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Citizens Acceptance of Online Services in Sri Lanka Police: Study on Police Clearance Online System

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Abstract: The Police, as the main law enforcement agency in Sri Lanka, assure a society which is free from fear of crimes & violence by her vision statement. Ensuring the state security is vital because threat to the security is, undoubtedly, vulnerability for everything. The Police Clearance Certificate (PCC) is one of the proactive measures to assure the security and social tranquillity. PCC must be free from fraud and errors. The criticism towards issuing agency was to delay of processes, bureaucracy corruption. In order to expedite the clearance process, in 2015, it was introduced a E-governance approach. The aim of this study was to evaluate the efficiency and effectiveness of this new on-line system and reviewing the level of customer satisfaction. This is the first and only research made on this new Police Clearance Certificate Issuing System (PCCIS) in Sri Lanka. The data in this qualitative research were gathered through questionnaires, interviews, literature survey and observations. The samples were selected in a manner which can be generalized the results to the whole population. Though the Sri Lanka Police (SLP) assure the issuing of PCC within 14 days, this research revealed that 58% of the applicants don't get it within that period. But it was revealed that the corruption and organizational bureaucracy have been remarkably reduced with the online mechanism. The attractiveness & user friendliness of the system is comparatively good. The recommendations, made by this will contribute for further study, enhancements. Unfortunately, majority of

the people in Sri Lanka are not conversant with available police on-line services. Same time, unavailability of National Egovernment Platform and Data Warehouse, connecting the public & private agencies, is a big imperfection in the country.

Key Words: E-governance, Police Clearance Certificate, Police Clearance Certificate Issuing System

Intoduction

The SLP ensure to maintain a peaceful environment to live with confidence without fear of crimes & violence by her vision statement. (SLP, 2018) PCC is one of proactive strategies used to achieve that vision. SLP with the support of Information and Communication Agency in Sri Lanka (ICTA) introduced the new Police Clearance Certificate Issuing System (PCCIS) in order to expedite the issuing process in 2015.

A. E-governance for Policing

Electronic governance is the application of information and communication technology (ICT) for delivering government services, exchange of information, communication of transactions, integration of various standalone systems and services. (Bose & Rashel, 2019) It improves the efficiency and effectiveness in the government service, reduce individual and government cost, reduce corruption, transform public administration from bureaucracy to service orientation, reach out to a broader part of population, improve the democratic process. (Kanchana & Samarakoon, 2018)

The Police organizations in the world has introduced numerous online services to their

citizens in order to improve the service efficiency. As an example, India Police has provided DIGITAL POLICE Portal as a platform for citizens to file crime related complains on- line and seek antecedent verification of prospective employees or tenants, PCC process etc. The Digital Police Portal in India is a smart policing initiative to provide a better service to the citizens and for efficient police investigations and preventive measures. (INDIA) (India) (INDIA) Singapore immensely applies online services in order to make Singapore the safest place in the world. On-line corridor is open for the public to check their eligibility for a certificate of merit, individual criminals' records, traffic offences records, warrants of arrest, driving license and demerit points, suspicious transactions, PCC etc. Most importantly Singapore police force values its clients' feedback for the system developments. (Singapore, 2018)

Establishing of ICTA in July 2003 is a milestone of information & communication technology in Sri Lanka. (GIC, 2007) According to the policy Statement of ICTA "All government organizations should ensure the availability and delivery of services through multiple electronical channels". (ICTA, 2015) Adhering toabove policy, SLP with the guidance and support of ICTA initiated PCCIS in order to provide efficient service. Today it is been issued more than fifty thousand PCC, annually. New system could to resolve the prevailed issues like unattended applications in the queue, fraudulent document and frustrations. The new PCCIS is providing her service almost three years to date. Technologically advanced policing system undoubtedly enhance the customer satisfaction and service efficiency. This is the first and only systematic study done on PCCIS, ever.

B. Aim

The aim of this study is to evaluate the efficiency & effectiveness of newly

Introduced PCCIS and to identify the areas for system advancement.

C. Objectives

The objectives of the study are,

- 1) To check the efficiency level of the new PCCIS.
- 2) To test effects of PCCIS on organizational bureaucracy and corruption.
- 3) To explore new strategies to improve the current PCCIS.
- 4) To find the level of citizens' familiarity on PCCIS.

Research Methology

An unreliable method produces unreliable results. And as the consequence of poor methodology, it undermines the value of the interpretation of findings. Hence the methodology of this study was carefully selected allowing the readers a critical evaluation and to ensure the study's overall validity and reliability.

A. Research questions

- 1) The researcher identified following questions in this study.
- 2) Whether the introduced on-line clearance certificate mechanism has succeeded enough to provide efficient and effective service to the applicants.
- 3) Whether this on-line clearance certificate system has supported to overcome the corruption and the bureaucracy in the police service.
- 4) Are there any new technologies, systems or processes which can be implemented in order to improve the efficiency of this on-line clearance system?
- 5) Whether the Sri Lankan citizens are conversant with the on-line services provided by SLP.



