BEE Trends and Competencies in informatics: IT Governance and the BEE Scorecard

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Abstract

There is currently a lot of research work that is being done to gain insights into the value proposition for IT Governance frameworks and different other variables that have significant bearing on successful implementation of IT governance in South African organisations. There is however no adequate research on how Black Economic Empowerment (BEE) policy and more specifically the three significant elements of the BEE scorecard (ownership, preferential procurement and skills development) affect IT governance within South African Enterprises. The paper tentatively evaluates trends and competencies in informatics with special interest to BEE compliance and South African Government (Department of Trade and Industry) policies closely associated with IT. A broad outline of the research is presented and a tentative framework that will assist monitor these three elements of the BEE score card in IT Governance implementation is suggested. The paper aims at giving an improved understanding and insights about the correlation between these two concepts, both of which will impact on the success of businesses operating in South Africa. Preliminary analysis show and highlight an overall industry-wide regression in progress on the BEE scorecard measurement and it remains interesting to correlate this measurement criteria with IT governance implementation. The proposed method of data gathering will be quantitative research with extensive use of questionnaires that target IT professionals and practitioners closely affiliated with BEE initiatives. It is envisaged that the resulting framework arising out of this work will form a foundation for other scholars and practitioners in IT field to expand on gained knowledge.

Key words

BEE, Trends, IT Governance, Scorecard, Frameworks

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1.0   Introduction

The future success of IT enabled organizations is guaranteed by the presence of existing and accurate IT governance practices, guidelines and decision making. IT decision making process influences the measure of potential value that will be realized from the increasingly rising IT investment costs (Weill and Woodham, 2002; Schwarz and HirSchhein, 2003). This implies a need for high proficiency and maximum competence in appropriately leveraging IT activities in an efficient manner to diminish IT costs and task duplication.

Information Technology decisions form the organizational baseline for the value generation through IT (Porter, 1985; Brown and Yarberry, 2009; Grembergen, 2004). This necessitates good IT governance arrangements within organizations to accurately govern key IT activities in order to derive expected value from IT. Effective IT governance predicts the wealth that IT generates for an organization (Pearlson and Saunders, 2009; Weill and Ross, 2004; Bernroider, 2008; Verhoef, 2007).

According Grembergen (2004) more emphasis should be put on placing qualified people in decision making positions. This position is also echoed by Benedict (2006). This study uniquely highlights emerging trends within a post-apartheid South Africa where a significant proportion of Black professionals are increasingly finding themselves in critical decision making positions in many sectors of the South African economy. The IT sector in South Africa has equally shown significant rise on the number of Black IT professionals entering this sector. The study has proposed to consider the role Black Economic Empowerment plays within the IT sector and its influence on competency levels for successful IT governance in South African organisations.

The study proposes to incorporate a comprehensive framework aimed at appraising Black Economic Empowerment (BEE) competency levels whilst complying with government policies such as BEE scorecards and IT Governance metrics.

The proposed framework will help provide useful insights for organizations to refine their understanding of IT related authority patterns as part of requirements for BEE. It will also allow organizations to benchmark their current IT processes to best practices that underpin successful IT governance implementation while simultaneously ensuring adhering to BEE requirements. The following are some of the critical questions that will be investigated;

- What are the emerging trends in IT governance and implementation is South African Enterprises?

- How are competence levels and decisiveness of Black IT professionals influencing these trends?

- Is there a correlation between a high ranking in BEE scorecard and IT governance?

This paper focuses on these emerging issues and questions. Section 2 following this section aims at presenting the scope of the research. Section 3 unpacks terminology related to IT governance and BEE in greater detail. Section4 delineates methodology, benefits and implications of the research, and lastly follows conclusion in Section5.

2.0 Scope

The research looks at IT governance frameworks, such as King III, Cobit, ITIL, and ISO/IEC 17799, used by organisations and which are complementary and more elaborate in defining good successful IT governance. The mentioned frameworks are frequently applied by organizations to assess and benchmark their own IT governance positions in terms of progress and advancement (Hardy, 2006; ITGI and OGC, 2005).

The research also looks at the BEE scorecard. According to Ramaphosa *et al*. (2009) metrics for Black Economic Empowerment comprise parameters such as the number of Black people playing more significant roles and decision making in areas such as *Procurement*, *Housing*, *Tendering*, *Skill and Training* and adequate *Black representative in executive management positions* etc.

For purpose of this study, the research focuses on the procurement, skill development, and Black ownership and representation in executive management position in organizations. The research highlights the IT areas of organisations and how BEE (including these specifically mentioned parameters) influence IT Governance and process facilitation. These chosen metrics of BEE scorecard are deemed necessary in helping determine success/failure issues for IT Governance.

