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## 39. Investigating the Misalignment in the Existing E-Legislation of South Africa

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### ***Abstract***

South Africa has recently enacted several e-legislation in order to address the escalating e-crime, the rise in electronic abuse and also the indifferences of the past. However, research shows that many organisations including public institutions do not understand these laws and thus, fail to comply with them. One major contributor to this are the inconsistencies found in the legislation. The National Development Plan and the Mid-term Strategic Framework recognise the complexity of laws, and thus endorse improvements in the removal of unnecessary obstacles and consistencies. Hence, the objectives of the present study are to examine the existing e-legislation in South Africa; identify areas of misalignment and investigate the factors that contribute to the misalignment. Ultimately researchers aim to develop a framework that can be used to guide the alignment e-legislation in South Africa. Extensive literature review was conducted to understand alignment of legislation. Firstly, all the e-legislation that was passed between the years 2000 and 2013 was retrieved and obtained from Sabinet database. This legislation was studied extensively and inconsistencies were identified. A conceptual framework which indicates contributing factors to misalignment and impact of misalignment to non-compliance, was developed and proposed to guide alignment of e-legislation. Based on the conceptual framework a questionnaire with open ended question was developed and tested in the Parliament of South Africa, since this institution champions the development and implementation of national laws such as the e-legislation. A total number of 50 respondents participated in the survey wherein the focus groups were people who are involved in the process of making/drafting laws, specifically ICT Laws. The influence of the factors on misalignment was measured and both qualitative and quantitative analysis confirmed these influences. The study reveals that lack of good industry standards has the greatest influence to the misalignment of e-legislation in South Africa. For instance lack of benchmarking, standardised procedures contribute the most to the misalignment of e-legislation, and that misalignment results into non-compliance. Therefore, in order to address these issues, South Africa must emphasize on benchmarking with good industry standards, and this can be achieved through harmonisation of e-legislation in the region and globally. It is also a major concern that some aspects of earlier e-legislation have not been repealed. Qualitative data also raises some issues relating to lack of ICT skills by legislators, political influences, lack of public participation, etc. Capacity/skills development issues e.g. legislative drafting and ICT technical skills for legislators must be addressed. Moreover, public involvement as a constitutional mandate must be strengthened in South Africa to ensure citizens are engaged and actively participate in the law-making process.

## ***Keywords***

Misalignment, Coherence, Compliance, e-Legislation, Legislative Process, South Africa.

## **1. Introduction**

A number of legislation governing the use of Information and Communications Technology (ICT) (referred to here as e-legislation), have been passed in South Africa (SA), to address the escalating e-crime and the indifferences of the past. These include: the Electronic Communications and Transactions (ECT) Act 25 of 2002, Promotion of Access to Information Act (PAIA) 2 of 2000, Protection of Personal Information (POPI) Act 4 of 2013, Regulation on Interception of Communication Related Information Act (RICA) 70, 2002, and the Protection of State Information Bill 6, 2010. Research shows however, that compliance with these laws by citizens and institutions has remained a major challenge over the years (Warkentin, Johnston & Shropshire, 2011; Mushore & Kyobe, 2013). One major contributing factor relates to the complexity and fragmentation of the e-legislation (Kyobe, 2010; Islam, Mouratidis & Jurjens, 2011). The National Development Plan (NDP) and Mid-Term Strategic Framework (MTSF) acknowledge these challenges and calls have been made for alignment of the e-legislation, and removal of unnecessary obstacles in the e-legislation reform/development processes, both at national and international levels (Belanger & Hiller, 2006).

The main objective of this study is to examine the existing e-legislation in South Africa and identify areas of misalignment. In addition, the researchers aim to investigate the factors contributing to the misalignment and develop a framework that can be used to guide the alignment e-legislation in South Africa.

## **2. Literature Review**

### **2.1 The Electronic Law**

The Parliament of South Africa is responsible for passing the national legislation including e-legislation. A number of legislation governing/regulating the use of ICT has been enacted, for example, the ECT Act, 2002. The problems relating to cyber-crime are addressed in Chapter XIII of the ECT Act, 2002. According to Michalson and Hughes (2005), this chapter introduces statutory criminal offenses relating to unauthorized access to data, interception of data, interference with data, and computer related extortions, fraud and forgery. The ECT Act does not exclude the application of other statutory or common law. Other legislation includes the Regulation on Interception of communication related information Act (RICA) 70, 2002, which regulates the interception of any communication in the course of its currency or transmission. The Financial Intelligence Centre Act (FICA) which provides that an accountable entity, may not conclude a business transaction with a client without having complied with certain information gathering and reporting duties. Regulation of Interception of Communications and Provision of Communication-Related Information Act (RICA) 70, 2002; Promotion of Access to Information Act (PAIA) 2, 2000; The Protection of Personal Information (POPI) Act is the first all-encompassing law that addresses information privacy and data protection in South Africa (POPI, 2013), and Protection of State Information Bill 6, 2010.

