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Investigating information technology skills retention challenges in South Africa's public sector

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South Africa's democracy in 1994 triggered the promotion of socio-economic development in the public sector, with specific emphasis on improving infrastructure and bridging the information Technology (IT) skills gap. In this paper, the factors that influence the retention of competent IT resources for the State Information Technology Agency (SITA) are examined. The Theory of Planned Behaviour (TPB) is the underlying theoretical framework. A case study approach is employed as a suitable qualitative research design to investigate contemporary occurrences in real-life settings for exploratory and theory-building research. Empirical insights, regarding excessive power accumulation, lack of accountability, and skills imbalance, in state enterprises, are provided to manage IT infrastructure, effectively. The authors assert that reliance on consultants, promotes opportunistic bargaining that could be detrimental to the government's strategy to retain skilled IT resources. The results reveal that recruiting and retaining appropriately skilled IT professionals, would address challenges of information asymmetry in the SITA, and facilitate the building of a strong professional network to manage the state enterprises' IT platforms. The analyzed data emanate from the minutes of meetings, as well as published media sources, and validated by the project's respondents. One limitation is that the stakeholders did not disclose all the facts.

Keywords: Information technology, skills retention, behaviour, attitude, public sector

Introduction

In April 1997, the South African Cabinet approved the appointment of an inter-departmental task team, to develop a package of policy, legislative, and institutional reforms that would create an enabling environment for public-private partnership [PPP] (Republic of South Africa [RSA] Department of Public Enterprises [DPE] 2005a, 2005b). The National Treasurer of the Republic of South Africa (RSA 2017, 151) describes a PPP 'as a contract between a public-sector institution and a private party where the private party performs a function that is usually provided by the public sector and/or uses state property in terms of the PPP agreement'. It is further explained that, contrary to the traditional government project approach, where the public sector pays for the capital and operating costs, as well as the risks of overruns and late delivery costs, project costs for PPPs are shared (RSA 2017). In this regard, technical, financial, and operational project risks are transferred to the private party, while project services, such as new infrastructure, maintenance, and facilities management, are transferred to the public sector.

Between 1997 and 2000, pioneering PPP projects were undertaken by the South African National Roads Agency for the N3 and N4 toll roads; the Departments of Public Works and Correctional Services for two maximum-security prisons; two municipalities for water services; and the South African National Parks for tourism concessions (Farlan 2005). In December 1999, drawing from earlier project lessons and international experience, Cabinet endorsed a Strategic Framework for PPPs (Fombad 2015). Subsequently, in April 2000, Treasury Regulations for PPPs were issued, in terms of the Public Finance Management Act (Republic of South Africa [RSA] Act 1 of 1999). The role of the PPP Unit, in this phenomenon, was to oversee project progress, as well as harness IT professional skills that could be transferred from project to project (Burger 2006; Fourie and Burger 2000, 2001).

The above ambitious political and social goals required strong political legitimacy, as well as competent administration, to prompt partnerships with private consultants. This endeavour was critical for government departments, namely SITA, to acquire their skill goals, as well as manage state-owned enterprises' IT infrastructure, efficiently. Consequently, in 1998, while attempting to bridge the IT skills gap in the public sector, the South African government entered into an Information and Communication Technology [ICT] service delivery contract with the Department of Labour [DOL] and Siemens South Africa [SIS] (Burger 2006; Republic of South Africa [RSA] Department of Labour [DOL] 2012). SIS was awarded the contract to implement an Enterprise Resource Planning System [ERP], which would enable the full automation of the customer service platform, thereby improving the DOL's IT infrastructure, and ultimately, service to public citizens (Burger 2006; RSA DOL 2012).

The transfer of DOL IT staff to SIS was significant to the ICT agreement, which, in this situation, was compliant with Section 197 of the Labour Relations Act (Republic of South Africa [RSA] Department of Labour [DOL] Act no. 66 of 1995; Bendix 2010) in South Africa. However, many DOL IT professionals terminated their employment contracts with DOL, after the ICT Agreement became effective. Consequently, the terminated IT professional staff positions were filled by SIS consultants. The challenge for senior managers was to chart a strategic course, in the context of a rapidly changing digital landscape, and

bridge the gap on IT skills between senior managers and consultants (Finkelstein and Hambrick 1990). It is commonly acknowledged that, while for private companies it is challenging to develop appropriate retention strategies of IT professionals; it is twice as hard for the public sector, since such initiatives lack the support of senior management (Diefenbach 2009). Coombs (2009) captures two gaps that current research have failed to investigate, namely: (1) the importance of retaining IT staff, who have acquired critical IT skills in organizations; and (2) IT staff turnover is not related solely to commonly researched human resource termination variables.

