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A Case Study On Manufacturing Industry Used Prognostic Tools To Remove The Problems In Shop Floor Challenges Faced In Maintenance Engineering

Ajay Kumar Pagare, Dr. Neeraj Kumar, Mohammad Salman Ilahi, Robin Khandelwal, Dr. Mohammad Israr

This case study reviews that the maintenance engineering process which is used by small scale industry and faced many time problems in shop floor and in this case stop the production and call the maintenance engineer but right now is not possible to any maintenance engineer is free come and rectify the problem, so this type of process some time given very big losses to the industry, example is HMT company follows the breakdown maintenance policy they never change yourself with time and the latest demand is to use predictive maintenance with prognostic and diagnostic process with CMMS (Computer maintenance management system) software.

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Influence Of Partial Curing On Strength Of Concrete

Rashmi Mishra,Reshma T V, Bhavya B S, Sankalpasri S S, Poojashri R Naik

This study is based on curing of concrete and determining the compressive strength for M30 grade as per 10262.2018.The cubes were cured using two methods(water ponding and nylon covering) made of two types of cement (ordinary portland cement and pozzolana portland cement)testing on 3,7,14 and 28 days of curing period. The cubes were casted based on mix proportion design. The compressive strength of concrete cubes is tested on the respective curing ages and maximum strength gaining age of concrete i.e. 28days is tested after air drying the cubes for every curing period. The results of the investigations demonstrate that superior strength is achieved by nylon covering method for OPC than nylon covering method

for PPC and water ponding for OPC achieved more strength than PPC for longer ages.

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Medsinfo: An Android Application For Recognizing JFDA Approved Medication And Acquiring The Corresponding Arabic Leaflet

Rawan Ghnemat, Amer Mansour, Jaafar Abbadi, Rola Madain, Alia Madain

This paper proposes a mobile application that targets the local Arabic speaking audience who use the local pharmacies in the Hashemite Kingdom of Jordan. It is aimed towards providing the ability for this specific audience to acquire the Arabic leaflets of the medication approved by Jordan food and drug administration. The application uses optical character recognition to recognize the enquired medication and provides a user-friendly interface to interact with the user and to display required information in Arabic. We provide a small-scale experiment over 20 medication boxes. Every step in the process of identifying the medication is tested separately. The experimental results show that the application was able to identify the majority of medication boxes tested.

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The Development Of Textbook Ecology Based On Local Wisdom To Improve Scientific Attitude Of Graduate Students

Hunaepi, Laras Firdaus, Taufik Samsuri, Endang Susantini, Raharjo

This research is development research which consists of two stages, namely the development stage and the implementation phase. The purpose of this study is to develop and see effectivity of textbook ecology based on local wisdom towards scientific attitude of graduate students. The development stage refers to 4-D model, that is defined, design, develop, and disseminate. The validation results indicate that the developed textbook ecology based on local wisdom is valid by the validator or has a good category in all aspects (material, language, and presentation), so it can be applied in learning process. The results of the graduate student response analysis showed that most graduate students give a positive response to the developed ecology textbook based on local, which amounted to 73.67%, and after the implementation of the ecology textbook based on local wisdom to improve the attitude of the developed, it was found that it can increase curiosity (61.80%), and caring attitude of graduate students on life and the environment (70.25%), but low on open-mindedness or flexibility (46.78%), and critical reflective (43.27%). Because the existing ecology textbooks are not yet integrated with local wisdom, so the results of this research will be recommended as an ecology study guide book that is integrated with local wisdom and scientific attitudes to the graduate students in IKIP Mataram.

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A Critical Analysis Of The Relationship Between Depression And Smoking Using Machine Learning

Mohammad Kharabsheh, Ahmad Qawasmeh, Omar Megdadi, Nadera Jawabreh, Rola Mudallal, Sukaina Alzyoud

Smoking has been a major concern for many decades due to its negative impact on societies. A study of the role of decision support system for student smokers in order to find the depression type is investigated in this research. In this work, we developed a hybrid machine learning model that consists of clustering and classification. The idea of this model is to predict the type of depression for youth smokers using numerous novel features such as father’s job, how many narghile (Shisha) heads students usually smoke, and some other relevant features. Our model illustrated a significant relationship between smoking and depression. Our model demonstrated a prediction accuracy of 97% when applied on a dataset consisting of 993 student smokers in Jordan. Therefore, efficient solutions must be considered to find useful alternatives to smoking.

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Spatial Representation On Geometry

Shinta Wulandari, Cholis Sa’dijah, Abdur Rahman As’ari, I Made Sulandra

Spatial representation is important in learning geometry. Spatial representation is needed by students to communicate spatial objects to others. This research is a qualitative research. The purpose of this study is to describe the thought process in students' spatial representation. The research subjects were students of grade VIII junior high school level who were able to complete geometry assignments. The results showed that the spatial representation contained 4 components of representation, namely shape, size, position, and special attributes. The importance of this research is that spatial representation is needed to know what someone is thinking and how to communicate it with others so that others understand what is represented.

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Critical Tradition On Hadith By Persis's Scholars (The Analysis On Acceptance And Rejection Of Al-Mustadrak Book)

Rafid Abbas

The book of al-Mustadrak composed by Abu Abdullah al-Hakim seemed to contain controversial hadith, especially those which were not found in the sahihain i.e. the book of Bukhari and Muslim but making use of the terms prepared by both or one of them, as well as sanad and matan on some hadith using another narration. Al-Hakim has contributed much in the science of Dirayah and became the methodological foundation in determining the validity of a hadith. Al-Hakim also specified the hadith criteria of valid, fair and weak, but not systematically, and much more that al-Hakim contributed to the science of hadith. Al-Hakim also received many judgments from Hadith scholars; there were criticisms, reproaches and praises, among his criticisms, some claiming that al-Hakim was a Shi’ite follower of Rafidli Khabith, but with a Sunni face, fanatical followers of Ali bin AbiTalib and hate Mu'awiyah. Hadith that are reported to be better known among the Shi'ites, but still use the sahihain theory, others claim that the hadith narrated by al-Hakim are not found in sahihain's terms

and others praise him that al-Hakim is a reliable narrator of hadith, because it is very rigorous, powerful, objective, tsiqah and wara' (careful). PERSIS sees that the hadith compiled and narrated by al-Hakim are full of controversy. Therefore it is necessary to conduct research and using the theory of thariqatuljam'ie (collect all the hadith then re-examined, after that takes his own attitude) and the scholars of PERSIS do not recognize the term fadailula'mal

