

## THE APPLICATION OF BUSINESS PROCESS RE-ENGINEERING SYSTEMS TO ENHANCE SERVICE DELIVERY IN THE PUBLIC SECTOR

**Tshibalo Lucas**  
Johannesburg Metropolitan  
Municipality  
Republic of South Africa

### ABSTRACT

The study investigated the application of the business re-engineering systems in enhancing service delivery and also proposed the systems to be used to enhance service delivery in the entire public sector of South Africa. It is widely researched that business re-engineering is a management approach aimed at improvements by increasing efficiency and effectiveness of the process within the public organisation, across public organisation, from public organisation to businesses and from public organisation to citizens. In the past, most of the business processes re-engineering (BPR) implementation were carried out in the private sector because of the dynamics of the business processes. The study reveals that based on its success in the private sector on effectiveness and efficiency service delivery, the concept finds its way to public sector. The study found that public sector will be effective and efficient in service delivery if the business process re-engineering is implemented. Furthermore, study reveals that based on its implementation in the public sector; BPR becomes a tool in transforming public sector for radical improvement in all aspects of its performance in rendering services to the public. It is based on the above background that the main focus of the study was to analyse systems used by public sector in re-engineering its service delivery businesses. Specific reference was made to service delivery at the Department of Justice and Constitutional Development (DOJ & CD). In conclusion based on the findings, recommendations will be made on how best business process re-engineering system can be used to effectively and efficiently in improving service delivery in the public sector. The paper reveals that it is not possible to re-engineer business processes without the Information Technology (IT) systems support. It is not only an enabler for re-engineering; it has also become an essential and integral part of all re-engineering efforts. It has been shown from the research that DOJ & CD improved its service delivery through the implementation of IT systems. The reasons behind DOJ & CD focuses on the IT systems to re-engineering service delivery based on the fact there is human capacity shortage. The study reveals that IT systems are effective and addressing gap of insufficient budget to cater for the human capacity. The study reveals that court services are rendered quickly, safe and in an effective way. The study reveals that courts in the Republic of South Africa (RSA) are now having lesser case backlogs as through IT systems cases are disposed quickly even in the absent of the accused in court. The study recommends that the IT systems be utilised to re-engineer business processes in all public sector institutions in the Republic of South Africa.

**Keywords:** Business Process, Re-engineering, IT Systems, Service Delivery and Public Sector.

### INTRODUCTION

The field of Public Administration has gone through various changes in the course of its history (Mukonza2014: 500). Mukonza further indicated that ICT's has brought transformation to various aspects of government operations and governance. He defined E-

governance as electronic governance, a compound word made up of electronic and governance. Research established that e-governance as business systems are defined as innovative information, communication and technologies such as internet to deliver efficient and cost effective services (Maserumule 2014: 77).

Public administration has got six generic functions namely, organising, financing, personnel provision and utilisation, work procedures determination, control and planning (Koliba at. el., 2011:37). Public administration as a scientific discipline is more focusing on the development of policies (techniques) to render services effectively and efficiency (Koliba at el 2011: 39). He further indicated that those techniques are implemented in all spheres of government namely national, provincial and local spheres. It is in this essence that administrative and management practices available in the public sector comprise of comprehensive sets of activities that requires knowledge of virtually all sciences. The practices mentioned above are acquired in the state institutions like universities and the subject is called Public Management.

Taking into cognisance the above, Public Administration is either a complex subject or field of study or both. The above depends on how theory about Public Administration is understood and analysed in its areas of research or elements of Public Administration. It should, however, be stated that one core issue distinguishes Public Administration from other related disciplines and that is the political milieu with which its operational activities are performed. All administration managerial issues that form the study of Public Administration are effective and efficiency if the study is keeping abreast with modern management systems to re-engineering the way public officials render services in the public sector.

In order to achieve the above the need therefore exist to re-engineer public services business and introduce IT systems that meet the modern way of management. Tarmin et al (2010: 15) defined business process re-engineering as a fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of organisations performance such as cost, quality, services and speed. Business Process Re-engineering (BPR) involves changes in structures and in processes within business environment (Zygiaris 2009: 2). It is further indicated that the entire technological, human, and organisational dimensions may be changed in BPR.

According to Ramachandran BPR is a pervasive but challenging tool for transforming organisations for radical improvement in all aspects of its performance(2010:2) . Prior 1994, there were few management systems in the Public Sector to improve effectiveness and efficiency public service delivery. However after 1994, a number of systems were brought into being to re-engineer the way public sectors render its service to the public.

