LEMAH ABANG RAILWAY CREW PAYROLL APPLICATION PROGRAM AT PT. X

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Abstract

In today's modern era the world of technology and information is growing so rapidly, computers have become a very basic need and able to help all oprasional activities in all fields, therefore it takes a creativity to facilitate and ease daily work. This research aims to facilitate the process of collecting the salaries of THB ka crew in accordance with its service, to help reduce errors in the payment of official money to the ka crew in charge, in order to improve the performance of the Ka Crew in accordance with applicable official regulations, make an ease in the unit of Crew KA THB in the process of data processing, as well as as a positive input in determining a policy, producing programs that support the work of related units. The method used in this research is data collection method such as interview, observation and literature study. The results of research on the Lemah Abang Railway Crew Payroll Application program at PT. The Desktop-Based Indonesian Railway (Persero) is expected to report and pay more easily, precisely, and efficiently.

Introduction

In today's modern era the world of technology and information is growing so rapidly, computers have become a very basic need and able to help all oprasional activities in all fields, therefore it takes a creativity to facilitate and ease daily work. With advances in technology must be needed competent human resources in all fields, especially knowledge and use of computers (Enterprise, 2015).

There are many fields that can be facilitated by the presence of information technology, both heavy and light work. With the information technology can make it easier for people to carry out their daily activities. Aspects that can be reached by technology ranging from the field of information, transformation, education, and many more.

The first definition is of "information technology". Information technology is the technology used to store, manipulate, distribute or create information. The type of information or data is not important to this definition. The technology is any mechanism capable of processing this data [1]. As it is widely known to perform a calculation of any type manually is very cumbersome and time consuming. But if we could develop efficient programs written in many languages and get them thoroughly tested for every function it is expected to perform before putting to use could save lot of efforts and time. Also the chance of human errors that could occur when things are done manually could also be avoided provided the programs are developed keeping in mind the exact requirements that are

sought after and developed properly to address the issues correctly without problems. Information technology works based on these simple concepts. As we know it's applications in our lives is extremely wide ranging from simple addition, subtraction to flying an aircraft though autopilot and controlling a spaceship which has landed in Mars from the ground of the earth. Electronic databases now can store huge volume of data which can be used very easily and internet can be accessed for any information on any field of activities. Section one gives an introduction of the area. Section two presents the analyses of works done in the field. Section three presents the impacts of Information Technology on society so far and where it is heading to in future. We put our concluding remarks in section four.

Target companies in the future want to be the best state-owned enterprises (State-Owned Enterprises) in Indonesia, it is necessary competent and quality human resources in their fields and the use of information technology to support in all aspects of railway activities (Maseleno, 2003). In accordance with the wishes and expectations of customers, namely: safe, comfortable and on time to the destination. So it must be fixed little by little what is still a deficiency.

UPT (Technical Training Unit) Crew KA (Railway) is one of the operational division units of PT. Indonesian Railways (Persero) namely Machinists, Assistant Machinists and Examiner Conductors (Pagora, 2015). In DAOP (Operational Area) 1 Jakarta there are 3 UPT Crew KA namely:

1. UPT Crew JNG Train (Jatinegara)
2. UPT Crew KA THB (Lemah Abang)
3. UPT Crew KA RK (Rangkas Bitung)

This unit becomes an important point because they are related and interacted by customers. So whatever they do good or bad will be a separate assessment by customers, especially indonesian services (Miller, 2013). Therefore, it is necessary to set an accurate and timely schedule of the Train Crew service in running the service, so that there is no part of the delay of the train because it waits for the Ka Crew, verification of the absence of the ka crew before running the service, besides the need for health checks before running the service and payment of G43 (official travel money) that is appropriate for those who run the service (Gaulton et al., 2017).

The purpose of this research is to find out what can be targets in the future to realize the dream of a large company that is beneficial to the community.

Method

Data Collection Techniques in order to collect data to fulfill the preparation of this application program, the author does several ways, namely:

1. Direct Observation Method (Observation)

    Observing the service process at PT. The train is by becoming a passenger to feel firsthand how the service to PT. Train to collect data and obtain data to be used as writing material.

2. Interview

    Conduct direct interviews with PT employees. train around sales and transaction activities at PT. Train by asking a variety of questions to obtain information and data (Dana & Setiawati, 2011).