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The Effects Of Instant Messaging Services On Working And Communication Quality

Anas M Abudaqa, Hasan Al Mujaini, Affendy Abu Hassim, Mohd Farid Shamsudin

Instant Messaging (IM) usage at work place bring different point of view among scholar since it does cause interruption to work and at same time workers, team and firms benefit this new technology by using it strategically. In accordance with communication performance and social network theories, this study suggest that work interruption will be cause by IM usage and at same time it will improve quality of communication among workers. The research was conducted to measure the relationship between the working interruptions, interactivity and social network towards working communication quality. 180 questionnaires were distributed using convenient sampling but only 134 useable data processed for the analysis using IBM SPSS 24. The results indicated that all variables are important and contribute significantly towards beefing up quality of working communication.

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Procyclical Fiscal Policy And The Role Of Fiscal Rule In Indonesia

Ida Alqurnia, Lilis Yuliati, Zainuri

Fiscal policy carried out by the government to intervene in the economy has an impact on business cycle fluctuations, while policies that are often used by developing countries are procyclical fiscal policy, while fiscal policies in 96 countries are limited by the fiscal rule including Indonesia stipulated in Law Number 23 of 2003 Therefore, the purpose of this paper is to find out how the role of the fiscal rule is in fiscal policy and the business cycle in Indonesia by using the GGM Time series analysis method. This research was conducted in the period 1984-2017. The results of the analysis show that of the four variables used as independent variables namely public debt, fiscal rule, fiscal primary balance, and the relationship of fiscal regulations with public debt, there is only one variable that has a significant effect, namely the fiscal regulation relationship variable with public debt but has negative relationship. These results indicate that the fiscal rule in Indonesia has a role in controlling the level of Procyclical fiscal policy carried out by the government.

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EMatsya – An Innovative Data Acquisition System To Collect Fish Catch Data From Reservoirs And Other Inland Water Bodies

M. Karthikeyan, B.K. Das, U.K. Sarkar, R. Vijayaraghavan

Collection of real-time fish catch data from inland water bodies of India has been a huge challenge for a multiplicity of factors – a large number of inland water resources and their scatter being the most important among other things. To overcome this problem, making use of mobile communication technology, an Electronic Data Acquisition System (eDAS) was developed along with an Android Application - eMatsya that was implemented on smart mobile phones of fishery friends (knowledgeable fishers who could send data using eMatsya) to collect fish catch data from inland water bodies. The data sent by fishery friends using eMatsya would get populated in the database MySQL in the webserver. Trial-implementation of eMatsya in selected reservoirs of Karnataka and Jharkhand (Indian states) not only yielded promising results but also proved that the scaling-up of this eDAS implementation is easy and when done at the national level would result in a continuous flow of authentic information on inland fish catch data. The eMatsya would significantly reduce the time, cost of collection of data and would facilitate in developing a database of the inland fish catch of the Indian reservoirs.

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Modelling Of Water Supply Cost For Offshore Platforms

N.Ismail, M.Z.Ahmad,M.N. Hussain, A.N.Ariffin, Zainol I.

An offshore platform like other industries requires water resources to support daily operation and activities. Supplying water to offshore platform mainly executed in two conventional ways: transported using offshore supply vessel and self- produced onboard platform using seawater desalination process commonly known as a freshwater generator. An alternative method such as water reuse or water recycling also received growing attention as one of a promising integrated solution for improvement of water resources. However, each water supply options have different characteristics and limitations in term of supply capacity, cost associated and level of water quality. Hence, it's difficult to identify which water supply sources that fulfil the demand and cost-effective. This paper proposes a new mathematical model namely Economic Water Supply Model (EWSM) for the operating cost function that includes the most representative variables in the process. This model enables decision-makers and owners to assess the economic value from the different sources of water supply for the offshore platform. The calculation of these extended cost function also enables a detailed comparison to be made of the various water sources from an economic of view in order to analyze the effects of supply capacity for cost-effective of various suppliers. In this sense, a model of the structure costs associated with each of the available water supply technologies can be useful input for future design, planning and operational stage of offshore water supply process.

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The Urban Traffic Congestion Problem In Benin City And The Search For An ICT-Improved Solution

Wilson Nwankwo, Akinola S. Olayinka, Kingsley E. Ukhurebor

Many hours are wasted often due to the intense traffic congestion on roads in highly populated cities with resultant loss of labour productivity. The reason is that while road

infrastructure follows an arithmetic progression and often fixed in developed cities, population and road usage patterns follow a geometric progression. In Nigeria, as well other countries with huge road usage, traffic management is a critical challenge to the Government and traffic managers alike. Traffic officers complemented with time-based traffic control infrastructure have remained commonplace. A lot had been done on traffic control systems especially in high traffic density-prone cities. Many studies had proposed the use of sensor arrays. This study is centred around Benin City, the sixth largest city in Nigeria with its unique geography and socio-economic characteristics. In this paper, traffic management challenges are addressed through an improved model and with regard to the existing infrastructure and environmental factors. Two motion sensors are implemented per lane and placed at intervals apart with a range counter and an optical recognition module is interfaced with it. Any vehicle in between the sensors is considered the number of vehicles in the queue whereas once a vehicle gone pass the last sensor point, the counter is reduced accordingly. The design of the prototype is preceded by a 15-day road traffic usage survey in Benin City. The prototyped solution is a 3G/4G network-enabled integrated solution that enables the relay of traffic information from one location to another enabling the dissemination of traffic information to road users and traffic control authorities.

