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The Impact of Human Resources Strategies on Worker's Performance in Construction Project

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Abstract: Every construction organization has its own human resources department (HRM) to handle the issues related to workers in order to ensure the construction activities runs smoothly and completed on time. However, there have still occur delayed in construction projects in Malaysia either in public or private sectors where about 73.60 percent are due to issues related to worker's productivity. Therefore, the objectives of the study are to identify the importance of human resources management strategies, to identify the main human resources management strategies used to improve worker's performance and to study the impact of human resources management strategies towards worker performance in construction project. This study involves Grade 7 contractors in Johor Bahru and the respondents are included senior management level personnel in contractor organization namely project manager, senior manager or site manager. To achieve the study objectives, quantitative method was adopted where questionnaire survey was conducted to 85 respondents. The data collected was then analyse by using the Statistical Package for the Social Science (SPSS) software. This study shows that the main importance of HR strategies are including to monitors the culture, to retain and motivate employee to accomplish company's goal and to resolve conflicts. Meanwhile the main HR strategies used to improve construction worker's performance is human resources following up strategy. In addition, the impact of human resources management strategies towards worker performance in construction project in many aspects such as level of competencies of workers, level of quality and quantity of tasks, level of knowledge of work requirements and the level of perseverance and dedication are also had been determined. In conclusion, HR strategies such as human resources follow-up strategy and training and development strategy can improve the worker's performance from aspects of competencies of workers or level of knowledge of work requirement and consequently can improve the productivity of workers in construction project.

Keywords: Human Resources Management Strategies, Importance, Impact, Worker Performance, Construction Project.

1. Introduction

According Abdul Halim *et al.* (2016), human resources management is a significant asset for any association and satisfactory administration of Human Resources can enable an association to achieve its objectives and targets. Human Resources Management involves management decisions related to policies and practices that together shape the employment relationship and are aimed for achieving some certain goals which set by organization. According to global poll conducted by Gallup in 2017, there have an astronomical 85% of people are unhappy in their jobs from out of the world's one billion full-time workers. Most of reasons that lead their unhappy with their works is due to the poor human resources management system in the organization such as work-life balance, employee engagement and company culture. Therefore, one of the most important actions is to create sustainable aggressive benefit is to through successfully implementing human resources management (HRM) practices.

From the report of CIDB (2017), the growth of construction workers increased by 7.1% which recorded the total number of construction worker in 2015 is 716,542 while in 2016 the number expand to 767,563. Therefore, the human resources management is important to successfully to implement to retain and development the workers to continuous contribute in the construction industry. Loosemore *et al.* (2007) stated that workforce is the one of the most important key to success to able achievement of organizational performance.

The purpose of the goal of effective and strategic use of performance management can potential to guide and lead the employees, teams and company to pursuit in order to achieve the organization objectives (Gunnigle & Mcdonnel,2018). Therefore, the performance management is more about how the employees can do or contribute themselves for the development of the organization. However, how to raising the workers performance become a problem to human resource requires action as the key of success and creativity to the company. Thus, recognizing employees is the simplest way to improve morale and engagement (Clarke, 2017). Recognition is also positively linked to productivity and high performance.

In Malaysia, it has been uncovered that 79.5 percent and 66.7 percent of private and public projects were not finished in the time in the contracts out of 359 projects in Malaysia (Ramli *et al.*, 2017). Furthermore, in 2018, Implementation Coordination Unit (ICU) found that 61 government projects were delayed due to the failure of project management in planning and implementation phases and 87 percent in the construction phase (Idrus *et al.*, 2019). The causes of construction delayed have been identified by the researches in Malaysia, Jordan, Norway and Slovenie which they grouped into three key causes which is contractors, clients and consultants (Idrus *et al.*, 2019). The data that recordings in project of include labour non-productivity which can cause the project delayed by 73.60 percent. This already shown that performance of worker can affect the progress of construction project (Hamzah *et al.*, 2017). Therefore, human resources management strategies that can implement such as monitoring and controlling the progress can ensure that the construction projects can be complete on time (Liu, 2015).

