

# **Knowledge Creation and Transfer:**

## Implications for Knowledge Management in Parliamentary Service

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## DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature:

Date:

## SUMMARY

Knowledge based organisations must continually create, share, and capture knowledge in order to improve performance. This demand for performance improvement has now also reached the public sector. The Parliamentary Service responded to this demand by contracting consultants to design systems, policies and strategies in areas such as performance management, information technology, human resource management, financial resource management, training and development.

Against this background, a case study was conducted within the Parliamentary Service to explore how organizational knowledge is created and transferred in practice. The theoretical lens for this case study is Nonaka's knowledge spiral, which puts emphasis on the creation, codification and diffusion of knowledge. The study explores processes and mechanisms of creating, transferring and capturing knowledge. This is done through the examination of strategies and systems for codifying tacit knowledge and storing that codified knowledge. Thereafter technological, cultural and organizational barriers that inhibit these efforts at sharing and storage of knowledge are identified. In the light of the above, implications for managing organizational knowledge are outlined. Lastly recommendations are made on how tacit and explicit knowledge could be efficiently managed within the sections and divisions of the Parliamentary Service.

Data was gathered through interviews, observation and an analysis of organizational documents. These demonstrate that through the contracting of consultants and the involvement of internal stakeholders, parliamentary service has made remarkable progress in creating, sharing, and codifying knowledge of the performance management system at individual, group and organizational levels. This progress was made as the result of the institutionalization of a performance management forum, the use of workshops, the training of trainers and staff, the publications of newsletters, the development of manuals and the writing and submission of reports.

However, it was also found that there are certain technological, cultural and organizational barriers to effective knowledge management. These include the lack of electronic databases, a culture of hoarding knowledge and the fact that knowledge management roles are not

assigned. Based on the analysis of these technological, cultural and organizational barriers the study makes six recommendations for the management of organizational knowledge within the parliamentary service. These recommendations deal with the following issues: The codification of tacit knowledge, the creation of a knowledge repository, the promotion of a knowledge sharing culture, the institutionalization of knowledge sharing incentives, the establishment of a knowledge management unit, and the appointment of a chief knowledge officer.

## OPSOMMING

Kennisgebaseerde organisasies moet aaneenlopend kennis skep, deel en kodifiseer om kompetend te bly. Kennisgebaseerde prestasie-verbetering word toenemend 'n prioriteit in die openbare sektor. Die Parlementêre Diensafdeling het, in 'n poging om prestasie te verbeter, konsultante gekontrakteer om sisteme, beleide en strategieë te ontwerp in areas soos prestasie-bestuur, informasie tegnologie, menslike hulpbronnbestuur, finansiële bestuur, en opleiding en ontwikkeling.

'n Gevallestudie in die Parlementêre Diensafdeling is teen hierdie agtergrond geloods om uit te vind hoe organisatoriese kennis in die praktyk geskep en oorgedra word. Die teoretiese lens vir hierdie gevallestudie is Nonaka se kennis-spiraal, wat die skep, kodifiseer en deel van kennis benadruk. Die studie verken die prosesse en meganismes vir die skep en oordrag van kennis. Dit word gedoen deur die strategieë en sisteme vir die kodifisering van versweë kennis (tacit knowledge) en die stoor van die eksplisiete kennis (explicit knowledge) te ondersoek. Daarna word die tegnologiese, kulturele en organisatoriese hindernisse wat die pogings tot die skep en deel van kennis frustrer geïdentifiseer. In die lig van bogenoemde word implikasies vir die bestuur van kennis uitgestippel. Laastens word voorstelle gemaak vir die bestuur van kennis in spesifiek die Parlementêre Diensafdeling.

Data vir die studie is verkry deur onderhoude, observasie en die analise van organisatoriese dokumente. Hierdie demonstreer dat die Parlementêre Diensafdeling, deur die kontraktering van konsultante en die betrek van interne belanghebbers, wel daarin geslaag het om kennis rondom die prestasiebestuurstelsel te skep, te deel en te kodifiseer op individuele, groep en organisasie vlak. Dit is hoofsaaklik toe te skryf aan die institutionalisering van 'n prestasiebestuursforum, die gebruik van werkswinkels, die opleiding van personeel, die publikasie van nuusbriewe, die ontwikkeling van handboeke en die skryf en indiening van verslae.

Dit is egter ook gevind dat daar sekere tegnologiese, kulturele en organisatoriese hindernisse tot effektiewe kennisbestuur in die Parlementêre Diensafdeling is. Hierdie sluit in die gebrek aan 'n elektroniese databasis, 'n kultuur van kennis-opgaarding, en die feit dat kennisbestuursrolle nie toegeken word nie. Die studie maak dan ses voorstelle vir die bestuur

van organisatoriese kennis binne die Parlementêre Diensafdeling gebaseer op die analise van hierdie tegnologiese, kulturele en organisatoriese faktore. Hierdie voorstelle gaan oor die volgende kwessies: Die kodifisering van versweë kennis (tacit knowledge), die skep van 'n kennis poel (knowledge repository), die bevordering van 'n kultuur van kennis deel, die institusionalisering van kennis insentiewe, die vestiging van 'n kennisbestuursafdeling, en die aanstelling van 'n Hoof Kennis Beampte (Chief Knowledge Officer).

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# CHAPTER 1

## INTRODUCTION AND OVERVIEW OF THE STUDY

*Knowledge, without a doubt, is the critical capital in any modern organisation. The ability to collect, interpret, direct and communicate knowledge is fundamental to developing an innovative organisation.*

Carol Stephenson, President and CEO: Stentor  
Resource Center Inc

*The only irreplaceable capital an organisation possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those that can use it*

Andrew Carnegie

### 1.1. INTRODUCTION

The findings contained in this study are based on nine months empirical research work conducted during the 2001-2002 financial periods in the Administration of Parliamentary Service to provide an understanding of processes of creating knowledge, mechanisms of transferring knowledge, methods of capturing knowledge and, the technological, cultural and organisational barriers inhibiting knowledge capturing, knowledge sharing and knowledge management within the sections and divisions of the Administration of Parliamentary Service.

The purpose of this chapter of introduction and overview is threefold. This first section provides background to the study.

The second section provides an overview of parliamentary service. The third section deals with problem discussion, research purpose, research focus, research methodology, limitations and delimitations of the study. The section provides a structure of the study

The emerging trends in the use of consultants' tacit knowledge to design organisational policies and systems that are knowledge intensive and the loss of organisational knowledge due to employees turn over have put the demand for value for money, knowledge transfer and knowledge management to the fore within the public service organisations. <sup>1</sup> In order to meet this challenge, knowledge-based organisations are being advised to efficiently and effectively create, locate, capture and share organisation's knowledge and expertise and have the ability to bring that knowledge to bear on problems and opportunities. <sup>2</sup>

It has been found in case study conducted in knowledge based organisations that in order to improve organisational performance, derive value for money in the use of consultants tacit knowledge and avoid loss of organisational memory due to employees resignations or retirement, knowledge creation processes, knowledge sharing mechanisms and knowledge storage systems are being institutionalised to enable the management of both tacit knowledge contained in employees heads and explicit knowledge contained in manuals, reports organisational policies. <sup>3</sup>

There are various models and strategies mentioned in knowledge management literatures on knowledge creation, transfer and management that could be facilitated within the organisations.

The most popular models and strategies cited are knowledge conversion,<sup>4</sup> knowledge transfer,<sup>5</sup> knowledge enablers,<sup>6</sup> knowledge codification and, knowledge

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<sup>1</sup> Department of Public Service and Administration Report, 2001, 18-20

<sup>2</sup> M H Zack, 1998, 45

<sup>3</sup> Mark, V 1998, 48 -78

<sup>4</sup> P Gomez, J Schuppel, and G Muller-Stewens, 1998, 222

personalization.<sup>7</sup> In order to explore knowledge creation, transfer and, technological, cultural and organisational barriers inhibiting knowledge storage, sharing and management within the administration of parliamentary service, the theory of organisational knowledge creation and strategies of knowledge management were used in this study as a tool for data collection and analysis. There are various reasons why this study used the theory of organisational knowledge creation and strategies of knowledge management as a framework of data collection and analysis.

Firstly, the theory of organisational knowledge creation provides a model describing how knowledge is created within the organisation. The authors of the theory assume organisational knowledge is created through a knowledge conversion model whereby tacit knowledge is converted into tacit knowledge through socialization mode, tacit knowledge converted into explicit knowledge through externalisation mode, explicit knowledge combined with new explicit knowledge through combination mode and, explicit knowledge converted into tacit knowledge through the internalisation mode.<sup>8</sup>

Secondly, the knowledge management strategies used in this study provides two strategies that can be used in organisation to facilitate capturing and sharing of organisational knowledge. The first strategy is codification, which refers to the process of codifying tacit knowledge into explicit knowledge and storing codified knowledge into knowledge repository.

The second strategy, personalization, refers to the process of facilitating knowledge sharing through personal contacts such as meeting, mentoring, coaching.<sup>9</sup>

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<sup>5</sup> T Hoerem, G von Krogh and J Roos, 1996, 119

<sup>6</sup> I Nonaka, , G von Krogh, and K Ichijo, 1998, 172

<sup>7</sup> M T Hansen, N Nohria and T Tierney 1999,106-116

<sup>8</sup> I Nonaka & H Takuechi, 1995, 62-70

<sup>9</sup> M T Hansen, N Nohria and T Tierney 1999,106-116

In this study, the concept of knowledge is distinguished from data and information and, operationally defined to imply:

...a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the mind of the knower. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms.<sup>10</sup>

Knowledge creation refers, to processes where an organisation “amplifies the knowledge created by individuals and crystallizes it as a part of the knowledge network of the organisation.”<sup>11</sup>

Knowledge transfer refers to mechanisms used within the organisations to facilitate the movement of knowledge, whether tacit or explicit, from the level of individual, group and the expanding communities that crosses sectional, departmental, divisional and organisational boundaries.<sup>12</sup>

The concept of knowledge management is broadly defined in this study to encompass any organisational processes and practices concerned with the creation, acquisition, capture, sharing and use of knowledge, skills and expertise irrespective of its location.<sup>13</sup>

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<sup>10</sup> T H. Davenport and L Prusack, 1998, 5

<sup>11</sup> I Nonaka and H Takuechi, 1995, 59

<sup>12</sup> I Nonaka and H Takuechi, 1995, 89

<sup>13</sup> M T Hansen, N Nohria and T Tierney 1999,106-116

## **1.2. OVERVIEW OF PARLIAMENTARY SERVICE<sup>14</sup>**

This section provides an overview of the administration of parliamentary service and policy developments leading to the use of Consultants knowledge to design the system of performance management during the 2001-2002 financial periods. The section focuses on parliamentary administration, service's strategic objectives and mission, organisational values, structure and services, policy developments.