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Laboratory Investigation Of The Suction Of Peat Soil In Drying And Wetting Process

Yulindasari Sutejo, Anis Saggaff, Wiwik Rahayu, Hanafiah

The suction of peat soil illustrate the characteristics of peat soil. This research aimed to investigate the peat soil suction (drying and wetting condition). Filter Paper testing (Whatman42) has been used for testing. The peat soil sample was acquired in village III Banyu Urip, Regency of Banyuasin, South Sumatera province. The percentage values of optimum water content in this study are: W1=41 %, W2=42 %, W3= 43 %, W4=44 %, W5=45 %, W1=46 %, W1=47 %, W1=48 %, and W1=49 %. The results of the test such as: the average water content (ω) = 263.538 %, average of acidity (pH) = 3.353, the value of optimum water content value (ωopt) = 45 %, the value of optimum dry content weight value (γdopt) = 0.954 kN/m3. The results of peat soil suction value (Ψ) due to the influence of wetting and drying are: P = 321.860454 kPa, W1 = 46.75611 kPa, W2 = 56.67991 kPa, W3 = 43.48429 kPa, W4 = 65.56742 kPa, W5 = 37.42705 kPa, W6 = 32.04885 kPa, W7 = 37.86667 kPa, W8 = 35.74133 kPa, and W9 = 28.58823 kPa. The results in the drying condition were greater when compared to the wetting condition.

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Verification And Proposed Modifications For Punching Shear Design Of Ledged Beams According To CPCI Design Manual 5th Edition

Ahmed M. Soliman, Hatem Ibrahim, Mourad M. Bakhoum

The paper presents proposed modifications for the design method adopted by the CPCI Design Manual, 5th Edition, to calculate the ledge punching shear capacity for ledged beams. The proposed modifications are summarized as follows: (i) Modification in area of crack surface Acr by considering Bearing Length (lb), (ii) Consideration of residual bar stress fsr, (iii) Reduction of Cohesion Stress c, (iv) Introduction of an additional limitation for allowable punching shear stress vr max. The study is based on recent research works' results for punching shear behavior of ledged beams. The research works were carried out on Short Span L-Shaped beams (span 5.03m) and Long Span L-Shaped beam (span 17.30 m). The specimens under study were previously tested in laboratory by applying jacking force till the punching failure load. The ledged beams were checked for punching according to the current CPCI Method and the proposed design method CPCI-M and the calculated capacities were compared to the originally recorded failure punching loads. The results have shown that the current method for CPCI Design Manual is non-conservative regarding punching design of ledged beams. While, the CPCI-M Method proved to be a conservative approach for the punching design of ledged beams with the proposed modified parameters.

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AES And Merkle-Hellman Knapsack Hybrid Cryptosystem

Maricris C.Castro, Edwin R. Arboleda, Reynaldo R. Corpuz

To develop an enhanced cryptosystem by combining two existing algorithm is the objective

of this study.The encryption process is composed of the Merkle-Hellman key generation combined with the AES sub-byte transformation that utilized an S-box. The strength of the proposed algorithm is provided by the extended Euclidian division of the Merkle-Hellman and the S-box of the AES algorithm. The proposed algorithm was tested using an example proving the encryption and decryption process.

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Is It True That Mathematics Anxiety Has A Bad Impact On Problem-Solving Skills?

Surya Sari Faradiba, Alifiani, Abdul Halim Fathani, Ganjar Setyo Widodo, Siti Nurul Hasana, Sikky El Walida, Isbadar Nursit, Anies Fuady

This study aimed to examine how students who experience high mathematics anxiety solve mathematical word problems. This research involved 40 math students of Universitas Islam Malang from 26 out of 34 provinces in Indonesia. From the 40 populations, five subjects were selected on the basis of their high score in Mathematics Anxiety Scale (MAS) questionnaire. Furthermore, these five subjects worked on problem-solving problems. The answers of the five subjects were analysed based on DOTS (Detect, Organize, Transform, and Solve) problem-solving criteria. The results of this study indicate there are two types of problem solving done by the subjects. First, four subjects solved the problem by doing DOTS steps. In this case, the subjects can detect the problem structure, but they have difficulties in applying arithmetic operations both in numerical and algebraic expressions. Interestingly, one of the four subjects can organize the information, but she misapplies commutative as well as associative properties when carrying out subtractions/divisions and fails to use distributive property of multiplication over addition. Meanwhile, the other one subject can do the DOTS steps at the same time. From these five subjects, it can be seen that mathematics anxiety does not always lead to failure in problem-solving. This can be seen in the fifth subject that shows good performance on problem-solving and goes through the DOTS steps at the same time.

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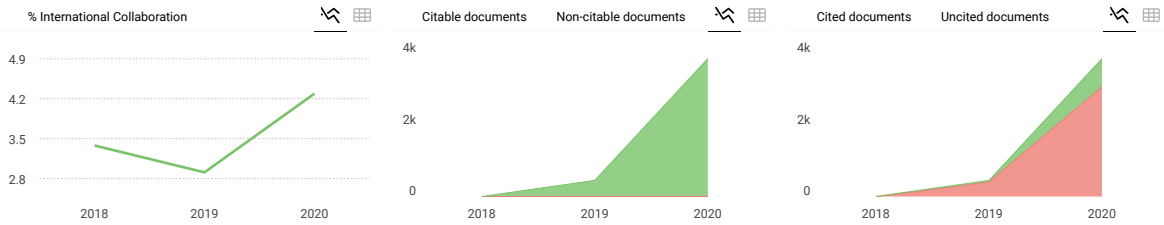

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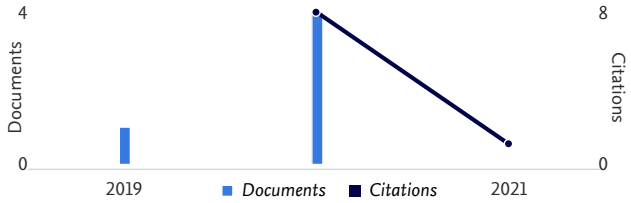

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Competence Enhancement Strategy At Uncertified Builders Group, Pringtali village, Jember