Many of the challenges regarding compliance with the e-legislation can be attributed to the weaknesses in the development and implementation processes. These challenges are not unique to South Africa but have also been identified in the developed countries (Lipton, 2014). E-legislation in South Africa is said to consist of grey areas, is unstable and incomplete (Islam et al., 2011), redundant and generally not harmonized (Dagada et al., 2009). Lipton (2014, p1117) cautions that “existing disharmonized state laws can effectively deter conduct that typically crosses state or national borders”.

## **2.2 The Law-Making Process**

Sections 73 to 79 of the Constitution of South Africa regulates that before any piece of legislation is passed as law or an Act, it is first drafted and introduced as a Bill (The Constitution, Act 108, 1996). According to Section 73, a Bill may only be introduced by either a Member of the Cabinet or a Deputy Minister or a committee of a member of the National Assembly committee. The draft Bill is then referred to the relevant Portfolio Committee (PC) for discussion. The public is also invited to comment on the Bill. Following the public involvement, the Committee members deliberate on the public inputs, and thereafter vote on the Bill, clause-by-clause. After the Bill has been agreed to, it is sent to the House for consideration and on adoption, the Bill is sent to the President for assent. Once the President signs the Bill off, it gets published in the Government Gazette.

## **2.3 Misalignment of e-Legislation**

Major challenges are often identified in the process of developing the laws. When the process of law development or reform is inappropriate, this leads to misaligned legislation and subsequently to non-compliance (Weber, 2014; Islam et al., 2011; Kyobe, 2010). Misalignment is also seen as a contributing factor to non-compliance with legal regulations (Kyobe, 2010). Literature suggests that there are three representations of misalignment in legislation: lack of Coherence, Interoperability and Harmonization (Winn & Jondet, 2009; Chaberek & Karwacka, 2012; Savin, 2013 & Lipton, 2014).

### *2.3.1 Lack of Harmonization*

In the context of legislation and for the purposes of this paper, harmonization is defined as the process of ensuring that different laws are in agreement with each other, forming a compatible or well-matched whole, thereby reducing technical issues in the laws and minimizing clashes and conflicts through coordination (Isasi, 2009; Koskenniemi, 2014). Isasi (2009) argues that harmony is not about uniformity rather it entails diversity, but when elements are in harmony, even though their individual attributes remain, they form a completely fresh feature. Koskenniemi (2014) adds that compatibility and coordination through standardization of rules or laws are some of the key principles of legal harmonization. Therefore, lack of harmonization between laws results into conflicts and poor alignment, which in turn leads to non-compliance.

### *2.3.2 Lack of Coherence*

In this paper coherence is defined as unity in principle of policies and regulations, reduction of ambiguities and fragmentation in order to generate higher levels of effectiveness and efficiency of laws (Weinrib, 1988; Dickson, 2010; De Coning & Friis, 2011). Balkin (1993) defines legal coherence or coherence of laws as normative coherence. He states that “coherence is the

consistency not of logic but of principle” (Balkin, 1993, p114). He argues further that Law is coherent “if the principles, policies, and purposes that could justify it form a coherent set, which in turn means that all conflicts among them are resolved in a principled, reasonable, and non-arbitrary fashion” (Balkin, 1993, p115).

### *2.3.3 Lack of Interoperability*

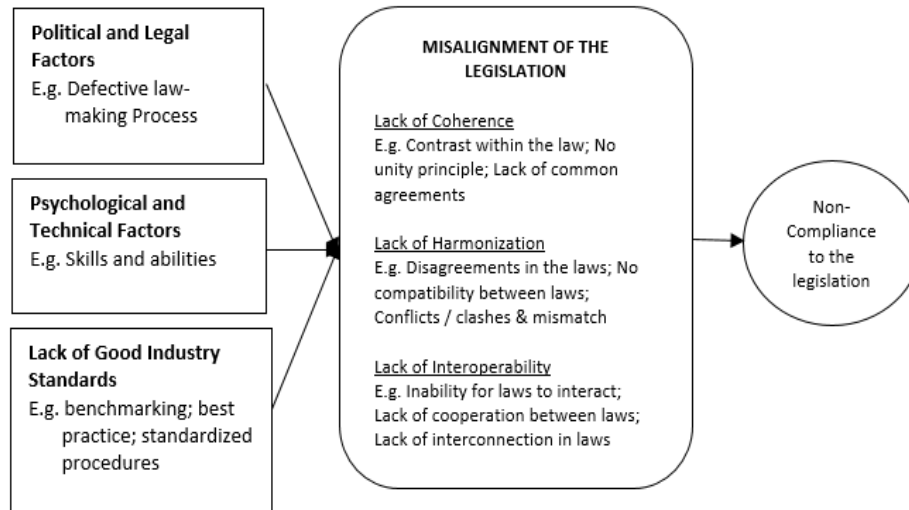
Interoperability is defined as the ability of related and non-related laws, to interact and operate effectively, through cooperation (Isasi, 2009; Chaberek & Karwacka, 2012; Moodley et al., 2014). Weber (2014) argues that in order to drive economic growth, efforts must be made in terms of achieving legal or policy interoperability. He asserts that “Legal interoperability addresses the process of making legal rules cooperate across jurisdictions, on different subsidiary levels within a single state or between two or more states...” Weber (2014, p6).