### **1.2.1. ADMINISTRATION**

The Administration of Parliamentary Service is composed of six sub programmes. The first sub-programme is, the Office of the Secretary to Parliament responsible for strategic, business planning, legal advice, external communication, and financial management.<sup>15</sup> The second sub-programme is, the National Assembly responsible for advice and guidance in respect of proceedings, procedures and administrative services.<sup>16</sup> The third sub programme is, the National Council of Provinces responsible for procedural support and liaison for provincial legislatures and local government.<sup>17</sup> The fourth sub -programme is, the legislation and oversight division responsible for procedural, administrative, language and information support service. The fifth sub-programme is, the corporate services responsible for human resource management, IT and technical support.<sup>18</sup> The sixth sub- programme is, the institutional support responsible for provisioning, housekeeping, security, health and environmental services.<sup>19</sup>

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<sup>14</sup> S G Mfenyana, 2001, 10

<sup>15</sup> Estimate of National Expenditure, Parliament Vote, 2001, 34-35

<sup>16</sup> Estimate of National Expenditure, Parliament Vote, 2001, 35-36

<sup>17</sup> Estimate of National Expenditure, Parliament Vote, 2001, 36-39

<sup>18</sup> Estimate of National Expenditure, Parliament Vote, 2001, 39-43

<sup>19</sup> Estimate of National Expenditure, Parliament, Vote 2, 2001, 43-47

### **1.2.2. STRATEGIC OBJECTIVE AND MISSION**

The aim of the Parliamentary Service is to provide legislative and institutional support required by Parliament to fulfil its constitutional functions. The mission of parliamentary service is to facilitate the smooth operation of parliament to enable its members to perform their tasks. <sup>20</sup>

### **1.2.3. POLICY DEVELOPMENTS**

In light of a rapidly changing economic, social, political and technological environment, one of the new policy developments within the parliamentary service was the adoption, earlier in 1999, of an Integrated Human Resource Development Plan composed of elements such as promotion policy, skills development, employment equity, career management, succession planning, remuneration system and performance management. <sup>21</sup>

Due to lack of capacity and management within the HR section of parliamentary service, the management board of the Administration of parliamentary service contracted consultants to design the system of performance management during the 2000-2001 financial periods. <sup>22</sup> It is within this context of contracting Consultants' tacit knowledge to design the new system of performance management that this study was conducted

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<sup>20</sup> Estimate of National Expenditure, Parliament, Vote 2, 2001, 34

<sup>21</sup> S G Mfenyana, 2001, 30

<sup>22</sup> S G Mfenyana, 2001, 30

### 1.3. RESEARCH PROBLEM

The use of consultants in public services to design policies and systems that are knowledge intensive has put the demand for value for money, knowledge and skills transfer to the fore.<sup>23</sup> Despite the evolving trends in the use of consultants' tacit knowledge to design systems for government departments in strategic and operational areas such as performance management, information technology, human resource management, training, development and education, financial resource management, management of the delivery of services, planning, policy development and research, there are however, four concerns related to the knowledge transfer processes and mechanisms.<sup>24</sup>

The first concern is about the inability of consultants to transfer skills. The second concern is about contracts not stating skill transfer in terms of measurable indicators. The third concern is about public servants not enthusiastic to work with consultants. The fourth concern is about the tendency of public servants of not attending workshops and meetings intended to transfer knowledge.<sup>25</sup>

Notwithstanding the worthy efforts within the Administration of Parliamentary Service to create knowledge related to the implementation of integrated human resource development plan such as performance management system, career management, succession planning, skills development, employment equity plans and, remuneration system, lack of capacity within the HR Section, contracting of consultants in knowledge intensive project, lack of electronic database to store codified knowledge, loss of knowledge due to employees' resignations, lack of incentives to encourage and reward knowledge sharing practices.

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<sup>23</sup> Department of Public Service and Administration, 2001, 18-20

<sup>24</sup> G J Fraser-Moleketi, 2001, 1-27

<sup>25</sup> G J Fraser-Moleketi, 2001, 1

The general challenges facing parliamentary service within the contexts of developing and integrated human resource development plan, contracting of consultants, loss of tacit knowledge due to employees resignation is to develop internal capacity, strategy and system to codify tacit knowledge, store codified and, promote knowledge sharing across all the sections and divisions of the organisation.

#### **1.4. RESEARCH PURPOSE**

Due to lack of empirical study and evidence on how knowledge related to the implementation of policy components of the Parliamentary Service's Integrated Human Resource Development strategy (i.e. career management, succession planning, employment equity, promotion, skills development and performance management system) would be created, shared, transferred, captured and managed, this study was conducted with the purpose of:

- Exploring the processes and mechanisms of creating, transferring and, capturing knowledge
- Analysing the existing mechanisms of codifying and storing organisational knowledge
- Identifying and analysing the technological, cultural and organisational barriers inhibiting knowledge storage, knowledge sharing and knowledge management
- Drawing implications for managing knowledge across the Sections and Divisions of Parliamentary Service and,
- Making recommendations on how knowledge within the Administration of Parliamentary Service could be managed

## 1.5. RESEARCH FOCUS

In order to provide an empirical evidence on how organisational knowledge is managed within the parliamentary service, this study focused on parliamentary service' case of designing the system of performance management during the 2001-2002 financial periods to explore the actual processes and mechanisms of creating, transferring and capturing organisational knowledge. The study focused on knowledge creation processes and knowledge transfer and capturing mechanisms leading to the design of performance management system.

Based on the review of model of organisational knowledge conversion<sup>26</sup> (i.e. socialization, externalisation, combination and internalisation) and, strategies of knowledge management<sup>27</sup> (i.e. codification and personalization), the research questions guiding this study focused on knowledge creation, knowledge transfer, knowledge codification, knowledge storage, technological, cultural and organisational barriers inhibiting knowledge storage, knowledge sharing and, knowledge management within the administration of parliamentary service.

The creation knowledge process was explored and examined in terms of the roles of the Consultants, managers and union officials in designing the system of performance management. The knowledge transfer mechanisms were explored and examined in terms of the use of briefing sessions, training of trainers, coaching, workshops and training of staff on the implementation of performance management system. The capturing of knowledge was explored and examined in terms of publication of manuals, reports and, newsletters on performance management system. The technological barriers were analysed in terms of the organisational capacity to use of information technology tools to store explicit knowledge contained in manuals, reports, and policies.

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<sup>26</sup> I Nonaka and H Takuechi, 1995, 62-70

<sup>27</sup> M T Hansen, N Nohria and T Tierney 1999,106-116

The cultural barriers were analysed in terms of organisational policy and system to promote and reward knowledge sharing. The organisational barriers were explored and examined in terms of internal capacity to develop policies and strategies related to knowledge management across all the sections and divisions of parliamentary service

## **1.6. RESEARCH METHODOLOGY**

This section provides the reader with description of the research methodology of how the study was conducted within the administration of parliamentary service to explore knowledge creation, transfer and codification practices. The main focus of this section is on the use of case study and data collection methods such as observations, interviews and use of organisational documents

### **1.6.1 CASE STUDY**

As qualitative case study is characterised by the main researcher spending substantial time, on site, personally in contact with activities and operations of the case, reflecting, revising meanings of what is going on and has a potential of providing thick description of the context by communicating information that is grounded in the setting being studied and, builds on the readers tacit knowledge by presenting holistic and lifelike description of the context being studied.<sup>28</sup>

The researcher of this study used a case study method within the parliamentary service during the financial period of 2001-2002 to explore the processes and mechanisms of knowledge creation, transfer, capture and, the technological, cultural and organisational barriers inhibiting knowledge capturing, sharing and, knowledge management. As the use of the case study demonstrates interplay between inquirers and respondents, provides thick descriptions, communicates data grounded from setting being studied, in context this study, its application has been suitable for exploring questions related to processes, mechanisms and barriers of knowledge

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<sup>28</sup> R E Stake, 1995, 242

creation, transfer and storage.<sup>29</sup> The data collections techniques used in this study consisted of documents, observations, and interviews <sup>30</sup>. The section that follows provides a description of how each of the data collection techniques was complementary used during the period of the study.

### **1.6.2. OBSERVATION**

In theory, observation techniques are generally grouped into four categories.<sup>31</sup> The first category, namely complete participant role, involves a situation in which the researcher becomes a fully –fledged member of the group or institution under study and the research purpose is concealed. The second category, the complete observer role involves situations where a researcher has no contact with persons or groups being observed. The third category, participant-as-observer, involves situations where a researcher participates as well as observes by developing relationships with informants in the research setting so that some understanding of their world may be achieved. The fourth category, observer-as-participant, involves a situation in which a researcher keeps involvement with subjects brief, formal and, where possible, limited to a minimum.<sup>32</sup>

In this study, both participant-observation and observer–as participant were used as observation techniques. The decision to use these techniques was that at the time the organisation contracted consultants to design the new system of performance management, the researcher of this study was one of the employees within the organisation who also benefited from the knowledge transferred mechanisms led by consultants. Secondly, the researcher was one of the employees who had formal status within the performance management forum created to facilitate interaction between consultants, managers and union officials.

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<sup>29</sup> Y S Lincoln, and E G Gobi, 1985, 359-360

<sup>30</sup> J W Creswell, 1994, 149

<sup>31</sup> J W Creswell, 1994, 150-151

<sup>32</sup> JW Creswell, 1994, 150-151

The data collection during observations was collected in various ways. Field notes were taken during (1) meetings, (2) briefing sessions, (3) workshops and (4) training sessions. The purpose of compiling field notes was to capture data related to knowledge creation, transfer and codification. Furthermore, observations focused on interpersonal contact in the meetings, briefing sessions, workshops and training sessions, as well as on the sharing of explicit knowledge through the publication of newsletters, manuals, reports and presentation materials.

### **1.6.3. ORGANISATIONAL DOCUMENTS**

The use of organisational documents such as historical or journalistic accounts, memos, newspapers, brochures, meeting agendas and notes, constitute an important research technique for gathering data and can be used in the same manner as data derived from interviews or observations.<sup>33</sup> In this study, documents produced within the parliamentary service such as newsletters, manuals, reports, workshops and briefing sessions materials, agenda items and minutes of meetings and, existing policies were also used during the period of the study to form part of findings, analysis and interpretation.

### **1.6.4. SEMI-STRUCTURED INTERVIEWS**

In order to complement the data collected through observations made during the meetings, workshops and training sessions, and the use of organisational documents such as newsletters, manuals and, reports, interviews were conducted. The interview technique used in this study was the semi-structured interview<sup>34</sup>. The semi-structured interviews consisted of interview guide questions.<sup>35</sup> The interview guide was compiled by analysing the observations notes made during fieldwork.

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<sup>33</sup> SD Allen, B L Skipper, EL, Harris and, DA Erlandson, 1993,99

<sup>34</sup> J W Creswell, 1994, 150-151

<sup>35</sup> J W Creswell, 1994, 150-151

The purpose of using the interview guide was to provide a framework for exploring and an opportunity for the interviewees to freely share their views on the knowledge creation process, knowledge transfer and codification mechanisms and cultural, technological and organisational barriers inhibiting knowledge sharing, storage management within the Administration of Parliamentary Service.

After the interviewer's guide was e-mailed in to all the interviewees, interviews were then conducted with the HR Manager, the IT Manager, the Training and Development Practitioner, the Co-ordinator of Performance Management Forum, the Parliamentary trainer on Performance Management Systems and the Senior Consultant. All the interviews were recorded and transcribed. The duration of the interviews ranged from thirty to sixty minutes. This was done with the permission of each of the participants. The purpose of recording participants was to capture their actual words.

In addition to the tape recordings, sparse notes were made during interviews of key sentences and words on spaces provided below each sub-topic on the interview guide. The primary strategy used in this study to ensure external validity was the provision of rich, thick and detailed descriptions of the practice of creating and transferring knowledge within the parliamentary service so that anyone interested in transferability will have a solid framework for comparison.<sup>36</sup>

In order to ensure reliability of data collected, this study has outlined the research objective and focus, clarified researcher's role and, described how data during the period of the study was collected through research methods such as participant observation, semi-structured interviews and use of organizational documents. In addition to the description of research methods, this study has also described how qualitative data was analysed. <sup>37</sup>

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<sup>36</sup> J W Creswell, 1994, 150-151

<sup>37</sup> J W Creswell, 1994, 168

### 1.6.5. DATA ANALYSIS

In this study, qualitative data from interviews, observation notes, and organizational documents was analysed by mapping and categorizing answers and themes that were related to the knowledge creation processes and mechanisms of transferring knowledge. Three modes of data analysis such as the search for patterns, explanation building and time series analysis were used in analysing data. <sup>38</sup>

The analysis of data was made on the basis of the selected analytical units namely, acts, activities, meanings, participation, relationships and setting.<sup>39</sup> The knowledge creation modes of such as socialisation, externalisation, combination and internalisation were also used as a framework of analysis. <sup>40</sup> In addition to the use of knowledge creation modes, knowledge management strategies such as codification and personalization were also used in the analysis of data collected through interviews, observations and use of organisational documents. <sup>41</sup>

The objective and goal of using knowledge creation modes and knowledge management strategies as analytical framework was to understand and explain how tacit and explicit knowledge were created and transferred and what organisational mechanisms were used to capture the created knowledge. The institutionalisation of performance management forum, briefing sessions, training of internal trainers, scheduling of workshops, training of managers and staff, publication of newsletters, manuals and reports were analysed in terms of their outcomes of facilitating knowledge creation, transfer and codification.

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<sup>38</sup> J W Creswell, 1994, 145-159

<sup>39</sup> J W Creswell, 1994, 166-167

<sup>40</sup> I Nonaka and H Takuechi, 1995, 62-70

<sup>41</sup> M T Hansen, N Nohria and T Tierney 1999,106-116

Based on the analysis of technological, cultural and organisational barriers inhibiting sharing of knowledge, storage of codified knowledge and, development of knowledge management strategy, implications and recommendations for managing knowledge within the parliamentary service have been drawn and made.