Amri Gunasti, Isti Fadah

Abstract: In Indonesia on the whole builders who worked on the construction project, only about three percent have a certificate of competence. Although the 97% builders do not have the certification, where they are very important and acknowledged its existence. Only in the field, because they do not receive adequate training, competence often they do not fit the needs of the construction project. In addition to the weakness of the ability of hard skills, they also have drawbacks soft skills. An assessment of the blacksmith or concrete, there is still a sizeable gap between what is expected by the foreman, construction manager, site planner and users of other builders. Due to the presence of the builders are not certified is very important, so we need to find strategies to improve the competence of the builders. The object of research is a group of builders, village Pringtali, Jember. To determine the strategy carried out a SWOT analysis. SWOT analysis of the calculation results is known that the total value for the internal factor evaluation (IFE) is +0.79. Instead the value for the external factor evaluation (EFE) of -0.47. When coupled between the IFE with EFE value builders group, Pringtali village, Jember is located in the third quadrant. Because it is on the third quadrant builders groups described as an organization that is weak but very Opportunities . The strategy that should be taken is to change tactics, builders groups who are not certified must change the previous strategy, because the old strategy is feared difficult to capture the opportunities that exist, such things be done by improving the performance of the workers.

Keywords: Builders Group, Not Certified, Competence, SWOT Analysis

1. INTRODUCTION

Construction workers in Indonesia amounted to 4.9 million, only 3 percent of that has been certified and competent. The competency certificate is a form of recognition of the competence of the construction workforce in their respective fields (Haryadi, 2010), Although the 97% builders do not have the certification, where they are very important and acknowledged its existence. Only in the field, because they do not receive adequate training, competence often they do not fit the needs of the construction project. In addition to their inability to hard skills soft skills also have drawbacks. Results of the assessment carried out by the foreman, construction manager, site planners and other users of the blacksmith builders/concrete on the application of standards job competence Iron Works/Concrete in Jember there is a gap between the ability of builders in the field with expectations. Almost all indicators show a negative vote, except in indicators to create, assemble, and install the reinforced columns and beams practical positive value that is equal to 0.257. these results indicate that the application of standards Work Competence Iron Works/Concrete not met the expectations of superiors blacksmith/concrete indicators Knowledge about Occupational Health and Safety at -0.371, preparing materials iron work in accordance with the listing requirements of -0.229, making the mall to form reinforcing steel, stirrup, iron arch at -0213, caring for work-tool and equipment, and cleaning work of -0.207, dirt and rust on iron amounted to -0.114, straightening, cutting, bending rebar amounting to 0.114.

- *Amri Gunasti is a lecturer at Muhammadiyah University of Jember, Indonesia, E-mail: amrigunasti@unmuhjember.ac.id*
- *Isti Fadah is a Professor and lecturer at Faculty of Economics and Business, University of Jember, Indonesia, E-mail: istifadah1966@gmail.co.id*

The biggest gap found on indicators Knowledge about Occupational Health and Safety, which as big as -0.371, Being the smallest gap found in the confidence indicator is equal -0.167. These results indicate that Knowledge about Occupational Health and Safety still far from superiors blacksmith / concrete, while indicators create, assemble, and install the reinforced columns and beams were practically in line with expectations of a blacksmith boss / concrete,

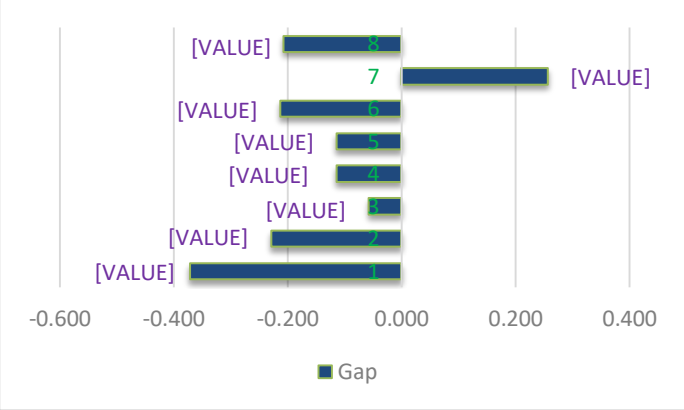

***Figure 1**. Gap Between Reality and Expectations*

In the assessment of the implementation work competency standards blacksmith/concrete is done by using a Likert scale of 1 to 5 with 1 criteria is very less, 2 is less, 3 is Enough, 4 is good, 5 is Very Good. Of distributing questionnaires to 35 respondents including blacksmith boss/supervisor concrete either direct or indirect supervisor for the implementation of work competency standards blacksmith/concrete values obtained for Knowledge of Health and Safety at 3.971, prepare materials iron work in accordance with the listing requirement for 4.114, preparing tools/supplies as a list of 4.143, dirt and rust on iron 4.200, straightening, cutting, bending rebar 4.257, making the mall to form iron

reinforced, stirrup, iron arch 3.444, create, assemble, and install a practically reinforced columns and beams 4.486, caring for tools and work equipment as well as cleaning the workplace 4.250. Overall Assessment of the implementation work competency standards blacksmith / concrete made the highest value contained in the indicator create, assemble, and install the reinforced columns and beams practically 4.486 while the lowest value contained in the indicators Knowledge of Health and Safety at 3.971.

