

Literature Review on Railway Reservation System

Sample

The chief purpose of planning and coming up with this system is to extinguish the usage files and registering system in entering hebdomadal and monthly minutess of pata commercial bureaus and let an easy system that allows the house in entering and analysing everyday minutess and supply a clear drumhead and study of all the proceedings that the bureau set about in their minutess. in proviso of this engineering progress there will be an efficient and effectual system thank will convey in a speedy and systematic attack towards the activities of this bureau and let a dependable beginning of information all about all minutess related to routine activities. Having this system in topographic point it will heighten rapid productiveness of services to clients by supplying speedy client service and besides provide a really fast study on all the rent paid and all the times of the twelvemonth as to when all this payments were made and associate all this to past records that are made available by these system.

Chapter ONEIntroductionBackgroundDue to increase in demand for both commercial and rental premises since independent in Kenya and due to the addition in population it has brought about debut of commercial agencies' like pata commercial bureau which was started back in twelvemonth 2007 in Lanet so as to provide for both commercial and residential flats by offering services related to roll uping house lent's on behalf of land Godheads. For this ground pata commercial agencies' have wholly been committed to its services through usage of a manual system for entering their minutess therefore there is a demand for a alteration of the current system in usage so as it can better its services to its clients and travel in line with technological progresss made in the state and the full universe. The debut of this new system which receives entries on minutess like house rent paid by a renter at a peculiar clip and be able to cipher entire rent corrected and be able to give a definite study about those who have paid and those who have non at a peculiar period of clip.

The Problem Statement Of StudyHaving the jobs in analysing the everyday minutess. job of loss of records that have been recorded on paper. duplicate of informations stored and wastage of clip and infinite for hive awaying paper work due to the addition in dealing which has been caused due to the addition of premises and the concern of puting in existent estates the bureau has experienced frequent jobs that need to be addressed in a systematic manner. 1. 3 intent of the survey

Develop a computerized system that will assist the bureau in entering minutess hebdomadal and monthly so that it eases the sum of clip spent when entering everyday minutess therefore salvaging clip and besides the system will supply a steady flow of information which in bend will assist in supplying the bureau with effectual designing processs and agendas related to their activities and avoid duplicate of information which in bend makes informations to lose its unity.

1. 4 REASERCH OBJECTIVES

1. 4. 1 Main ObjectiveIs to develop a system that will transport out everyday minutess in the commercial bureau accurately and in an efficient manner and supply a good study which in bend will salvage clip and resources.

1. 4. 2 Specific Aims

I. Come up with a system that will heighten a speedy recording of everyday minutess by replacing the current paper work.

II. To increase work force therefore increasing productiveness.

III. The system will assist the bureau bring forth mistake free records and bring forth a summarized study

of all minutess.

1. 5 Research Questions

I. How will this system finally save clip in entering minutess?

II. How will this system increase the work force of employees?

III. How will the system aid in bring forthing an mistake free summarized records?

1. 6 JustificationThe chief importance of this system is to heighten a good flow of information and records in the bureau so as to heighten a speedy and steady flow of work and besides supply a dependable and efficient beginning of information that will assist in twenty-four hours to twenty-four hours activities of the bureau in return extinguishing the reverses provided by the manual system that is presently in usage.

1. 7 Premises

The research will fundamentally continue with a few premises chiefly: the respondents will give right information. the information given will be right at the clip of the survey and besides it will be relevant adequate to develop the system.

1. 8 Scope of ResearchThe range of this research merely feature Nakuru county and in precise Lanet estate in developing a theoretical account based on explicating version of TPS in commercial bureaus. informations aggregation and analysis in a specific commercial bureau that is accommodating a TPS. explicating the critical success factor and transferability issues of TPS in commercial bureau and convey out the issues for version of TPS to a specific concern scene. The range of thisresearch is limited to this commercial bureau and does non widen to other sectors of the commercial bureau.