B. Research Strategy

The strategy in this study was selected in order to provide an insight of the problem and appropriate solutions. Mainly this is a Qualitative study of subjective in nature. Quantitative research strategy also was used but comparatively low. The descriptive strategy was used only when describes a particular situations. The researcher did not manipulate any condition. It just observed already exists in the field & surrounding and it helped to uncover the hidden facts & figures of the study area.

C. Data Collection Method and Tools

In this study it was collected both primary and secondary data using the the instruments of questionnaires,interviews, observations and literature survey as shown below

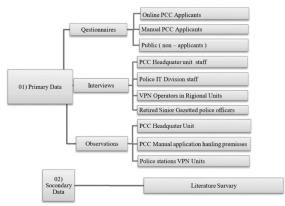


Figure 1: Data Collection Method and Tools Source: By Researcher (2019)

Questionnaire: The questionnaires 1) were properly constructed and responsibly administered. Number of key questions, direct and indirect, were asked from the participants in order to obtain statistically and qualitatively useful information to the research topic. They were structured in a simple but logical order to grab the views & opinions of the participants. Blank spaces were provided for any observation comments. The questions which generate irrelevant information to research questions were omitted. Collecting only appropriate data, making data comparable and amenable to analysis, minimizing the bias, grabbing the real opinion of the participants were the points which were focused by questionnaires.

The sample of population of on-line applicants (OLA) was delivered questioner by E-mail. Telephone conversation was used to motivate the OLA order to return back the filled questionnaires through E-mail. Further clarifications were done using telephone conversations. The questionnaire for sample population of manual applicants (MA) was delivered by postal mail. If any further clarification on given answers, they were requestioned via telephone. Questionnaires for non-applicants (NA) were delivered manually. When arise a clarification by the NA, it was briefed verbally. The main objective of questioning NA was to identify whether this new PCCIS is familiar and conversant with the Sri Lanka general public. Hence this sample of population consisted with population over the age of 16 and representing different social status. No deep classification was done because the main intention of the researcher was to get a general view on citizens' familiarity on PCCIS.

- 2) Interviews: Interviews, as the instrument for data collection in this study, was mainly used to identify the history of PCC and to identify the current practices in the process. Interviews were supported in this study to find the valuable information because the related written document and details on the system had been destroyed or misplaced.
- 3) Observation Method: Though the observation is a complex research method, the researcher puts himself in the actual situation and watch carefully. The researcher uses observation method with the objective of observing people in their natural setting. Observation was found more suitable in order to overcome the criticism of validity of data and biasness of the study. The



researcher, himself, observed the Police Headquarter Clearance Unit (PHCU), manual applications handing over premises and other 12 local police area units. It was monitored available infrastructure facilities, manpower, space & comfort in premises, actual behaviour and response of the staff towards applicants.

4) Literature Survey: The researcher followed written research articles and sources available in the web to collect secondary data. The data available in the PHCU was collected and analysed. The secondary data were helpful to researcher to gain initial insight into the study area and it provided access to the work of scholars all over the world. It gave a frame of mind that in which direction the researcher should go in the study. Though it saved time and money the researcher was mindful on reliability and accuracy of content when using the secondary data sources.

D. Population and Sample Selection

The research population is generally a large of individuals collection or objects. Practically it cannot be tested every individual in the population. Hence in this study the researcher randomly selected comparatively adequate comprehensive group of individuals. The researcher's 1st target population was the PCC applicants. The 2nd target population was the Sri Lankan citizens. 3rd target population was the police officers who are engaging with PCC issuing process. The results of the study will apply to all population for whom the study was done. Randomization strategy followed to create equal opportunity to each individual in the population. Every member of the population had a probability of being selected for the sample. It was created adequate representativeness of the population in order to decrease sampling error and sampling bias.

E. Research Process

The researcher identified four research question in related to PCCIS. Literature review was done to gather the knowledge in related field. Research objectives were made. Data were collected pertaining to the research questions and objectives. Data were analysed and the recommendations were made according to the findings and results. The data analysing tool was SPSS. The findings of interviews and observations were evaluated manually.

Result and Discussion

Covering all research questions, identified, this analysis was conducted critically evaluating all the data collected. The results in the study is categorized to following sub topics.

- A. Efficiency and Effectiveness
- B. Organizational Bureaucracy
- C. corruption
- D. Infrastructure facilities, Manpower & connectivity
- E. New technologies and strategies to develop the system
- F. The citizens' familiarity with PCCIS

A. Efficiency and Effectiveness

Efficiency and effectiveness are two main management tools assess the organizational productivity. In this study it was tested whether the PCCIS is efficient and effective to fulfil the applicants' expectations. Following four aspects were tested in order to check the efficiency and effectiveness of PCCIS and results are shown below as a percentage.