3.0 IT Governance

3.1 Social Systems Theory and Governance

IT governance is seen as a subset of corporate governance focused on IT systems and their performance and risk management (ITGI, 2010). According to Schwarz and HirSchhein (2003) governance issues related to organizing the IT functions are often portrayed as highly complex and cumbersome. Ask, Björnsson, Johansson, Magnusson and Nilsson (2007), in their extension of seminal work by Luhmann (1995) on Social Systems Theory have looked at organizational complexities relating to organizing logic, authority patterns and capabilities in governance.

Luhmann's (1995) work tries to link organizations and structure and is a theoretical attempt to solve problems related to 'dualistic differentiations' such as subjectivity/objectivity, agent/structure, and macro/micro. This approach is almost similar to that of Giddens' (1984) work on structures of society using Structuration Theory. While there remains a strong interest within current social-organizational theory to use Luhmann's seminal work (Seidl and Becker, 2005), on organizations, research on governance and applications in IT has been limited. There is seen to be a research gap into IT Governance that is focused on the setting rather than research into IT management which is focused on operations.

With this realization, it is only recently that Ask *et al*. (2007) have looked at such limitations and gaps and extended further usage of Luhmann's (1995) Social Systems Theory within IT governance related research. They have applied Luhmann's (1995) concepts of 'paradox and deparadoxization' as a starting point for looking at IT governance within large organizations.

According to Ask *et al.,* (2007:4) a number of organizations that they have looked at, had an IT Governance function that had come as a result of "*initiatives from the business side mainly due to a feeling of lack of control over the development-side of the IT function*". They saw tension

arising from the IT personnel and business with political dimension of forums adding weight to these tensions making investment, evaluations and prioritization of IT initiatives problematic (Ask *et al.,* 2007). Ask *et al.,* (2007) in their attempt to incorporate sociological building blocks (Social Systems Theory) into the study of the organization of IT have provided insights as to the tensions that arise particularly in the dimensions of politics that creates complexities and problems.

3.2 Contemporary Governance of IT

In recent years the role of IT Governance has turned out to be a fundamental issue in strengthening and intensifying business control on IT resource so as to capitalize on business performance (Weill and Ross, 2004; Pearlson and Sauders, 2009). A common understanding of the main theme in IT Governance are the means to accurately delineate the roles and responsibilities between board of directors and top managers and appropriately administering and managing IT risks and opportunities that characterize an organization (Croteau and Bergeron, 2001; Brown and Yarberrry, 2009). There should be models that are consistently employed for the extraction of business rules and polices within organizations so as to ensure effective and transparent IT governance that is aligned to the business strategy (Helbig, Hrdinová and Canestraro, 2009; Pearlson and Sauders, 2009; Grembergen, 2004). For organizations to fully realize their IT strategic value, IT best practices have to be recognized, build up or gained, as well as put into operation and embedded into the business processes (Croteau and Bergeron, 2001; Brown and Grant, 2005; Sohal and Fitzpatrick, 2002). According to Guldentops (2004) this is a big leap towards good IT governance.

3.3 Black Economic Empowerment (BEE)

BEE is a program of the South African government to give economic power to formerly deprived persons through employing black people in public and private enterprises while at the same time improving their quality of life (Irene-marie and Adriette, 2008; Ponte *et al*., 2009; Nieman and Bennett, 2006). The existence of this underprivileged group is ascribable to the legacy of apartheid regime in South Africa before 1994; this is said to include African, Asian and Colored groups (Nattrass, Nicoli, and Seekings, 2001). These mentioned groups and more specifically the Africans were denied access to privileged and influential positions in organizations grounding racial discrimination (Hamann, Khagram and Rohan 2008; Mark 1997). With discrimination on hand a lot of talent remained unexploited, thus limiting the economy of the South Africa (Mark 1997). To redress the imbalances of white domaminated resource accessibility in all aspects business contexts, the South African Government formulated autonomous bodies charged with regulating and ensuring meaningful participation of black people in the economy of the country (Denton and Vloeberghs 2002). One measure used by the South African government was the creation of the BEE scorecard, a tool used to measure BEE compliance level of South African organisations. South African government used BEE scorecard and adopted organization support measures to uphold broad-based black economic empowerment (Nieman and Bennett 2006; Roger and Roger 2008).

According to Nieman and Bennett (2006), BEE can be regarded as an external factor that impact either negatively or positively on any entity that aims to carry out business in South Africa).

3.3.1   BEE Set Backs

There have emerged a few problems with BEE which cast doubt as to its sustainability as well as effectiveness. The contributing factors primarily dwell on organizations' lack of proper IT governance and well as lack of establishing proper IT policies. The BEE charter sets out criteria for organizations to align policies and processes to BEE in order to remain competitive in the local and international market (Irene-marie and Adriette, 2008). BEE therefore influences companies directly or indirectly, and depending on how it is handled, it may create opportunities and risks or problems for an organization. In its current form, BEE is now currently known as Broad Based Black Economic Empowerment (BBBEE) to emphasize the fact this policy is not meant to benefit only the elite minority of blacks (Ramaphosa *et al.,* 2009; Roger and Roger, 2008). This study assumes BEE **Competency** and **Compliancy** in context share exactly same meaning.