Thus, HRM need to do some strategies so the construction workers to protect and motivate their workers in construction site in order to ensure that the project completed on time (Eaton & Salford, 2008). The strategies used to improve workers performance in construction sector such as compensation, hiring workers, training and rewarding employees (Ristic M.R *et al.*, 2017). Therefore, this study conducted to figure out the most common used of human resources strategies in construction industry.

2. Literature Review

Construction industry in Malaysia is one of the most important contributors to the country's overall economic growth. Construction industry has contributed between 3% to 5% of the whole economy's GDP over last two decades. As the result, a huge of workers in needed in this industry compare than other industrial sectors thus made employer and worker relations become more flexible, transitory and ambiguous. The cyclical nature of construction project demand necessitates having a flexible workforce which can meet the requirements but most companies to employ the bottom rather than peaks (McGrath-Champ & Rosewarne, 2009).

2.1 Human Resources Management (HRM)

According to Batti (2014), human resources management is a management function in any company, in any case of its activity. They are most crucial factor in the company's success. As a result, human resourc3es management is a procedure that assists business within the organization, recruit, select, and develop employees According the Armstrong (2009), human resources management's ultimate aim is to ensure that the company's ability to thrive is based on its employees. Furthermore, Armstrong also outlined that human resources management initiatives seek to help efforts to enhance organizational efficiency by implementing policies in areas like knowledge management, talent management and building a comfortable working places.

Vincent& Joseph (2013) defined human resources management as a company's management role dealing with people and their relationship at work. While O'Brien (2011) determined HRM as the management of a company's employees which included in charge of hiring, training, evaluating, rewarding and following up with employees as well as career planning.

Additionally, Watson (2010) defined human resources management as the most effective administrative use of people's efforts, abilities, knowledge and committed behaviors as part of a completely coordinated human project as part of an employment exchange in a way that allows the company to continue in the future and achieve its goals.

2.2 The Importance of Human Resources Management

The significance of human resources management stems from its direct engagement with the establishment's most important resource, the human resources which is the first and most valuable resource in economic terms advancement. Human resource management is the most valuable assets and significant for an organization because to implement successfully need to put invest to it. Human resources management is critical to firms since it has a number of objectives that can either improve or negatively impact the organization.

Kearns (2004) outlines two degrees of HR function development in organization where workers are seen as a cost or resource and employees are considered as a competitive asset. Therefore, Taylor & Finley (2009), stated that the important of the human resources will be becomes a strategic partner charged with maximizing the value of the company's workforce. Moreover, according to Othman, Idrus & Napiah (2012), a strong human resources management system is also important asset of 21st century in construction because an enterprise's efficiency is highly associated with its strategy.

Additionally, Laura Portolese Dias (2012), point out that. The role of human resources management is to ensure that workers are hired, trained, compensated, policies are developed for them and retention tactics are developed in order to achieve the goals of the company in the future.

2.3 Human Resources Management Strategies

Human resources management strategies (HRMS) is a collection of HR practices that arose from research of people's actions in the workplace where they collaborate to achieve company objectives.

Graetz, Rimmer, Lawrence & Smith (2006) given their definitions that human resources management strategies is the design and execution of internal consistent policies and practices that are aligned with the corporate strategy in order to ensure that employees participate to the attainment of business goals. While Tiwari & Saxena (2012) defined that the strategies of HRM is an organizational activities aimed at managing a pool of human resources and ensuring that those resources are used to achieve organizational goals.

Ling (2012) stated that, recruitment, selection, training and development, motivation and maintenance can be classified as few examples of human resource management tactics. Besides that, Choudhary & Lamba (2013), pointed out HR strategies such as recruitment, selection, training, development and follow-up the workers progress, which can be consistent, integrated and strategically focused in order that companies can maintain long-term commitment to their employees.