In this current research, the Theory of Planned Behaviours (TPB) was employed as the underlying theoretical framework, to examine the challenges affecting the retention of IT skills in organizations. The concept's approach to behaviour, subjective norms, and perceived behaviour, was used to examine the factors that influence the DOL IT staff resignations, and how such resignations could be minimized in the future, to ensure that staff is retained for SITA. In addition, IT retention strategies in the public sector were explored, with a particular focus on transferring staff to the contracting party, for skills enhancement, as well as a possible viable IT retention strategy in the public sector. The methodology for this research included a qualitative analysis of the minutes of meetings, media articles, and recordings of the project, which were validated by the project's respondents. The analysis was conducted to determine the behavioural challenges that influenced the retention of DOL staff, as well as skills development strategies, through the dominance of the consultants.

The Department of Labour (RSA DOL 2012) emphasized that the role conflict and ambiguity of top management in the public sector has led to the contracting of consultants, who seize the opportunity to dominate the project environment. In addition, senior managers, reportedly, often seek the advice of consultants to perform their function, which results in the public sector's dependence on consultants to execute their tasks (Davidson 2009). This phenomenon provides consultants with the opportunity to usurp roles that were not anticipated, and/or cause work to be performed outside the scope of the contractual agreement (Davidson 2009). As a result, many IT consultants' contracts are extended to ensure the smooth functioning of the project.

Theory of planned behaviour

The Theory of Planned Behaviour (TPB) is a body of theory, employed by researchers in several studies, to analyse the challenges associated with skills retention (Dewberry and Jackson 2018). The Theory of Planned Behaviour (TPB) was developed by Ajzen and Fishbein (1980; Fishbein and Ajzen 1975), as an extension of the theory of reasoned action, to overcome the limitation of dealing with behaviours, over which people have incomplete coercive control (Ajzen 1991). For this current research, postulating planned behaviour is investigated as the main theme for the employment of private sector contractors to upskill information systems resources, for

retention in the public sector. Theory of Planned Behaviour (TPB) is illustrated in Figure 1.

In Figure 1, the Theory of Planned Behaviour is depicted in the form of a structural diagram (Ajzen 1991). It illustrates the importance of assessing the amount of control an individual exercises over behaviours and attitudes (Ajzen 1991). The Theory of Reasoned Action (TRA) incorporates the subjective norms construct, as well as the attitude towards behaviour construct, as influencing individual behaviour (Fishbein and Ajzen 1975). However, TPB builds on the model of TRA, by supplementing an additional construct, namely *perceived behavioural control*, to enhance the understanding of an individuals' failure to perform desirably, when attitude and subjective norms are positive (Ajzen 1991).

The adoption of the TPB revealed that not all behaviour is under volitional influence, and at some point, behaviours are located along a scale, which extends from total control to a deficiency of control (Ajzen 1991). Therefore, TPB provides a framework, which supports the analysis of the retention of public sector staff, placing the responsibility on contractors to transfer knowledge and skills to public sector employees. The control factors include *internal factors*, namely, skills, abilities, information, and emotions, as well as *external factors*, for example, a situation, or environmental factors (Ajzen 1991).

Planned behaviour and influence

Although, it could be argued that measuring actual behaviour, using a longitudinal research design, would have been a desirable approach, in this current study, a longitudinal design was not a suitable design, as actual departure depends on current economic conditions. All constructs, namely, Attitude towards behaviour, Subjective norms, and Perceived behavioural controls, are considered in this current study (Ajzen 1991). According to W Dacsh (personal communication, June 21, 2006), building skills capacity in-house, and transferring skilled staff from project to project, to address large public sector human resource development, poses many challenges. The absence of a stabilized and developed SITA in South Africa's public sector, to harness and retain professional information systems resources, hampers in-house capacity building (RSA DOL 2012). This challenge creates reliance on private entities to provide services, at enormous premiums (Batley 1996; RSA DOL 2012). In South Africa, the economic crises of 2008 and 2015 have challenged the ineffectiveness of the state to retain IT professionals in the public sector. Additionally, the apparent lessons from international experience of successful market-friendly economies have been combined, to produce, what some scholars refer to as, the 'redefinition of the role of the state or public sector' (Ajzen and Fishbein 2000, 16).