Chapter TWOLITERATURE REVIEW

2. 1 IntroductionThis reappraisal literally focuses on what a dealing processing system is all about in footings of the demands related to operations of this system and as it is made in different theoretical accounts for different specifications. This is an of import portion in proposal composing since it gives a direct over position of other surveies done on the same and how information is shared in the bureau that is from the lower degree where rent is collected to the in-between degree where records are defined to the upper degree where studies are made and brief history of TPS and besides an illustration of a TPS and its failing and the decision.

2. 2 Literature Review

Transaction Processing System or TPS can be defined as a type of Information System or IS which gathers. shops. alterations and retrieves the informations minutess of an organisation or concern Therefore. it offers tools that will assist to ease or automatize application programming. executing and disposal. In add-on. it supports a web of device that submits different questions and updates to the application. Based on these inputs. the application will keep a database stand foring some existent universe province. Application will so. responses and end products typically drive real-world actuators and transducers that change and control the province. The applications. database and web tend to germinate over several decennaries. Increasingly. the systems are geographically distributed. heterogonous. continuously available and have stringent response clip demands (Gray & A ; Reuter. 1995. p. 5) . TPSs have been available since the 1970s. and most of the concerns are utilizing them. It's widespread usage can be associated with the coming of the Internet. As a consequence. the cost of purchasing. using and implementing the needed package has dropped so much that most of the concerns can use the said system in profitable mode.

Therefore. banking from place. booking a vacation online. shopping and working from place are now readily available and less clip devouring due to dealingprocessing (Crystal 2009) . TPS shows for critical features:

rapid processing, dependability, standardisation and controlled entree. The rapid or fast processing of dealing is considered as important facet in the success of any concern. due to the demand of the clients towards immediate action. Furthermore, dependability pertains on the issue of mistakes ; this is because clients will non digest any errors. Therefore, TPS must be defined in order to do certain that the systems remain operational for good. TPS must besides be standardized, significance, each operational regulations ; must look to take topographic point in isolation ; and must do certain that if a dealing was completed is can non be undone. The said conditions make certain that the TPS carry out their minutess methodically (Crystal, 2009 ; Gray & A ; Reuter, 1993) .

2. 3 History of dealing processing system

Transaction processing was the first type of information system. Transaction treating systems were used during the 1950s when the electronic computing machine became available for concern usage. The first commercially available electronic computing machine was called Universal Automatic Computer. It was designed by John Presper Eckert and John William Mauchly. The first was delivered to the U. S. Bureau of Census. It could treat both numerical and alphabetical computations with easiness and was used by organisations to batch procedure concern minutess, such as paying employees and entering client purchases and payments. These initial applications of a TPS are still of import today

2. 4 Example of Transaction Processing System

Manual dealing systems are concern systems that operate without the usage of machines Peoples are used to enter the informations about the concern activities. For illustration, a manual point of sale dealing system has eleven operational stairss performed by a gross revenues helper to sell a merchandise to a client. Analyze the merchandise and find the merchandise monetary value. Record the merchandise monetary value on the gross revenues faux pas and add it to the entire monetary value of all selected merchandises. Check the entire monetary value of all the merchandises selected. Inform the client of the entire monetary value and delay for payment. Receive payment for the merchandises. Calculate the sum of alteration owing to the client. Give the selected merchandises, a transcript of the gross revenues faux pas, and the alteration. At the terminal of the concern twenty-four hours entire all gross revenues faux pass to look into that the money collected is incorrect, take a stock cheque of the staying stock. Check that the stock staying peers the stock at the beginning of the concern twenty-four hours minus the stock sold. The manual point of sale system is typical of a manual dealing system. It is based on a clear set of regulations that is followed by a individual. These regulations, or processs, in a manual dealing system let the system to be easy computerized. The processs that can be computerized are identified by the informations they are treating Inthe organisation