3. Library Study Method

    Visit the National Library of Indonesia as well as bookstores such as Gramedia to get reference materials to help the preparation of the Final Task.
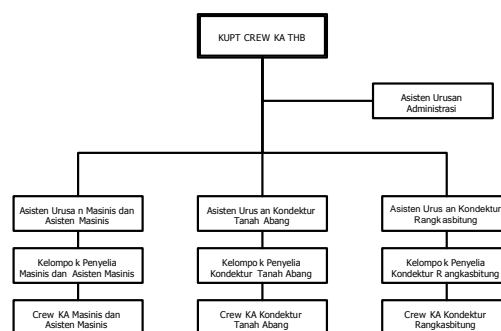
Result and Discussion

A. A Brief History of PT Kereta Api Indonesia (Persero)

After the proclamation of Indonesian independence was proclaimed on August 17, 1945, employees of the railway company incorporated in the Moeda Railway Force (AMKA) took over the railway power from Japan. On September 28, 1945, the reading of Ismangil's statement of attitude and a number of other AMKA members confirmed that from that day on the railways were in The Indonesian hands so that Japan was no longer entitled to interfere in railway affairs in Indonesia. This was the establishment of September 28, 1945 as Railway Day and the establishment of Djawatan Kereta Repoeblik Indonesia (DKARI), the name DKARI was later changed to State Railway Company (PNKA). The name was changed again to Railway Office Company (PJKA) on September 15, 1971. On January 2, 1991, the name PJKA was officially changed to Railway Public Company (Perumka) and since June 1, 1999 was changed to PT. Indonesian Railways (Persero) until now (Andoko, 2017).

PT. Kereta Api Indonesia (Persero) is a state-owned enterprise (SOE) owned by the Indonesian government that serves as the operator of land transportation facilities in Indonesia. Services PT. The Indonesian Railway (Persero) includes passenger and freight transportation. In the organizational structure there are many divisions whose function is to provide the best service to customers, one of which is the operational division.

The operational division has a Technical Services Unit (UPT) of the Railway crew. Crew KA was formed by the operational division in November 2009, with the information of the Board of Directors No; 25, 2009, which contained the separation of positions, duties and functions of Machinists and Assisten Masinis from the Directorate of Facilities to the Directorate of Operations. In principle, the driver and assisten driver have duties and functions as operational personnel or operators who control the locomotive facilities in serving train travel, langsiran and as a backup. Each Operational Area (Daop) domiciled in Java island and Regional Division (Divre), Regional Sub Division (Sub Divre) domiciled on the island of Sumatra. The driver and assistant driver are placed in a unit led by the Head of Technical Implementation Unit (KUPT) under the Operational Division in one area.

B. Organizational Structure of Lemah Abang Railway Crew

Figure 1
Organization Structure of Lemah Abang Railway UPT Crew

C. Authority and Responsibility

Human-centered automation is an approach to realize a work environment in which humans and machines cooperate. It is usually claimed in the framework that "the human must have final authority over the automation." However, correctness of the statement is context

dependent: we note that humans have limited capabilities and authority is interconnected with responsibility. This paper illustrates the need for a machine-initiated trading of authority from humans to automation in the vehicle driving context and clarifies issues to be solved for implementing useful automation invocation based on the machine's interpretation of the situation and the human's behavior.

Parts of an agency's organization have their own duties and functions, but they are interconnected with each other. There are several tasks directly related to this system (Abdul, 2003), related to the details of the tasks in each ka crew organization, namely:

1. Kupt Crew KA

Upt Crew KA Lemah Abang (THB) led by a Head of UPT (KUPT) has the main task of planning the number and quality of ka crew, evaluating and assessing the performance of the KA Crew, making a schedule of Ka Crew assisted by Assur Administration, the implementation of the administration of upt crew ka, conducting supervision of griya karya in its territory and making management reports to direct superiors (Sutanta, 2011).

2. Administrative Affairs Assistant

Administrative affairs assistant has the main duties and responsibilities of carrying out financial administration, ratification of G43 premium payments to the Ka Crew, making the schedule of the Ka Crew office, evaluating the bookkeeping of G43 Crew KA premium expenditures and carrying out other administrations related to data, ka crew information and griya karya supervision.

The use of a personal assistant (assistant-to) by the high-level executive has excited controversy among management consultants and well-known business executives. An earlier study of the assistant to the president of a business firm described the role of the "assistant-to" and revealed why he is controversial and how his presence can affect communications and power relationships in the management hierarchy. The present study extends the study to the military establishment, the federal government, and city management. The purpose is to learn which dimensions of the assistant-to role persist and which change in organizations with widely varying goals, sizes, and tasks. The study reveals (1) wide variation in the task content of the assistant-to, (2) long use of the role, (3) dominance of the communication dimension of the role, and (4) differences in the role related systematically to differences in the organizations studied. Several propositions about this role in relation to organizational conditions are presented.