The public sector in South Africa has difficulties with retaining skilled IT professionals across all sectors, particularly when PPP contracts are entered into with the private sector (RSA DOL 2012). According to Soni (2004), the public sector does not attract younger generation employees. This belief is observed because of the perceived negative hiring process of the working class,
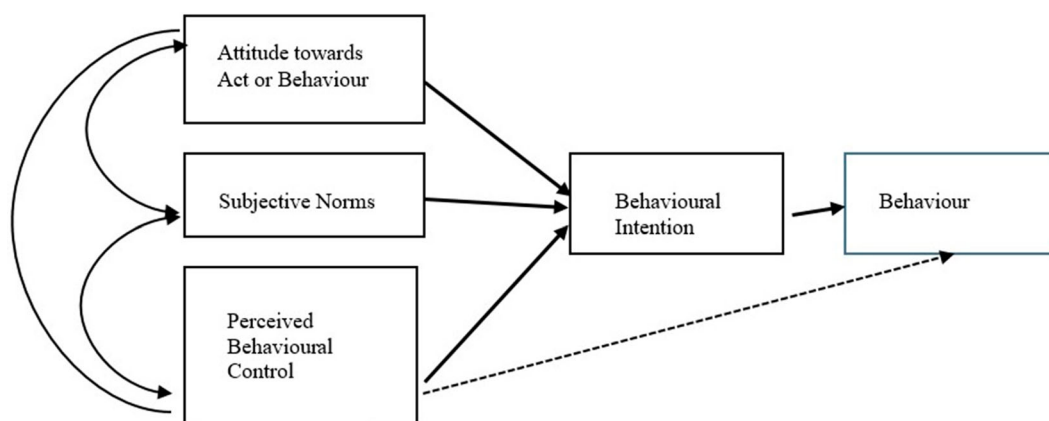
Figure 1: Theory of planned behaviour (adopted from Ajzen 1991).

its deficiency in providing challenging work, as well as its outdated reward systems (Soni 2004). The problem is that employees, who terminate their services to join other organizations, take with them valuable knowledge and expertise that should be retained in the public sector (RSA DOL 2012). Therefore, it is of paramount importance to retain IT staff, who have acquired the appropriate knowledge and desired skills in the public sector.

The challenge to develop appropriate strategies for the up-skilling and retention of IT professionals in the public sector has proven difficult. Coombs (2009) highlights that many IT professionals appear to be satisfied in their jobs, but still exercise their options with other organizations. To support his view, Coombs (2009) explains that managers in the USA expected their IT professionals to remain in employment at their organizations for a period of 30 months. However, it was determined that the average tenure was only 19 months (Coombs 2009). From the literature examined, it was clear that current research failed to capture a holistic perspective that explored why the retention of IT professionals is a challenge (Van Hooft et al. 2004).

Over the last 20 years, new forces, such as globalization, information technologies, and innovation, have transformed the perception of governance, the role of government, and the work performed in public sector institutions (Hodge 2004). According to Ahadzi and Bowles (2004), developed, as well as developing, countries have undertaken wide-ranging reforms to address the IT professional retention challenge. Remarkably, some have been successful, while others not (Ahadzi and Bowles 2004). Consequently, these authors state,

> We have seen progress on many fronts in different parts of the world, and we have made enough mistakes that it should now be possible to look back and assess the lessons learned, as we turn our attention to the challenges ahead. (Ahadzi and Bowles 2004, 969)

Bureaucracy plays an important role in the operations of the government in developing countries. Heady (2001) maintains that developing countries tend to suffer from weak political institutions, low levels of development, inexperienced political leadership, and political instability. In addition, Heady (2001, 299–302) argues that the

landscape of such government's administration is 'imitative', deficient in skilled manpower, with a tendency to neglect production-orientation, the discrepancy between form and reality, as well as 'a generous measure of operational autonomy'.

According to Haque (2001, 65), the basic function of public sector management comprises several institutions that provide services to the citizens, based on 'realization and representation of public interest and its possession of public qualities compared to business management', which regrettably, has been lacking. The public sector's objective is to improve their information systems platform; therefore, it is critical that they employ and retain IT professionals with the correct IT skills.

Analytical framework

Based on the context described above, in this study, the researcher aimed to examine the factors that influence the termination of IT professionals, after the completion of a project in the public sector, as well as explore a retention strategy in the public sector IT project environment that would promote the retention of IT professionals. Consequently, the over-arching objective of this current study was to employ the TPB, through a qualitative case study design, in the public sector IT project environment, to understand the factors that influence the terminations of IT professionals, after the completion of a project, and arrive at a retention strategy that would lessen these terminations.