Department of Justice and Constitutional Development (DOJ & CD) is the Republic of South Africa department that is responsible to administer courts services namely criminal law, civil law and family law (DOJ & CD 2016). The department manages Constitutional court, Supreme Court of Appeal, Labour courts, Land Claim courts, High courts, Lower courts, Equality courts and Small Claim courts. Currently there are 713 Lower courts that include magistrate courts, branch courts and periodical courts (DOJ & CD 20116).

All this courts are scattered all over 9 provinces in the Republic of South Africa and deals with courts services within their area of jurisdictions. In order to improve its services, DOJ & CD was one of the pioneers in introducing the IT systems which eventually improved its court

services hence the focus of the study. The study investigates IT systems used by DOJ & CD in improving its court services to the public and proposes IT strategies in improving service delivery in the public sector institutions.

## **LITERATURE REVIEW**

The DOJ and CD in the Republic of South Africa is the department that is responsible to administer court services namely criminal, civil, and family law. The department manages Constitutional Court, Supreme Court of Appeal, Labour Courts, Land Claim Courts, High Courts, Lower Courts, Equality Courts and Small Claim Courts (DoJ& CD 2016).

Currently there are 713 Lower Courts that include magistrate courts, branch courts and periodical courts (DOJ & CD 2016). In addition all this courts are scattered all over 9 provinces in the Republic of South Africa and deals with court services within their area of jurisdictions. All the above mentioned courts have implemented IT business process re-engineering systems which will be discussed in details later in the article.

According to Gutman, Information Technology is the science and activity of moving data digitally (2010: 1). It focuses on activities that deal with the solution of the problems through logical thinking, information management and communication (Department of Education 2012). It is further indicated that IT focuses on the development of computer applications using current development tools.

It is further indicated that IT improve effective and efficient service delivery. According to Ramachandran, IT plays an important role by either enabling or constraining successful implementation of re-engineering (2010:2). It is further indicated IT allows the organisation to do business process more efficiently and effectively. It is further indicated that IT plays a major role in BPR as it provides office automation. In general it allows an effective change in the manner in which work is performed (Zygiaris 2009: 11).

The Department of Justice and Constitutional Development (DOJ & CD) had a serious challenge in delaying service delivery due to non-availability of suitable IT systems (PMG 2012). Based on the above challenge DOJ & CD decided to re-engineer the way court services are rendered using IT systems.

In the past before 2000 services were rendered manual and that resulted in delays, fraud, theft and corruption. For the purpose of the study the following systems were introduced by DOJ & CD in trying to re-engineer the way court services are rendered, Electronically Funds Transfer (EFT), Justice Deposit Account System (JDAS), Digital Court Recording System (DCRS) and Justice Yellow Pages (JYP). The above mentioned systems were introduced to re-engineer the way DOJ & CD are running court services. The main reason was to be effective and efficient in their quest to speedily rendering court services.

## **RESULTS AND DISCUSSION**

### **Electronically Funds Transfer (EFT)**

According to Gutman, EFT is intended to protect individual consumers engaging in electronic fund transfer that are done safer and quick(2010: 6). EFT was introduced by DOJ & CD to pay maintenance beneficiaries via internet transfer (DOJ & CD 2016). The study reveals that in the past before 2009 public members have to travel long distance to collect

maintenance monies from court and the travelling was costly versus monies to be collected. Another challenge proven by the study is that manual way of payment over the counter lead to DOJ & CD losing millions of monies due to theft, corruption and fraud.

The study reveals that the introduction of EFT system addresses theft, corruption and theft. In addition long wait for get monies over the counter is the things of the past after implementation of EFT system. It has been reveals that the study that DOJ & CD has further decentralised EFT system in 149 of 200 courts on line and 217 000 of the approximately 250 000 beneficiaries of maintenance were now receiving monies direct into their bank accounts (PMG 2016). It is further reveals that 102 000 individuals had been paid through this system in June 2012 (PMG 2016).

It is been further indicated that EFT system improved service delivery in an effective and efficiency way. It is highlighted that EFT payment also improved turnaround time on speedy payment as well as producing audit trail (PMG 2012). The study reveals that the increase in efficiency and effective through EFT enabling the department to reduce queues in the courts (DOJ & CD 2016).

Furthermore the study established that EFT system has managed to limit the possibility of fraudulent, theft and corrupt activities. There is also an improved turnaround time in finalisation of payment transaction. It is also a cost saving measures as public do not have to travel long distance to access their monies. EFT system is very effective and efficient in service delivery within DOJ & CD environment.