3.4 King III and IT Governance Frameworks

The release of King III report on the month of September 2009 symbolizes a significant milestone in the development of corporate and by extension IT governance in South Africa. King III is a framework that emphasizes self-regulation, where organizations voluntarily monitor their own adherence to legal and ethical standards (PWC, 2010). Proponents argue that that King III allows organizations to maintain control over standards through self-policing. The key principles of King III include good governance, sustainability, innovation, fairness, collaboration, and social transformation in a strategic and coherent manner (PWC, 2010). Apart form King III, there are other applicable frameworks for proper IT governance implementation within South Africa that are manifested in organizations. Holtsnider and Jaffe (2007) postulate that if these frameworks are applied consistently across an entire organization, this will result to an appropriate execution of IT governance.

Simonsson and Johnson (2006) acknowledge that Cobit and other frames could be equally be applied in tandem and still result in compliance and process enhancement. Guldentops (2004) highlights the point that Cobit does not provide, as its task, how to route map for IT implementation. Those tasks are performed by ISO/IEC 17799 and ITIL. They provide best practice information and process advancement. Rather, Cobit is responsible for measuring processes encapsulated by in ISO 1779 and ITIL, and it can be leveraged by process enhancement (ITGI and OGC, 2005). Weill & Ross (2004) have created a comprehensive IT governance framework that can be utilized to develop a high level IT governance framework that can be used to dispense tasks for decision making. However its application does not give further assistance on how an IT company can actually deploy them practically based the theory. ITIL gives details regarding creation and sustenance of service level agreements and assist in establishment of processes of service level agreements (SLA) and support the creation of processes linked to IT delivery and support (ITGI 2010, Hardy 2006). ISO/IEC 17799 is solely meant to address security issues within organizations and therefore it plays a major role in increasing confidence in activities that are carried out internally and externally to the organizations (Information Shield 2005; Hardy 2006). It is implemented through security standards and security management practices.

Additionally, COBIT is a widely used framework for IT governance improvement, risk mitigation, IT value delivery, and strategic maturity assessments (Weill and Woodham 2002; Solms 2005). IT governance frameworks are said to be descriptive in nature, they help describe the condition of an IT company in accordance with best practices (IT Governance Institute; 2007). COBIT can be effectively deployed concurrently with other widely used IT frameworks such as ITIL and ISO/IEC 1779 (Hardy, 2006; ITGI and OGC 2005; ITGI 2010). Conclusively, based on the

current literature, Cobit and ISO/IEC 17799 give direction as to what should be done and ITIL give details how it should be done.

3.5 Good Governance and the BEE Charter for ICT Sector Development

The formulation of an all inclusive group (BEE Charter, 2005) on the 9 November 2004, comprising representatives from Labor, Community, ICASA, Government, Industry Representatives from IT, Electronics, Telecommunications and Broadcasting made broad steps in identifying issues fundamental to Information, Communication and Technology (ICT) sector development. The various stakeholders identified the following;

- "Equity;
- Governance and Double Jeopardy;
- Multinationals;
- Scorecard and Ranking Methodology;
- Corporate Social Investment;
- Harmonization of the ICT charter with the Department of Trade and Industry's proposed Codes of Good Practice" (BEE Charter, 2005:3).

From the workshop it was recognized that ICT, by nature was cross cutting and played a major role in social and economic development of South Africa. The stakeholders therefore resolved to commit to;

- "The objectives of the BBBEE Act and to promote its effective implementation in the ICT sector;
- Bridge the "digital divide" by actively promoting access to ICT's; stimulate and support growth in the ICT sector;
- Advance economic and social transformation in the ICT sector;
- Contribute towards the reduction of unemployment and poverty alleviation;
- Support skills development and training initiatives;
- Foster equity and address the legitimate economic aspiration of all South Africans; and
- Provide an enabling environment conducive to transparency, fairness, and consistency when adjudicating on matters related to BEE in the ICT sector" (BEE Charter, 2005:3).

The following are fundamental areas highlighted by these stakeholders that were identified for ICT sector development as explicated by the BEE charter;

3.5.1 Procurement

The ICT sector commits itself to the implementation of strategies to ensure increased procurement from excellent, good and satisfactory BEE contributors (BEE Charter, 2005).

3.5.2 Ownership

Suggestions for the establishment of a special BEE fund to finance the acquisition of equity from established companies in the ICT industry. The ownership indicators on direct empowerment (BEE Charter, 2005) to be calculated as follows;

$$EiS = \frac{\% Ei}{\% EiT} \ x \ WP$$

Where

- **EiS** is the score achieved for the ownership indicator being measured **%Ei** is the percentage that economic interest (to which members who fall within the category of black people in the enterprise being measured) holds to the total of all economic interest to which all members of that enterprise are entitled
- **EiT** is the compliance target for economic interest in respect of the applicable ownership indicator being measured, as specified in the scorecard.
- **WP** means the weighting points allocated to the applicable ownership indicator being measured.