2. 5 Weakness of the Manual Transaction processing System

Incompatibility of informations: there will be no information available for future usage, since information might acquire misplaced during manual filing, so data habit be preserved decently for future usage. Repeat of work if there are any alterations to be made, the information will hold to be entered once more, at times the worker would bury to do the alterations or bury that they had already altered it and might remake it once more, its once more clip devouring. Excessively much paper work: since everything and every item written down manually in paper there will be excessively much paper work! Space consuming: since the informations and paper is stored in registering cabinets it consumes excessively much topographic point, as the sum of work done on paper increases the filing cabinets excessively additions. Slow retrieval of informations: the information of clients and inside informations are stored in different parts of the site and so takes a long clip to recover the information. It takes a long clip to happen the information about a relevant individual, in instance of a hold, the hold will be held back. This results in a crisp bead in gross revenues, unhappy clients and a bad feeling on the

2. 6 Data flow Diagram of a TPS

1| Location || Process|

D1| File/Store|

In this system the user enters specifications through the keyboard and so the system procedure the input and at the same clip it shops the information in a storage media.

2. 7 Decision

In line with the presence of this

computerized system processing of minutess will be efficaciously and expeditiously done in due short continuance of clip therefore salvaging the bureau cost and cut downing the work burden therefore giving its clients effectual services which in bend additions client assurance to relay on the services they offer.

Chapter THREE Research Methodologies

3. 1 Introduction In this chapter I fundamentally focus on the procedure of roll uping and forming informations related to this survey and puting out a basic rhythm on the procedure of developing the system with the usage of a system development flow chart and a clear definition of all the phases involved in the development procedure.

3. 2 System Design Stages

3. 2. 1 Feasibility Study Feasibility survey is a preliminary probes into the possible benefits associated with set abouting a specific activity or undertaking. The chief intent of the feasibility study is to see all factors associated with the undertaking, and find if the investing of clip and other resources will give a desirable consequence

Types of Feasibility Studies

1. Technical Feasibility Studies A proficient feasibility survey looks into costs and possible benefits of new engineerings, or look into the sum of resource required to develop the system

2. Economic Feasibility The process is to find the benefit and nest eggs that are expected from the system, if there is a determination is made to plan and come up with the system

3. Operational feasibility Operational feasibility is a step of how good a proposed system solves the jobs, and how effectual it will be to hold the system in topographic point.

3. 2. 2 System Design: Involves doing a figure of designs of the system on paper or on the computing machine and see to it that the unsmooth image made of the system comprises of all the demands. Once this is done, you select and finalizes a best suited design for the development of the system.

3. 2. 3 System Cryptography:

One translates the codification or the plan in such a manner that they become in machine clear signifier so that the machine will understand and put to death every bit required.

3. 2. 4 System Testing: Once coding phase is through there is proving of the system and seeing to it that it is working as per the outlooks or non. And here there is rectification of the mistakes in the system if any.

3. 2. 5 System Execution: This is the most critical phase as in this phase the system is given to the client and awaits feedback.

3. 2. 6 System Care:

The last phase of the SDLC is that the system needs to be maintained and doing certain that it is working within the criterions set by taking any defaults in the system.

3. 3 System Design Flow Chart

1. Start
2. Feasibility survey
3. Design
4. Coding
5. Testing
6. Mistakes
7. Design Error
8. Maintain

9. Maintain
10. EndEnd

Figure 1. 0 System Design Flow Chart

3. 4 Data Collection Methods

3. 4. 1 ObservationObservation is a primary method of roll uping informations by homo. mechanical. electrical or electronics means with direct or indirect contact Observations involve looking and listening really carefully in order to detect peculiar information about the survey at manus and allows research worker to travel into the field and observe the conditions in their natural province.

3. 4. 2 Advantages of Observations

DirectnessThe chief strength of observation is that it provides direct entree to the societal phenomena under consideration. It avoids the broad scope of jobs associated with self-report Diversity. Flexibility and Applicability Provision of a lasting record

Much of human societal behaviour that may be of involvement to the research worker is extremely transeunt. The fact that all observation entails some signifier of entering agencies that it provides a lasting record of such events orbehaviour. therefore leting farther analysis or subsequent comparings across clip or location to be carried out. Complementarily with other attacks

Another strength of observation is that it can efficaciously complement other attacks and therefore heighten the quality of grounds available to the research worker.