### **Justice Deposit Account System (JDAS)**

According to DOJ & CD Annual Report, JDAS is a system introduced in 2008 to administer funds on behalf of the third parties (2016:66). In addition, TPF was not reported upon and no audit opinion was presented. TPF related service delivery was not effective and efficiency as there was no monitoring tool. DOJ & CD administer funds on behalf of the third parties and historically Third Party Funds (TPF) was not reported and no audit opinion was presented as the matter was not regarded as a reporting entity (DOJ & CD 2016).

In order to report on TPF, DOJ & CD during 2007 financial year re-engineer the way to handle TPF by introducing JDAS and it was rolled out in all courts in South Africa (DOJ & CD 2016). The introduction of JDAS system has brought with it an increased control and audit trail (DOJ & CD 2016). It is however indicated that there is still having challenge related to financial reporting functionality of the system.

According to DOJ & CD to address the above challenge, DOJ & CD introduced Management Information System to assist financial reporting (2016). The study found out that JDAS system is effective and efficiency in improving service delivery in the court service points. Fraud, theft and corruption activities are detected unlike in the past wherein it was difficult to do audit trail. Study reveals that DOJ & CD is able to do financial reporting.

### **Digital Court Recording System (DCRS)**

DCRS is defined as technology used to capture high quality recordings of court proceedings and maintaining recordings electronically in a searchable database (Teb 2009). According to Wright over the last fifteen years there has been a gradual move to digital recording solutions

to reduce costs and improve functionality(2008: 3). He further indicated that DCRS allows for central storage for simple access, powerful search for quick retrieval, reduced maintenance and media costs, no loss of quality and easy distribution and quicker transcription time.

DOJ & CD has been allocated R 9.7 billion to improve access and develop a more efficient and effective justice system through upgrading by new technology called DCRS. The study reveals that currently in 2016, DOJ & CD do have DCRS in all court rooms. It has been established by this study that the system is effective and efficiency as record are kept, there is quick retrieval of records. In the past five years DOJ & CD were having missing records however after the introduction of DCRS challenges related to missing records are things of the past (DOJ & CD 2016). The study reveals that DCRS is effective and efficient in rendering court services.

### **Justice Yellow Pages (JYP)**

According to PMG,JYP was introduced at DOJ & CD in 2009 to manage supply chain processes (2016). Concerns were raised by Auditor General that DOJ & CD is failing to report on unauthorised, irregular, fruitless and wasteful expenditure. The situation was not conducive to effectively and efficiently improve service delivery. DOJ & CD is an outwardly focused, customer centred-government department mandated to uphold and protect the Constitution and Rule of Law in the interest of a safer and more secured South Africa (DOJ & CD 2016), DOJ & CD pursuit to the provision of PFMA read with DOJ & CD supply chain management policy (DOJ & CD 2016).

Based on the above DOJ & CD introduced its own system to manage suppliers who rendered services to DOJ & CD (DOJ & CD 2016). In order to manage suppliers effectively and efficiently, JYP system was introduced in 2000. The main aim of the system was to deal with challenges from the suppliers not properly screened before being awarded services. In the past prior 2000, there was no system that keep database of suppliers rendering services to DOJ & CD hence challenges in poor services rendered. JYP provides conditions of which suppliers should comply that will prevent awarding tender and services to service providers not meeting necessary requirements in line with PMFA and Supply Chain Management Processes.

The study reveals the system is working effectively and efficient as suppliers are screened before being awarded a contract. Furthermore, services to be rendered by them are recorded for future reference. Poor service rendered by one supplier might prevent them being awarded contract in the future.

### **Total Quality Management (TQM)**

TQM is an integrated management philosophy and set of practices that emphasises, among other things, continuous improvement, meeting customer requirements in an effective and efficiency way (Powell 2012:16). According to Powell, TMQ is the way of managing for the future, and is far wider in its application than just assuring product and service quality; it is a way of managing people and business processes to ensure complete customer satisfaction at every stage internally and externally (2012: 1). In addition it combined with effective leadership, results in an organisation doing the right things right, first time. DOJ & CD as the



focus of the study do have quality management directorate to monitor quality of service rendered in all service points (DOJ & CD 2012).

According to the President performance monitoring and evaluation system was established in the 1<sup>st</sup> January 2010 to ensure that public sector performance makes meaningful impact in the lives of the public(2016) . The vision of the system is to strive for continuous improvement in service delivery through performance monitoring and evaluation system. After 2010 all other public departments also established sections dealing with monitoring and evaluation and that include DOJ & CD which is a focus of the study. Monitoring is defined as the ongoing review while evaluation means an analysis of the relevance, effectiveness and efficiency of the multi-sectoral team's prevention and response strategies (Cabinet 2010: 97). In every government there should be techniques or instruments used to monitor and evaluate the effectiveness and efficiency of public sector in rendering services to the public.