## **2.4 Potential causes of misalignment and non-compliance**

Several factors contribute to the misalignment in the legislation. These are political and legal; psychological and technological; and lack of good industry standards for benchmarking.

Political and legal factors refer to issues such as the process of drafting and enacting laws (East African Internet Government Forum, 2011, UNCTAD, 2012); the constant amendment and repeal of laws (Islam et al., 2011). Psychological and Technological factors - Munatsi (2011) questions the technical capacity of policy makers. The UNCTAD (2012, p9) report also raises concerns about the lack of experience of policy makers and abilities to effect decisions during law reforms. Lack of Good Industry Standards - Grobler & Vuuren (2010) study the scope of cybercrime in Africa, and identify lack of standardised procedures to be one major challenge. Standardised procedures encourage effectiveness in investigation techniques, prevents uncertainties and inconsistencies. Good industry standards act as benchmarks in government institutions for measuring the implementation of cyber security (ITU, 2014).

When the process of law development is misaligned, adopting the laws and compliance with them become problematic (Kyobe, 2010; Quarshie, 2014; Olowu, 2009). Compliance is a state in which someone or an entity (e.g. an organisation or a nation) is in accordance with established guidelines, specifications, or legislation. We therefore propose a framework to examine the misalignment in e-legislation and its impact on compliance in South Africa. The proposed framework (Figure 1) comprises of five constructs: The first three, also defined in the preceding section, represent the factors that contribute to misalignment. The next construct measures misalignment. Misalignment of the law as mentioned in the previous section can be identified by lack of harmonization, lack of coherence and lack of interoperability in the law and development processes (Venkatraman, 1989; Isasi, 2009; Moodley et al., 2014). The last construct represents non-compliance with e-legislation. We argue that the misalignment in the e-legislation will result in non-compliance with e-legislation (Zhang, 2005; Kyobe, 2010 & Islam et al., 2011).



**Figure 1:** Proposed Conceptual Framework: Factors contributing to the misalignment of e-legislation in South Africa and the impact of misalignment on compliance with e-legislation

### 3. Research Methodology

This study adopted a positivist philosophy which assumes an observable social reality that can be measured more objectively, whereby there is more reliance on statistical data that can be quantified (Bazeley, 2002; Kaplan & Duchon, 1988; Saunders et al., 2009). The research paradigm related to this study is exploratory in nature, (Saunders et al., 2009) because the researcher objectively explored and examined the existing electronic legislation that has been passed in SA in order to identify areas of misalignment. Firstly, the directory of South African legislation, which includes e-legislation, was consulted with specific focus to e-legislation enacted between the years 2000 and 2013. (<http://www.sabinet.co.za/>). The e-legislation was then retrieved and studied extensively to identify areas of misalignment, gaps and inconsistencies (Weber, 2014; Islam et al., 2011; Kyobe, 2010). Having studied the existing e-legislation in SA, gaps and inconsistencies were identified on five pieces of e-legislation that are most relevant to this study were selected.

Secondly, the available limited literature on this legislation was then reviewed and a conceptual framework developed. Based on the conceptual framework a questionnaire with open ended question was developed and tested in the Parliament of South Africa “Parliament”, since this institution champions the development and implementation of national laws in SA. A total number of 50 respondents participated in the study wherein the focus groups were people who are involved in the process of making/drafting laws, specifically ICT Laws.

The Parliament of the Republic of SA was selected to be the study environment since it champions the development and implementation of national laws. A total number of 50 respondents participated in the study wherein the focus groups were people who are involved in the process of making/drafting laws, specifically ICT Laws. Amongst others these legislators include Procedural Advisors, Legal Advisors, ICT Committees, ICT Focus Group and Chairpersons of the Portfolio Committee who are Members of Parliament (MPs). The survey

used in this study was approved by the Ethics Committee of UCT and it consisted of structured and open-ended questions. Brief unstructured interviews with selected few were also conducted based on their initial responses to open-ended questions in the survey and also their expertise according to their profiles. The unstructured interviews were guided by the respondents' initial responses to the questionnaire. The researcher would probe the respondents for more information or explanation. The survey consisted of a brief description of the research model used when crafting the questions.