3. Driver's Affairs Assistant and Driver Assistant

Assistant affairs machinist / assistant driver has the main duties and responsibilities of planning, mangatur and preparing the service of the driver and assistant driver, as well as making performance assessments of the driver and assistant driver Lemah Abang. In addition, the main duties and responsibilities of the driver's affairs assistant /assistant driver are supported by the Supervisory group.

With the latest initiative of the government to develop a high speed passenger rail system in the United States the first and most important strategic transportation goal is to "Ensure safe and efficient transportation choices. A key element of safe railroad operation is to address the issue of fatigue among railroad operating employees and how to fight it. In this paper, we are presenting a novel approach to estimating fatigue levels of train conductors by analyzing the speech signal in the communication between the conductor and dispatch. We extract vocal indicators of fatigue from the speech signal and use Fuzzy Logic to generate an estimate of the mental state of the train conductor. Previous research has shown that sleeping disorders, reduced hours of rest and disrupted circadian rhythms

lead to significantly increased fatigue levels which manifest themselves in alterations of speech patterns as compared to alert states of mind. To make a decision about the level of fatigue, we are proposing a Fuzzy Logic algorithm which combines inputs such as word production rate and speech intensity to generate a Fatigue Quotient at any moment in time when speech is present. The computation of the Fatigue Quotient relies on a rule base which draws from existing knowledge about fatigue indicators and their relation to the level of fatigue of the subject. For this project, the rule base and the membership functions associated with it were derived from real time testing and the subsequent tuning of parameters to refine the detection of changes in patterns. It was successfully shown that Fuzzy Logic can be implemented to estimate alertness levels from speech metrics in real-time and that the membership functions for this purpose can be found empirically through iterative testing. Furthermore, this study has proven that the framework to run such an analysis continuously as a monitoring function in locomotive cabins is feasible and can be realized with relatively inexpensive hardware.

4. Assistant Affairs Conductor Lemah Abang

The assistant conductor of Lemah Abang has the duties and responsibilities of planning, arranging and preparing the conductor's office and making performance assessments of Lemah Abang conductors.

5. Assistant Affairs Codektur

Assistant affairs conductor has the duties and responsibilities of planning, arranging and preparing the conductor's office and making performance assessments of Lemah Abang conductors (Taneja, Zhang, & Xie, 2010).

6. Driver Supervisory And Assistant Machinist Group

The driver supervisory group and the driver assistant have four groups for the construction of the driver and the assistant driver, the supervisory group helps the Driver's Affairs Assistant / Driver Assistant with the following task description:

a) Arrangement and preparation of service Masinis / Assistant Road Machinist for the service of the train, as well as the service of Masinis Langsir

b) Attendance check of train crew who will run the service

c) Examination, research of completeness and correctness of official forms of travel for machinists who are road and service masinis langsir, among others LHM (O.83), Railway Table (O.100)

d) Filling in the form of O.83 Machinist Daily Report (LHM) and calculation of the number of kilometers of road

e) Briefing to the Driver / Assistant Driver of the road service and the driver of the road service langsir

f) Arrangement of the implementation of administrative activities to support the smooth and orderly implementation of operational duties of the ka crew and other employees in the environment Of Assistant Affairs Machinist / Assistant Machinist

g) Recording of employee performance assessment book and making RAPI (Railway Report) of employees in the Environment Assistant Affairs Machinist / Assistant Driver

h) Making the form of fees and monthly reports of the cost of the ka crew (Masinis / Assistant Driver of the road service and masinis langsir office)

i) Monitoring of ka - ka in its territory and in cooperation with PPKA

j) Daily reporting of operating situations

k) Provision of data and information on the strength and needs of employees in the Environment Assistant Affairs Machinist / Assistant Machinist

l) Establishment and field training of Prospective Machinists / Assistant Machinists both in terms of regulation and tactically run the train so that the driver is able to carry out the task of operations safely, safely and comfortably

m) Development and evaluation of performance of Machinists / Assistant Machinists