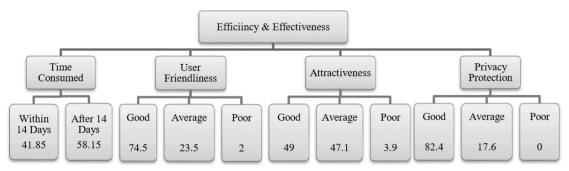


Figure 2: Efficiency and Effectiveness Source: By Researcher (2019)

- Time consumed to complete the PCC process
- 2) User friendliness of PCCIS
- 3) Attractiveness of PCCIS
- 4) Protecting privacy and confidentiality of the applicants
- 1) Time consumed to complete the process: PCCIS web page states that the PCC will be issued within 14 days if it is submitted appropriate particulars. Researcher tested actual consuming time of issuing PCC by MA, OA, 2018 January randomly selected applicants & 2019 January randomly selected applicants. It was revealed that 72.5% of OA & 50% of MA haven't got their certificates within 14 days. 58% of the selected samples in January 2018 and 52% of selected samples in 2019 have not got their PCC within 14 days time. After statistically calculation of above four findings, more than 58% of the applicants haven't obtained it within 14 days. This study revealed that there is a delay in the process and the customers has not meet their service requirement efficiently.
- 2) User Friendliness: 74.5% of OAs stated that PCCIS is user friendly. Most of OAs proposed advancements like Chatbot, self-downloading facility, Auto Save option, eForm, states checking, SMS service & channels for customer feedback etc. to improve the friendliness in the system.

- 3) Attractiveness: Attractiveness is a vital substance not only in a computer system but also in every aspects in the life. Comparatively 95% population are happy on attractiveness of SLP web page. The 5% OA commented that the SLP webface must improve with simple and descentappearance reducing it's complexity and turbulences.
- 4) Protecting the privacy and confidentially: Privacy protection is vital because the PCC is a job done with applicants' personal informations. If the PCCIS staff are fail to keep safe the personal and sensitive details of applicants it can be created many social issues and embarrassing situations. This study revealed that almost all applicants are confident enough on privacy protection by the SLP.

B. Organizational Bureaucracy

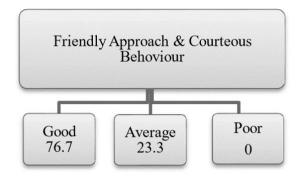


Figure 3: Efficiency and Effectiveness Source: By Researcher (2019)

Bureaucracy is the one of main criticisms against public services. The influence which

was made by PCCIS on organizational bureaucracy was evaluated in this study. It was revealed that none of applicants in this study were treated indecently. But it was revealed some poor attentiveness in telephone conversations. Tri languages incompetency of the Police Clearance staff created embarrassments had frustrations to Tamil and English speaking applicants. Some MA had specially suggested that distinctive attention and care must be given for the people like elderly, pregnant, disable when the MA are in the queue to handover the applications. field observations the researcher witnessed that the PCC staff were attending with the applicants in friendly and cheerful manner. No delay of attendance was observed. But there was inadequacy of basic facilities like seating, photocopier, drinking water and lavatory in the office premises. The bureaucratic approach has been remarkably reduced because of less physical participation in new PCCIS process.

C. corruption



Figure 4: Corruption Source: By Researcher (2019)

None of OA or MA in this study hadn't been subjected for bribing or corruption. They hadn't pay any additional payment than to the stipulated amount. Hence it was revealed that the PCCIS has supported to enhance the transparency in PCC issuing process. This is good evidence that the E-government approach always supports to reduce corruption because of transparent phases.

D. Infrastructure facilities, Manpower & connectivity

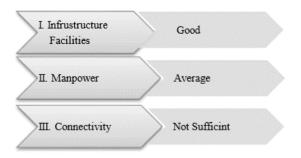


Figure 5: Infrastructure facilities, Manpower & connectivity
Source: By Researcher (2019)

This study checked whether the respective attending units have been facilitated with necessary equipment, man power and internet bandwidth. SLP has internet leased line of 100Mbps and annually the SLP pays more than Rs. 138000000/= on VPN connections to Sri Lanka Telecom. The internet bandwidth are not sufficient to fulfil the current requirement. As a consequence the efficiency has slowdown. With the available high demand it must be upgraded the main connectivity.

Both the face to face interviewees' and telephone interviewees' common opinion was that the manpower should be increased with the present-day requirement. Headquarter Unit has enough computers. Each regional units also have been equipped with adequate computers. But sometimes there are delays with repairs, installations and supplying of new machines to the regional units.