2.4 Workers Performance

For firms, worker performance in relation to their jobs has been a big concern because when stated workers performance are also known as labour productivity. A good of labor productivity can ensure the project complete on time or even earlier however when inversely the project will be delay. McCloy, Camphell & Cudeck (1994) said that, the behaviors or activities of employees in relation to the firm's objectives or goals are referred to as job performance.

2.5 Human Resources Management Strategies in Construction Industry

The number of construction workers in Malaysia have a trend of increasing recent years which recorded 153,720 in 2016 and the number will expect keep increasing. According to the report CIDB 2017, the labour productivity performance also increase from RM 33,744 in 2014 to RM 40,018 in 2016. Therefore, a successful implement of human resource management strategies to ensure that the productivity of labour in construction industry can keep increasing in order to achieve the company goals by the way improve the global competitive of construction industry Malaysia in global.

(a) Human Resource Planning

Human resources planning is the process of determining the amount of workers required by an organization in terms of both quality and quantity and it also in long-term period and systematic planning for the development of the company. Human resource planning has become one of the significant management strategies in order to have a competitive advantage over competitors. According to Dwivedi (2012), human resources planning is for the future of the development of company in which a project manager should offer additional time to the human resources experts to work on that by comparing the numbers of workers needed to the number of current workers who can be expected to stay with organization.

(b) Human Resource Training

Training can be classified as one of the most important and effective human resources strategies for company to achieve its objectives. According to the Grossman & Sales (2011), training is a systematic process for developing attitudes, knowledge and abilities in order to improve performance in a given circumstance. These strategies should include both old and new workers in order to performance their tasks well with facing the challenges of the technology to achieve company's goals by the way increasing the labor productivity too. Furthermore, training also is a systematic way to learning and staying current with technology advancements in order to improve the efficacy of individuals, teams and companies in completing their tasks well.

(c) Recruitment and Selection

Recruitment and selection is the process of identifying, evaluating and hiring the best people for the job. According Hausdorf & Duncan (2004), there have a positive relationship between recruitment,

selection and other techniques used to pick applicants which can bring a significant impact on overall performance and success and clear aim and giving project staff with incentive.

(d) Monitoring and Evaluation

Monitoring and evaluation the worker's performance which supervisors or contract manager following up the progress of the project when a project is implements. Follow the progress can ensure that the project can complete in time in order also increasing the labor productivity. According to Liu (2015), a successful project is always linked to strong administration and management which includes planning, control, monitoring, a specified.

(e) Compensation, Rewards and Incentives

The term compensation refers to the amount of money paid for the workers who working to the company. Compensation for internal workers is managed by the company's compensation system which plays a vital role in boosting employee performance and increasing productivity. According to Boyd & Salamin (2001), Compensation practices is the main strategies to attract and retain the workers for the successful company's strategy and business requirement. Besides that, Dubrin (2008) also stated that implement and maintaining an effective compensation system is an important function of the company.

2.6 The Impacts of Human Resources Management On Organizational and Worker Performance

An effective of human resources management practices can give significant impact on worker's performance in which the performance of employees is directly related to the company's performance. According to the Boselie (2005), HRM can defined as a set of practices for managing employees in order affect the worker's performance. Nowadays, line managers use actual human resource technique on a daily basis which have a beneficial impact on worker's perceptions of HRM methods (Purcell and Kinnie, 2007). The manager's abilities determine whether HRM practices are implemented successfully or not (Guest, 2011). Therefore, employee performance can be enhanced by human resources practices such as selection, training, work environment and performance review.

According to the Esra Nemli Caliskan (2010), he stated out the impact on organization performance due to the human resources management strategies and the results have summarized in Table 1.