7. Lemah Abang Conductor Supervisory Group

The group of supervisors of the conductor assists the Assistant Conductor Affairs with the task description as follows:

a) Preparation, arrangement and preparation of the service of the Crew of the Conductor Train

b) Examination, research of completeness and correctness of forms of official travel, conductor (LAPKA)

c) Briefing the conductor

d) Arrangement of the implementation of administrative activities to support the smooth and orderly implementation of operational duties of the KA crew (Conductor) and other employees in the environment Assistant Affairs Conductor

e) Recording of the assessment book keinerja and rapi making of employees in the Assistant Affairs Conductor

f) Making a form of cost and monthly report of ka crew cost (Conductor)

g) Monitoring of ka - ka in its territory and in cooperation with PPKA

h) Daily situation report creation of operations

i) Provision of data and information on the strength and needs of employees in the Assistant Affairs Conductor

8. Conductor Supervisory Group

The group of supervisors of the conductor assists the Assistant Conductor Affairs with the task description as follows:

a) Preparation, arrangement and preparation of the service of the Crew of the Conductor Train

b) Examination of the completeness and correctness of the forms of official travel, conductor (LAPKA)

c) Briefing the conductor

d) Arrangement of the implementation of administrative activities to support the smooth and orderly implementation of operational duties of the KA crew (Conductor) and other employees in the environment Assistant Affairs Conductor

e) Recording of the assessment book keinerja and rapi making of employees in the Assistant Affairs Conductor

f) Making a form of cost and monthly report of ka crew cost (Conductor)

g) Monitoring of ka - ka in its territory and in cooperation with PPKA

h) Daily situation report creation of operations

i) Provision of data and information on the strength and needs of employees in the Assistant Affairs Conductor

9. Crew of Driver's Train and Driver's Assistant

Crew KA Masinis and Assistant Machinists have duties and responsibilities that are to help some of the main tasks kupt Crew KA and as the operator of locomotive facilities in serving train travel, langsiran or reserves.

Despite technical advances over the past few years in the area of systems support for cooperative work there is still relatively little understanding of the organisation of

collaborative activity in real world, technologically supported, work environments. Indeed, it has been suggested that the failure of various technological applications may derive from their relative insensitivity to ordinary work practice and situated conduct. In this paper we discuss the possibility of utilising recent developments within sociology, in particular the naturalistic analysis of organisational conduct and social interaction, as a basis for the design and development of tools and technologies to support collaborative work. Focussing on the Line Control Rooms in London Underground, a complex multimedia environment in transition, we begin to explicate the tacit work practices and procedures whereby personnel systematically communicate information to each other and coordinate a disparate collection of tasks and activities. The design implications of these empirical observations, both for Line Control Room and technologies to support cooperative work, are briefly discussed.

10. Crew of Lemah Abang Conductor Train

The conductor's crew has duties and responsibilities to assist in part the duties of the Assistant Conductor's Affairs, inspecting and regulating passengers or goods. Assisting the Driver in terms of: limited speed, installation of ababila motto there is a disruption of train facilities or infrastructure in the region

11. Crew of Conductor Train

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Operations management of subway systems is associated with combinatorial optimization problems (i.e. crew and train scheduling and rostering) which belong to the np-hard class of problems. Therefore, they are generally solved heuristically in real situations. This paper considers the problem of duty generation, i.e. identifying an optimal trips set that the conductors should complete in one workday. With regard to operational and labor conditions, the problem is to use the lowest possible number of conductors and minimize total idle time between trips. The problem is modeled and solved using a constructive hybrid approach, which has the advantage of visualizing a solution construction similar to the manual approach typically used. Our approach takes advantage of the benefits offered by evolutionary methods, which store a candidate solutions population in each stage, thus controlling the combinatorial explosion of possible solutions. The results thus obtained for problems similar to those that are solved manually in the Santiago Metro System were compared with two alternative approaches, based on tabu search and a greedy method. The hybrid method produced solutions with the minimum number of duties in six of the ten problems solved. However, the tabu search method provided better results in terms of idle time than either the hybrid method or the greedy method.

Conclusion

Based on the subject matter and discussion that has been described by the author in the previous chapters, it can be concluded as follows:

1. By Using The Payroll Application Program of Lemah Abang Railway Crew at PT. The Desktop-Based Indonesian Railway (Persero) is expected to report and pay more easily, precisely, and efficiently

2. Lemah Abang Railway Crew Payroll Application Program at PT. The Desktop-Based Indonesian Railway (Persero) is a program created to facilitate users in inputting and reporting the crew of the land train brother.

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3. This application program is a computerized program that requires a computer with specifications that match the system that has been created
4.

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