Respondents were informed that participation is voluntary, they were assured that responses would be kept confidential, and that they could exit at any time. The aim of the survey was clearly stated and the questionnaire was divided into two sections. The first section was on demographic information such as Age, Level of IT Knowledge, Job Role, Years of Experience etc. The second section was based on the five constructs of the research model namely: Political and Legal factors; Psychological and Technological factors; Lack of Good Industry Standards; Misalignment of Legislation; and Non-compliance. The latter section measured the extent to which respondents agreed or disagreed with statements as informed by literature on all constructs of the model. A rating scale of 1 to 5 was employed, wherein 1=Strongly Disagree; 2=Disagree; 3=Not Sure; 4=Agree; and lastly, 5=Strongly Agree. Before the questionnaire was administered, permission was obtained from the Parliament and the selected respondents through a signed research agreement. All data was captured and analysed using suitable data analysis instruments such as follows: for quantitative data, STATISTICA was used; whereas for qualitative data Thematic Analysis was used)

In order to determine validity and reliability of the results, the paper largely used quantitative data analysis methods/techniques, for example a Reliability Test and Factor Analysis was performed on the quantitative data using STATISTICA software. But also for triangulation purposes the qualitative data obtained from the questionnaires was used and analysed.

## **4. Findings and Analysis**

This section presents both quantitative and qualitative analysis, starting with the quantitative analysis.

### **4.1 Quantitative Data Analysis**

#### *4.1.1 Descriptive Statistics (Analysis)*

Below is the descriptive analysis performed on the quantitative (statistical) data received wherein 1=Strongly Disagree; 2=Disagree; 3=Not Sure; 4=Agree; 5=Strongly Agree.

To determine the distribution of data, a Descriptive Statistical Analysis was performed for each of the following constructs: political and legal factors (PL); psychological and technological factors (PSYT); lack of good industry standards (LGOOD); misalignment in the law (MSAL); and non-compliance (NCOMP). This method yielded different results per construct as shown below in table 1.

## Descriptive Statistics

<b>Descriptive Statistics</b>					
<b>Variable</b>	<b>No</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>SD</b>
Age (Common age group was 35-45 years)	50				
IT knowledge possessed	50	2,86	1	4	0,76
Job Role	49	1,80	1	4	0,68
Committee Membership	48	3,48	1	4	1,11
Involvement in Law making processes	50	3,08	1	5	1,61
No Committees involvement – sitting in	50	2,26	1	5	1,55
Years of experience in Law making process	49	2,37	1	5	1,18
<b>Political and Legal factors</b>					
PL1 - The legislative process Complexity	50	3,48	1	5	1,11
PL2 -Amendment or repealing of e-legislation creates confusion	49	3,45	1	5	1,08
PL3 - e-legislation is unstable and incomplete	49	3,22	1	5	0,96
PL4 -The process of aligning the new bill with related Acts is unclear	49	2,98	1	5	1,25
PL5 - RICA Definitions are broad and confusing	44	3,07	1	5	1,02
PL6 -The ECT act (2002) fails to prescribe how to communicate and complete transactions electronically when it comes to advanced electronic signatures	40	3,30	1	5	1,09
PL7 - section 12 of PAIA does not give access to Cabinet's records	47	2,72	1	5	1,39
<b>Psychological and Technological Factors</b>					
PSYT1 -The technical capacity of the policy makers is a critical matter when drafting policies/laws	50	4,16	1	5	1,06
PSYT2- Drafting e-legislation requires a specific skill-set, and lack of such skills could impede the effectiveness of drafting and the passing of the legislation	50	3,84	1	5	1,27
PSYT3 -In my view, businesses, government institutions, organisations and ordinary citizens do not fully understand and are not aware about the ICT legislation and therefore fail to comply.	50	3,52	1	5	1,16
<b>Good Industry Standards</b>					
LGOOD1 -Lawmakers in SA are very much aware and knowledgeable about the existing international standards in lawmaking	48	3,67	1	5	1,12
LGOOD2- In my understanding and/or experience, Lawmakers in SA do benchmark from other leading national and international standards	46	3,76	1	5	1,10
LGOOD3 -Lawmakers in South Africa do perform Quality Assurance (QA) on every piece of legislation before it is passed into law	48	3,21	1	5	1,30
LGOOD4 -The current lack of standardized procedures, not only in South Africa, but in Africa at large has created many challenges in terms of benchmarking	46	2,85	1	5	1,25
<b>Misalignment in the law</b>					
MISAL1 -Chapter IV of the ECT Act makes a provision for e-Government Services, section 28 (2) of this chapter provides for the South African Post office (SAPO) to be appointed as the preferred service provider. This could however, impede the effective use of electronic communications due to inefficiency and poor services provided by the SAPO.	48	3,21	1	5	1,13
MISAL2 -The ECT Act does not provide for a definition for a "device" instead the Act refers to a device as a program or a computer	47	3,23	1	5	1,03
MISAL3 -Jurisdictional challenges of the ECT Act: Cyber Inspectors only have powers to search, seize or arrest cybercrimes within South Africa.	47	3,43	1	5	0,88
MISAL4 -Section 90 of the ECT Act presents many other jurisdictional challenges pertaining to cybercrime	45	3,24	1	5	0,91
MISAL5 -The ECT Act is too prescriptive when it comes to electronic transactions, and this may disturb the way in which e-commerce and electronic transactions are carried, if international suppliers could feel that it is not worth the trouble to comply with fairly burdensome SA obligations, and therefore not want to do business with SA	47	3,11	1	5	0,89
MISAL6 -Section 87(2) of the ECT Act prescribes weak or low maximum penalties, in relation to breach of section 86 (3&4) wherein unauthorized access, interception of or interference with data is prescribed	45	3,40	1	5	0,86
MISAL7 -The ECT Act provides for admissibility of data messages to count as acceptable evidence and should constitute as sufficient proof when produced in a hard copy print out.	45	3,20	1	5	0,66
MISAL8 -The Regulation on Interception of Communication Related Information Act (RICA) 70, 2002 provides adequate penalties compared to the ECT Act.	45	3,00	1	5	0,77
MISAL9 -Copying, using and distributing data illegally is not criminalised in the ECT Act.	44	3,05	1	4	0,65
MISAL10 -The ECT Act presents inadequate criminal sanctions for section15	49	2,90	1	5	1,28
MISAL11- The Protection of State Information Bill 6, 2010 undermines the right of access to information, rights of whistleblowers and journalists.	47	3,30	1	5	1,27
MISAL12 -The gaps in the law making process contribute to the misalignment of related legislation.	49	2,84	1	5	1,20