Table 1: HR Impacts on Organizational Performance

HR Practice Area	Impaction
Recruiting, developing and retaining top	Provides for the hiring, development and retention of
talent employees	outstanding people who can provide excellent
	performance, productivity, flexibility, innovation and
	high levels of personal customer service as well as who
	matched the organization's strategic goals and culture.
Training and learning development	Expands the skill base and raises the needed levels of
	competence in the workforce. Encourages
	discretionary learning which occurs when people
	deliberately seek out knowledge and skills that will
	help the company achieve the goals. Creates a learning
	environment according to a growth medium where
	self-directed learning, coaching, monitoring and
	training thrive.
Encourages motivation, commitment and	Encourages people to identify themselves and keep it
participation in roles	up as well as to participate willingly to the attainment
	of organizational goals. Creates an atmosphere of
	collaboration and trust by laying forth the
	psychological contract.

Compensation and rewards management	By paying salary for the employees in accordance with	
	their contribution and sometimes given rewards for	
	grateful their effort. By doing this, it can foster	
	motivation, commitment, job engagement and	
	discretionary behaviour.	

3. Research Methodology

3.1 Research Design

In this study, quantitative approach be carry out in collecting data from targeted sample group by using questionnaires. This approach is used to identify and examine what are the human resources management strategies used in construction industry and its impact on worker performance.

This research consists 5 phases in describing the whole procedure and activities from the beginning till the end of the research. Phase 1 is study and discuss the tittle from problem statement. Phase 2 is about the literature review with research title study on mostly human resources management strategies used and its impact on worker performance in construction industry. Phase 3 is the data collection. Phase 4 is express data analysis and results which explains the data analysis technique and results that collect from the questionnaire. Lastly, Phase 5 is the last step of this research which is conclusion and recommendation of this research.

The targeted population for this research in focus on the construction site which located in Johor. The targeted respondents of this research were drawn from G7 Contractors that has registered under Construction Industry Development Board Malaysia (CIDB). The respondents included senior management level in contractor organization such as project manager, senior manager or site manager. In this research, random sampling method will be used, the targeted population was a list of 432 Malaysia contractor companies graded G7 in Johor (CIDB, 2017). A total of 150 of respondents were chosen randomly from the target population for questionnaires survey by using Krejcie and Morgan (1970) sample size.

3.2 Data Collection

In this study, the questionnaire will be use which is a series of questions that are used to collect data from respondents. Besides that, questionnaire of a series of questions with clear instructions that need to fill up by the respondents. In the questionnaire, there will consist of three parts in the questionnaire form which is correspondents and company information, human resources management strategies used and level of worker performance. Most of the questions adopted a five-point Likert scale to gather data for each construct of research model (Preece *et al.*, 2015).

3.3 Data Analysis

Data analysis is the science of analyzing raw data to draw conclusions about information and form a conclusion or results. In this research, simple random sampling techniques will be used for select a certain group to answer the questions in the google form. All the data that collect will present in the simple, easy and understandable form. The results of data analysis will come out in graph, chart or table form to show the information more clearly. The data that collected will be analyzed by using Statistical Package for Social Science (SPSS).

4. Results and Discussion

This section presents the data collected from the questionnaires. Data were obtained from the survey conducted and was then analyzed. Data analysis includes the importance of human resources

management strategies, the main human resources strategies used to improve the worker performance and the impact of human resources strategies towards worker's performance in construction project.

4.1 Respondents Background

The data of the research was collected through questionnaires and used as an indicator about the human resources strategies and worker's performance in construction industry. The results obtained from 85 respondents over 180 and the response rate is acceptable which indicators 47.2% since it over the requirements of the quantitative research which is 30% (Ramshaw, 2019). The results of the study are shown below.

(a) Gender

The gender of respondents of this study had been classified out with two categories which are male and female. In Table 2, the below findings shown that number of male respondent who answered the questionnaires are higher than the female respondent from total 85 valid respondents. In this research, the number for male respondents is 48 from 85 valid respondents while female is 37. The percentage of respondents for male and female is 56.5% and 43.5% respectively.