3. 4. 3 Disadvantages of ObservationPracticabilityOne of the chief disadvantages of observation is that it can be really clip consuming and resource intensive. Observer BiasThis can be because the perceiver records non what really happened. but what they either wanted to see. expected to see. or simply thought they saw. Observer EffectAnother possible failing of observation is the alleged perceiver consequence. which refers to the manner in which the presence of an perceiver in some manner influences the behaviour of those being observed.

3. 5 The targeted population

Targeted population included both residential and commercial renters the renters of the whole estate more than 5 1000 with 3. 500 as residential renters and 1. 500 commercial renters were a topic of the survey. Level| population|

Commercial tenants| 1. 500|Residential tenants| 3. 500|Total| 5. 000|Table 1. 0Targeted population

3. 6 Sampling techniqueThe basic technique used was probability trying method sing the survey unit had an equal opportunity to be picked in the sample size and besides non-probability sample size was selected since the survey units were convenient and purposive.

3. 7 Sampling processThe Sampled population is in three strata as divided by commercial and residential renters. In each watercourse 16 % of the population were assumed to be sufficient for a sample.

3. 8 Sampled population

Strata| Population| Sample percentage| Sample size|Commercial tenants| 1. 500| 16| 240|Residential tenants| 3. 500| 16| 560|Total| 5. 000| | 800|

Table 1. 1 Sampled population

3. 9 System demands

3. 9. 1 Software demands Microsoft office 2007 Microsoft window 7 professional

3. 9. 2 Hardware demands Intel microprocessor-pentium4 Flash disc 4GB Hard disc 150GB HP optical maser jet pressman

Mentions

1. Gerhard Weikum. Gottfried Vossen. Transactional information systems: theory. algorithms. and the pattern of concurrence control and recovery. Morgan Kaufmann. 2002.
2. Jim gray Andreas Reuter. Transaction Processing — Concepts and Techniques. 1993.
3. Morgan Kaufmann. Philip A. Bernstein. Eric Newcomer. Principles of Transaction Processing. 1997.
4. Morgan Kaufmann. Ahmed K. Elmagarmid (Editor) . Transaction Models for Advanced Database Applications. Morgan-Kaufmann. 1992.
5. Domanski. D. (1993) ‘A Road map for client/server computing’ . Informatics. September 1993. 25-30. Gibbs. M. (1993)
6. ‘Networking people and computing machines: A survey of the Australian Taxation Office’s re-equipment program’ . Working Paper No. 2. Union Research Centre on Office Technology. Melbourne. Hammer. M. . Champy. J. (1993)
7. Reengineering the corporation. Allen & A ; Unwin. International Business Machines Corporation (1987) .
8. Common user entree panel design and user interaction. IBM. Johansen.R. (1992)
9. An debut to computing machine augmented teamwork. in Boston. Kinney. Watson. ‘Computer augmented teamwork’ . Van Norstrand Reinhold. Moad. J. (1993)
10. ‘Does reengineering truly work?’ . Datamation. August 1. 1993. 22-28. Otte. F. (1982)
11. Consistent user interface. in Vassiliou. Y. (Ed.) ‘Human factors and synergistic computing machine systems’ . Ablex Publishing Corporation. Norwood. NJ. 261-275. Tetschner. W. (1993)
12. Voice processing. 2nd edn. Artech House. File disconecusrchrispapers r94-02. physician

Decision Having taken a great consideration on the facet of utilizing the processs outlined in this proposals and taking attention and utilizing the design procedures available and following with the design formant to guarantee that the system is in topographic point am certainly that it will be of great benefit to the bureau particularly in footings of transporting out their everyday minutess therefore increasing productiveness and effectivity to its clients expeditiously in an organized mode.