In the Republic of South Africa (RSA), office of the President has section that deals with monitoring and evaluation (The President 2012). The unit visits service delivery points in the public sector to check if they have got measures that are effective and efficiency to render public service to the public expectation. It is further indicated that the Performance Monitoring and Evaluation System (Cabinet 2010:4) is a modern public sector management technique developed recently to improve the way in which government achieves results by examining outcomes and impacts of projects and programmes. This management technique is focusing more on integrated approach to planning and performance reporting; consistent tabling of plans and performance reports before parliament. The unit uses IT related tool in its monitoring and evaluation mandate.

In reference to South African Public Sector context, in addition to directorate established in the office of the President, all departments are having directorates dealing with monitoring and evaluation of service delivery. The study reveals that , DOJ & CD do have directorate dealing with monitoring and evaluation that focuses on effectiveness and efficiency of department in rendering justice services to the public (DOJ & CD 2016). The study reveals that the directorate is understaffed and those employed in the directorate could not be able cover all service points within DOJ & CD.

To compliment the gap above, the study reveals that National Operating Centre (NOC) system is used by COJ & CD to monitor and evaluate quality of services rendered in the various courts in South Africa. At national level, the executive management are able to view number of cases, case status and how cases are being finalized at the end of the court session.

A typical example was the fire incident that took place in Polokwane Court in the Limpopo Province, Republic of South Africa as reflected on the picture below;

**Picture 1: Retrieved from [www.bdlive.co.za](http://www.bdlive.co.za)**



According to the Beeldlive newspaper accessed at [www.bdlive.co.za](http://www.bdlive.co.za) the following was reported;

“A FIRE broke out at the Polokwane Magistrate’s Court on Friday, Limpopo police. He further indicated that Brig HangwaniMulaudzi confirmed the fire but could not provide further details and said that “We can’t comment now because a docket still has to be opened”. Justice and Constitutional Development Department spokesman MthunziMhaga said no injuries were reported.”The fire is currently under control, no injuries were reported, and the extent of damage is still to be determined,” he said in a statement (2016). It was reported that; “We hope that dispensing of justice will not severely be affected by this unfortunate event.”Beeld newspaper reported that several awaiting-trial prisoners were confined inside the building when the fire started. By 11am the building was evacuated while the fire was still raging.Beeld journalist MarietieLouw-Carstens, who was covering a lawsuit in the building when it caught fire, reported that the upper part of the courthouse had burnt down.Three fire trucks and six ambulances were on the scene, and downtown Polokwane was cordoned-off.It was not yet clear what caused the fire” (2016).

**Picture 2: Retrieved: [www.timeslive.co.za](http://www.timeslive.co.za)**



According to the Timeslive newspaper accessed at [www.timeslive.co.za](http://www.timeslive.co.za) the following was reported;

"None of the police statements relating to that case were anywhere near that court," said department spokesman MthunziMhaga. "We are yet to complete an assessment of the damage in so far as court documents are concerned but people should not panic." The former African National Congress Youth League president appeared at the court on September 26 on a charge of money-laundering. He was released on bail and expected to return on November 30. Mhaga said case files could easily be reconstructed in the event that they were destroyed in the fire. Statements could be retaken and reports from hospitals or mortuaries could be regathered. The same applied to partially heard cases. "It is only in extreme cases where the presiding officer could order a retrial or, for the matter, start afresh," he said. Cases would be transferred to an unused court room at the Limpopo High Court as a temporary measure (2016).

It was further reported that; "A meeting of all stakeholders, including public works, would take place over the weekend to discuss ways to ensure justice would not be compromised in any way". Mhaga said they were still waiting for the forensic report on the actual cause of the fire and also an assessment of the damage. "All I can confirm is that it started with smoke in one of the offices and quickly developed into a full blown fire," Mhaga said. "We hope and believe that the dispensing of justice will not be severely affected by this unfortunate incident (2016)."

Due to the fact that DOJ & CD have implemented JDAS, EFT, DCRS and JYP the impact of the fire as shown above is not a challenge due to the fact that all courts documents are scanned, proceedings are recorded and all financial issues are captured in the systems which automatically transfer the information to the NOC system which central located in Pretoria and monitor all activities in all courts in the Republic of South Africa.