<b>Non-compliance with e-legislation</b>					
NCOMP1 -I have a good understanding of ICT legislation and I understand very well the compliance requirements, and the consequences for non-compliance	49	3,35	1	5	0,93
NCOMP2 -My organisation is aware of all ICT related legislation and compliance to this legislation is exercised	48	3,21	1	5	1,05
NCOMP3 -My organisation complies with the ICT legislation that exists in SA such that related regulations (e.g. policies) for implementing these laws and ensuring compliance have been developed	50	3,54	1	5	0,97
NCOMP4 - To a very large extent I always ensure that I comply with the provisions of ICT laws	42	3,48	1	5	1,04

**Table 1:** Descriptive Analysis

#### 4.1.2 Reliability Test – Cronbach Alpha

Table 2 below shows how these constructs performs when a reliability test was performed. To test for the reliability of data Mult/Exploratory/ Reliability Item in Statistica was performed on the variables. In this method, all variables from all three constructs were selected and analysed at once. Table 2 below shows the results of this test, which shows that the data is reliable as the average for Cronbach alpha is not more than 0.7, in most instances average for Cronbach alpha for these variables is just above 0.6.

<b>CONSTRUCT</b>	<b>No of Items</b>	<b>Cronbach Alpha</b>
political and legal factors	7	0.70
Psychological and technological factors	3	0.63
lack of good industry standards	4	0.64
Misalignment	13	0.60
Non-Compliance	4	0.65

**Table 2:** Reliability Test

#### 4.1.3 Regression Analysis

First we run Spearman Rank Order Correlations in to determine the level of association between group items. Few items that measured the Political and legal construct were not associated with the rest of the group items. We averaged the group items excluding those that were not associated. We then used the average to conduct regression analysis. Table 3 shows the regression analysis of Misalignment (Dependent variable) and the independent variables (AVGPL, AVGPSYT and AVGLGOOD). AVGPL is the average score for all the questions that measured political and legal factors; AVGPSYT is the average score for all the questions that measured psychological and technological factors; and AVGLGOOD is the average score for all the questions that measured lack of good industry standards factors. As illustrated below in table 3, the p-value of all three variables (AVGPL, AVGPSYT and AVGLGOOD) is less than 0.05 and that means the relationship between them is significant.

The model fits and approximately 35% of the variance in the dependent variable is explained ( $R^2 = .34866879$ ). As shown in table 3 above, the Political and legal factors (AVGPL) influence misalignment (AVGMISAL) positively, that is as political influence increases, and so does the misalignment. Also we see that where law makers are aware and knowledgeable of the

international standards, benchmark and perform Quality Assurance (AVGLGOOD) this has the greatest influence (p-value=0.04), misalignment is reduced. Psychological and Technological factors (AVGPSY) influence misalignment negatively – i.e. where there is more technical capacity of a policy maker, misalignment is reduced, and where there are special skills set, misalignment is reduced.