SOURCE: BEE Charter (2005)

3.5.3   Skills development

The proposals for having funding set aside by both the Information Systems, Electronics and Telecommunications Technologies ISETT-SETA (Skills Education Training Authorities) and the Media, Advertising, Publishing, Printing and Packaging MAPPP-SETA for high-level training, where the funding could be used in order to encourage various training organizations to provide ICT training to designate groups (BEE Charter, 2005).

3.5.4   **Black Representatives in Management Positions**

There should be commitment by the ICT sector and other stakeholders to the development of black management development programs. These programs should be available, affordable and easily accessible to ensure a larger pool of black managers to draw from (BEE Charter, 2005).

3.6 Discussions on IT Governance and BEE

Skills development is one of the crucial essentials in rectifying social disparities in South African enterprises initiated by Black Economic Empowerment (Nattrass *et al.,* 2001, CT Empowerment Charter fourth working draft; 2004), likewise the scope of the chosen   IT governance frameworks entail capability and aptitude through skill and continuous employee training (ITGI and OGC, 2005).

Irene-marie and Adriette, (2008) explored the effect of BEE on good corporate governance, and Brow and Grant (2005) affirm that IT governance is integral part of corporate governance. As such, narrowing focus on BEE and IT governance in South African context is worthwhile. Furthermore, In accordance with the Information Communication Technology (ICT) charter (2004), Information Communication Technology sector has been acknowledged by the South African government as being of tactical significance in the coming future's escalation and prosperity of the country's economy, since it is one the top value adding sectors in terms of its contribution to South African 'Gross Domestic product (GDP) (Benedict, 2006). This is driven by technology transformations that have resulted in changes in work-related content as well as performance requirements, thus demanding ceaseless skill development. IT governance frameworks such as COBIT are responsible for technology changes monitoring and performance measurement to ascertain effective running business processes (Simonsson and Johnson, 2000; Solms, 2005)**.** ITIL entails as its main tasks implementation of ICT Infrastructure

management (ITGI and OGC 2005). It is my assumption that enterprises can only expedite good IT governance through skill development and training.

According to Pearlson and Saunders (2009) good IT governance involves making informed decisions on all activities outlined by Boatright (2000) such as adaptation and management of information. Mcnutt and Batho (2005) emphasize that the continuing economic markets tragedies and the dynamic global economic situation necessitates improving the governance of organizations and, in actual fact, enhancing and clarifying of employees` responsibilities. Therefore this study endeavors to authenticate and present the model that will form the basis for identification of BEE concepts that may have impact on universally appreciated IT governance frameworks. Similarly Evans (2006) acknowledges that ICT Executive position has only come into being recently and this has led to most challenging and unstable roles in the business environment. Furthermore, (Benedict, 2006) raises the concern that a lot of IT Executives in South Africa are not aware of the factors that can be ascribable to failure of projects and this may be due to the failure to take a holistic view on the IT related company transformation and growth. It therefore lies at core of this study to discover if BEE is responsible for these issues, since leadership is also about decision making and decision making is central to IT governance. Coghlan and Hurtley (1996) insist that currently enterprises are exceedingly political in nature and IT leaders have to be prepared to cope with various conditions they face.

3.7 Proposed framework

While the previous sections have discussed BEE being a political movement (Roger and Roger, 2008) and IT leadership forming part of IT governance (Brown and Yarberrry, 2009), the researcher believes that these two elements be seen as an integral whole worth of empirical research. It remains of much benefit and value to investigate how these two concepts influence each other within South African enterprise context. The researcher proposes considering IT Governance and BEE holistically as denoted by **Figure 1**. below.

Figure 1 should an inherent relationship and coherence between BEE and IT governance. The figure indicated the various BEE perspective and metrics for consideration in line with IT governance frameworks.
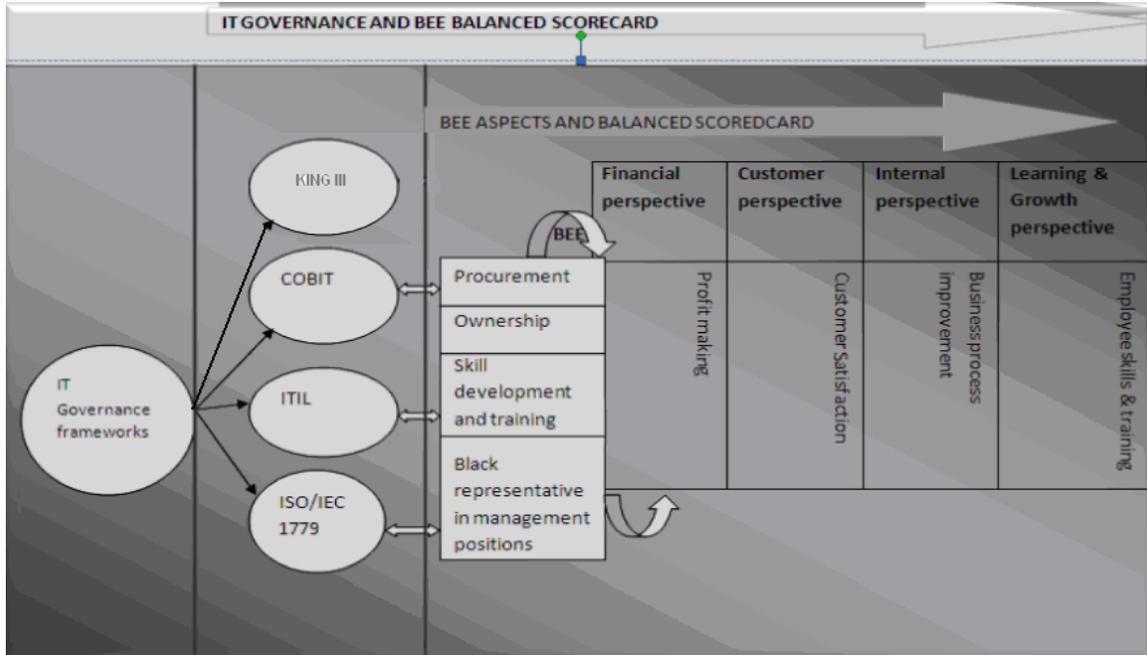
Figure1 Proposed IT governance framework, BEE Aspects and Balanced Scorecard