## **1.7. LIMITATIONS AND DELIMITATIONS**

This case study has been delimited to the design of performance management system at parliamentary service. Interviews were made with people directly involved in the knowledge processes and mechanisms for transferring knowledge and, most of the conclusions are rooted in practices experienced from the parliamentary service. The recommendations in this study build a foundation for a more focused knowledge management system for effective management of both tacit and explicit knowledge.

Although this study has used the case of designing performance management system within the context of the adoption of integrated human resource development strategy to illustrate how knowledge creation, transfer and codification were facilitated, due to time constraints the study could not explore knowledge creation processes, transfer mechanisms and codification strategies related to policy components such as succession planning, career management, skills development, promotion policies and employment equity which means no generalizations could be made related to these above- mentioned outstanding. However, implications and recommendations for management of knowledge emanating from the design of the above-mentioned outstanding policies have been drawn.

## **1.8. STRUCTURE OF THE STUDY**

In addition to this introductory and overview chapter, this thesis is subdivided into four chapters. **Chapter2** reviews the model of knowledge conversion and strategies of knowledge management.

**Chapter3** provides findings on how parliamentary service through the assistance of consultants facilitated knowledge creation, transfer and capturing and what are the technological, cultural and organisational barriers inhibiting knowledge management within the parliamentary service.

**Chapter4** provides analyses of knowledge creation, transfer and codification processes and draws implications for managing organisational knowledge.

**Chapter5** makes recommendations related to knowledge management within the Administration of Parliamentary Service.

## CHAPTER 2

# ORGANISATIONAL KNOWLEDGE CREATION MODEL AND KNOWLEDGE MANAGEMENT STRATEGIES

There are various models and strategies in knowledge creation and knowledge management literatures describing how organisations facilitate the processes and mechanisms of creating, transferring and managing organisational knowledge. These include models such as knowledge spiral and knowledge conversion,<sup>42</sup> knowledge transfer,<sup>43</sup> knowledge enablers,<sup>44</sup> and strategies such as knowledge codification and personalization.<sup>45</sup>

In this chapter, the model of knowledge conversion and strategies of knowledge management are reviewed to provide an understanding of a how knowledge is created and managed within organisations. The review focuses on knowledge conversion modes such as socialization, externalisation, combination and internalisation, conditions of creating knowledge such as intention, autonomy, fluctuation and creative chaos, redundancy and requisite variety, knowledge creation phases such as of sharing of tacit knowledge, creation of concepts, justification of concepts, building of archetype and cross levelling of knowledge and, knowledge management strategies such as knowledge codification and knowledge personalization.

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<sup>42</sup> P Gomez, J Schuppel, and G Muller-Stewens, 1998, 222

<sup>43</sup> T Hoerem, G von Krogh and J Roos, 1996, 119

<sup>44</sup> K Ichijo, G von Krogh, and I Nonaka, 1998, 172

<sup>45</sup> M T Hansen, N Nohria and T Tierney 1999,106-116

## 2.1. KNOWLEDGE CREATION

The theory of organisational knowledge creation describe the processes and mechanisms of creating and transferring knowledge in an organisation have been described as a spiral starting at individual level and moving through expanding communities of interaction that crosses sectional, departmental, divisional and organisational boundaries.<sup>46</sup> In this theory, organisational knowledge is classified into tacit knowledge and explicit knowledge. Tacit knowledge refers to “ personal knowledge embedded in individual experience and involving intangibles such as personal belief, perspectives and values”. Explicit knowledge refers to “ knowledge articulated in formal language (grammatical statements, mathematical expressions, specifications, manuals, etc)”.<sup>47</sup>

## 2.2. KNOWLEDGE CONVERSION

The theoretical assumption that knowledge in an organisation is created through the interaction between tacit and explicit has allowed its authors to conceptualise four modes of knowledge conversion.<sup>48</sup> The knowledge conversion modes include socialization (from tacit to tacit), externalisation (from tacit to explicit), combination (from explicit to explicit) and, internalisation (from explicit to tacit).<sup>49</sup> The externalisation mode plays an important role in the knowledge creation process because of its potential to create explicit knowledge from tacit knowledge.<sup>50</sup> The content of the knowledge created by each mode of knowledge conversion is according to the authors, different from each other.<sup>51</sup>

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<sup>46</sup> I Nonaka and H Takeuchi, 1995, 89

<sup>47</sup> I Nonaka and H Takuechi, 1995, 89

<sup>48</sup> I Nonaka and H Takeuchi 1995, 89

<sup>49</sup> I Nonaka and H Takuechi, 1995, 62-70

<sup>50</sup> I Nonaka and H Takuechi, 1995, 66

<sup>51</sup> I Nonaka and H Takuechi, 1995, 72

Figure 1 shows the four modes of knowledge conversion and, figure 2 shows the knowledge content produced by each mode of knowledge conversion.<sup>52</sup>

		<b>TO</b>	
		Tacit	Explicit
<b>FROM</b>	Tacit	Socialization	Externalisation
	Explicit	Combination	Internalisation

Figure 1. Knowledge Conversion as proposed by Nonaka and Takuechi (1995)

		<b>TO</b>	
		Tacit	Explicit
<b>FROM</b>	Tacit	Socialization <b>Sympathized Knowledge</b>	Externalisation <b>Conceptual Knowledge</b>
	Explicit	Combination <b>Operational Knowledge</b>	Internalisation <b>Systemic Knowledge</b>

Figure 2. Contents of Knowledge Conversion as proposed by Nonaka and Takeuchi (1995)

The knowledge conversion model presented in figure 1, views organizational knowledge creation as a social and collaborative process characterized by an interaction between tacit and explicit knowledge. From an ontological point of view, the process of creating organisational knowledge is perceived as a spiral through which knowledge is transferred from individual, group and organizational levels.<sup>53</sup>

<sup>52</sup> I Nonaka and H Takuechi, 1995, 89

<sup>53</sup> I Nonaka and H Takuechi, 1995, 57

There are four epistemological assumptions contained in knowledge conversion model presented in figure 1. Firstly, the model assumes that tacit knowledge can be converted into tacit knowledge through socialization process. Secondly, the model assumes that tacit knowledge converted into explicit knowledge through externalisation mode. Thirdly, the model assumes that explicit knowledge can be combined with new explicit knowledge through combination mode. Finally, the model assumes that explicit knowledge can be converted into tacit knowledge through internalisation mode.<sup>54</sup>

In figure 2, the general assumption is that each mode of knowledge conversion yields a distinct knowledge content such as sympathized knowledge, conceptual knowledge, systematic knowledge and operational knowledge.<sup>55</sup> Each of the modes of knowledge conversion is described in sections that follow to describe how tacit knowledge is converted into tacit knowledge, how tacit knowledge is converted into explicit knowledge, how explicit knowledge is combined with new explicit knowledge and, how explicit knowledge is converted into tacit knowledge.

### **2.2.1. SOCIALIZATION**

The first mode of knowledge conversion is described as socialization. This mode of knowledge conversion assumes that an individual within the organisation can gain tacit knowledge directly from others without using language. Tacit knowledge sharing in mode is facilitated through mechanisms such as on- the -job training, observations, imitation and, rotation of staff, team building, brainstorming sessions and interaction with customers.<sup>56</sup> The knowledge content produced during this interaction is described as 'sympathized' knowledge.<sup>57</sup>

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<sup>54</sup> I Nonaka and H Takuechi, 1995, 67-69

<sup>55</sup> I Nonaka and H Takuechi, 1995, 72

<sup>56</sup> I Nonaka and H Takuechi, 1995, 62-63

<sup>57</sup> I Nonaka and H Takuechi, 1995, 62-63

### 2.2.2. EXTERNALISATION

The second mode of knowledge conversion is described as externalisation.<sup>58</sup> This mode of knowledge conversion is generally described as: “[a] quintessential knowledge creation process in that tacit knowledge becomes explicit, taking the shapes of metaphors, analogies, concepts, hypotheses, or models”.<sup>59</sup> In this knowledge conversion mode, tacit knowledge is articulated into explicit concepts through the use of metaphor, analogy, hypothesis or models. <sup>60</sup>It is in this mode that tacit knowledge, which is personal, context specific, and therefore hard to formalize and communicate to others, is codified into explicit knowledge in the form of manuals, words or numbers. The mechanism for sharing knowledge in this mode is dialogue or collective reflection in self-organizing teams. The knowledge content produced by this mode is described as conceptual knowledge.<sup>61</sup>

### 2.2.3. COMBINATION

The third knowledge conversion mode is described as combination.<sup>62</sup> This mode of knowledge transfer refers to the process of combining different sources of knowledge to produce new explicit knowledge. The methods of creating new explicit knowledge involve reconfiguration of existing information through sorting, adding, combining and categorizing. This mode refers to the process of combining new knowledge from existing explicit knowledge. In their analysis, the “networking” of newly created knowledge and existing knowledge from other sections of the organization triggers combination.

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<sup>58</sup> I Nonaka and H Takuechi, 1995, 64-67

<sup>59</sup> I Nonaka and H Takuechi, 1995, 64-65

<sup>60</sup> I Nonaka and H Takuechi, 1995, 64

<sup>61</sup> I Nonaka and H Takuechi, 1995, 71

<sup>62</sup> I Nonaka and H Takuechi, 1995, 67-69

The mechanisms for creating and sharing explicit knowledge in knowledge combination mode include sorting, adding, combining, categorizing, sharing or exchanging explicit knowledge through documents, meetings, and communication networks.<sup>63</sup>

#### 2.2.4. INTERNALIZATION

The final mode of knowledge conversion is described as internalization.<sup>64</sup> This knowledge conversion mode refers to the process of converting explicit knowledge into tacit, operational knowledge such as know-how or shared mental models. The knowledge content produced by this mode of knowledge conversion is described operational knowledge. To aid the internalization process of the knowledge, such activities as documenting, verbalizing and diagramming the knowledge is necessary. This mode is further induced when team members start to internalize the new explicit knowledge that is shared throughout the organization. It is argued that when experiences through socialization, externalization and combination are internalized into individual's tacit knowledge bases in the form of shared mental models or technical know-how, they become a valuable asset.<sup>65</sup>

From this point, the creation of organizational knowledge requires that: "the tacit knowledge accumulated at the individual level be socialized with other organizational members, thereby starting a new spiral of knowledge creation."<sup>66</sup> While each of the four modes of knowledge conversion create distinctive new knowledge, the central theme of the model of knowledge conversion hinges on a dynamic interaction between the different modes of knowledge conversion.<sup>67</sup>

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<sup>63</sup> I Nonaka and H Takeuchi 1995, 67

<sup>64</sup> I Nonaka and H Takuechi, 1995, 225

<sup>65</sup> I Nonaka and H Takuechi, 1995, 69

<sup>66</sup> I Nonaka and H Takuechi, 1995, 69

<sup>67</sup> I Nonaka and H Takuechi, 1995, 61

## 2.3. KNOWLEDGE CREATION CONDITIONS

In order for the knowledge conversion to succeed, the organization must provide a proper context in terms of enabling conditions. The enabling conditions that support the knowledge conversion process include: (1) intention, (2) autonomy, (3) fluctuation and creative chaos, (4) redundancy and (5) requisite variety.<sup>68</sup>

### 2.3.1 INTENTION

The first condition for enabling the knowledge spiral is intention.<sup>69</sup> This condition refers to an organization's aspiration to meet its goals. In a knowledge-creating environment, intention provides the criterion for judging the truthfulness of the knowledge created.<sup>70</sup> At an organizational level, intention is often articulated or expressed by organizational standards or visions used to evaluate and justify the knowledge created.<sup>71</sup>

### 2.3.2. AUTONOMY

The second enabling condition for promoting knowledge transfer and sharing is described as autonomy.<sup>72</sup> This condition refers to the provision of freedom or autonomy to individuals and teams to whom the organization has given a responsibility of creating new knowledge.<sup>73</sup> It is assumed that by allowing members of the organization to act autonomously, the organization may stimulate unexpected opportunities and motivation to create new knowledge.<sup>74</sup>

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<sup>68</sup> I Nonaka and H Takuechi, 1995, 61