**Regression Summary for Dependent Variable: AVGMISAL, R= .59048183 R<sup>2</sup>= .34866879 Adjusted R<sup>2</sup>= .30322708 F(3,43)=7.6729 p<0.0500**

Regression Summary for Dependent Variable: AVGMISAL, R= .59048183 R <sup>2</sup> = .34866879 Adjusted R <sup>2</sup> = .30322708 F(3,43)=7.6729 p<0.0500						
N=47	b*	Std.Err. of b*	b	Std.Err. of b	t(43)	p-value
Intercept			5.107113	0.817198	6.24954	0.000000
AVGPL	0.297365	0.133899	0.379314	0.170799	2.22082	0.031682
AVGPSYT	-0.274746	0.134278	-0.269302	0.131618	-2.04609	0.046893
AVGLGOOD	-0.463860	0.123918	-0.648480	0.173237	-3.74330	0.000534

**Table 3: Regression Analysis-1**

The second regression tests in table 4 below, between Misalignment (AVGMISAL) and Non-compliance (AVGNCOM) also reveals significant results. The results confirm that MISALIGNMENT leads to non-compliance. However, only 11% of the variance in the dependent variable is explained.

**Regression Summary for Dependent Variable: AVGMISAL, R= .34149014 R<sup>2</sup>= .11661551 Adjusted R<sup>2</sup>= .09821167 F(1,48)=6.3365 p<0.0000**

Regression Summary for Dependent Variable: AVGMISAL R= .34149014 R <sup>2</sup> = .11661551 Adjusted R <sup>2</sup> = .09821167 F(1,48)=6.3365 p<0.0000						
N=50	b*	Std.Err. of b*	b	Std.Err. of b	t(48)	p-value
Intercept			2.324557	0.316763	7.338482	0.000000
AVGNCOM P	0.341490	0.135661	0.232559	0.092387	2.517236	0.015221

**Table 4: Regression Analysis - 2**

## 4.2 Qualitative Data Analysis

We adopted a thematic analysis and coding in order to discover themes that emerged from the open questions. Thematic analysis has been used successfully in a number of previous studies (Attride-Stirling, 2001; Thomas, 2006). Onweuegbuzie et al. (2009) indicate that researchers can construct themes by preparing codes, identifying all instances of a given code from various statements and placing them into similar groupings. In the present study, the researchers matched

the frequently cited phrases in the open question responses with those in the questionnaire survey. This approach also assists in confirming the validity of the data collected (Onwegbuzie et al., 2009). The following themes in Table 5 emerged:

Influencing Factors	Themes
Political and Legal factors	Legislative process not complex (legislators); Legislative process complex (ordinary citizens); Complex nature of ICT laws; Poor consultation process; Changing ICT environment; Lack of experience; Time (date) of drafting/enacting laws; Unclear alignment process; Discordant legislation; Complex language used; Secrecy and unaccountability; Readiness Status of RSA - a developing country
Psychological and Technological factors	Avoid amendments; Drafters expertise, experience & field of study; Lack of ICT legal skills & expert knowledge Lack of awareness/ education programmes; Technicality and change Complexity and legalese; Too many laws in ICT- need to consolidation
Good Industry standards	Lack of national indices; No time for QA; Lack of resources; Effort & quality of benchmarking too low; No coordination between government departments; Uniqueness of each country Lack of skills; Lack of Public participation
Misalignment in the law	Bad drafting; Poor consultation process; Poor skilled lawmakers/lack of expertise; No quality control and assurance during drafting; Lack of coherence; Inconsistency; International agreements; Political influences; Lack or research; Challenges to implement
Noncompliance with e-legislation	Implementation challenges; Lack of resources; Benchmarking challenges; Unclear Government departments mandates; Lack of consistency; Lack of political Will; State of Readiness

**Table 5:** Themes that emerged from qualitative data

## 5. Discussion of the findings

Most of the respondents were between 35 to 45 years of age and possessed semi to average IT skills (Mean results for IT knowledge = 2.86 which represents semi-average skills). The respondents consisted of administrators, managers, members of parliament and committee chairs. Most of these respondents were members of the ICT Committees (Mean results for Committee membership = 3.48). Many however were not fully engaged in the actual law making process and those who did only had 5 – 10 years of experience.