Figure 1 also denotes the idea that the research emphasis will be on four IT governance frameworks namely, King III, Cobit, ITIL and ISO/IEC 17799. What will be required in the research is that each one of the BEE aspects is mapped and compared against stated IT governance frameworks for select organisations. Different perspectives will be assessed against different competencies.

Figure 1 can be interpreted as follows: positive responses of measures of each perspective implies high competency of specific BEE aspect for a specific organization and then the same BEE aspect will be assessed according to how efficiently a specific IT framework should be executed (literature review will be used), this will be performed for all BEE Aspects for each IT Governance framework mentioned above ; as a result it will be easy to establish whether indeed there is any explicit relationship between IT governance and BEE Scorecard in order to validate a claim that one of the two concepts(**IT governance and BEE**) may influence the other or they influence each other, hence the use of double arrow. IT governance maturity of an organization will be established on the basis of how effectively organizations implement the above IT governance frameworks, and BEE effectiveness in value generation will be established on the basis of balance scorecard measures (profit making, customer satisfaction, business process improvement and employee skills and training) of the different perspectives for all selected BEE Aspects. This will assist in answering unanswered questions such as does ranking high in BEE Scorecard necessarily imply black effective implementation of IT governance in south African context within ICT Sector? If the answer is affirmative, then to what extent? If there answer negative, then any implicit or hidden relationship exiting? Answers to these questions will attract interest of other researchers to delve deeper into these two concepts.

Table 1 below shows proposed criteria for understanding parameters used in the proposed framework.

Table 1: Sample of BEE scorecard as conceptualised: Balanced scorecard to supplement BEE scorecard

Criteria	Numbers of Previously disadvantaged	
	Company A	Company B
Procurement	30	40
Ownership	20	60
Skill Development & training	70	40
Black Representation in management positions	30	45

BEE scorecard focuses more on the number of previously disadvantaged South Africans engaging in each of the BEE aspects but then it fails to give a clue as to their effectiveness in carrying out tasks and responsibilities encapsulated within all facets of IT governance. Klan and Norway's balanced scorecard (1993) will assist in establishing whether empowered South Africans are not only increasing numbers in organizations but are capable of adding value to organizations. In short, BEE scorecard will be used separately to help with giving number of blacks in each aspect , and balanced scorecard will test the effectiveness of those numbers in each BEE aspect which will in turn be assessed against IT governance's requirements as far as COBIT, ITIL and ISO/IEC 17799 are concerned.

4.0 Research Methodology

The research is quantitative in approach. According to Mitchell, (2005) quantitative design attempts to manage preconception in order that facts, cases and incidents can be comprehended objectively. With this explanation in mind, the researcher believes this research design will be appropriate because of nature of BEE.

Black (1999) adds that quantitative design can endow a researcher with a general idea of an area to divulge quantitative models and contradictions that may be further explored using Qualitative designs.

4.1 Sampling criteria

The researcher will sample stakeholders in South Africa industries belonging to the ICT sector. It is preferred that samples be sourced from Gauteng region, the main economic powerhouse of the nation. In order to reduce sampling error and have a representative population, the researcher will use the probability sampling technique. This is important since it will allow a probability that elementary units of the ICT sector will have an equal chance of being chosen.

Questionnaires will be distributed randomly and used to investigate and examine respondents' awareness and views on the requirement for successful IT governance. The questionnaires will be used to draw statics of BEE scores for selected organizations. The element of a specific questionnaire will comprise two parts. In the first part, closed questions will be used where respondents will be given a chance to choose most important skills required for IT leadership and governance. The connotations of the various skills will be clearly elucidated in the questionnaire. Respondents will have the prospect to include other skills not cited in the

questionnaire. The second part will scrutinize respondents` emotions, judgments and perceptions. They will also be given chance to give details in their answers relating to real life situations and workplace experiences. Consequently, the questionnaire will be concluded on the basis of the findings from the selected research sample. The questionnaire will elicit some private data from the respondents.