<sup>69</sup> I Nonaka and H Takuechi, 1995, 74-75

<sup>70</sup> I Nonaka and H Takuechi, 1995, 74

<sup>71</sup> I Nonaka and H Takuechi, 1995, 74-75

<sup>72</sup> I Nonaka and H Takuechi 1995, 74-75

<sup>73</sup> I Nonaka and H Takuechi 1995,76

<sup>74</sup> I Nonaka and H Takuechi 1995, 76

### **2.3.3 FLUCTUATION AND CREATIVE CHAOS**

The third enabler for promoting the knowledge spiral is described as fluctuation and creative chaos. At an organizational level, environmental fluctuation generates what has been described as 'creative chaos', which triggers the process of organizational knowledge creation. In an organizational setting, creative chaos is realizable when organizational members have the ability to reflect upon their actions.<sup>75</sup>

### **2.3.4 REDUNDANCY**

The fourth enabler for promoting the knowledge spiral is described as redundancy. This condition refers to the existence of information about business activities and management responsibilities. By definition, redundancy facilitates dialogue, communication; knowledge creation processes and assists other organizational members to understand. The important point to note is that this condition promotes mutual trust facilitates interaction and the transfer of tacit knowledge within the organization. The way to promote organizational information redundancy is through the strategic rotation of organizational members.<sup>76</sup>

### **2.3.5. REQUISITE VARIETY**

The final condition that helps to promote the organizational knowledge spiral is described as requisite variety.<sup>77</sup> This condition states that everybody in the organization should be assured of the fastest access to the broadest variety of necessary information.<sup>78</sup>

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<sup>75</sup> I Nonaka and H Takuechi 1995, 78

<sup>76</sup> I Nonaka and H Takuechi 1995, 82

<sup>77</sup> I Nonaka and H Takuechi, 1995, 82

<sup>78</sup> I Nonaka and H Takuechi, 1995, 82

It is assumed that the condition of requisite variety helps members to cope with many contingencies.<sup>79</sup> The value of this condition in the organizational knowledge spiral is the provision of access to organizational information or knowledge.<sup>80</sup>

The enabling conditions reviewed thus far, demonstrate how organisations could facilitate the four modes of knowledge conversion and the spiral of organizational knowledge creation. The role of the organization is, therefore, to provide an enabling context in which knowledge accumulated at the individual level is transferred to other organizational entities, such as group and organizational levels. The core of the organizational knowledge –creation process takes place at the group level, but the organization provides the necessary enabling conditions, contexts or devices that facilitate the group activities, as well as the creation and accumulation of knowledge at the individual level.

## **2.4. PHASES OF KNOWLEDGE CREATION**

In addition to the enabling conditions required to promote the spiral model of organizational knowledge creation, there is a presentation of a temporal dimension that takes the form of the spiral with five- phases of knowledge creation process within the organization.<sup>81</sup> These include: (1) sharing of tacit knowledge, (2) creating concepts, (3) justifying concepts, (4) building an archetype, and (5) cross-levelling knowledge. What follows is a description of the phases of the organizational knowledge creation process.

### **2.4.1 SHARING OF TACIT KNOWLEDGE**

The first phase of knowledge creation is described as the sharing of individual tacit knowledge among people or organizational members with different backgrounds, perspectives, and motivations.

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<sup>79</sup> I Nonaka and Takuechi 1995, 82

<sup>80</sup> I Nonaka and H Takuechi, 1995, 82

<sup>81</sup> I Nonaka and H Takuechi, 1995, 82

It is argued that this process is critical for the creation of organizational knowledge.<sup>82</sup> The method used to facilitate the sharing of tacit knowledge includes a 'field of interaction' or a team through face- to face dialogue.<sup>83</sup>

#### **2.4.2. CREATION OF CONCEPTS**

It is argued that the most intensive interaction between tacit and explicit knowledge occurs during the creation of concepts in the organisational knowledge creation process.<sup>84</sup> During this phase of organisational knowledge creation, the tacit knowledge shared among members is crystallized into concepts, gradually becoming explicit through metaphors, analogies and/or sketches.<sup>85</sup> What facilitate this process of converting tacit knowledge into explicit knowledge is the use of multiple reasoning methods such as deduction, induction and abduction.<sup>86</sup>

#### **2.4.3. JUSTIFICATION OF CONCEPTS**

In this third phase of organisational knowledge creation, the concepts created in the previous phase are then justified by the organization to determine their value and need for persuasion.<sup>87</sup> It is argued that in a knowledge –creating organisation, it is the primarily the role of top management to formulate the justification criteria in the form of organisational intention, which is expressed in terms of strategy and vision.<sup>88</sup>

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<sup>82</sup> I Nonaka and H Takuechi, 1995, 85

<sup>83</sup> I Nonaka and H Takuechi, 1995, 85

<sup>84</sup> I Nonaka and H Takuechi, 1995, 85

<sup>85</sup> I Nonaka and HTakuechi, 1995, 86

<sup>86</sup> I Nonaka and H Takuechi, 1995, 86

<sup>87</sup> I Nonaka and H Takuechi, 1995, 86

<sup>88</sup> I Nonaka and H Takuechi, 1995, 87

#### **2.4.4. BUILDING OF AN ARCHETYPE**

In the fourth phase, the knowledge created is then transformed into what is described as an 'archetype', such as development of working models, operational innovation, corporate value, managerial systems or organizational structures. The working models in the cross-levelling of the knowledge phase are developed by combining newly created explicit knowledge with existing explicit knowledge possessed by people with different fields of expertise, such as research and development (R&D), production, quality control and marketing.<sup>89</sup>

#### **2.4.5 CROSS-LEVELLING OF KNOWLEDGE**

The final phase of the cross-levelling of knowledge is described as a catalyst to the spiral of organizational knowledge creation, in the sense that knowledge created is practically shared and transferred among entities such as individuals, groups, sections, departments, divisions and affiliated organizations.<sup>90</sup> It is recommended that autonomy should be provided in order to ensure the effective transfer and application of knowledge across organizations.<sup>91</sup>

The five phases of knowledge creation discussed in the preceding section facilitate the spiral of organizational knowledge creation. The creation of organizational knowledge in this phase takes an ontological dimension involving creation, transfer and sharing among the individual, group, organizational and inter-organizational levels. Having reviewed the theory of organisational knowledge creation with focus on knowledge conversion model, conditions of knowledge creation and phases of creating organisational knowledge, the sections that follow provide a review of knowledge management strategies and knowledge transfer culture as contained in knowledge management literatures.

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<sup>89</sup> I Nonaka and H Takuechi, 1995, 88

<sup>90</sup> I Nonaka and H Takuechi, 1995, 88

<sup>91</sup> I Nonaka and H Takuechi, 1995, 88

## 2.5. KNOWLEDGE MANAGEMENT STRATEGIES

In the literature of knowledge management, two categories of strategies of knowledge management have been named differently.<sup>92</sup> The first strategy is known as codification and the second strategy as personalisation. The knowledge codification strategy refers to the process whereby individual tacit knowledge is carefully codified or converted into explicit knowledge and stored in a database or electronic knowledge repository for easy access or retrieval by anyone within the organisation.<sup>93</sup> The primary function of knowledge management in the codification strategy is to codify and capture knowledge.<sup>94</sup> The critical success factor of this strategy of managing knowledge is technology.<sup>95</sup>

The knowledge personalization strategy on the other hand, refers to the process whereby tacit knowledge is shared through mechanisms such as meetings, workshops and so forth.<sup>96</sup> Unlike the knowledge codification strategy the primary function of knowledge management in the knowledge personalization strategy is to encourage knowledge sharing through networking.<sup>97</sup> The critical success factor of this strategy of managing knowledge is trust and collaboration.<sup>98</sup>

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<sup>92</sup> M T Hansen, N Nohria, and T Tierney 1999, 105-117

<sup>93</sup> M T Hansen, N Nohria and, T Tierney, 1999, 105-117

<sup>94</sup> J Swan 2001,1-3

<sup>95</sup> J Swan, 2001, 3

<sup>96</sup> MT Hansen, N Nohria and, T Tierney, 1999, 105-117

<sup>97</sup> J Swan, 2001, 3

<sup>98</sup> J Swan 2001, 3

The table below provides two contrasting views on codification and personalization strategies of knowledge management:<sup>99</sup>

<b>Codification Strategy</b>	<b>Personalization Strategy</b>
Knowledge for innovation is equal to objectively defined concepts and facts.	Knowledge for innovation is socially constructed and based on experience.
Knowledge can be codified and transferred through text and, information system has a crucial role.	Knowledge can be tacit and is transferred through participation in social networks including occupational groups and teams.
Gains from knowledge include exploitation through the recycling of existing knowledge.	Gains from KM include exploration through the sharing and synthesis of knowledge among different social groups and communities.
The primary function of KM is to codify and capture knowledge.	The primary function of KM is to encourage knowledge sharing through networking.
The critical success factor is technology.	The critical success factor is trust and collaboration.
The dominant metaphors are human memory and the jigsaw (fitting pieces of knowledge together to produce a bigger picture in predictable way).	The dominant metaphors are the human community and the kaleidoscope (creative interactions producing new knowledge in sometimes unpredictable way)

<sup>99</sup> MT Hansen, N Nohria and, T Tierney, 1999, 105-117

### 2.5.1. KNOWLEDGE CODIFICATION STRATEGY

The strategy of codifying knowledge involves the capture and representation of knowledge for re-uses either by an individual, group, or an organization.<sup>100</sup> The aim of codification is to put organizational knowledge into a form that makes it accessible to those who need it. Tacit knowledge is extracted from the person who developed it, codified and stored in documents, manuals or databases.<sup>101</sup> For tacit knowledge to become explicit is normally codified into documents as reflected in the table below.

INSTRUMENTS	DESCRIPTION	INTENDED EFFECTS
Materialization of knowledge in documents	Systematic collection of already explicit knowledge in distributable documents (knowledge maps, yellow pages)	Basis for usage and distribution of knowledge and for standardization process
Combination of materialized knowledge	Creation of new knowledge through endless combination processes	Multiplying existing knowledge in different product and service contexts
Concept for personal integration	Familiarization with existing knowledge, procedures etc.	Internalisation already existing knowledge; reproducing standard operating procedures

<sup>100</sup> R Ruggles, 1997,2

<sup>101</sup> H Zack,1999, 45-58 1998? See bibliography

The focus of managing tacit knowledge through the documentation approach provides three benefits. The first benefit relates to the factual materialization of explicit knowledge for everyone's use. The second benefit relates to the combination of single knowledge components to new knowledge processes and, the third benefit to the internalisation of collective knowledge.<sup>102</sup>

The literature on knowledge management research shows that in cases where knowledge can be explicitly encoded and recorded, or where the interpretative context is well-shared, collaborative technologies play a central role in knowledge acquisition, combination and dissemination.<sup>103</sup> The tools used for managing codified knowledge have been described variously in knowledge management literature. The most cited tools and mechanisms for explicit knowledge capture and transfer include value added network, Local Area Network, Electronic Mail, point of sales system named "groupware", Computer supported cooperative work, Computer-Aided Design Manufacturing, in-house publications, handbooks,<sup>104</sup> electronic knowledge repositories, and documentation of knowledge in the form of manuals and handbooks<sup>105</sup>

One of the best-known approaches for using technology to store codified knowledge is the use of knowledge repository.<sup>106</sup> The use of the knowledge repository for managing explicit knowledge assumes that tacit knowledge can be codified and stored in an electronic knowledge repository.<sup>107</sup> The repository is an electronic knowledge base that supports a powerful acquisition, storage and

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<sup>102</sup> H Zack, 1998, 235

<sup>103</sup> H Zack, 1998, 207-239

<sup>104</sup> I Nonaka and H Takeuchi 1995, 67-87

<sup>105</sup> Gomez, Schumppele, and Stewens 1998, 223-252.