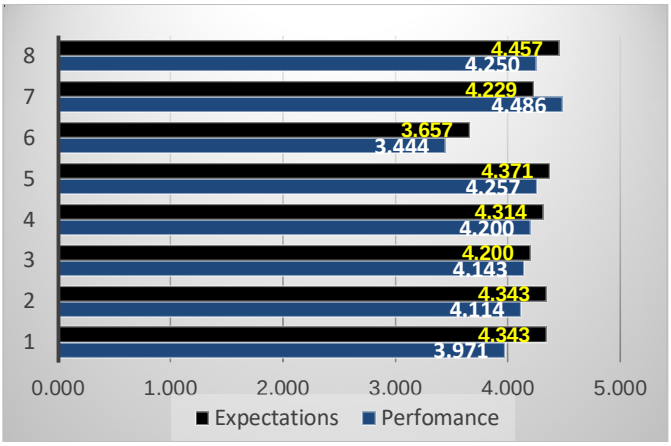

***Figure 2**. Average Performance and Expectations*

Tops Expectations Rate Iron Works/Concrete done using a Likert scale of 1 to 5 with 1 criteria is very less, 2 is less, 3 is Enough, 4 is good, 5 is Very Good. Of distributing questionnaires to 35 respondents including blacksmith boss/supervisor concrete either direct or indirect supervisor for the implementation of work competency standards blacksmith/concrete values obtained for Knowledge of Health and Safety for 4.343, preparing materials iron work in accordance with the listing requirement for 4.343, preparing tools/supplies as a list of 4.200, dirt and rust on iron 4.314, straightening, cutting, bending rebar 4.371, making the mall to form iron reinforced, stirrup, iron arch 3.657, create, assemble, and install a practically reinforced columns and beams 4.229, caring for tools and work equipment as well as cleaning the workplace 4.457. Overall Assessment of the implementation work competency standards blacksmith/concrete made the highest value contained in the indicator maintain the machinery and work equipment as well as cleaning the workplace by 4457 while the lowest value contained in the indicator makes the mall to form reinforcing steel, stirrup, curved iron amounted to 3.657. Due to the need for very large builders, on the other hand Builders-certified to very small, then there is no other option but to empower the builders who do not have certification. To reduce and eliminate the gap between the ability of builders who are not certified by a certified builders then need a special strategy. The strategy should also be able to eliminate the gap between reality and expectations are still very large builders. The purpose of this study was to identify the strengths, weaknesses, threats and opportunities of the builders in the district of Jember so found a strategy to improve the ability of the builders.

2. METHOD

This analysis identify internal factors (strengths and weaknesses) and external factors (opportunities and threats) that supports and does not support in order to improve the ability of the blacksmith and concrete. SWOT analysis is used to assess the strengths and weaknesses of builders and external opportunities and threats facing (Jogiyanto, 2005). Strength, are all forms of resources (natural, artificial, human) that have a competitive advantage and profitable for the business improve. Weakness, are all forms of limitations or lack of Builders that can hinder the performance of the effort to improve the ability of builders. Opportunity (Opportunity), are all forms of situations or trends from outside builders that can help businesses improve the ability of builders. Threat (Threat),

Function of SWOT analysis according to Ferrel and Harline (2005) is to identify the environmental situation an builders work and separating the internal subject matter (strengths and weaknesses) and external subject matter (opportunities and threats). SWOT analysis will be able to explain the situation that will benefit builders and situations that would be detrimental to builders, so this analysis will be very useful in the study of particular builders.

Use of the SWOT analysis will be able to describe all aspects that will strengthen or weaken the performance of builders, explaining indications opportunities that can be captured as well as threats to be faced. Thus the builders will be able to capture all the situations and opportunities that can strengthen its performance, and minimize weaknesses and avoid threats that may invade. The purpose of this research is to find strategies to improve the ability of builders in construction projects.

SWOT Analysis is a strategic planning method used to evaluate the strengths, weaknesses, opportunities, and threats in a project. SWOT analysis can be applied in a way to analyze and sort out various issues that affect all four factors (SWOT) and then apply them in a matrix.

The first thing to do in the SWOT analysis technique is to make a list identifying all sorts of situations that affect the performance of builders, both internal and external factors. Once the list is complete, the next thing to do is sort out these situations to be identified as strengths, weaknesses, opportunities or threats. The list can then be incorporated into the matrix of a SWOT analysis as above and then undercrossed to conclude the best thing to do with the application following the first SO (Optimistic), namely Optimizing the potential to capture opportunities, which both WO (Opportunistic) which use the opportunity to solving problem.

	Strength (S)	**Weakness (W)**
Oppor-tunities (O)	**DEVELOPMENT** Using S to capitalize O	**REPAIR** Utilizing O to cope with W
Threats (T)	**STRENGTHENING** Using S to avoid T	**CONSOLIDATION** Minimizing W to avoid T

***Figure 3**. Matrix Crossing At SWOT Analysis*

Data collection phase involves the collection of data and information relating to the internal factors and external workers. This information can be sourced from builders, foreman, project manager, and the parties involved in the construction project. The values of internal and external factors are described in the form of a SWOT diagram by reducing the value of the power with the values of weakness, and values odds with the values of the threat. All the information is arranged in a matrix, then analysed to obtain the right strategy to optimize efforts to achieve an effective, efficient and sustainable. Therefore, the SWOT matrix is used to analyze the four strategies applicable improve builders. The result could be whether Strength-Opportunities (SO) strategy, Weaknesses-Opportunities (WO) Strategy, Strengths-Threats (ST) Strategy, or Weaknesses-Threats (WT) strategies. Steps to develop a matrix of IFE and EFE are as follows, (1) Make a list of key internal or external factors, (2) Set weights ranging from 0.0 to 1.0, (3) Set a rating of 1 to 4 for each factor, (4) Multiply the weight by the rating, (5) Sum of scores.

4. RESULTS AND DISCUSSION

SWOT analysis stage in the builders group, Pringtali village, Jember is as follows. The first step taken is to explore the internal factors which consists of strengths and weaknesses builders group.

***Table 1**. Analysis of Internal Variable Builders Group, Pringtali village, Jember*

Internal factors	
Strength	**Weakness**
Builders have high flying hours	Besides working as a Builders as well as farmers and other work
Builders have the experience that much	Builders tend to be disciplined when supervised
Buikders Has sufficient ability when compared to a certified Builders	Employment status is not fixed, so do not get paid when you stop working and difficult to get a job after a long time the project ends
Builders have the ability almost to all arable fields, usually able to become a blacksmith/ concrete, masons, carpenters at once	Looking for new projects has traditionally not use technology
Builders do not require financial capital in the works	Never get special training
Builders Can master all the equipment	Quickly feel satisfied with their salary, so often rejected the offer of new projects

Interviews, observations, data is secondary, tertiary and quarter showed that the overall internal factors there are twelve items. Six items is the strength of a group of builders, village Pringtali, Jember and the item is a weakness of the builders group.

After determining the strengths and weaknesses of the builders group the next step is to make the weight and power rating. Next the same job we did on the weakness of builders groups, village Pringtali, Jember. The purpose of giving weight and this rating is to determine the score of each item.