Because of political instability and the sensitive temperament of BEE (Roger and Roger, 2008), the respondents will be given a guarantee that they will remain anonymous after the completing of the questionnaire. Other important questions concerning gender, age, ethnicity and race will be included in the questionnaire., Last but not least respondent's work experience, tenure and management position as well as the time spent serving in IT department or industry will be requested. IT Governance maturity questions will included in the question to be able to confirm successful implementation of IT governance from each company in the research sample.

4.2 Data collection

The participants will be assured of the confidentiality of their personal information and the purpose of the research will be concisely elaborated for the participants to have interest in participating in the study. Some critical and pertinent information will be derived from statistics collected from BEE Ranting agencies such as Empowerdex and may other ranting agencies.

4.3 Research data and ethics

Primary data and secondary data will be used in the research mindful of plagiarism and acknowledgement of cited information from the other authors. Research participants will be assured of anonymity and the purpose of the research will be made clear made as well as guidelines as to how to complete questionnaires (Du Plooy, 2002). Finally the research participants will be notified about the results of research if this is requested.

4.4 Expected Findings

The rationale behind this study is to build a framework that will provide useful insights that will help in understanding governance (via BEE) through the enhancement of Information Technology governance. The objective of the proposed framework is to provide guidelines for determining available BEE competencies in South African organizations pertaining to IT governance. Such a framework will be useful for stimulating and inducing positive reflections and outcomes within South African Enterprises; bringing to light the underlying issues that might be thwarting successful IT governance implementation.

4.5 Implication to Practice

This study seeks to add insight into questions raised and not answered which pertain to BEE and IT governance. The study will help IT professional gain value knowledge on what constitute impediments or success features of good IT governance. The framework will facilitate the refinement of perspectives and IT related authority patterns, such that these are in harmony with requirements stipulated both BEE and IT governance frameworks.

In order to achieve transparency and to apply the values of good IT governance within an organization, effective framework needs to be applied, the full participation by all citizens is important (Irene-marie and Adriette, 2008). Further more, the use of IT at all levels is often seen

as a useful instrument towards enhancing IT skills to all employees in order to prepare them for future leadership positions as required by BEE. In the near future BEE might have to emphasize more on skill development in all BEE Aspects and IT governance frameworks rather than place unskilled workers in highly skill intensive job positions just to increase number black representatives in organizations. That way the quest for effective and collaborative IT governance will be achieved.

4.6 Research limitation

Since in case of quantitative research the problem is identified in advance (Black, 1999), there is a possibility of false representation during the creation of standard questionnaires. Mitchell (2005) affirms that despite the efficiency of quantitative data in testing hypotheses, there may be loss of contextual details. Limitations such as these are inevitable as they are inherent in the methodology itself. Other limitations include unwillingness of the targeted participants to participate in research, delayed return of questionnaires, uncompleted parts of questionnaires and other issues outside the control of the researcher such loss of information during transmission of questionnaires(Du Plooy, 2002). The researcher aims at extending research rigor and relevance to mitigate such limitations.

5.0 Conclusions

Empirical findings have revealed that diverse economic empowerment issues have built up in the ICT industry in South Africa over the past 10 years (Evans, 2006). This paper ascertained a synchronous fusion between government strategy (BEE) and organizational strategy (business/enterprise) which in turn drives IT strategy (IT governance) of a specific organization for value generation(economic value).The proposed study has highlighted the significance of this. It is hoped that this research will contribute towards organizational and government goals. As confirmed by Coghlan and Hurley (1996), running organizational IT function is progressively getting more intricate, IT executives and their staff should acquire new skills so that they put more focus on business skills rather that technical skills. It is hoped that insight in this paper will shed light to BEE initiatives playing a contributing rather than a limiting role to IT Governance.

References

Ask, U., Björnsson, H., Johansson, M., Magnusson, J. & Nilsson, A. (2007) "IT Governance in the light of Paradox – A Social Systems Theory Perspective", *Proceedings of the 40th Hawaii International Conference on System Sciences*, Hawaii, USA.

Balnaves, F. and Caputi, P. (2001). *Introduction to quantitative research methods*, Sage Publication Ltd. California.

Barry, R.R.G., Du Plessi, D.T., Klein, J.J, Hans, A.A., Thelm, L.G and Richer, G. (1976). *Black Development South Africa*, Maddox, Rolfes & Parners (Pty) Ltd. Pretoria.

BEE Charter (2005) – ICT Black Economic Empowerment Charter (Draft) for the ICT Sector available at http://ictcharter.org.za (accessed on 1 September 2010).