<sup>106</sup> T H Davenport and L Prusack, 1998, 130

<sup>107</sup> MT Hansen, N Nohria and, T Tierney, 1999, 107-10

publishing environment. It enables organizations to adapt their knowledge in the form of tips, formal procedures, processes, policies, guidelines and tasks.<sup>108</sup>

The knowledge repository is a versatile technology that can capture and structure many types of knowledge inputs. With the repository, knowledge outputs can be packaged in a variety of easily accessible formats, such as paper and electronic formats. The repository strategy views knowledge as an object that can be collected, stored, organized and disseminated.<sup>109</sup>

The idea of codification is to put organizational knowledge into a form that makes it accessible to those who need it. The codification strategy emphasizes the importance of converting tacit knowledge into explicit knowledge so that it could be accessed at both group and organizational levels.<sup>110</sup> This approach focuses on codifying and storing knowledge in repository by allowing many people to search for and retrieve codified knowledge without having to contact the person who originally developed it.<sup>111</sup>

The cognitive model denotes a perspective where valuable knowledge is conceived as being captured and codified from individuals and packaged, transferred and managed through the use of information communication technology.<sup>112</sup> The codification KM strategy focuses on the organization's efforts in creating, codifying, storing and re-using knowledge in documents and databases for access and use by staff in organizations. The knowledge that is codified involves different forms of explicit knowledge such as sympathized knowledge, systematic knowledge, conceptual knowledge, operational knowledge,<sup>113</sup>

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<sup>108</sup> MT Hansen, N Nohria and, T Tierney, 1999, 110-114

<sup>109</sup> J Swan 20001, 1-3

<sup>110</sup> J Swan,2001, 1-3

<sup>111</sup> J Swan 2001, 1-3

<sup>112</sup> J Swan 2001, 1-3

<sup>113</sup> I Nonaka and H Takeuchi 1995, 70-71

declarative knowledge, procedural knowledge, casual knowledge, and specific contextual knowledge.<sup>114</sup>

This approach suggests that tacit knowledge can be formalized, codified and stored in repositories and information and communication technologies are perceived as a critical success factors.<sup>115</sup> It is argued that in order to reflect the full range of explicit organizational knowledge, the knowledge repository should strive to record meaningful organizational knowledge concepts such as categories, definitions (i.e. declarative knowledge), processes, actions, sequences of events (i.e. procedural knowledge), rationale for taking and action or making a conclusion (i.e. casual knowledge) and circumstances and intentions under which the knowledge was developed (i.e. contextual knowledge).<sup>116</sup>

In order to handle the management of the knowledge repository, organizations have created the position of Chief Knowledge Officer.<sup>117</sup> The responsibility of the Chief Knowledge Officer includes championing knowledge management, educating the organization, managing knowledge mapping, integrating the organizational and technological resources and ensuring effective creation and meaningful use of the knowledge repository.<sup>118</sup> In addition to the management of explicit knowledge through the knowledge repository, other sources of explicit knowledge management include the knowledge refinery,<sup>119</sup> knowledge management roles<sup>120</sup> and information technology.<sup>121</sup>

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<sup>114</sup> H Zack, 1999, 45-58

<sup>115</sup> J Swan, 2001, 1-3

<sup>116</sup> H Zack, 1998, 5-7

<sup>117</sup> H Zack, 1998, 5

<sup>118</sup> H Zack, 1998, 5

<sup>119</sup> H Zack, 1998, 4-5

<sup>120</sup> H Zack, 1998, 5

<sup>121</sup> H Zack, 1998: 5

The tools that enable codification and personalization strategies have been segmented into integrative and interactive applications each addressing different knowledge management objectives such as tacit knowledge management or explicit knowledge management.<sup>122</sup>

The application of integrative knowledge management tools exhibits a sequential flow of explicit knowledge into and out of the repository.<sup>123</sup> The producers and consumers of knowledge interact with the repository rather than with each other directly.<sup>124</sup> The repository becomes the primary medium for knowledge exchange, providing a place for members of a knowledge community to contribute their knowledge and views.<sup>125</sup> The primary focus tends to be on the repository and the explicit knowledge it contains, rather than on the contributors, users, or the tacit knowledge they may hold.<sup>126</sup>

In contrast to integrative applications, the interactive knowledge management tools facilitate tacit knowledge transfer from the teams or sharing among the community of practice.<sup>127</sup> The focus of interactive tools in the personalization approach of knowledge management is primarily on supporting interaction among people holding tacit knowledge.<sup>128</sup> The repository is a by-product of interaction and collaboration rather than the primary focus of the application.<sup>129</sup> Although the strategies of codification and personalization require different

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<sup>122</sup> H Zack, 1998, 13

<sup>123</sup> H Zack, 1998, 13

<sup>124</sup> H Zack, 1998, 13

<sup>125</sup> H Zack, 1998, 13

<sup>126</sup> H Zack, 1998, 13

<sup>127</sup> H Zack, 1999, 13

<sup>128</sup> H Zack, 1999, 13

<sup>129</sup> H Zack, 1999, 13

information technology and levels of support, they, however, both start from the assumption that knowledge is a critical asset and essential for innovation.

### **2.5.2. KNOWLEDGE PERSONALIZATION STRATEGY**

The knowledge personalization strategy allows the organization to benefit from effective person-to-person knowledge sharing. The focus of this strategy is on the dialogue between individuals, not knowledge stored in databases. The strategy highlights the importance of social relationships, shared understanding, attitudes to knowledge creation, transfer and sharing within the organisation. In the personalization strategy the knowledge is contextual, subjective, inter-subjective, created and applied through development of social communities including project groups and teams to encourage it's sharing and transfer to individuals and groups levels.<sup>130</sup>

Contemporary research reveals that through personalization strategy, tacit knowledge is normally shared and transferred through the application of interactive tools and human communication modes.<sup>131</sup> The interactive tools include video-conferencing, knowledge mapping, recording the stories and experiences of senior practitioners on video or CD – ROM. The human communication mechanisms include the following: face-to-face conversation, storytelling, shared experiences,<sup>132</sup> teamwork, learning by examples, knowledge brokers, brainstorming sessions; fields of interaction, observation, practice, strategic rotation of personnel, collaboration, workshops and seminars and conferences. The application of Information Communication Technology (ICT) is perceived as an enabler for the development of communities, but not as an essential component of knowledge management.<sup>133</sup>

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<sup>130</sup> J Swan 2001, 6-7

<sup>131</sup> Hansen, Nohria, and Tierney, 1999

<sup>132</sup> H Zack, 1993, 207-239

<sup>133</sup> J Swan, 2001, 1

## 2.6. KNOWLEDGE TRANSFER CULTURE

Research findings indicate that the key to leveraging knowledge successfully in any organization depends on the institutionalisation of organizational culture that fosters the sharing of information and knowledge.<sup>134</sup> The table below provides some of the barriers, and possible solutions to knowledge transfer in organizations<sup>135</sup>

FRICTIONS	POSSIBLE SOLUTION
Lack of trust	Build relationships and trust through face-to face meetings.
Different cultures, vocabularies, frame of reference.	Create common ground through education, discussion, and publications, teaming and, job rotation.
Lack of time and meeting places; narrow idea of productive work	Establish times and places for knowledge transfer: fairs, talk rooms, conference reports.
Status and rewards go to knowledge owners	Evaluate performance and provide incentives based on sharing
Lack of absorptive capacity in recipients	Educate employees for flexibility; provide time for learning; hire for openness to ideas.
Belief the knowledge is prerogative of particular group, not –invented – here syndrome.	Encourage no hierarchal approach to knowledge, quality of ideas more important than status of source.
Intolerance for mistakes or need for help	Accept and reward creative errors and collaboration, no loss of status from not knowing everything.

Figure 3: Knowledge Frictions and Solutions as Proposed by TH Davenport and L Prusack, 1998

<sup>134</sup> T H Davenport and L Prusack 1998,

<sup>135</sup> T H Davenport and L Prusack, 1998,

The knowledge frictions or inhibitors indicated in figure 3 suggest that the success of facilitating knowledge transfer does not depend only on strategies of knowledge management nor technological tools, but also on cultural and behavioural intervention for the creation of a knowledge –friendly organizational climate.<sup>136</sup> These interventions include organizational norms that promote and value knowledge sharing, allocation of organizational resources for employees to participate in knowledge management activities, and the adoption of an incentive system that promotes and rewards knowledge creation and knowledge sharing behaviours.<sup>137</sup>

## 2.7. KNOWLERDGE SHARING INCENTIVES

It has been argued that in order for organisations to stimulate and encourage knowledge sharing culture organisational members need to be provided with incentives to participate in the knowledge sharing process. In organisational practice, the application of both codification and personalization strategies require different knowledge sharing incentive systems.<sup>138</sup> In the codification model, it is suggested that managers need to develop a system that encourages people to write down what they know and to get those documents into an electronic repository.<sup>139</sup> The level and quality of employees' contribution to the document database should be part of their annual performance review.<sup>140</sup> In the personalization approach, it is recommended that managers need to reward people for sharing knowledge directly with other people.<sup>141</sup>

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<sup>136</sup> T H Davenport and L Prusack, 1998, 43-44

<sup>137</sup> T H Devenport and L Prusack , 1998, 43-44

<sup>138</sup> T H Devenport and L Prusack, 1998, 43-44

<sup>139</sup> T H Devenport and L Prusack , 1998, 43-44

<sup>140</sup> T H Devenport and L Prusack , 1998, 43-44

<sup>141</sup> T H Devenport and L Prusack, 1998, 43-44

## 2.7. SUMMARY

The theory of organisational knowledge creation reviewed thus far, proposes a paradigm for managing the dynamics aspects of organisational knowledge creating processes. Its central theme is that organisational knowledge is created through a continuous dialogue between tacit and explicit knowledge. The assumption that knowledge is created through conversion between tacit and explicit knowledge, has allowed the theory reviewed in this chapter to postulate four different modes of knowledge conversion whereby tacit knowledge is converted into tacit knowledge, tacit knowledge into explicit knowledge, explicit knowledge into explicit knowledge and, explicit knowledge into tacit knowledge. According to this theory of organisational knowledge creation, there are five conditions required at organisational level to promote knowledge sharing or spiral. These conditions are intention, autonomy, fluctuation and creative chaos, redundancy and requisite variety.

What has also been demonstrated in this chapter of theoretical review is that tacit knowledge can be created and transferred through mechanisms such as face-to-face conversation, storytelling, knowledge flairs, open forums, community of practice, mentoring programs, teamwork, learning by examples, knowledge brokers, multifunctional project groups, brainstorming sessions, observations, rotation of personnel, apprenticeship, workshops, seminars and conferences and, explicit knowledge captured and shared through mechanisms such as knowledge repository, intranet, Electronic Mail, in-house publications and, documentation of knowledge in the form of manuals and handbooks.

Both the model of knowledge conversion and strategies of managing organisational knowledge reviewed in this chapter, emphasize the importance of creating, sharing and, managing knowledge as organisational strategic resource.

## CHAPTER 3

# KNOWLEDGE CREATION AND TRANSFER IN PARLIAMENTARY SERVICE

“Parliament is increasing its knowledge of Performance Management on a daily basis. The transfer of information as well as the Project itself from HR Outsource to Parliament is well under way.”

Performance Management Project–Newsletter 5,  
Parliament of RSA, Sept 2001,1

“The most common mechanisms used in the parliamentary service to transfer knowledge of performance management system were briefing sessions, workshops, newsletters, manual, training of internal trainers, coaching and training of all managers and staff.”

Interview with B Mthembu, HR Section Manager

This chapter provides findings on how Parliamentary Service through the contracting of consultants and involvement of its staff facilitated the creation, transfer and capturing of knowledge of performance management system during the 2001-2002 financial period. The focus of this chapter is two-fold. The first is on the use of performance management forum, briefing sessions, publication of newsletters, manuals, training of trainers, coaching, training of staff and publication of report to facilitate knowledge creation, capturing and transfer. The second focus is on the cultural, technological and organisational barriers inhibiting knowledge sharing, management of codified knowledge and development of knowledge management policy, strategy and projects within the sections and divisions of the organisation.

### 3.1. PERFORMANCE MANAGEMENT FORUM

In February 2001, parliamentary service established a performance management forum consisting of management, consultants and union officials to coordinate and oversee the design and implementation of a performance management system.<sup>142</sup> In the opinion of the coordinator of performance management forum:

The establishment of performance management forum has played a critical role in facilitating the creation of knowledge of performance management system. The knowledge created at the level of the forum nearly all the members were exposed to was the theory, systems, processes and techniques of the performance management system. What happened as far as knowledge creation is that consultants had to explain and interpret performance management concepts such as job profiles, performance contracts, reviews, assessments, rating systems, and the benefits of implementing the new system across all the sections and divisions of the organisation. As the result knowledge of performance management project was created and captured in the form of newsletter, manual and report and mechanisms of sharing and transferring knowledge of the new system such as briefing sessions, training of trainers, workshops and coaching were conceptualised at the level of performance management forum.

<sup>143</sup>

According to the HR Outsource Consultant:

The establishment of the performance management forum has also played a knowledge transfer role by publishing newsletter and coordinating briefing and workshops sessions.<sup>144</sup>

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<sup>142</sup> Performance Management Newsletter, 2001, 1

<sup>143</sup> Interview with the Coordinator of Performance Management Forum.