Table 2: Gender of Respondents

Gender	Frequency	Percentage (%)
Male	48	56.5
Female	37	37.5

(b) Respondent's Highest Academic Qualification

The highest academic qualification of the respondents had been classified out with five categories which are certificate, diploma, bachelor degree, master degree, and PhD. For the highest academic qualifications as revealed in Table 3, there have three same number of academic qualifications which are certificate, diploma and master degree. These three academic qualifications are recorded same number of respondents which is 18 from 85 respondents respectively (21.2%) and the rest number are categorized to bachelor degree and PhD. However, the number for PhD had the lowest population among those academic qualifications which it only had 4 number of respondents (4.7%) in this categories from total number of respondents. Conversely, bachelor degree are states as the highest number of respondents which is 27 respondents (31.8) among others four academic qualification.

Table 3: Respondent's Highest Academic Qualification

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Highest Academic	Frequency	Percentage (%)	
Qualifications			
Certificate	18	21.2	
Diploma	18	21.2	
Bachelor Degree	27	31.8	
Master Degree	18	21.2	
PhD	4	4.7	

(c) Respondent's Position

The respondent's position in the company has been classified into four which are project manager, site manager, human administration, and foreman (refer Table 4). For the job position as revealed in Table 4.3, 20 from 85 respondents are project manager (23.5%) and 19 of them are site manager (22.4%). Besides that, the number of human administration and foreman are the same which are represent as 23 from 85 respondents (27.1%) in both positions.

Table 4: Respondent's Position

Position	Frequency	Percentage (%)
Project Manager	20	23.5
Site Manager	19	22.4
Human Administration	23	27.1
Foreman	23	27.1

(d) Respondent's Years of Working Experience

Based on the data obtained, majority of the respondents having 11 to 15 years working experience in the construction industry (42.4%). Besides that, there are 27.1% of respondents having 6 to 10 years working experience in the field, followed by 16 to 20 years working experience (14.1%). However, the years working experience from 1 to 5 years and 20 years are contributes the lowest number of the respondents in this research which represent 7.1% and 9.4% respectively. The full data are shown in Figure 1.

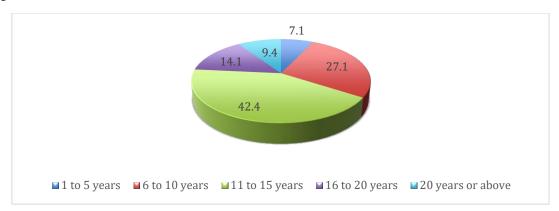


Figure 1: Respondent's Years of Working Experience

(e) Number of Workers in the Company

From the Figure 2 below, it has indicated the highest number of workers where respondents works for is 101 to 150 person (31.8%), followed by 24.7% for the number of workers which is 51 to 100 person. Besides that, there have 17 of respondents works in the size of company from 151 to 200 person and the numbers of workers in the company from 200 person or above are also stated as 17.6%. However, only 5.9% from the respondents do their jobs in a small amount of workers which is 1 to 50 person company.

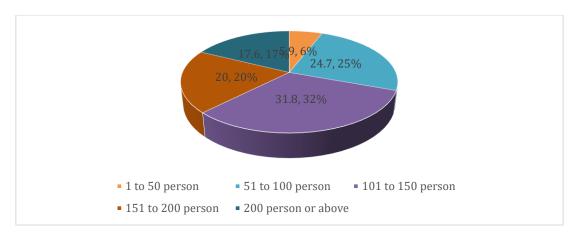


Figure 2: Number of Workers in the Company

(f) The Number of Projects Implemented in Recent 10 Years (2011 to 2021)

In Table 5, frequency and percentage of company implemented projects in recent 10 years from 2011 to 2021 shown that 44.7% of the respondents company having implemented from 5 to 10 projects in the time period. It is followed by 10 projects or above (34.1%) and less than 5 projects (21.2%) for the number of projects implemented by the company in recent 10 years. Overall, majority of construction company in Johor Bahru implemented their projects from 5 to 10 projects between 2011 to 2021.