Benedict, K. (2006) .Hardware Drags the market down: Research house sees growth for IT Market. *Finweek*, August pp79-79.

Bernroider, W.N. (2008).IT Governance for resource Planning supported by the Delone-McLean Model of Information Systems Success. *Information & Management*, Vol 45(5), pp257-269.

Black, T.R. (1999). *Doing quantitative research in social sciences*. Sage Publication Ltd. California.

Boatright, J. R. (2004). Employee Governance and The Ownership of the Firm. *Business Ethics Quarterly*, Vol 14(1), pp1-22.

Brown, A.E. and Grant, G.G. (2005). Framing the Frameworks: A review Of IT Research. *Communications of the Association for Information System,* Vol 15, pp 696-712.

Brown E. j and Yarberrry, A. (2009). *CIO, How to achieve Success through Strategic Alignment, Financial management and IT Governance*. Taloy & Francis Group LLC.US.

Coghlan, L. and Hurley. M. (1996). A profile of the information technology executive. *Information Management & Computer Security*, 4(1), pp5-9.

Croteau, A and Bergerone, F. (2001). An information technology trilogy: business strategy, technological deployment and organizational performance. *Journal of Strategic Information Systems,* Vol 10, pp77-99.

Dandjinou, P. (2007). e-Governance Strategies in Cape Verde and South Africa: From Service Delivery to e-Participation. *ACM International Conference Proceeding Series*, Vol 232, pp 435-436.

Denton, M. and Vloeberghs, D. (2003). Leadership challenges for organizations in the new South Africa. *Leadership and al Development Journal. Vol 24(2)* pp84 -95.

Du Plooy, G.M. (2002) .*Commutation Research*. Juta & Co.Ltd.Lansdowne.

Emley, T. (1996). *Malaysians experience of Affirmative action*. Human & Rousseau (Pty) Ltd. Cape Town.

Evans, N. (2006). Leading Information Technology in South Africa: A Unique Challenge. Tshwane University of Technology. South Africa. *Association For Computing Machinery,* Vol 4(1), pp 90-96.

Fuld, M. (1995) .*The New Competitive Intelligence*. John Wiley & Sons Inc, Canada.

Giddens, A. (1984). *The Construction of Society*. University of California Press, CA

Gorard, S. (2001). *Quantitative methods in educational research*, PastonPrepress Ltd, Nework.

Grembergen, W.V. (2004). *Strategies for Information Technology Governance*. Idea Group publishing.US.

Guldentops, E. (2004). *Governing Information Technology through COBIT. In Strategies for Information Technology Governance.* Idea Group Publishing.US.

Hamann,R., Khagram,S and Rohan,S.(2008)South Africa's Charter Approach to Post Apartheid Economic Transformation: Collaborative Governance or Hardball Bargaining? *Journal of Southern African Studies,* Vol 34(1), pp21-37.

Hardy,G. (2006). Guidance on Aligning Cobit, ITIL, and 17799. *Information Systems Control,* Vol 1, pp32-33.

Helbig, N., Hrdinová, J., & Canestraro, D. (2009). Enterprise IT governance at the state level. *An emerging picture The Proceedings of the 10th International Digital Government Research Conference,* Vol. 390, pp 172-179.

Holtsnider, B., and Jaffe, B.D. (2007). *IT Manager's Handbook*. M organ Kauffman Publishers.US

ICT Empowerment Charter Working Group (2004). The ICT Charter: fourth working draft. The ICT Empowerment Charter Working Group. Rivonia.

International organization for Standardization (2008). ISO/IEC standard offers guidelines for making IT office equipment friendlier for the elderly and disabled Available from http://www.iso.org/iso (accessed 03 March 2010).

Irene-marie and Adriette (2008). Dynamics of corporate governance in Africa South: Broadbased Black Empowerment and the enhancement of Good Corporate Governance Principles. *Journal International Commercial Law and Technology*. Vol 3(3), pp157-169.

ITGI 2005. Control Objectives for Information and Related Technology. Available from Edition.http://www.itgi.org. (Accessed 01 March 2010).

Information Shield.(2005)Using Information Shield publications for ISO/IEC 27001 certification available from http://www.informationshield.com (accessed on 14 May 2010).

ITGI.(2010).Aligning Cobit 4.3, ITIL v3 and ISO/IEC27002 for Business Benefit. available from www.itigi.org (accessed on 21march 2010).

ITGI and OGC.(2005).Aligning Cobit,ITIL, and ISO/IEC 1779 For Business Benefit Management Summary available from http://www.itgovernance.co.uk/files/ITIL-COBiT-ISO17799JointFramework.pdf (accessed on 26 may 2010).

ITGI(2003)Board Briefing On IT governance:2nd edtition.Available at www.isaca.org (accessed on 24 march 2010).

Johnson, E.C.(2005).IT Governance:New Players, Challenges and Opportunities. *Information System Control Journal*.Vol 2, pp17-18.

Kaplan, R.S. (1993).Using Balanced Scorecard As Strategic Management System. Harvard Business Review.US.