### 5.1 Political and Legal Factors

When asked about the political and legal factors contributing to misalignment of e-legislation, most agreed to some extent (see Table 1), that the legislative process is complex (mean=3.48), and this finding of the present study is consistent with the literature revealed (Islam et al., 2011). Literature also revealed that the e-legislation is unstable and incomplete (Islam et al., 2011); and that laws are amended and repealed all the time and that creates confusion for compliance (Bracciali, Firpo, Leth, Michelet, & Sacchi, 2011). Findings of this study confirm this instability and incompleteness with a mean of 3.22 (mean=3.22); and also the issue of laws being amended and repealed regularly (mean=3.45). According to Kyobe (2010) the ECT act (2002) fails to prescribe how to communicate and complete transactions electronically when it comes to advanced electronic signatures, this study has confirmed this issue (mean=3.30). Respondents did not however agree firmly that section 12 of PAIA (2000) does not give access to cabinets records (mean=2.72).

These findings are consistent with the common themes that emerged from the open ended questions (see Table 5). For instance, while the legislators did not have difficulties in understanding the legislative process, non-legislators perceived it to be complex. Many perceived the electronic law to be complex due to language issues and lack of public consultation etc. (Zhang, 2005; Kyobe, 2010 & Islam et al., 2011). Respondents agreed that electronic laws are generally unstable, incomplete and have to be amended all the time due to legislators' lack of experience, thus the changing nature of ICT. They also indicated that South Africa being a developing democracy, it is not fully ready for the rapid changes in ICT. Respondents also agree that the process of aligning new Bills with related existing laws is unclear.

## **5.2 Psychological and Technological Factors**

Table 1 presents respondents views about the contribution of psychological and technological factors to e-legislation misalignment. The technical capacity of the policy makers a major problem when drafting policies / laws, particularly, ICT capacity must be developed in order for these policy makers to get the necessary skills (Waema, 2005; Munatsi, 2011). Findings of this study are consistent with the literature and reveal that the technical capacity of the policy makers is a critical matter when drafting laws (mean=4.16). Moreover, drafting e-legislation requires a specific skill-set (Waema, 2005), and that lack of such skills could impede the effectiveness of drafting and the passing of the legislation (mean=3.84). According to available literature, government institutions, organisations and ordinary citizens do not fully understand e-legislation and as such fail to comply (Kyobe, 2010). Results of this study are consistent with the statement above and (mean=3.52).

Table 5 confirms these sentiments, for instance many reiterated the need for legislators to have technical competencies. They also agreed that lack of awareness and educational programmes about the legislation impact on the success of e-legislation reforms. There was concern that the electronic laws are many and need to be consolidated in order to reduce the misalignment resulting from overlaps and inconsistencies.

## **5.3 Lack of Good Industry standards**

Table 1 also presents the opinion of the respondents regarding the impact of lack of industry standards on misalignment of e-legislation. Koskenniemi (2014) reports on fragmentation of international law and asserts that compatibility and coordination through standardization of rules or laws are some of the key principles of legal harmonization. Therefore, lack of harmonization between laws results into conflicts and lack of alignment, which in turn contributes to noncompliance. Grobler & Vuuren (2010) study the scope of cybercrime in Africa, and identify lack of standardised procedures to be one major challenge. Standardised procedures encourage effectiveness in investigation techniques, prevents uncertainties and inconsistencies. Good industry standards act as benchmarks in government institutions for measuring the implementation of cyber security (ITU, 2014).

This study revealed that lawmakers in South Africa are very much aware and knowledgeable about the existing international standards in lawmaking (mean=3.67); benchmarking against leading national and international standards is done (mean=3.76); and that Quality Assurance (QA) on legislation before it is passed into law (mean=3.21) is performed. However, themes

from the qualitative data suggest that the effort and quality of benchmarking is too low relative to other leading countries (See table 5). Calls for more research in this areas were made. It also appears that the current lack of resources and poor quality assurance in the e-legislations is a major challenge. A few other themes emerged in this category for example, the current lack of indices and absence of uniform standards and lack of coordination of the reforms between government departments.

#### **5.4 Misalignment in the e-Legislation**

Three factors that underpin misalignment as shows in the literature were lack of coherence, harmonization and interoperability in the e-legislation. Questions pertaining to misalignment of the e-legislation also tested the inconsistencies, gaps, duplications, vagueness that is claimed to exist in the e-legislation. 12 questions were asked and most respondents appear to agree regarding these misalignments in the e-legislation exist.

For instance, Chapter IV, section 28 (2) of the ECT Act provides for the South African Post office (SAPO) to be appointed as the preferred service provider. Some critics note the inefficiency and poor service provided by the SAPO, and therefore argue that this could impede the effective use of electronic communication (Gerada, 2006). However, in Table 1 respondents are concerned that an institution like the South African Post Office, which has been facing many challenges for a while is still considered (as per the ECT Act) to be the preferred service provider for e-Government Services (mean=3.21). Respondents were concerned about the SA post-office being the authority. *“...the Post Office is inefficient. Many people in other areas of the country heavily rely on Post Office for communication”* (P001=Participant 001).