<sup>144</sup> Interview with HR Outsource Consultant

### 3.2. PERFORMANCE MANAGEMENT NEWSLETTERS

During the period of designing the new system of performance management a total of 4 editions of performance management newsletters were published by the performance management forum and distributed across all sections and divisions of parliamentary service.<sup>145</sup> According to HR Outsource Consultant:

The main objective of publishing performance management newsletter was to facilitate information sharing about performance management project, provide simple explanation of concepts of performance management related concepts such performance contracts, personal development plans, performance review, performance assessment, job profile, source documents, performance management criteria, outputs and, to inform parliamentary staff in different sections and divisions of organisation about members of the performance management forum, employees selected as trainers of performance management process, progress made in respect of job profiling and, scheduling, objectives and outcomes of workshops, training sessions.<sup>146</sup>

According to the IT Manager:

The Information and Communication Technology Section in collaboration with members of the performance management forum facilitated the electronic distributions of performance management newsletters across all the units, sections and divisions of the organisation through the application of group wise e-mailing system.

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<sup>145</sup> Performance Management Report, 2001, 8

<sup>146</sup> Interview with HR Outsource Consultant

<sup>147</sup> Interview with IT Section Manager

In the first edition of the performance management newsletter, the secretary to parliament, stated that:

Parliamentary service alongside other public institutions and private corporation are to abide to various legislations towards the development and betterment of lives for all. To this end the Parliamentary Service has embarked on a human resources development plan that aims at developing the human asset of the parliamentary service in a holistic way. I am happy to announce that practical workshops that are essential for the design and implementation of our Performance management system have now started. This process will encompass development of documents and materials and training of trainers. Final report is scheduled for midyear. There is sufficient evidence of enthusiastic support on the part of staff and management to guarantee commitment to the final realization of Parliamentary' s own performance Management system in the current year. Let us move forward to proper assessment of improved performance in our year of delivery.<sup>148</sup>

The second newsletter issued coincided with the scheduling of briefing sessions and job profiling workshops. Project activities such as project initiation, review of job profiles, design of performance management documents, training of trainers, training of staff and concepts related to job profiling such as key results areas, outputs, measurement criteria and source documents were captured and covered in the second edition of the newsletter.<sup>149</sup> The third newsletter issued during the period under review coincided with the training of trainers program. This included a list of people selected as trainers for performance management process to train other staff.

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<sup>148</sup> Performance Management Newsletter 1, 2001, 1

<sup>149</sup> Performance Management Newsletter 2, 2001, 1-2

<sup>150</sup> Performance Management Newsletter 3,2001, 1-2

The final newsletter issued coincided with the training of managers and staff on performance management system. Highlights of the training sessions and explanation of performance management system concepts such as performance contract, personal development plan, performance review and assessment were provided.<sup>151</sup>

### **3.3. BRIEFING SESSIONS**

During the period of February and April 2001, performance management forum in collaboration with HR Outsource Consultants facilitated 18 briefing sessions in all the sections and divisions of the organisation.<sup>152</sup> According to the HR Outsource Consultant:

The main objective of conducting briefing sessions was to clarify why parliamentary service has decided to design and implement to system of performance management, to explain performance management concepts. We used the briefing sessions to transfer knowledge created at the level of the performance management forum to the general staff, incorporate staffs concerns and ideas into the design of the new system and to build wider support within the stakeholders of the organization.<sup>153</sup>

The briefing sessions conducted in the sections and divisions of the administration of parliamentary service focused on definitions of performance management concepts, reasons for measuring performance, objectives and goals of performance management system, publication of manuals, newsletters, reports and, scheduling of job profiling workshops, training of trainers, managers, staff.<sup>154</sup>

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<sup>151</sup> Performance Management Newsletter 4, 2001, 1-2

<sup>152</sup> Performance Management Report, 2001, 8

<sup>153</sup> Interview with HR Outsource Consultant

<sup>154</sup> Performance Management Briefing Document, 2001, 1-14

### 3.4. JOB PROFILING COACHING

The HR Outsource Consultant coached a parliamentary job evaluation practitioner on how to design and develop job profiles.<sup>155</sup> According to the consultant who spent a day of coaching the job evaluation practitioner:

The main objective of coaching the job evaluation practitioner on job profiling was to facilitate knowledge and skills transfer on job profiling principles, techniques and methods into the HR section of parliament. One of the benefits of developing the training of trainers has been the creation of internal capacity within the parliamentary service to conduct job profiles on the basis of proper organisational techniques, principles and methods.<sup>156</sup>

According to the job evaluation practitioner:

The learning outcomes and knowledge content of the coaching program covered basic skills of designing job profiles and operational knowledge of how job descriptions could be used in job profiling processes and within the system of performance management.<sup>157</sup>

In the opinion of the Human Resource Manager,

The coaching program on job profiling like the training of trainers, training of staff and development of training manual was one of the requirements of consultants in designing the system of performance management system for Parliamentary Service.<sup>158</sup>

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<sup>155</sup> Performance Management Report, 2001, 1-17

<sup>156</sup> Interview with the HR Outsource Consultant

<sup>157</sup> Interview with Job Evaluation Practitioner

<sup>158</sup> Interview with HR Section Manager

### 3.5. JOB PROFILING WORKSHOPS

During the period of February and March 2001, parliamentary service facilitated job profiling workshops in all the sections and divisions of parliamentary service in collaboration with HR Outsource Consultants.<sup>159</sup> The workshops covered a range of topics related to the job profiling. According to the HR Outsource Consultant:

The objective of conducting job-profiling workshops was to identify and document competencies (i.e. knowledge, skills and attitudes) related to job descriptions of each and every job titles within the organization so as to ensure that employees' job profiles are aligned with the strategic objectives and business plans of the organization. In all the workshops conducted representatives of staff were on how to design and incorporate job key performance areas from the job descriptions into job profiles. Job profiling concepts such as key performance areas, outputs, criteria for measurement, standards and source documents were finally discussed and captured into job profiles templates of each and every representative of staff members.

<sup>160</sup>

In the opinion of the HR Section Manager:

The job profiling workshops was of the mechanisms used within the sections and divisions of parliamentary service to facilitate knowledge creation, sharing and capturing of job proofing concepts such as key results areas, performance measurement criteria, outputs and source documents. <sup>161</sup>

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<sup>159</sup> Performance Management Final Report, 2001,

<sup>160</sup> Interview with HR Outsource Consultant

<sup>161</sup> Interview with HR Section Manager

A total of 188 job descriptions were profiled and job profile template covering concepts such as key performance areas, outputs, measurement criteria and source documents developed for submissions to HR Section for circulation and management sign-off.<sup>162</sup>

### **3.6. PERFORMANCE MANAGEMENT MANUAL**

In preparations for the training sessions, a manual on performance management system was developed within the parliamentary service during the period under review.<sup>163</sup> According to the HR Outsource Consultant:

During the process of developing the manual on performance management system, we had to ensure that existing knowledge within the parliamentary service in the form of vision, mission, values and goals is incorporated with the new created knowledge of performance management processes and cycles. The objective of developing the manual was to capture both the procedural and operational knowledge of performance management system to be applied in all the sections and divisions of the organisation during the implementation stages.<sup>164</sup>

According to the HR Section Manager:

The development of performance management manual has facilitated not only the capturing of knowledge of but also the sharing of knowledge among all employees within the units, sections and divisions of parliamentary service.<sup>165</sup>

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<sup>162</sup> Performance Management Final Report, 2001, 1-9

<sup>163</sup> Performance Management Training Manual, 2001, 1-43

<sup>164</sup> Interview with HR Outsource Consultant

<sup>165</sup> Interview with HR Section Manager

The manual contains five chapters detailing how performance management system should be implemented across all the sections and divisions of the administration of parliamentary service. The first chapter of the manual provides information on the mission, vision, values and goals of the administration of parliamentary service and introduction of the principles and processes of performance management system.<sup>166</sup>

The second chapter of the manual focuses on performance contracting and its components such as key performance areas, job outputs, performance measurement criteria and source documents.<sup>167</sup> The third chapter focuses on performance review, processes of conducting reviews, roles of managers and employees during the reviewing and how to deal with poor performance.<sup>168</sup>

The fourth chapter focuses on performance assessment, objectives, performance rating, and the role of managers, supervisors and individual employees in the performance assessment process.<sup>169</sup> The final chapter provides definitions of concepts of performance management rating system such as unacceptable, poor, meets agreed standards, commendable and excellent. Also contained in the final chapter, are templates of performance contracting, personal development plan, performance review and, performance assessment.<sup>170</sup>

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<sup>166</sup> Performance Management Manual, 2001, 11-14

<sup>167</sup> Performance Management Manual, 2001, 19-27

<sup>168</sup> Performance Management Manual, 2001, 29-34

<sup>169</sup> Performance Management Manual, 2001, 37-42

<sup>170</sup> Performance management manual, 2001, 43-47

According to the Coordinator of Performance Management Forum:

Though the manual has captured practical knowledge of performance management system, the manual has been developed only in English and not translated into other languages. Parliamentary service has a number of employees who understand Afrikaans and Xhosa better. The use of English in developing the manual has been the major barrier of capturing knowledge of performance management system. The future organisational challenge in facilitating implementation is to ensure that employees who are not competent in English understand the content and concepts contained in the manual. <sup>171</sup>

### **3.7. TRAINING OF INTERNAL TRAINERS**

In April 2001, fifteen internal staff of parliamentary service were trained as trainers for the implementation of performance management system. The internal trainers received five days training in facilitation, presentation and material orientation on performance management system.<sup>172</sup> According to the HR Outsource Consultant:

The process of mobilizing parliamentary trainers involved identification, recruitment and selection of some employees in different sections and divisions of the parliamentary service with more or less competencies required to do the job, train others, and understanding of strategic objectives, mission and goals of parliamentary service and why performance management system should be implemented within the context of parliamentary service. <sup>173</sup>

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<sup>171</sup> Interview with the Coordinator of Performance Management Forum

<sup>172</sup> Performance Management Report, 2001, 1- 7

<sup>173</sup> Interview with HR Outsource Consultant

According to HR Section Manager:

The training of internal trainers was one of the specific requirements of the consultant to ensure knowledge and skills transfer into the organization. The knowledge transferred into the parliamentary service and benefited the HR Section and internal trainers include; knowledge of job profiling, performance management processes, cycles and rating systems.<sup>174</sup>

In the opinion of the consultant:

The objective of training internal trainers was to facilitate knowledge sharing and transfer into the parliamentary service. The main goal of the training program was to create an internal parliamentary consultancy that could make knowledge transfer of performance management system sustainable. As the selected trainees were expected to apply knowledge they gained in their workplace, the whole process was actually a knowledge management type of intervention.<sup>175</sup>

According to the one of the internal trainers:

The training of trainers program covered learning outcome and knowledge content such as presentation and facilitation skills, training techniques, knowledge of performance management processes such as job profiling, performance contracting, reviewing, assessing and rating systems.<sup>176</sup>

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<sup>174</sup> Interview with HR Section Manager

<sup>175</sup> Interview with HR Outsource Consultant

<sup>176</sup> Interview with Parliamentary Trainer

### 3.8. PERFORMANCE MANAGEMENT TRAINING

Between May and June 2001, the training team consisting of internal trainers and HR Outsource trainers conducted training on performance management system.<sup>177</sup>

According to the HR Outsource consultant:

The training on performance management was developed to capacitate managers and staff with necessary knowledge to implement the performance management system. The general goal of conducting training was to transfer procedural and operational knowledge of the system.<sup>178</sup>

In order to encourage staff's participation in training sessions, the Secretary to Parliament stating that:

We have now reached the stage at which we are preparing ourselves for implementation of the Performance Management System. Training sessions started running on Monday, 11 June 2001 and will be completed on Saturday, 14 July 2001. It is imperative that ALL staff attends these sessions in their own interest, as well as in the interest of Parliament as a whole, since the improvement of our performance hinges on this process. I therefore call on managers and staff to attend these training sessions and to make a success of this exercise. In doing so, we aspire to highest standards of service delivery in line with our vision<sup>179</sup>

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<sup>177</sup> Performance management newsletter 4, 2001, 1-2

<sup>178</sup> Interview with HR Outsource Consultant

<sup>179</sup> Performance Management Newsletter, 2001, 1

According to the HR Outsource Consultant, the training sessions for managers and staff covered knowledge of:

Preparing performance management contract, designing individual personal development plan, conducting performance reviews, performance assessment and application of rating system within the parliamentary service<sup>180</sup>

The table below provides statistics in terms of occupation, race and gender of staff received training on performance management system during the 2001-2002 financial periods.<sup>181</sup>

Table: Performance Management Training

Occupational Groups	African		Coloured		Indian		White		Total	
	M	F	M	F	M	F	M	F	M	F
Legislators, senior officials, & managers	15	6	1	1	2		5		23	7
Professionals	8	10	6	8			12	7	26	25
Technicians & associate professional	26	17	19	12	3		9	17	57	46
Clerks	22	42	30	48		3	8	23	60	116
Service & Sale	13	25	18	41	1		15	16	47	82
Craft & related trades		1	2		2				4	1
Plant & machine operators			1	2			1		2	2
Elementary occupations	12	21	85	54	1	1	17	7	115	83
Total=696	96	122	162	166	9	4	67	70	334	362

<sup>180</sup> Interview with HR Outsource Consultant

<sup>181</sup> S Mfenyana, 2002, 48

### 3.9. PERFORMANCE MANAGEMENT REPORT

After the completion of training session, a performance management project report was submitted to the members of management board and performance management forum for adoption and consideration.<sup>182</sup> According to the HR Outsource Consultant:

The report provides feedback on the progress made in respect of training of trainers, briefing sessions, job profiling workshops, training of staff and recommendations on how performance management system within the organisation should be implemented. The main recommendations made in the report relate to the establishment of performance appeals committee, integration of performance management system with outstanding policies such as succession planning, career management and remuneration system and the roles of senior managers, section managers, individual staff and human resource section in the implementation of performance management within the parliamentary service.<sup>183</sup>

On the role an employee in sections of parliamentary service should play in performance management process, the report recommends that:

An employee should agree and sign a performance contract, personal development plan, performance review, performance assessment documentation and to implement agreed actions where relevant; use the job profile to complete draft documentation for each event in the performance management process; and be proactive in the collation of source documents and other information related to performance management system.<sup>184</sup>

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<sup>182</sup> Performance Management Project Final Report, 2001, 1-9

<sup>183</sup> Performance Management Project Final Report, 2001, 8

<sup>184</sup> Performance Management Report, 2001, 9

On the role line Managers in Sections of Parliamentary Service should play in the performance management process, the report recommends that:

The manager must ensure that the performance management process is implemented, manage Performance Contracting, Review and Assessment sessions; agree and sign a Performance Contract, Personal Development Plan, Review and Assessment documentation for each individual staff under his/her direct management; provide on-going feedback and communication regarding staff performance; implement agreed actions to improve performance; and communicate and implement measures to deal with poor performance.<sup>185</sup>

On the role the Human Resources Section of Parliamentary Service should play in the performance management process, the report recommends that:

The HR Section must develop policy and procedure for performance management; monitor the implementation of the performance management process within the organisation; provide policy and procedural advice, documentation and support to management and staff; develop and maintain a database of the performance management documentation; develop and implement quality control and auditing mechanisms for the process; review and implement the outcomes of performance assessment process; and report on the performance management process and make appropriate recommendations on policy and procedure.<sup>186</sup>

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<sup>185</sup> Performance Management Report, 2001, 6

<sup>186</sup> Performance Management Report, 2001, 7

### **3.10. INSTITUTIONAL BARRIERS**

Notwithstanding the progress made in respect of creating and transferring knowledge of performance management system through the institutionalisation of processes and mechanisms such as performance management forum, briefing sessions, training of trainers, staff, management and publication of newsletters, reports and manuals, cultural, technological and organisational barriers were mentioned in some of the interviews.

#### **3.10.1. CULTURAL BARRIERS**

When responding to questions related to cultural barriers that inhibit knowledge sharing and the challenges for promoting knowledge sharing that the Coordinator of Performance Management Forum stated that:

Parliamentary service has generally made progress in empowering its staff through training interventions to gain knowledge and the institution has also acquired knowledge related to other business processes and policy related issues. However, the cultural barriers that inhibit continuous knowledge creation and sharing are loss of knowledge due to staff turnover, employees tendencies to hoard knowledge and lack of incentive systems to reward knowledge sharing. What is now needed within the context of implementing the new system of performance management processes and cycles is to develop mechanisms and system to promote knowledge sharing and reward employees who share their knowledge in all the sections and divisions of the organisation for the benefit of improving service delivery. In order to implement the system and mechanisms, performance management contract should emphasise knowledge sharing through mechanisms such as mentoring, coaching and, on the job training.<sup>187</sup>

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<sup>187</sup> Interview with Coordinator of Performance Management Forum

### **3.10.2. TECHNOLOGICAL BARRIERS**

When responding to questions related to knowledge management and technological barriers and challenges facing the parliamentary service the Information and Technology Communication Sections Manager stated that:

Parliamentary service as a knowledge based- organisation has developed a website, provided most of its employees with email facilities but has not yet developed a policy and strategy on managing organisational knowledge. The technological barriers that inhibit management of knowledge contained in policies, manuals and procedures relates to lack of knowledge database system. The knowledge management strategy needed within the Administration of Parliamentary Service is to build knowledge-based systems that will facilitate knowledge capture and storage so that existing and new organisational knowledge could be accessed at any give time when needed.<sup>188</sup>

### **3.10.3 ORGANISATIONAL BARRIERS**

When describing the organisational barriers inhibiting the management of knowledge within the administration of parliamentary service, the Manager of Information Technology and Communication Section stated that:

The parliamentary service does not have a person charged with the knowledge management functions. The organisational barriers affecting the management of organisational knowledge relates to the non-assignment of knowledge management responsibilities and functions. What is needed in the Parliamentary Service as practiced in other organisations is to appoint a person who will be responsible for the development of knowledge management policies and strategies.<sup>189</sup>

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<sup>188</sup> Interview with Information Technology and Communication Section Manager

<sup>189</sup> Interview with Information Technology and Communication Manager

### 3.10. SUMMARY

The findings presented in this chapter have demonstrated how during the 2001-2002 financial periods the administration of parliamentary service with the assistance of consultants facilitated the creation, transfer and capturing of knowledge of performance management system as part of integrated human resource development plan composing of other HR policies such as succession planning, career management, promotion and remuneration system. The data collected through the interviews demonstrate that the institutionalisation of mechanisms such as performance management forum, briefing sessions, workshops, training of trainers, coaching, training of staff, publication of newsletters, manual and report were used to facilitate the creation, sharing, transferring and, capturing of performance management system during the period under review.

The knowledge of a performance management system that is now being created, transferred, shared and captured relates to how managers in the sections and divisions of the administration of parliamentary service should implement performance management contracts (i.e. key results areas, job outputs, measurement criteria, standards, weighting of key results areas), prepare job profiling, develop employees personal development plans, conduct performance assessments and performance reviewing and, apply performance rating system ( i.e. unacceptability, failing to meet agreed standards, meeting agreed standard, commendable and excellent).

Despite the progress made in respect of creating, transferring and capturing knowledge of performance management system, the findings have also shown that cultural, technological and organisational barriers such as knowledge hoarding, lack of knowledge sharing incentives, absence of knowledge database system and assigned responsibilities for managing organisational knowledge inhibit knowledge sharing, knowledge capturing, and the development of knowledge management policies, strategies and projects within the administration of parliamentary service.

## CHAPTER 4

# THE IMPLICATIONS OF MANAGING KNOWLEDGE WITHIN THE PARLIAMENTARY SERVICE

“Knowledge based organisations are being advised that in order to remain competitive, they must efficiently and effectively create, locate, capture and, share their organisation’s knowledge, expertise and, have the ability to bring that knowledge to bear on problems and opportunities”

H ZACK

In this chapter, the findings of processes and mechanisms used within the parliamentary service to create, transfer, capture knowledge of performance management system are analysed with the purpose of drawing implication for knowledge management. The context of analysis is the policy development of an integrated human resource development strategy which compose of policy components not only of creating knowledge of performance management system but also of career management, succession planning, promotion, employment equity, skills development and remuneration system. The focus of analysis in this chapter is four-fold. The first focus is on knowledge creation. The second focus is on knowledge transfer. The third focus is on knowledge codification and, the fourth focus is on implications for managing knowledge within the Administration of Parliamentary Service

## **4.1. KNOWLEDGE CREATION**

The analysis of data gathered during the period of this study demonstrate that the creation of knowledge of performance management system was part of organisational commitment to implement an Integrated Human Resource Development plan composed of policy components such as succession planning, career management, promotion, skills development, employment equity, remuneration. Clearly, prior to the contracting of consultant, parliamentary service did not have tacit and explicit knowledge of how the system of performance management would be implemented across all the sections and divisions of the organisation. The use of consultants' tacit knowledge to design the system of performance management and the establishment of the performance management forum has really played a critical role in facilitating knowledge creation within the sections and divisions of the administration of parliamentary service. The analysis of the objective of establishing the performance management forum and its roles in coordinating knowledge transfer and sharing mechanisms such as training of trainers, workshops and coaching, publication of newsletters, manual and report provide clear examples of how knowledge of performance management system was created within the parliamentary service during the 2001-2002 financial periods.

### **4.1.1.KNOWLEDGE CREATION LESSONS LEARNT**

There are couple of knowledge creation lessons that has been recorded from the contracting of consultants to design the system of performance management for parliamentary service. The first lesson relates to the importance of providing an enabling environment of collaboration between the consultants and internal stakeholders such as manager and union officials. The second lesson relates to the value of using manuals, reports and newsletters as sources of knowledge carriers. From the perspective of knowledge conversion, newsletters, manuals and reports has indeed facilitated the conversion of tacit knowledge into explicit knowledge (externalisation), explicit knowledge into explicit knowledge (combination).<sup>190</sup>

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<sup>190</sup> I Nonaka and H Takeuchi, 1995, 62-70

The third knowledge creation lesson learnt from the design of performance management system is the importance of creating procedural and operational knowledge related to job profiles, performance contracts, personal development plans, performance reviews, performance assessments and allocating performance ratings.

#### **4.1.2. KNOWLEDGE CREATION CHALLENGES**

Despite the progress made generally by parliamentary service in creating organisational knowledge of say, job evaluation, skills development and performance management system, there is a need to ensure that knowledge created at individual level is not lost due to employees resignations and retirement. The knowledge management challenge facing the parliamentary service within the context of policy developments is to ensure that knowledge creation processes and strategies to manage created knowledge are institutionalised to facilitate the creation and integration of tacit and explicit knowledge related to outstanding policies such as succession planning, career management, promotion and remuneration system for successful implementation of integrated human resource development plan.

#### **4.2. KNOWLEDGE TRANSFER**

The analysis of data gathered through the interviews and use of organisational documents has demonstrated that knowledge of performance management system was transferred across all the sections and divisions of parliamentary service through the institutionalisation of mechanisms such as briefing sessions, workshops, training of trainers, coaching, training of managers and staff. The institutionalisation of the above- mentioned knowledge transfer mechanisms have created an enabling environment for tacit knowledge of performance management system such as job profiling techniques and procedures for preparing performance contracts, personal development plans, performance review, performance assessment and allocation of rating systems to be transferred at individual, group and organisational levels.

From the perspective of knowledge conversion, the use of training of trainers, coaching and workshops has facilitated the transfer of consultants' tacit knowledge of performance management system and the socialization and internalisation modes of knowledge creation across all the sections and divisions of the administration of parliamentary service.<sup>191</sup> The analysis of the objectives of training of trainers, workshops and coaching program on job profiles has demonstrated three important knowledge transfer best practices.

#### **4.2.1. KNOWLEDGE TRANSFER LESSONS LEARNT**

The first best practice relates to the importance of facilitating tacit knowledge sharing between consultants and employees. The second best practice relates to the significance of mobilizing internal employees as training of trainers to ensure knowledge transfer and sustainability. The third best practice relates to the importance of providing enabling environment in the form of training to allow employees who had been mobilised as internal trainers to share knowledge with others employees across the sections and divisions of the organisation.

#### **4.2.2. KNOWLEDGE TRANSFER CHALLENGES**

Despite the progress made in respect of providing enabling environment for employees to gain tacit knowledge of performance management system and of other systems and processes such as job evaluation, business planning, strategy formulation and financial management, the cultural barriers such as 'knowledge hoarding' posed a serious threat to organisational knowledge transfer and sharing practices within the administration of parliamentary service. The knowledge transfer challenge facing the parliamentary service within the context of implementing skills development, employment equity, and new system of performance management is to institutionalise systems and mechanisms that will discourage the culture of hoarding knowledge and improve the manner tacit and explicit knowledge is transferred and shared at individual, group, sectional and divisional levels.