The specific objectives were to:

- Investigate attitude towards behaviour, subjective norms, and perceived behaviour control, as determinants that influence termination; and
- Propose a retention strategy in the IT domain, after the completion of a project

Generally, attitude has been observed to be more predictive of behaviour intention, than subjective norms (Trafimow and Fishbein 1994). Rimal and Real (2005) conclude that the findings of the effects of social norms (which include subjective norms) on behaviour, are a mixed bag of emotion. Consequently, many studies have determined that attitude and subjective norms, together, are predictive of behaviour (Trafimow and Fishbein

1994), including health behaviours (Finlay, Trafimow, and Moroi 1999). Festinger (1964) and Wicker (1969) investigated the attitude and behaviour relationship. According to these authors, the relationship between attitude and behaviour is often taken for granted, with the understanding that changes in attitude influence behaviour (Festinger 1964; Wicker 1969). They proposed that the social context and norms are determinants of human action (Festinger 1964; Wicker 1969). The findings of research conducted by De Fleur and Westie (1958), Deutscher (1969), and LaPiere (1934), yielded similar results.

A subjective norm is measured as a normative belief, without including motivation to comply. Ajzen and Driver (1992) assert that normative beliefs are the beliefs of individuals, about the extent to which other people, who are important to them, think they should, or should not behave. In general, researchers, who measure normative beliefs, also measure motivations to comply, as well as how much individuals desire to behave consistently, according to with the prescriptions of important others. Efforts should be focused on the population's normative beliefs, which are good predictors of subjective norms, instead of on beliefs that are not widespread in the population under scrutiny, nor good predictors of subjective norms (Ajzen and Driver 1992). An effect, referred to as *contagion*, was documented by several authors, who concurred that people in a crowd are strongly affected by the beliefs, emotions, and behaviours of others in that crowd (Fishbein and Ajzen 1975).

However, the current perceived behavioural control view is most compatible with Bandura's self-efficacy theory (Bandura 1982). Accordingly, Bandura's (1982, 745) self-efficacy theory 'is concerned with judgments of how well one can execute courses of action required to deal with prospective situations.' Much of the knowledge about the role of perceived behavioural control comes from the systematic research programme of Bandura and his associates (Bandura, Adams, and Beyer 1977; Bandura et al. 1980). The findings of their studies reveal that the behaviour of individuals is strongly influenced by the confidence in their ability to perform it (namely, by perceived behavioural control). Self-efficacy beliefs could influence the choice of activities, preparation for an activity, effort expended during the performance, as well as thought patterns and emotional reactions (Bandura 1982, 1997).

The methodology and model

A case study approach was adopted, as it is a well-established method that investigates contemporary occurrences, within its real-life context, for exploratory and theory building research (Eisenhardt 1989). Eisenhardt (1989, 532) adds that it is this 'intimate connection with empirical reality that permits the development of a testable, relevant, and valid theory, when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used'. Questions regarding the 'How?' and 'Why?' are made possible when using a case study approach (Yin 1994). Some researchers claim that the contributions of case studies are limited to proposing hypotheses, while others argue that a single case study

will falsify existing theory (Lee 2004). Firstly, it allows close-up observation of an organization, during a period of intense instability, while experiencing periods of drastic change, when normally, outsiders would not be allowed. According to Lewin, 'If you want to understand something, try to change it' (Daft and Lewin 1990). Secondly, it ensures that the direction of the research is of guaranteed managerial relevance, since company management is closely involved in the research effort, as it progresses (Gill 1983). Thirdly, it, indirectly, generates the close relations and common understanding, which enable researchers to revisit the company during subsequent periods of change, to observe and reflect, with members of the organization, on ultimate causes and consequences of the observed changes (Miles and Huberman 1984).

Empirical analysis

In this study, the researchers employ an abductive approach, which is a natural and instinctive method to analyse the three TPB constructs, namely, subjective norms, attitude towards behaviour, and perceived behavioural control research constructs, as determinants that influence the terminations of IT professionals in the public sector. In addition, the three-stage approach to conduct content analysis of Henning (2004) is employed. The challenges experienced by DOL IT professionals are assessed, in relation to the leadership of the contractors on the PPP projects. Using the research objectives of Ajzen (1991), the researchers speculated that TPB influenced the relationship of the Siemens consultants and the DOL staff, which led to the research questions. Additionally, literature from the Theory of Behavioural Planning is used to conceptualize the analysis (Ajzen 2005; Coombs 2009). By employing the TPB framework, the three-stage content analysis and coding process is conducted to identify the TPB objectives (Henning 2004).

The results of this theoretical elaboration are presented as follows:

• *Stage 1: Assessment of the three research categories*
    As suggested by Ajzen (1991), the case is examined for correlation against the research objectives, to assess the value of each TPB construct, namely, subjective norms construct, attitude towards behaviour construct, and perceived behavioural control, to determine its influence on IS retention in the public sector, as well as a retention strategy. It is not implied that the three aforementioned constructs comprehensively uncover all the retention challenges, since the objective is not one of completeness, instead, the researchers endeavour to reveal the variables that challenge the retention of IT professionals in the public sector.