***Table 2**. Analysis of Internal Factors Builders Group, Pringtali village, Jember*

	Internal Strategy Factors	Weight	rating	Score
	Strength			
1	Builders have high flying hours	0.10	4	0.6
2	Builders have the experience that much	0.09	4	0.52
3	Builders Have sufficient ability when compared to a certified Builders	0.08	4	0.4
4	Builders Have the ability almost to all arable fields, usually able to become a blacksmith / concrete, masons, carpenters at once	0.07	3	0.21
5	Builders do not require financial capital in the works	0.06	3	0.21
6	Builders Can master the use of all equipment carpentry	0.06	2	0.12
	Weakness			
1	Besides working as a Builders as well as farmers and other work	0.06	4	0.36
2	Builders tend to be disciplined when supervised	0.05	3	0.3
3	Employment status is not fixed, so do not get paid when you stop working and difficult to get a job after a long time the project ends	0.08	3	0.24
4	Looking for new projects has traditionally not use technology	0.03	2	0.06
5	Never get special training	0.07	3	0.21
6	Quickly feel satisfied with their salary, so often rejected the offer of new projects	0.05	2	0.1
	Total	1.00		3.33

Results weighting and rating of making known that the highest score on the power contained in the builders items have high flying hours which was 0.6. The lowest scores are in the item, Builders can master the use of all equipment in the amount of 0.12 carpentry. While other items that is between them is Builders has extensive experience, Builders Have sufficient capability when compared with the certified builders, have the ability almost to all arable fields, usually able to become a blacksmith / concrete, masons, carpenters at once and Builders do not requires financial capital in the works.

In contrast to the weakness factor The highest score is the item in addition to working as a well as farmers and other work that is equal to 0.36. Conversely items with the smallest score is for new projects has traditionally not using the technology of 0.06. Total score for internal factors builders are not certified after you add up the strength with weakness is of 3.33.

Next is determine what are the items that exist on external factors. External factors are positive so-called opportunities. Instead of negative external factors that are known threats.

***Table 3.** Analysis of External Variables Builders Group, Pringtali village, Jember*

Opportunities	**threat**
Projects of construction is increasing every time	Builders certified with increasing time
Builders certified	Rapid development of construction

number is very small	technology
More open access to information, including information on equipment, materials and construction technology	Government regulation favouring only a certified Builders
Contractor / users still choose a Builders who is not certified	Builders are paid only for his job, no family benefits, health benefits
	Training using the latest technology does not exist
	There is no regulation to improve the ability of builders who are not certified sustainably
	There is no social security
	Very high risk construction work
	Regulation requires that builders have certifications

Interviews, observations, reference data secondary, tertiary and quarter are four items that become opportunities and nine items that are a threat. Next each item external factors analyzed by adding weight and rating for each item. For the opportunities with the greatest weight items are construction projects is increasing from time to time that is equal to 0.60. In fact on the ground is getting increasing time construction projects always grow in line with population growth, the growing needs of the construction for the purpose of a more varied when compared to previous eras. The next item with the lowest score on the item contained a contractor or Builders users still choose who is not certified to work on projects with a score of 0.21. These opportunities still occur because of the number of builders who are certified only three percent of the total number of builders, so that there is no other choice but to empower the builders who are not certified. The cost of non-certified builders relatively less with capabilities not inferior to builders certified. Among the items with the highest and lowest scores are included two items, namely opportunities The cost of non-certified builders relatively less with capabilities not inferior to builders certified. Among the items with the highest and lowest scores are included two items, namely opportunities The cost of non-certified builders relatively less with capabilities not inferior to builders certified. Among the items with the highest and lowest scores are included two items, namely opportunities Builders certified numbers are very small with a score of 0.40 and more open access to information, including information on equipment, materials and construction technology with a score of 0.30.

Table 4. *Analysis of External Factors Builders Group, Pringtali village, Jember*

Factor External Strategies		Weight	rating	Score
Opportunities				
1	Projects of construction is increasing every time	0.15	4	0.60
2	Builders certified number is very small	0.10	4	0.40
3	More open access to information, including information on equipment, materials and construction technology	0.10	3	0.30
4	Contractor / users still choose a Builders who is not certified	0.07	3	0.21
Threats				
1	Builders certified with increasing time	0.20	3	0.60
2	Rapid development of construction technology	0.10	2	0.20
3	Government regulation favouring only a certified Builders	0.20	2	0.40
4	The Builders are paid only for his job, no family benefits, health benefits	0.06	4	0.24
5	Training using the latest technology does not exist	0.04	3	0.12
6	There is no regulation to improve the ability of builders who are not certified sustainably	0.09	3	0.27
7	There is no social security	0.07	3	0.21
8	Very high risk construction work	0.03	2	0.06
9	Regulation requires that builders have certifications	0.04	2	0.08
Total		1.00		3.49

External factors such as the threat consists of nine items. The highest value contained in the item certified repairman with increasing time that is equal to 0.60. While the item with the lowest score points contained in the very high risk of the construction work with a score of 0.06. Factors threat among the highest score consists of very rapid development of construction technology with a score of 0.20. Government regulation favouring only certified Builders with a score of 0.40. The Builders are paid only for his job, no family benefits, and health benefits with a score of 0.24. Training using the latest technology does not exist with a score of 0.12. There is no regulation to improve the ability of builders who are not certified sustainable manner, with a score of 0.27. There is no social security with a score of 0.21. Regulation 0.08 requires that builders have the certification.

After conducting an analysis of internal factors (IFE) and the analysis of external factors (EFE), the next step is to create a matrix analysis. In the matrix analysis of internal factors, all strength rating is positive. In contrast to the weakness of its weight is negative.

