo)
[31] Kreitner K 2013 Organizational behaviour in construction Const. Management and Economics 31 11 pp 1165-1169
[32] Yang L R, Wu K S, Wang F K and Chin P C 2012 Relationships among project manager’s leadership style, team interaction and project performance in the taiwanese server industry Quality and Quantity 46 1 pp 207-219
[33] Kennedy E and Daim T U 2010 A strategy to assist management in workforce engagement and employee retention in the high tech engineering environment Evaluation and Program Planning 33 4 pp 468-476
[34] Longo M and Mura M 2011 The effect of intellectual capital on employees’ satisfaction and retention Inf. and Management 48 7 pp 278-287
[35] Markova G and Ford C 2011 Is money the panacea? rewards for knowledge workers Int. J. Productivity and Performance Management 60 8 pp 813-823
[36] Denny R 2002 Motivate To Win (Great Britain: Clays Ltd)
[37] McClelland D C and Burnham D H 2003 Power is the Great Motivator (Boston: Harvard Business School Press)
[38] Roper K O and Juneja P 2008 Distractions in the workplace revisited J. Facilities Management, 6 2 pp 91-109
[39] Zentall S R and Morris B J 2010 Good job, you’re so smart: the effects of inconsistency of praise type on young children’s motivation J. Experimental Child Psych. 107 2 pp 155-163
[40] Mumim J and Mutlu B 2011 Designing motivational agents: the role of praise, social comparison, and embodiment in computer feedback Computers in Human Behavior 27 5 pp 1643-1650
[41] Lam S F, Yim P S and Ng Y L 2008 Is effort praise motivational? the role of beliefs in the effort–ability relationship Contemporary Educational Psych. 33 4 pp 694-710
[42] Chippendale T 2013 Factors associated with depressive symptoms among elders in senior residences: the importance of feeling valued by others Clinical Gerontologist 36 2 pp 162-169
[43] Spreitzer G, Sutcliffe K, Dutton J, Sonenshein S and Grant A M 2005 A socially embedded model of thriving at work Organization Science 16 5 pp 537-549
[44] Marisa A 2018 Analysis of architect’s performance indicators in project delivery process, IOP Conf. Series: Earth and Env. Science 126
[45] Priyatno D 2012 Belajar Praktis Analisis Parametrik dan Non Parametrik dengan SPSS: Prediksi Pertanyaan, Pendadaran Skripsi dan Tesis (Yogyakarta: Penerbit Gava Media)
[46] Jarkas A M 2013 Primary factors influencing bid mark-up size decisions of general contractors in kuwait J. Financial Management of Property and Const. 18 1 pp 53-75
[47] Hassanain M A, Assaf S, Al-Ofi K and Al-Abdullah A 2013 Factors affecting maintenance cost of hospital facilities in saudi arabia Property Management 31 4 pp 297-310
[48] Boge K, Salaj A T, Bakken I, Granli M and Mandrup S 2019 Knowledge workers deserve differentiated offices and workplace facilities Facilities 37 1/2 pp 38-60
[49] Sinesilassie E G, Tabish S Z S and Jha K N 2017 Critical factors affecting schedule performance: a case of Ethiopian public construction projects – engineers’ perspective Eng., Const. and Arch. Management 24 5 pp 757-773
[50] Manzoni J F 2010 Motivation through incentives: a cross-disciplinary review of the evidence Studies in Managerial and Financial Accounting 20 pp 19-63