• *Stage 2: Discussion of theoretical findings*
    Once the interlocking circumstances had been reflected upon, a theoretical discussion, to generalize the findings, are provided. According to Ngwenyama and Nielsen (2014), the generalizability of case study research findings is usually questionable, particularly, when a single case is used. Consequently, Ngwenyama and Nielsen (2014) suggest that any three of the

following questions be used to validate the new theory's explanatory power:

1. Does the case consider predictions through which the theory could be falsified?
2. Are all predictions consistent with each other?
3. Does the case study confirm theory through empirical evidence?
4. Does the case study rule out rival theories?

This current research case study satisfies all four criteria. A discussion of the empirical observations, in relation to the TPB framework, are presented.

Data collection

This current case study is derived from a PPP contract between the DOL and Siemens for ICT service delivery to implement an ERP system. The implementation process was followed from 2003 to 2009. Data were collected in 2009, when the project was in crisis, and close to completion. At this stage of the project, in line with Section 197 of the Labour Relations Act (RSA DOL 1995), the IT professionals of DOL, working on the ERP, were transferred to SIS. Section 197 of the Labour Relations Act (RSA DOL 1995) was enacted to effect the automatic transfer of employment contracts from the transferring employer (in this instance DOL) to the acquiring new employer (in this instance SIS), in the event that the whole, or part of any business, trade, undertaking, or service, is transferred from the previous employer to the new employer, as a going concern (Bendix 2010). The intention was to upskill the IT professionals of DOL, while in SIS employ, to facilitate continuity, through the transference of skill on the project, from SIS IT professionals to DOL IT professionals, once the project was concluded.

In order to limit personal biases, sources of data from different perspectives were used to ensure reliability. The main sources of empirical data were the minutes of meeting, recordings, media reports, and the actual contract agreement. The use of multiple sources of data enabled the triangulation of responses, which strengthened the validity of the study. The analysis of the minutes of the meeting, media reports, and the actual contract agreement, was validated, as well as peer-reviewed by randomly selected interviewees, who worked on the project, and their responses were documented in the findings.

Organizational context of the case

The PPP was established in 2002 as a result of the high staff turnover of IT professionals in the public sector, the challenges with reaching IT objectives, the automation of services towards e-government initiatives, the DOL need to improve its IT capacity and expertise, and the need to exploit international best practice, as well as a DOL employment system. The deliverables comprised data centre services, local area network services, IT helpdesks, office productivity, customer satisfaction, end-user access, as well as the deployment of end-user devices, such as desktops, laptops, and printers. Systems development included: training services for new systems; the design, construction and implementation of new systems; and maintenance, support, and enhancement. The cost of the public-private partnership (PPP) between Siemens and the Department of Labour (DOL), for the implementation of new IT systems, increased dramatically; however, the delivery of services decreased, as did the dissemination of critical IT knowledge and skills.

Four options were reviewed to address DOL's strategy to deliver ICT. The first option was implementing Section 197 of the Labour Relations Act (RSA DOL 1995) to provide IT services, and organizing the SITA to provide outstanding services that fell within its mandatory services. This was a feasible option, as it would allow IT continuity in the DOL, as well as stabilization after November 2013, which was the project termination date. The second option was to arrange for the SITA to assume the IT services, with EOH resources. This option, however, was not feasible, because the SITA had gone through a transformation, and already had redundant staff. The third option was to appoint the SITA as a full IT service provider; however, this also was not feasible, since the SITA was also experiencing human resource challenges. Finally, although taking on EOH's resources, through the implementation of Section 197 of the Labour Relations Act (RSA DOL 1995), the Department was required to take on all EOH human resources.

Subsequently, after engaging in consultations with its internal employee relations and legal services departments, it was concluded that the application of Section 197 of the Labour Relations Act (RSA DOL 1995) was appropriate. In addition, external senior counsel advice had been sought, and it was agreed that Section 197 of the Labour Relations Act (RSA DOL 1995) was applicable. This decision was further supported by the legal advice offered to EOH. The interpretation of Section 197 of the Labour Relations Act (RSA DOL 1995) implied that neither DOL, nor EOH, would be allowed to select the resources they preferred. Additionally, all leave accruals and pension funds needed to be transferred to SIS, without altering the terms and conditions of employment.