Table 5*. Matrix Internal Factor Analysis Group, Builders Village Pringtali, Jember*

Internal Strategy Factors		Weight	rating	Score
Strength				
1.	Builders have high flying hours	0.10	4	0.6
2.	Builders have the experience that much	0.09	4	0.52
3.	Having sufficient ability when compared to a certified Builders	0.08	4	0.4
4.	Having the ability almost to all arable fields, usually able to become a blacksmith / concrete, masons, carpenters at once	0.07	3	0.21
5.	Builders does not require financial capital in the works	0.06	3	0.21
6.	Can master the use of all equipment carpentry	0.06	2	0.12
Total Strength				2.06
Weakness				
1.	Besides working as a Builders as well as farmers	0.06	-4	-0.36

	and other work			
2.	Builders tend to be disciplined when supervised	0.05	-3	-0.3
3.	Employment status is not fixed, so do not get paid when you stop working and difficult to get a job after a long time the project ends	0.08	-3	-0.24
4.	Looking for new projects has traditionally not use technology	0.03	-2	-0.06
5.	Never get special training	0.07	-3	-0.21
6.	Quickly feel satisfied with their salary, so often rejected the offer of new projects	0.05	-2	-0.1
	number of weakness			-1.27
	Total	1.00		0.79

Matrix analysis showed that the total score for strength is of 2.06. While the total score for the weakness amounted to -1.27. So the total score for the internal factor is equal to 0.79. The score is positive because the power is still more dominant than the weaknesses. This indicates that the internal condition of builders groups there is not much problem, this is the basis for reducing the external problems later when his score is negative. After creating a matrix of internal factors next is to create a matrix of external factors. For these external factors, all of its value opportunity positive rating. In contrast to the threat of all is negative. Total score of 1.51 for the opportunity is. In contrast to the threat of total score amounted to -1.98. The total number of external factors analysis result amounted to -0.47. Because the total value for the external factor is negative, it needs great effort to maximize the strengths and reduce the weaknesses by builders groups, Pringtali village, Jember those who are not certified. Certainly builders group cannot change the external factors such as opportunities and threats. Because of these factors are outside the group can come from the government, of society, of the natural environment, public policies, so that these external factors can only be accepted. Once again we can do is change the internal factors.

***Table 6**. Matrix Analysis of External Factors Builders Group, Pringtali village, Jember*

Factor External Strategies		Weight	rating	Score
	Opportunities			
1	Projects of construction is increasing every time	0.15	4	0.60
2	Builders certified number is very small	0.10	4	0.40
3	More open access to information, including information on equipment, materials and construction technology	0.10	3	0.30
4	Contractor / users still choose a Builders who is not certified	0.07	3	0.21
	Total Opportunities			1.51
	Threats			
1	Builders certified with increasing time	0.20	-3	-0.60
2	Rapid development of construction technology	0.10	-2	-0.20
3	Government regulation favouring only a certified Builders	0.20	-2	-0.40
4	The Builders are paid only for his job, no family benefits, health benefits	0.06	-4	-0.24
5	Training using the latest technology does not exist	0.04	-3	-0.12
6	There is no regulation to improve the ability of builders who are not certified sustainably	0.09	-3	-0.27
7	There is no social security	0.07	-3	-0.21
8	Very high risk construction work	0.03	-2	-0.06
9	Regulation requires that builders have certifications	0.04	-2	-0.08
	Total Threats			-1.98
	Total	1.00		-0.47

Data obtained from tables 5 and 6 are used for the calculation of Matric Space Analysis, then obtained a grading scale as follows:

- Strength score builders group that is not certified = 2.06
- Weakness score builders group that is not certified = -1.27
- Opportunity score builders group that is not certified = 1.51
- Threat Score builders group that is not certified = -1.98

So as to be able to make a point on the horizontal coordinate that assessment scale image by adding together the strength of the builders who is not certified by the value weaknesses builders groups that are not certified. Then it can be obtained the coordinates of the horizontal, namely:

(+2.06) + (-1.27) = + 0.79

Meanwhile, to make the vertical coordinate point on the image scale of assessment, namely by adding together the builders group opportunities are not certified by the value of the threat of non-certified builders group. Thus obtained vertical coordinate points, namely:

(+1.51) + (-1.98) = -0.47

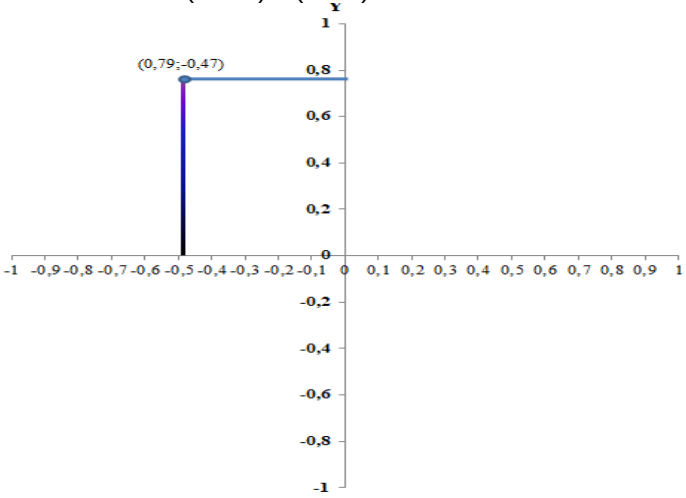

***Figure 4**. The position of the Quadrant results IFE and EFE*

Cartesian coordinate graph shows that the condition of the builders, village Pringtali, Jember are not certified are in the third quadrant.Because it is on the third quadrant groups Pringtali village builders, Jember, not certified organization described as a weak but very Opportunities .