Luhmann, N. (1995). *Social Systems*. Stanford University Press, Stanford, CA.

Matheus, R., and Ribeiro, M. M. (2009) Models for Citizen Engagement in Latin American – CaseStudies of Public Digital Budgeting. *Association for Computing Machinery*. Vol 322, pp 109-116.

Mcnutt, P.A and Batho, C.A. (2005).Codes of ethics and Employee Governance. *International Journal of Social Economics*, 32(8), pp 656-666.

Meyer, J.P. & Allen, N.J. (1991). A three component conceptualization of organizational commitment. *Human Resource Management Review*. Vol1, pp61-98.

Misuraca, G.C. (2006) e-Governance in Africa, from theory to action: a practical-oriented research and case studies on ICTs for Local Governance. Proceedings of the 2006 international conference on Digital government research. Vol. 151 pp209-218.

Mitchell, W.K. (2005). *Research Methodology*. Published by Oxford University Press, South Africa.

Nasir, A. (2007). Use of ICT: A Step Towards Good Governance in Developing Countries. *Association for Computing Machinery,* Vol. 232, pp296-300.

Nattrass, F. Nicoli, A. and Seekings J, 2001. 'Two Nations? Race and Economic Inequality in South Africa Today'. *Daedalus*, Vol 130 (1) pp 45–70.

Nieman, G and Bennett, A. (2006). *Business Management. Value Chain Approach*. Published by Van Schaik Publishers. Pretoria.

Pearlson, K.E and Sauders, C.S. (2009). *Strategic management of Information System*.John and Sons Inc.New Jersey.

Porter, M.E. (1985).*Competitive Advantage*, The Free Press, New York.

Ponte,S. Roberts, S and vav Stitter,L.(2009).Black Economic Empowerment: Business and the State in South Africa. *Development and Change*. Vol38 (5), pp933-955.

Pour,M.K.(2006). *Emerging Trends and Challanges in Information Technology Management*. Idea Group publishing.UK.

PWC (2010) (PriceWaterhouseCoopers) KING III Introduction and overview- Compliance with laws rules, codes and standards, available from www.pwc.com/za/en/king3 (accessed on 1 September 2010)

Ramaphosa, C., Nzumande, B., Lunes, D.,Sachs,A., Maseko,S., Mbeki,M., Zilwa S.,Malabane, I., Kaz,M., Ndlovu,L., Macozoma,S.,Mafuna, and Luhabe,W. (2009).*Challenges facing BEE. Visions of Blach empowerment*. Jacania Media (Pty), South Africa.

Renken, J. (2004).Developing an IS/ICT Management Capability Maturity Framework, *Proceedings of SAICSIT, Vol*75 pp 53 – 62.

Roger T and Roger S (2008) The Politics of Black Economic Empowerment in South Africa. *Journal of South African Studies*, Vol 34, pp699-716.

Seidl, D. & Becker, K.H. (2005) (eds.). *Niklas Luhmann and organization studies,* Liber & CBS, Malmö.

Solms, V.(2005) Information Security Governance: Cobit or ISO 17799 or Both ? *Computers & Security, Vol* 24(2) pp99-104.

Schwarz, A and HirSchhein .R. (2003). An extended platform logic perspective of IT governance: managing perception and activities of IT. *The Journal of Strategic Information Systems*, Vol 12(2),pp129-166.

Simonsson, M and Johnson, L . (2006). *Assement of IT Governance: A Prioritization of COBIT*. Published by Royal Institude of Technology: Sweden.

Simonsson, M., Lagerström, R., and Johnson, P. 2008 A Bayesian Network for IT Governance Performance Prediction. *Association for Computing Machinery*, Vol. 342, (1).

Top Empowerment companies (2009) available from http://www.empowerdex.co.za.(accessed 15 April 2010).

Sohal, A.S. and FitzPatric,P.(2002).IT governance and management in large Australian Organizations. *International Journal of Production Economics* Vol 75(1),pp97-112.

Trites, G. (2004).Director Responsibility for IT governance. *International Journal for Accounting Systems,* Vol 5 (2), pp89-99.

Weill, P. and Ross, J.W (2004). *IT Governance: How Top Performers Manage IT Decision Rights for Superior Results*. Published by Hrvard Business Press. New York.

Weill, P. and Woodham, R. (2002). Dont Just Lead, Govern: Implementing Effective IT Governance. MIT Sloan School of Management Working Paper, 4237-02. MIT Sloan School of Management.

Willam, R. and Lehem, B. (1988). *Economy in revolutionary societie*s, National Book Print, Cape Town.

Wrich, D. and Smallwood, N (2003) how leaders build value, John Wiley & Sons Inc, UK.

Verhoef, C.(2007).Quantifying the effects of IT governance Rules. *Science of Computing Programming,* Vol 67(1-2), pp247-277.

Zerpa, C. (2009) Improving Governance with an e-Government Maturity Model, *Association for Computing .*Vol. 322, pp 347-351.