Vikash Sirkisson, CIO of the Compensation Fund at the DOL, briefed the parliamentary portfolio committee on the status of the PPP and the IT systems, stating that the initiative initially cost R1.2 billion, but had escalated to R2 billion, due to the increase in the consumer price index (Nchabeleng 2012; RSA DOL 2012). Furthermore, the treasury's review of the system determined several flaws in the PPP, including the insufficient monitoring and contract management by the DOL (Burger 2006). Inconsistent change management was exercised by the department, to integrate the business into the new IT environment, and delays were encountered during the implementation of the improvement services, due to inadequate details of the business processes (Burger 2006; RSA DOL 2012). In addition, the treasury determined that a lack of contract understanding by DOL stakeholders, resulted in contractual remedies being overlooked, when Siemens' performance was inadequate (Burger 2006). Other highlighted challenges were the delays and backlogs in procurement, outdated desktops

in the DOL environment, delays in cabling of offices, increased demands for laptops, and the lack of an architectural plan to address data centre consolidation (Burger 2006; RSA DOL 2012).

Findings of the empirical analysis

The findings are based on an assessment of the TPB diagram of Ajzen (1991). The behaviour of SIS consultants became apparent through the analysis of the different data source, which were validated through random selected interviewees. The findings from the analysis were documented under the three constructs, attitude towards behaviour, subjective norms and perceived behavioural control, revealing the behaviour of consultants, during the execution of the DOL/SIS project. The findings revealed that the SIS consultants had the appropriate knowledge to implement the software and manage the ICT platform required by the DOL; however, they failed to transfer the knowledge to in-house personnel (RSA DOL 2012). Although the SIS IT professionals possessed the cognitive ability and appropriate skills to execute the project, as well as assume the roles and responsibilities to roll out the project, effectively, the DOL IT professionals became dependent on the consultants, because they lacked the knowledge and skills to execute the project successfully, and ensure business continuity (RSA DOL 2012). DOL staff members, who were transferred to SIS under Section 197 of the LRA (RSA DOL 1995), received no support from DOL management, thereby creating a vacuum, as well as the need to recruit staff to manage the information systems infrastructure (Vorster 2012). DOL staff were marginalized on the project, due the dominance of consultants; while the transference and development of pertinent IT skills was non-existent at the DOL. Subsequently, a discussion is presented on the validation of the analysis by randomly selected interviewees, who worked on the project.

Attitude towards behaviour (beliefs about the likely consequence of the behaviour)

The findings also revealed that public sector workers had received insufficient exposure to twenty-first century innovative IT practices. The reason was perceived as a flawed government recruitment process, which may be open to the manipulation of appointment decisions. Consequently, individuals, who may not have acquired the appropriate knowledge and skills, could be appointed, based on decisions that were not guided by their abilities and skills. The consequences of this action is symptomatic of the caveat, regarding skills retention and the IT skills gap. Should the public sector recruit skilled IT professionals, they could build a successful SITA, to drive organizational success, and become competitive with their counterparts from the private sector. In addition, consultants would be more aware of debunking public sector professionals' input, thereby nurturing the necessary skills to enable them to manage new IT infrastructure implementations. The following quotation refers:

> We resigned not because we were not capable; but consultants made us feel inadequate and did not share information

on the development of the project. Software coding and implementation mandates wasn't shared I did not feel that I belong. I was ostracised and alienated by the same individuals that I have assisted when the project started. When they had to orientate themselves with the old processes, we were indispensable, but once the new project started taking shape DOL staff was sidelined. First, it was subtle e.g. we shared information on the existing platform and existing framework, but when the new platform was taking shape communication and sharing information regressed, e.g. we have deadlines we cannot provide training it will be done at a later stage. It frustrated me and I felt my skills could be better utilised somewhere else while I still had leverage to move on.

In addition, the findings disclosed that the lack of support from top management to project members, often result in abuse, as well as opportunistic bargaining. Consequently, it was implied that the contract was written to offer preference to SIS/EOH employees (Nchabeleng 2012). Therefore, as the contract unfolded it became apparent that the absence of support from DOL management, created an opportunity for consultants to dominate the project. The perception was that the consultants' superiority dominated the project culture, portraying the view that they were indispensable, which allowed them to make decisions without being held accountable. This environment induced an unfair participatory work culture among project members, resulting in dissatisfaction, and culminating in the resignations of DOL IT professionals. The following quotation refers:

> The attitude and arrogance of consultants made them invisible because there were no consequences for their behaviour. None of the top management at the DOL held them accountable, and since we were transferred to them, we faced disciplinary action for insubordination. I feel they were above reproach, a law unto themselves. Remunerations at the DOL for IT personnel are relative to private sector compensations and based on the salaries consultants were earning the strategy was to engrain themselves into the DOL to ensure long-term security of a good income. Their salaries were higher than some executive personnel at the DOL but SIS/EOH new that in terms of Section 197 of the LRA agreement, that if DOL take them on board they will have to be remunerate at the salaries they have become accustomed to.