Research shows that ECT Act does not provide a definition for a “device” instead it (the Act) refers to the device as a program or a computer; on the other hand, RICA generally, provides for definitions that are broad and often confusing (Ferreira, 2012). Findings of the study confirm these issues (Mean=3.23). Respondents also confirmed the Jurisdictional challenges of the ECT Act, for example, Cyber Inspectors only have powers to search, seize or arrest cybercrimes within South Africa (mean=3.43); while literature had already shown that even though the ECT Act had good intentions, SA government had not appointed cyber inspectors, and therefore it’s not very effective (Dagada et al., 2009).

The other misalignment of the e-legislation identified in the literature is as follows: Section 90 of the ECT Act presents many other jurisdictional challenges pertaining to cybercrime (Snail, 2008), and this is confirmed in the findings of this study (mean=3,24). According to Gerada (2006) ECT Act has been criticized as too prescriptive when it comes to electronic transactions which could disturb the way in which e-commerce and electronic transactions are carried, currently, but also Section 87(2) of the ECT Act prescribes weak or low maximum penalties, in relation to breach of section 86 (3&4) wherein unauthorized access, interception of or interference with data is prescribed. The study has confirmed these issues (mean=3.40), but also qualitative data and the following themes emerged: bad drafting of the legislation; Poor consultation process; poor skilled lawmakers/lack of expertise; no quality control and assurance during drafting hence so many inconsistencies and gaps in this law; lack of coherence and the law poses many inconsistencies.

In terms of jurisdictional challenges respondents indicated that it's largely due to the international agreements that South Africa signed with other countries. Adding to some issues in the e-legislation are the political influences, lack of research and some cited implementation challenges. Lastly on the issues of the Protection of State Information Bill 6, 2010 undermines the right of access to information, rights of whistleblowers and journalists (mean=3.30)

### **5.5 Non-Compliance with e-Legislation**

Lastly, respondents were also presented with questions on non-compliance with e-legislation as influenced by misalignments of the e-legislation. As shown in table 1 above, the mean for all the responses is above 3.2. While there is general agreement with these statements, some interesting themes emerged from the qualitative data regarding non-compliance with e-Legislation. The lack of political will, state readiness and unclear government department mandates are amongst those themes. However, some respondents cited issues such as implementation challenges, lack of resources – both financial and human and also challenges experienced with benchmarking may lead to non-compliance in some instances (issues of suitability, can a certain provision(s) be implementable in RSA etc.).

## **5. Conclusions**

This study set out to examine the existing e-legislation in SA to identify areas of misalignment; investigate factors contributing to misalignment; and to develop a framework that can guide alignment of e-legislation. Three key influences on alignment and compliance with e-legislation were identified in the literature, i.e. political and legal factors; psychological and technological factors; and lack of good industry standards. Three attributes of misalignment were also identified, i.e. lack of coherence; lack of harmonisation and lack of interoperability. Consequently, a conceptual model which depicts the factors contributing to the misalignment of e-legislation in South Africa and the impact of misalignment on compliance with e-legislation is proposed in this study.

The influence of the factors on misalignment was measured and both qualitative and quantitative analysis confirmed these influences. The study reveals that lack of good industry standards has the greatest influence to the misalignment of e-legislation in South Africa. Therefore, in order to address these issues, legislative institutions such as Parliament must emphasize on benchmarking with good industry standards, and this can be achieved through harmonisation of e-legislation in the region and globally. It is also a major concern that some aspects of earlier e-legislation have not been repealed. For instance, the fact that South African post office, which has been experiencing management and operational challenges, is still the preferred choice for communication. Qualitative data also raises some issues relating to lack of ICT skills by legislators, political influences, lack of public participation, etc. Capacity/skills development issues e.g. legislative drafting and ICT technical skills for legislators must be addressed. Moreover, public involvement as a constitutional mandate must be strengthened in South Africa to ensure citizens are engaged and actively participate in the law-making process.

The study contributes to the very limited literature on misalignment of e-legislation and thus provided useful information that can guide practitioners/legislators on what need to be focused on in ensuring alignment of e-legislation. The conceptual model identified the key influencing factors, these were tested empirically and found to have significant influences. Therefore this framework makes a good contribution as it shows what legislators need to focus on, for instance the need to benchmark and also to adhere to industry standards is identified. It has been learnt throughout the experience of conducting this research that Parliament is not the only institution that is involved in enacting laws, government department and Ministers play a major role. However this study could not reach those institutions and engage them, therefore it is recommend that future studies be inclusive enough to involve relevant prospective participants from those government departments.

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