Table 5: The Number of Projects Implemented in Recent 10 Years (2011 to 2021)

The Number Projects	Frequency	Percentage (%)
Implementation in Recent 10		
Years (2011 to 2021)		
Less than 5 projects	18	21.2
From 5 to 10 projects	38	44.7
10 projects or above	29	34.1

4.2 The Important of Human Resources Management Strategies in Order to Improve Work Performance of Construction Worker

Figure 3 shows the findings related to the important of human resources management strategies in order to improve work performance of construction worker.



Figure 3: Importance of Human Resources Management Strategies

There have seven statements about the important of human resources management strategies in order to improve work performance of construction below. The result has shown that to monitors the culture obtained the highest percentage from the respondents which indicate 90.4%, followed by to retain employee and motivate them to accomplish company's goal which the percentage of 89.4%. To produce employees who are easily adaptable to change and to resolve conflicts placed in third highest percentage statement due both had the same number of percentage which is 89.2%. To maintain a conducive work environment and to recognize and valuing individuals stated in fourth and fifth with the number of percentage of 88.8% and 87.8%. The important of human resources management strategies for to increase productivity and profits stated the lowest percentage of the respondents which indicate as 85.8%.

4.3 Human Resources Management Strategies Used by Companies in order to Improve Worker Performance

Table 6: Human Resources Management Strategies used by Companies In Order to Improve Worker Performance

Rank	Human Resources Management Strategies	Ave. Mean
1	Human Resources Following Up Strategy	4.6
2	Human Resources Planning Strategy	4.53
3	Training and Development of Human Resources Strategy	4.38
4	Selection and Recruitment Strategy	4.3
5	Compensation, Rewards and Incentives Strategy	4.26

Table 6 shows the average mean score of five categories of human resources strategies used by construction company in Johor Bahru in order to improve the worker performance. The highest average mean score shown in the table is Human Resources Following Up Strategy with the value of 4.6, followed by Human Resources Planning Strategy at the second place with the value of 4.53.

Training and Development of Human Resources Strategy ranked at third place with average mean score value of 4.38. Selection and Recruitment Strategy and Compensation, Rewards and Incentives Strategy ranked at 4th and 5th which indicated average mean score of 4.3 and 4.26 respectively.

4.4 The Impact of Human Resources Management Strategies towards Level of Worker's Performance

Table 7: The Impact of Human Resources Management Strategies towards Level of Worker's Performance

Rank	Item	Average Mean
1	the level of competencies of workers	4.33
2	the level of quality and quantity of tasks	3.96
3	The level of knowledge of work requirements	3.88
4	the level of perseverance and dedication	3.6

Table 7 shows the impact of human resources management strategies towards level of worker's performance. The highest average mean score shown in the table is the level of competencies of workers with the value of 4.33, followed by the level of quality and quantity of tasks at the second place with the value of 3.96.

The level of knowledge of work requirement ranked at third place with average mean score value of 3.88. The level of perseverance and dedication ranked at 4th which indicated average mean score of 3.6.

4.5 Discussion

According to Armstrong (2016), human resource management is a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organisations. Thus, this statement had proven that a good strategiec can impact worker performance.

(a) The Important of Human Resources Management in Order to Improve Worker Performance

The goals of human resources management which stated by Armstrong and Taylor (2015), one of the goal is to assist in the creation of a high-performance culture. This have indirect shown that a strong culture company is important. The most of the respondents believe that the important of human resources management strategies is to monitors the organizational culture because a strong culture can lead the firms to be successful. Conversely, an ineffective culture can break down the organization and its leadership. Employee disengagement, high turnover, poor customer relations, and fewer earnings are some of the examples of how the incorrect culture can bring negative effects to the bottom line.