Subjective norms (belief about the normative expectations of others)

The interviewees reported that IT professionals, who were creative and specialists in their fields, became frustrated because they could not contribute to the project, through their competence and creativity. This contradicted the envisioned learning and development aspects of the contracts with SIS/EOH. They were of the opinion that public sector managers failed to interpret the project agreement, and were not held accountable for failing to provide them with the opportunities to learn and grow. It was disclosed that staff members were allowed to consult with industry stakeholders, networks, and syndicates, when they required support on deliverables. Consequently, many consultants formed private companies, and contracted their services to the public sector, at a premium. Many DOL staff were of the opinion that, despite South Africa's new labour dispensation, initiatives to accelerate

transformation in the areas of financial empowerment, as well as employee development, were absent.

> People in government collude with consultants because they are promised kickbacks. Just so by the by, after the DOL/SIS contract cost the government R1.9bn, the ministers of labour provided a contract to Accenture but never declared that her nephew was employed by Accenture. April last year, Accenture had been paid more than R33.5 million. Accenture was appointed after the department's R1.9bn PPP contract with SIS/EOH to improve its IT capability, leverage expertise and specialist knowledge failed. Accenture's appointment was through a deviation from procurement processes and excluded competitive bidding processes.

Particularly, Public Sector employees were isolated from technological advancement if they were never previously employed in big IT powerhouses. This was because it was perceived that they did possess the intellectual capital required to enhance IS systems. It was for this reason that consultants could strengthen their employability in the public sector. If consultants were not enforced to share information and transfer knowledge and skills, they would invariably create a niche in industry. Hence, it was perceived that consultants behaved like this in order to ensure long term contracts that required their knowledge and skills. The following quotation refers:

> The Department was compelled, through Section 197, to take over EOH resources and this was the most complex and time-consuming option, which had the potential to become protracted. The DoL had finalised a paper on how Section 197 should be applied, but was challenged as to how over 200 employees would be accommodated in 131 positions. The Department intended to take over operational staff, while the view of EOH was that all staff needed to be taken over. Coupled to this challenge was the fact that some EOH employees earned above the government-approved salary scales. The public sector give preference to black South Africans and all other races who were disadvantaged are marginalized. This situation has created a niche for white minorities who monopolizes the consulting domain and thereby they find their way back into top IT positions. By creating an equal opportunity job market, they could potentially do away with the cartel mentality of consulting houses and build up the resources and much needed IT skills and intellectual capital required to keep state institutions align with twenty-first century innovation with limited dependence on consultants.

Perceived behavioural control (beliefs about the presence that may facilitate or impede performance of the behaviour)

The perceived bullying behaviour of the consultants was tantamount to harassment, which resulted in DOL staff resignations. When people feel inept and excluded from the use of certain tools, they become disillusioned and frustrated. However, it is never one set of circumstances that drives individuals away. Therefore, the environment and culture, apart from knowledge and aptitude, has a significant role to play (Ipe 2003). Consultants have created a niche for themselves in industry, under the impression that they are indispensable. In an environment that is predisposed to learning and growing, without threats, anyone could thrive. In highly politicized situations, some people are inclined to avoid (resign), rather than confront the situation. The Government has offered consultants a platform of superiority, enabling them, as well as absolving them from accountability and delivery. The following quotation refers:

> It is not that consultants are not held to account, public managers in DOL absolve themselves from responsibility allowing consultants to hijack the environment and bring in more of themselves instead of utilizing us and involving us in the development of the project to come to grips with new Technology and IT skills that will enable us not to be reliant on them.

It was conjectured that consultants obstructed the up-skilling of DOL staff, by not involving them in the intricacies of the project implementation. They were not involved in the main objectives, but assigned the more mundane tasks to perform. Whether this was deliberately orchestrated, was difficult to establish. Nonetheless, a number DOL staff resigned. It was concluded that the project environment was highly stressful, rather than the perception of it being an environment to increase intellectual capital. In fact, the implementation at the DOL was regarded as one of the most valuable learning platforms to up-skill, reskill, and encourage the retention of IS professionals in the public sector, in the wake of new IT platforms, intended for a robust customer service centre. The following quotation refers:

> The new customer service centre was intended to streamline unemployment insurance payouts and minimise the manual time-consuming process that lent itself to fraud. Streamlining the customer service environment would have been a major achievement because people would not have had to sit in long queues. An efficient IT service would have cut down on the long lines and linking it to the department of home affairs fingerprinting system could have drastically decrease fraudulent activity. By using a fingerprinting system, the amount of paper used to process unemployment insurance could have decrease significantly, as well as fraudulent activity that DOL have been exposed too.