Vesting of VPN staff for other duties, in some stations, has created negative effects. In some stations VPN operators don't deploy at night. Some police stations, the OIC/HQI doesn't directly approach to the VPN. Instead, the VPN operator make a print of the massages produce to the OIC/HQI. This negative practice must be discouraged in order to achieve the objectives of E-governance.



E. New technologies and strategies to develop the system

In this study the researcher could to explore many technological and practical advancements to amalgamate with PCCIS. Those areas to be developed has included in recommendations of this study.

F. The citizens' familiarity with PCCIS

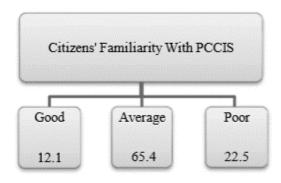


Figure 6: The citizens' familiarity with PCCIS Source: By Researcher (2019)

PCCIS had been the first on-line experience of 67% of OA. High majority of MA are not aware with this PCCIS. 88% of NA's knowledge on government on-line services are average or below to the average. 1/3 of NA know nothing on Sri Lanka police on-line services.

Over all majority of public are not conversant with the on-line facilities providing by the SLP. Some are not rely on on-line services and others are not conversant with new technologies.

As a summery, the efficiency of PCCIS is not adequate because more than half of the applicants don't get it within 14 days' time. The three components, namely, user friendliness, attractiveness and privacy protection, which was considered as main criteria in the effectiveness of the system, are comparatively good. But, still, there are many new technologies and mechanisms to be coped up with in order to upgrade the system effectiveness as mentioned in recommendations. Most importantly PCCIS has reduced organizational bureaucracy and

corruption. The infrastructure development and implementation of new technological strategies, identified by this study, will enhance the quality of the service ensuring the global security, as a key requirement in today.

Conclution and Recommendations

This study was done in order to find the answers for 4 research questions mentioned above. Research is the tool for the innovations and improvements in any field. Maturity is not a destination but a never ending process. This topic in this study was selected in order to develop the PCCIS by identifying the gaps available with other global on-line systems. I hope this study will direct and motivate SLP to improve PCCIS with proposed recommendation.

A. Recommendations to Enhance the Sri Lanka Police on-line Clearance System

Following recommendations are made in order to upgrade the PCCIS as more friendly, efficient and attractive service.

1) Biometric verification must be applied in order to uniquely identify

the applicants. Biometric verification is a method by which a person can be uniquely identified by evaluating one or more distinguishing biological traits likes fingerprint, hand geometry, earlobe geometry, retina patterns, voice waves or DNA (Rouse, 2008). (Ahmed, 2019) The Department of Registration of Persons must initiate to accomplish this. Following conceptual diagram depicts the directions for respective task.



Figure 7: Personal Data Warehouse Source: By Researcher (2019)

- 2) The PCCIS should be developed with,
 - a. A Chatbot via auditory or textually (Team, 2018)
 - Secured self-downloading facility using Digital Signature or QR code (WordPress, 2019) (Direct, 2019)
 - c. Auto Save option
 - d. Improved file uploading size and capacity
 - e. eForm facility to download the application, fill it and uploading to the system (India, n.d.)
 - f. Improved "status checking" facility
 - g. Braking the PCCIS application in to sub categories like personal details, professional details, document downloading etc.
 - h. Auto calculation and auto filling technology
 - i. Improved web interface with simple and descent appearance
 - j. System advancements to prevent the problems like missing the web page and system stuck

- k. Speed delivery & courier service facility with additional chargers
- l. Channels for customer feedback and grievances 24×7 basis (Haije,2017) (Pal,2018).
- m. SMS service to update the customers on progress of the process
- 3) Maintaining of comprehensive Data base on PCC applicants by PCC Headquarter Unit.
- 4) Assigning CRD as 7th consulting agency in PCCIS.
- 5) Establishing a National Egovernment Platform and Data Warehouse comprising with the man-made intelligence and Artificial Intelligence (AI) to perform the tasks and decision makings as shown in following diagram. (RIGANO, 2018)



Figure 8: National E-government Platform and Data Warehouse Source: By Researcher (2019)

- 6) Most importantly, the public must make aware on available SLP on-line services through electronic media and other medias.
- 7) Language capacity and the healthy communication skills of the PCC staff must be enhanced by undergoing them for proper trainings with exposure.

Efficient law enforcement mechanism is a prime requisite in any state. When the security is under the threat vulnerability is ubiquitous. This study was done in order to strengthen the SLP technologically. SLP by her vision statement gives utmost confidence for her citizens. Her motto is decorated with very attractive jargons like people friendly, professional and prestigious. Empowering the police with professionalism is timely requirement. Today world we can't utter the professionalism forgetting technology. If the SLP can effectively integrate the recommendations made by this study it will pave the way to upgrade the PCCIS and E-governance in SLP.

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