(b) Human Resources Management Strategies Used By Companies in order to Improve Worker Performance

In quantitative research across UK companies (Purcell *et al.*, 2003), the findings revealed six essential human resources strategy that can boost the performance of worker which are career development and opportunities, training opportunities, job influence and challenge involvement and communication, performance management and appraisal processes, and work-life balance. From the research, the most of the construction companies used because human resources management strategies used to improve work performance of construction worker such as specialized in monitoring worker performance, management provides report about worker's performance, and companies follows up continuously the development of the workers. By doing this, the progress of the construction project can be monitor along the period and the construction workers performance also can be known clearly through human resources follows up strategy.

(c) The Impact of Human Resources Management Strategies towards Level of Worker's Performance

According to Armstrong (2015), the impact of human resources towards worker's performance is productivity, quality and customer satisfaction. Thus, the impact of human resources management strategies towards worker performance in construction project is the level of competencies of workers such as workers are committed to all skills and technical requirements required to perform their functions, the qualifications of the workers correspond to the nature of the tasks they perform, and workers are their best for the success of the project. This is due to the companies will assigned the workers according training and follow up strategy in the project had over 70% agreement from the respondents.

5. Conclusion

In the conclusion, the objective of findings had been achieved, which is to determine the important of human resources management strategies in order to improve work performance of construction worker which all the statements had over 80% of the agreement from the respondent. For second objective which is to determine the main human resources management strategies used to improve work performance of construction worker also achieved which is the most human resources management strategies used by construction companies is human resources following up strategy which have 92% respondents have agrees this type of human resources management strategies used to improve work performance of construction worker. For third objectives which is to figure out the impact of human resources management strategies towards worker performance in construction project also achieved from four aspects which are level of competencies of workers, level of quality and quantity of tasks, level of knowledge of work requirements, and level of perseverance and dedication.

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References

- Abdul-Halim, H. and Che-Ha, N. and Ramayah, T and Geare. A (2016) The pursuit of HR outsourcing in an emerging economy: The effects of HRM strategy on HR labour costs. *Canadian Journal of Administrative Sciences / Revue Canadianne des Sciences de l'Administration*, 33 (2). pp. 153-168.
- A Ayob, A A Shaari, M F M Zaki and M A C Munaaim (2018). Fatal Occupational Injuries in the Malaysian Construction Sector- Causes and Accidental Agents. *Journal of Earth and Environmental Science*, 140, pp. 3-11. Retrieved on 16 May 2021, doi; 10.1088/1755-1315/140/1/012095
- Armstrong M (2016), Armstrong's Handbook of Strategic Human Resource Management, London: Kogan Page Armstrong M and Taylor S (2015), Armstrong's Handbook of Human Resource Management Practice, London: Kogan Pag
- CIDB Malaysia (2017). Country Report Malaysia. Retrieved on April 3, 2021 from https://www.cidb.gov.my/sites/default/files/2020-04/Malaysia----Country-Report-2017--22nd-Asia-Construct.pdf
- David Eaton Salford (2008). Human Resource Management in Construction. UK
- Francis & Taylor (2009). Strategic Human Resources Management in U.S. Luxury Resorts. Journal of Human Resources in Hospitally & Tourism 8(1), pp. 82-95. Retrived on 3 May,2021, doi: 10.1080/15332840802274460
- Hamzah, N.Khoiry, M.A. Arshad, I. Badaruzzaman, Tawil, N.M. & W.H.W. (2012). Identification of the Causes of Construction Delay in Malaysia. In Proceedings of World Academy of Science. Engineering and Technology, 72(1), pp. 614. World Academy of Science Engineering and Technology
- I.Othman, A.Idruas & M.Napiah (2012). Human Resources Management in the Construction of a Sustainable Development Project: Towards Successful Completion. *Journal of Environmental Issues*, 24(2), pp. 2-7.