According to the findings, DOL staff members were always under scrutiny because of poor service delivery to the public. An implementation of this nature would have re-engineered the entire infrastructure, and breathed new life into DOL for better service delivery to the public. The project was intended to enhance the unemployment benefits customer service environment and ensure that payouts to the public were protected from fraudulent activities. The IT staff, as well as operational personnel, were mandated to deliver a more efficient system to increase productivity. However, when the consultants dominated the project, DOL became dissatisfied, demoralized, and insecure. The appointment of more consultants, to replace DOL staff, who had resigned, conjured up feelings that change management objectives were not achieved.

Conclusion
Based on the empirical findings discussed, it became apparent how behaviour, whether attitude or perception, could influence skills retention. The TPB model of Ajzen (1991) enabled the understanding of behavioural challenges, as well as how it influenced staff retention (Trafimow and Fishbein 1994). Generally, *attitude* has

been observed to be more prognostic of behavioural intention, than subjective norm. To clarify this empirical finding, the TPB, (Ajzen and Fishbein 1980, 2005) highlighted that behaviour is purpose-driven. Consequently, these behavioural traits have provided a framework, which allows researchers to analyse the retention of public sector staff, while placing the onus on contractors to transfer knowledge and skills.

The empirical analysis revealed that the DOL skills retention challenge was not going to be solved instantaneously, as it is a comprehensive problem in the private sector, as well. Behavioural beliefs, whether consciously or unconsciously, affect the attitudes of individuals, especially when it pertains to job security. Since, the advent of South Africa's democracy in 1994, the issue of job security is regarded as a problem, particularly for white South Africans. When the public sector started sourcing potential employees from racial groups, other than the white racial group, retired, retrenched, and disgruntled public sector servants formed new consultancies, or were absorbed into existing agencies, plying their trade to a floundering public sector. Consequently, the issues of upskilling DOL staff, as well as ensuring retention through agreements with SIS, proved to be challenging. The same people, who lost their jobs, whether through resignation, retrenchment, or retirement in 1994, with the regime change, currently had to train those, who, inadvertently, had replaced them.

Fishbein and Ajzen (1975) assert that behavioural aspects, such as attitude, social pressure, and control, give rise to perceived behaviour, which resulted in the challenges experienced with IT skills retention, as well as upskilling resources in the public sector. DOL staff believed that they did have the knowledge and skills, as a direct result of the repressing exposure from the consultants. Consequently, the staff felt vulnerable and frustrated with the attitude and behaviour of the consultants. The perception that staff would have the opportunity to acquire skills and expertise, during the implementation phase was diminished, due to the behaviour of consultants.

The struggle with the new South African democracy witnessed many destructive behavioural patterns in the workplace, especially between consultants and government organizations. The private sector is contracted, in good faith, to enhance the public sector infrastructure, but animosity is mishandled among public sector employees and consultants, who had previously occupied senior positions. The consultants' attitude seemed to imply, 'Why should we up-skill the people, who robbed us of our jobs?' These destructive patterns exist in South African society, under various guises. These patterns emerged during the partnership between the DOL and SIS/EOH, not as a matter of a project failure, due to lack of knowledge, but rather one of control and sabotage, to maximize profit. Sabotaging the success of the project was directly linked to staff turnover, which affected the retention strategy of the IT resource for the SITA. What appeared tangible on paper was politically unsound for the long-term retention strategy of IT resources for the SITA.

The challenges of information asymmetry have far-reaching consequences, based on the fact that the more knowledgeable party would assert authority over those, who display the slightest bit of doubt, in terms of what was expected of them. Social pressures in the work place capture the identities of individuals, causing them to conform to the norm (Gibson, Ivancevich, and Donnelly 1994). Everyone needs to be aware that challenges are everyday normal occurrences. However, it is important to realise that, in order to become empowered, questioning it, and understanding the challenge, is necessary. In addition, the assertiveness of outside consultants' roles and responsibilities should be managed, which would ensure that the initial project intention, would be realised, namely, the transference of knowledge and skills (Fuller et al. 1996).

The feelings associated with inadequate knowledge and skills could be frustrating and demotivating to individuals. According to Bandura, Adams, and Beyer (1977), as well as Bandura et al. (1980), when an individual's confidence is shaken, the ability to perform becomes questionable, not because of their lack of competence; but because of being undermined, which could have major negative psychological effects on their performance. These feelings are exacerbated by the lack of support from top management, and their acquiescence that consultants dominate the project environment, causing the intended retention strategies to fail.

Disclosure statement

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