The strategy that should be taken is to change tactics, builders groups who are not certified must change the previous strategy, because the old strategy is feared difficult to capture the opportunities that exist, such things done by changing the performance of the workers.So that the value of external factors become positive there should be some strategies. The first is SO strategy (Optimistic), namely Optimizing the potential to seize opportunities. To execute this strategy builders utilizes flying hours were high, experience a lot, enough ability when compared with the builders who is certified, the ability of most to all arable fields, usually able to become a blacksmith / concrete, masons, carpenters at the same time, take advantage of opportunities without capital, control of all equipment builders to get construction projects that always increases over time, offset the ability of a certified Builders whose numbers are very small, take advantage of more open access to information, including information on equipment, materials and construction technology,A second strategy is WO (Opportunistic) is Using the opportunity to resolve the problem. Because of the construction projects is increasing all the time, Builders certified the amount is very small, access information more open, including information equipment, materials and construction technology, contractors / users still choose a Builders who is not certified, this opportunity must be used properly in the way builders focus worked as a Builders, repairman must be independent although it is not supervised, benefit from access to information so that even if no permanent employment status, still get the job done on a regular basis. Access to information can also be used to search for new projects, reducing the traditional ways. Because contractors must involve builders who are not certified, then the work experience can be used as a substitute for training. Opportunities such as construction projects is increasing all the time is used as a means to prevent rapid satisfied with their salary, so it does not reject the offer of a new project.The third strategy is ST (Creative) that optimize the potential strength to overcome the threat. Because builders are not certified have high flying hours then flying hours can be a guarantee of quality and can compete with the certified builders with increasing time. Very high flying hours can also be utilized to offset the very rapid development of construction technology. builders are not certified also has extensive experience, having sufficient capability when compared with the builders who is certified, has the ability almost to all arable fields, usually able to become a blacksmith / concrete, masons, The latter strategy is WT (Survival) that keep the problem from getting or weaknesses and threats that do not aggravate the condition. The right strategy is focused as Builders into employment only, so as to compete with the certified builders. During builders tend to be disciplined when supervised all builders should be independent so that future government regulation not only in favour of builders certified, because the government would also look that builders are not certified considered equivalent to a certified repairman. In the presence of non-permanent employment status, do not get paid when you stop working and difficult to get a job after a long time the project ended, the builders have to show his professionalism, for example by means of the technology curve. No longer looking for new projects has traditionally not use the technology, it is time to use a more modern communication media, thus will get a lot of work that still paid job and can save as a substitute for the family allowances and medical benefits. Although never received special training, builders should always try to independently follow the information on the Internet so that it remains adept at using advanced construction technology. Not easily satisfied with their salary, so it does not reject the offer of new projects indirectly this could be a replacement for the vacancy regulation to improve the ability of builders who are not certified sustainable manner.

5. CONCLUSION

1. SWOT analysis calculation results show that the total value for the internal factor evaluation (IFE) is +0.79. Instead the value for the external factor evaluation (EFE) of -0.47. When coupled between the IFE with EFE value Builders group, Pringtali village, Jember is located in the third quadrant.
2. The third quadrant indicates that Builders group, Pringtali village, Jember, not certified organization described as a weak but very Opportunities . The strategy that should be taken is to change strategy and tactics. Especially for the recognition of equality in lieu of a certificate of competence.

6. ADVICE

Indonesian government should provide social security to builders who are not certified because they are also as citizens must be protected, particularly because they work with the level of risk is very high construction work; the next government should make regulations by equalizing them with a builder certified.

REFERENCES

[1]. Bada Haryadi, Kompetensi Tenaga Kerja Konstruksi Dalam Menghadapi Era Liberalisasi, Jurnal Inersia, Vol. VI No. 1, Mei 2010, pp. 33-40

[2]. Amri Gunasti, Penilaian Standar Kompetensi Kerja Tukang Besi/Beton Pada Proyek Konstruksi Di Kabupaten Jember, Jurnal Rekayasa Teknik Sipil Universitas Madura Vol. 2 No. 2 Desember 2017 ISSN 2527-5542, pp 13-17

[3]. Amri Gunasti, Penerapan Personal Protectif Equipment (PPE) Pada Proyek Konstruksi Di Kabupaten Jember, Jurnal Rekayasa Teknik Sipil Universitas Madura Vol. 3 No.1 Juni 2018 ISSN 2527-5542, pp 7-14

[4]. Amri Gunasti, Penilaian Kinerja Tukang Dan Harapan Mandor Dalam Proyek Konstruksi. Jurnal Penelitian IPTEKS, 2(1) (2017), pp. 77-90

[5]. Amri Gunasti, Kajian Tentang Faktor-Faktor Yang Mempengaruhi Kinerja Tukang Pada Proyek Konstruksi, Prosiding SemNas Hasil-Hasil Penelitian KEMENRISTEKDIKTI, September 2016, ISBN 978-602-6988-22-5, pp. 100-110

[6]. Freddy Rangkuti, Analisis SWOT Teknik Membedah KASUS Bisnis. Jakarta: Gramedia Pustaka Utama, 2006

[7]. Jogiyanto, *Analisis dan Desain Sistem Informasi*. Yogyakarta: Penerbit Andi, 2005

[8]. Fred. R. David**,** 2011. *Strategic Management: Concept and Cases*. Pearson , Prentice Hall, New York.
[9]. Istatuk Budi Yuswanto, Bhayangkara W D, and Isti Fadah, "Performance Improvement Strategic Home Based Manufacturer Tahu And Tempe Groups Based In The District Of Jember," International Journal Of Scientific & Technology Research, pp. 23-27, 2017
[10]. Setiyo Adi, Isti Fadah, Strategies For Increasing Customer Loyalty PT. BRI Multifinance Banyuwangi, International Journal Of Scientific & Technology Research Volume 7, Issue 12, December 2018, ISSN 2277-8616, pp. 154-159
[11]. Hunger, J David dan Thomas L Wheelen. 2003. *Management Strategis:* Terjemahan Julianto Agung. Edisi 2, Andi, Yogyakarta
[12]. Ferreland Harline, *Dasar-Dasar Pemasaran Jilid I*. Jakarta: Gramedia, 2005
[13]. Diyah Lestari, Agus Bambang Siswanto, Analisis Swot Dalam Pengembangan Real Estate, Jurnal Teknik Sipil 8, 2015
[14] A. Juniar, I. Fadah dan R. Rahmawati, “Strategy Of Financial Efficiency Of Coal Companies In Indonesia In The Era Of Disruption,” International Journal Of Scientific & Technology Research, vol. 7, no. 11, pp. 89-93, 2018.
[15]. Asrid Juniar, Isti Fadah, Efficient Financial Management Strategy For Indonesian Health BPJS, International Journal Of Scientific & Technology Research Volume 8, Issue 07, July 2019, ISSN 2277-8616, pp. 403-407