- Retrieved on 13 May,2021, from https://www.witpress.com/Secure/elibrary/papers/EID12/EID12016FU1.pdf
- Loosemore, M.; Dainty, A.; & Lingard, H. (2007). Human Resource Management in Construction Projects Strategic and operational approaches, London And NewYork: Spon Press
- Loosemore, M. (2000). Construction crisis management, American society of civil engineers, New York
- Michael Armstrong (2006). Human Resource Management Practive, 10th edition, Cambridge University Press
- M Z Ramli, M A Malek, M H Hanipah, C L Lin & M F Mahamad Sukri (2017). Study of Factors Influencing Constrcution Delays at Rural Area in Malaysia. *Journal of Physics*, 2(1), pp. 2-4. Retrieved May 15, 2021, doi:10.188/1742-6596/1049/1/012017
- Muhammad Fikri Hasmori, Ilias Said, Rafikullah Deraman, Nor Haslinda Abas & Mohd Hanif Ismail (2018). Significant Factors of Construction Delays Among Contractors in Klang Valley and its Mitigation. *Journal of Integrated Engineering*, 2(1), pp. 32-36. Retrieved May 16 2021, doi: 10.30880/ijie.2018.10.02.007
- McGrath-Champ, S., & Rosewarne, S. (2009). Organizational change in Australian building and construction: rethinking a unilinear, leaning discourse. *Construction Management and Economics*, 27(11), pp. 1111-1128¹
- Kasim, N., Mohamed Hamid Al-Shami, Aryani Ahamd Latiffi, Magaji Umar Ibrahim, Rozlin Zainal & Hamidun Mohd Noh. (2019). Improving Contractors' Practices of Industrialized Building System (IBS) Implementation in Construction Industry. *Journal of Technology Management and Business*, 6(3), pp 3-6. Retrieved Jun 10, 2021, doi: http://doi.org/10.30880/jtmb.2019.06.03.005
- Nor Aida Idrus, Ir.Assoc.Prof. Dr Syuhaida ismail and Ir. Faizal A.Sanusi (2019).Delays in Malaysian Government Projects: Learning From Project Management Failure, 2(1), pp. 2-9
- Patrick Gunnigle & Anthony Mcdonnell (2008). Performance Management. Retrieved on 15 May 2021, from https://www.researchgate.net/publication/31591116_Performance_management
- Peter A. Hausdorf & Dale Duncan (2004). Firm Size and Internet Recruiting in Canada: A Preliminary Investigation, 42(3), pp 325-334. Retrieved on 17 May 2021, doi: 10.1111/j.1540-627x.2004.00114.x
- Purcell J et al. (2003), Understanding the People and Performance Link, CIPD: London
- Purcell and Kinnie (2007). HRM and Business Performance. People and Performance 36(3), pp 207-210. Retrieved on 25 Jun 2021, doi: 10.1093/oxfordhb/9780199547029.003.0026
- Ramshaw (2019). The Complete Guide to Acceptable Survey Response Rates. Retrieved on December 29, 2012, from https://www.genroe.com/blog/acceptable-survey-response-rate-2/11504
- Rebecca Grossman & Eduardo Sales (2011). The Transfer of Training: What really Matters. *Journal of Training and Development*. 15(2), pp 103-120, doi: 10.111/j.1468-2419.2011.00373.x
- Ristic M.R, Selakovic M & Qureshi T.M. (2017). Employee Motivation Strategies and Creation of Supportive Work Environment in Societies of Post-Socialist Transformation. *Journal of Management Studies*. 15(2), pp 205 -210. Retrieved on 20 May 2021, doi: 10.17512/pjms.2017.15.2.19
- Vincent, G. S., & Joseph, G. A. (2013). Challenges for human resource experts in global scenario *International Journal of advancement in Research and Technology*, 2(4), pp. 209 214.
- Watson, T. J. (2010). Critical social science, pragmatism and the realities of HRM. *The International journal of human resource management*, 2(6), pp. 915-931