NOC system can able to retrieve information which was actual destroyed by fire and enable continuous court services. The study reveals that TQM through NOC system within DOJ & CD is effective and efficient. Furthermore, study shows that NOC system used to measure quality of service delivery is assisting top management in showing statistics on an increase number of criminal offenders, number of civil cases and decisions in human capacity needs as well as budgeting. The study reveals that NOC system is very useful within DOJ & CD and effective system in monitoring performance in the court environment.

## CONCLUSIONS

This paper aimed at how business re-engineering can improve the effectively and efficient of public sector. The paper reveals that it is not possible to re-engineer without IT support. It is not only an enabler for re-engineering it has also become an essential and integral part of all re-engineering efforts.

It has been shown from the study that DOJ & CD improved its service delivery through the implementation of IT systems. TQM (NOC system) ensured complete customer satisfaction matrix and assist in ensuring urgent intervention were necessary. Monitoring and Evaluation systems play an important role in re-engineering businesses. DOJ & CD monitoring and evaluation system is effective and efficient to render court services to the public expectation and should be applauded. It has been found that effective and efficient utilisation of the above



mentioned systems increases chances of improving service delivery. It is recommended that IT systems be utilised to re-engineer business processes in all public sector institutions. Every public sector need to implement monitoring and evaluation systems to check challenges hindering service delivery. The need therefore exist to ensure that the systems in place are being upgraded regularly to meet ever changing IT systems. The need also exist that countries do benchmark with each other to share best practises. It is with the above recommendations that effective and efficiency public sector service delivery will be realised.

## ACKNOWLEDGEMENTS

I wish to acknowledge Dr Musitha for assisting me with this manuscript, to put it together in line with the requirements of this Journal. I wish to thank Ms Joyce Mokoena, Director: Court Operations to work under her wing that lead me to complete this study.

## REFERENCES

- Beeldlive. (2012). *Fire guts Polokwane Magistrate's court*. [accessed 16 May 2016] Available from website: <http://www.bdlive.co.za/national/2012/10/19/fire-guts-polokwane-magistrates-court>
- Cabinet Office.(2010). *Journal on Performance Monitoring and evaluation System (PMES)Framework Document*. Cabinet Support and Policy Division: Performance Management and Evaluation Unit.
- Gutman, M. (2009).*Information Technology and Society*. Swiss Federal Institute of Technology Zurich: Ecole Centrale de Paris.
- Koliba, C. Meek, J.Wand Zia, A. (2011)*Government Networks in Public Administration and Public Policy*. USA: CRC Press.
- Maserumule, M.H. (2004). *E-Governance, e-Governance, and e-Democracy: a conceptual perspective*. Service Delivery Review, Volume 3 (2): 76-78.
- Mukonza, R.M. (2014). *E-Governance: A New Paradigm in Public Administration*. Journal of Public Administration: Tshwane University of Technology.
- Powel, T.(2012).*Total Quality Management as Competitive Advantage*. Strategic Management Journal: John Wiley & Sons. [accessed 13 May 2016] Available from website: <http://www.thomaspowell.co.uk/article>
- Ramachandran, N. (2010). *Business Process Reengineering*. Common Wealth Secretariat: Heads of African Public Services.
- Republic of South Africa.(2008). *DOJ & CD-Performance Management Policy of 2008*. Pretoria: Government Printer.
- Republic of South Africa.(2016). *DOJ & CD: Criminal/Child Justice*. [accessed 28 May 2016] Available from website: <http://www.doj.gov.za/vg/childjustice.html>
- Republic of South Africa.(2016). *Information Technology, Department of Education*. [Accessed on the 10 March 2016] Available from website: <http://education.pwv.gov.za>
- Republic of South Africa.(2016). *Parliamentary Monitoring Group*. [Accessed on 5 May 2016] Available from website: <http://www.pmg.org.za/report>
- Republic of South Africa.(2016). *The Presidency*. [Accessed on 5 February 2016] Available from website: <http://www.thepresidency.gov.za/pebble.asp?relid=1689>
- Tarmin, A at el. (2010). *Business Process Reengineering in Labuan Fire Services Operations: A case study*. Labuan School of International Business and Finance: University Malaysia Sabah.
- Teb.(2009). *Digital Court Recording*. Court Information Technology Officers Consortium.

Timeslive.(2012). *Malema case not affected by Polokwane Court fire*. [accessed 17 May 2016] Available from website: <http://www.timeslive.co.za/local/2012/10/20/malema-case-not-affected-by-polokwane-court-fire>

Zygiaris, S. (2010). *Business Process Re-Engineering BPR*. BPR Hellas: SA.