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<sup>191</sup> I Nonaka and H Takuechi, 1995, 80

## **4.4. KNOWLEDGE CODIFICATION**

The analysis of data gathered through the interviews demonstrates that knowledge codification during the period of this study was facilitated through the publication of manual, newsletters and, reports. From the perspective of knowledge convention model and knowledge management strategy, the use of manuals, newsletters and report has indeed facilitated the knowledge externalisation, combination and codification within the parliamentary service.<sup>192</sup> Through the application of the above –mentioned mechanism, consultants’ tacit knowledge of performance management system has been converted into explicit knowledge and transferred into the organisation and shared at individual and group levels

### **4.4.1. KNOWLEDGE CODIFICATION LESSONS LEARNT**

The knowledge codification lessons learned from the design of the system of performance management at parliamentary service can be classified into five categories. The first lesson demonstrates the importance of converting tacit knowledge into explicit form. The second lesson relates to the value of combining existing knowledge such as organisational mission, vision and values with new knowledge of performance management system through the development of manuals. The third lesson indicates the significance of facilitating explicit knowledge sharing at individual, group and organisational levels through the distribution of manuals during the training sessions. The fourth lesson, relates to the value of facilitating employees’ internalisation of codified knowledge through the formalization of training sessions. The fifth lesson relates, to the significance of codifying, procedural, conceptual and operational knowledge needed for the implementation of performance management system across all the sections and divisions of the organisation.

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<sup>192</sup> I Nonaka and H Takuechi 1995, 64-67

#### 4.4.2. KNOWLEDGE CODIFICATION CHALLENGES

Notwithstanding the worthy efforts of codifying knowledge in the form of knowledge sources such as organisational policies, manuals, reports and newsletters, lack of knowledge based systems and tools within the administration of parliamentary service to store codified knowledge makes access to existing codified knowledge such as difficult. The knowledge codification challenge facing the parliamentary service within the context of contracting consultants, loss of organisational tacit knowledge due to employees resignations, demand for procedural knowledge, and implementation of integrated human resource development plan is to review how information technology systems and tools at the administration of parliamentary service can be used within the sections and divisions of the organisation to facilitate and improve the electronic storage, access and retrieval, and updating of codified or explicit knowledge contained in organisational knowledge sources such as manuals, projects reports and policies.

It has been demonstrated in recent empirical studies that in order to improve organisational performance and the management of explicit knowledge, organisations in both private and public sectors are now using information technology tools and system to manage and improve access to codified knowledge. Instead of storing codified knowledge (e .g. policy documents, reports and manuals) in office cabinets, codified knowledge is now stored electronically for easy access by employees within the organisations.

Although parliamentary service has made progress in providing employees with personal computer, access to Internet and group-Wise technological facilities, codifying knowledge in the form of manuals, reports and policies, what is needed within the context of information technology development and knowledge based society is to explore the possibility of using information technology as enabler to electronically store codified knowledge. The essence of change required in sections and divisions of the administration of the parliamentary service in order to address the technological barriers inhibiting storage and access to codified knowledge is a paradigm shift from storing codified knowledge in a manual to the electronic storage.

Based on the analysis of knowledge creation, knowledge transfer, knowledge codification practices and current technological, cultural and organisational barriers that inhibit codification, storage, sharing and, management of organisational knowledge, the sections that follow draw implications for managing organisational knowledge within the administration of parliamentary service. The focus is on overcoming the culture of hoarding knowledge, linking knowledge management with policy developments and building knowledge management capacity.

#### **4.5. IMPLICATIONS FOR MANAGING KNOWLEDGE**

In the business environment of today, the ability to create, capture, transfer, and apply knowledge effectively is becoming an essential prerequisite for improved organizational performance and service delivery. The ability of the administration of parliamentary service to be successful in meeting its mission and vision, developing integrated human resource strategy composed of performance management system, career development, succession planning, skills development and, employment equity plan will depend on identifying strategies for leveraging and managing the vast amount of knowledge that it has in documents, employees and operational processes. The management of knowledge as strategic resource and the establishment of policies, processes and practices to support knowledge creation, capturing and sharing are critical to implementing designed policies and achieving business goals of the administration of parliamentary service.

There are four primary reasons why parliamentary service should treat knowledge as strategic resource and develop internal capacity for its management. Firstly, knowledge is central to the parliamentary service's mission and vision. Secondly, policies that are currently being developed and administrative services provided to members of parliament and internal stakeholders are knowledge intensive and require sharing of tacit and explicit knowledge at individual, group and organizational levels.

Thirdly, employees within the sections and divisions of the organization have developed tacit knowledge in number of business operations such as legal and procedural advice, human resource management, financial management, record management, research, business planning and strategy development that can serve as a starting point for identifying and developing strategies to manage organizational knowledge and facilitation of the sharing of tacit and explicit knowledge at individual, group and organizational levels. To develop this capacity requires a focus approach that links capacity building, knowledge management and policy development and implementation.

The most possible effective ways for linking knowledge management with policy developments in the parliamentary service is to focus on explicitly defining knowledge management roles, building an internal human resource capacity, skills, and information technology tools to create and capture knowledge and share knowledge.

The need to manage knowledge systematically at parliamentary service becomes critical taking into account the high rate of using consultants' expertise to develop organisational systems; loss of knowledge as the result of staff resignations, and demands for implementation of employment equity and skills development legislations and the developing of policies such as performance management system, career development, succession planning, promotion, remuneration and rewards system that focus on creating tacit and explicit knowledge for the successful implementation of integrated human resource development strategy.

The management of organisational knowledge within the above –described context implies institutionalising processes of creating, capturing, transferring, sharing and using knowledge to enhance organisational performance. This involves identifying, capturing and organising knowledge in key people's heads and ensuring that is it shared to the benefit of a broader parliamentary service. Hence the requirements of 'knowledge management' become those of managing parliamentary service knowledge and individual knowledge, and ensuring the transfer process amongst employees.

Developing organisational knowledge management strategy in line with the strategic objectives and integrated human resource plan will facilitate the achievement parliamentary service objectives more rapidly and ensuring systematic management of both explicit and knowledge tacit knowledge.

#### **4.5.1. OVERCOMING CULTURE OF HOARDING KNOWLEDGE**

In the context of skills development, employment equity, knowledge loss due to staff turnover is to overcome the cultural barriers of inhibiting knowledge sharing. Overcoming knowledge inhibitors such as knowledge hoarding will ensure that knowledge is leveraged across all the sections and divisions of the organization. In an environment of rapid technological developments, the need to comply with the requirements of skills development and employment equity legislations, reducing knowledge gaps, overcoming barriers to knowledge creation, capturing, sharing and transferring of tacit and explicit knowledge become key to organizational performance.

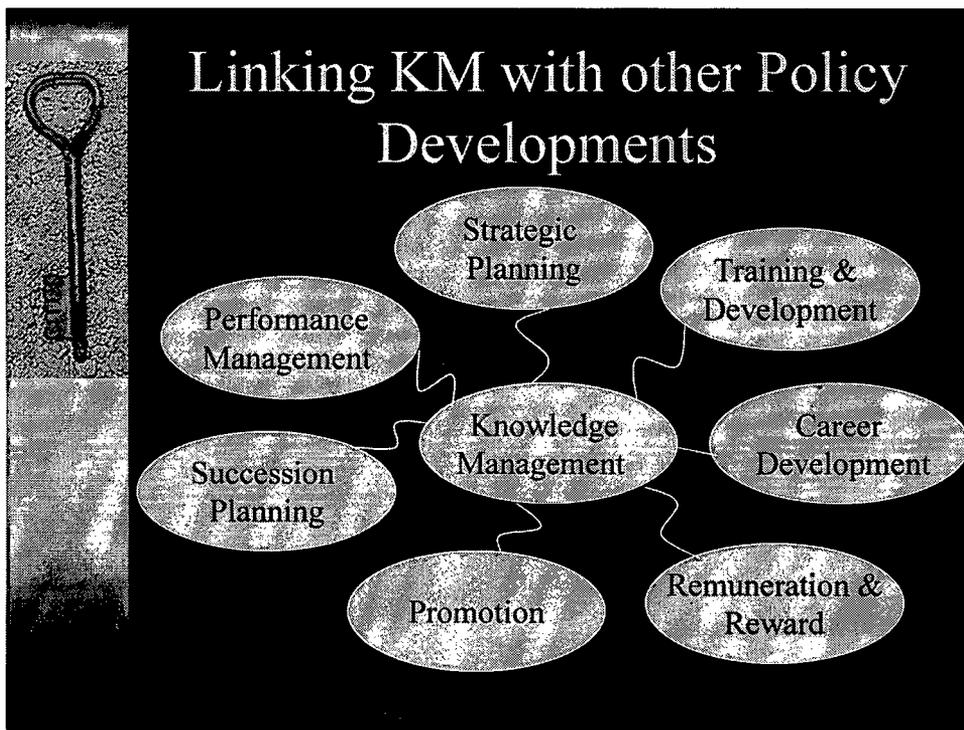
The ability of the parliamentary service to meet its mission of facilitating the smooth operation of parliament to enable members to perform their tasks and its goals of providing a world –class service to members, the public and other clients by remaining committed and dedicated to a well- trained and multi-skilled staff will depend on the ability to overcome knowledge gaps, culture of hoarding knowledge and inability to leverage the vast amount of knowledge it has in documents, employees and processes. The only way to effectively overcome the culture of knowledge hoarding is to create an environment in which open collaboration and the transformation of tacit and explicit knowledge is a cultural practice in all the sections and divisions of the organization.

#### **4.5.2.LINKING KNOWLEDGE MANAGEMENT WITH POLICY DEVELOPMENTS**

The parliamentary service has already launched a number of knowledge initiatives to improve performance and services delivery to its clients. As it is expected that many other knowledge initiatives will be developed, there is a need to manage knowledge. As tacit and explicit knowledge are required for the design and implementation of

parliamentary service integrated human resource development plan and service delivery to its clients, a good starting point for managing knowledge at parliamentary service can be the linking of knowledge management with numerous policy developments currently underway that focus on developing tacit and explicit knowledge for the successful implementation of integrated human resource development plan.

These policy developments include performance management system, skills development, employment equity, career management, succession planning, financial management, business planning and, strategy formulation. The following diagram shows the integration of knowledge management and policy developments for the successful implementation of Integrated Human Resource Development Strategy.



Taking into account that each of the policy components of the integrated human resource development plan has important tacit and explicit knowledge requirement, institutionalising knowledge management processes and strategies to facilitate the creation, capturing, sharing and application of knowledge gained from the design of each policy development will be necessary for the successful implementation. The linkage of knowledge management with policy developments implies that the

strategic capability of the parliamentary service to codify, store and make knowledge accessible should be developed to promote knowledge management principles, practices across all the sections and divisions of the organisation.

#### **4.5.2. DEVELOPING KNOWLEDGE MANAGEMENT CAPACITY**

In the periods of major restructuring and internal policy developments, there are four primary reasons for developing knowledge management capacity at the administration of parliamentary service. The first reason is the need to provide services that are knowledge intensive to members of parliament and external clients. The second reason is development of policies that require both tacit and explicit knowledge for their successful implementation. The third reason is the loss of knowledge as the result of employees' turnover. The fourth reason is the demand for just in time information and the need to manage knowledge as a strategic resource to foster sharing, learning and improved services.

An attempt build knowledge management capability at parliamentary service must address the barriers and challenges of the culture of hoarding knowledge, loss of knowledge due to staff turnover, inaccessibility of codified knowledge, absence of knowledge management roles, policies, strategies and projects. The organizational and strategic intervention of addressing these technological, cultural and organizational barriers will ensure that knowledge within the parliamentary service is treated as strategic resource, tacit knowledge acquired by employees through experience and training is not loss due to turnover, codified knowledge contained in manuals, reports policy documents is electronically managed accessed, employees are encouraged to share knowledge and knowledge management policies, strategies and projects are developed, implemented, monitored and, accounted for.

In an absence of organisational policy, strategy and assignment of functions to manage organisational knowledge management, building capacity in the parliamentary service for management organisational knowledge, implies assigning knowledge management functions for development and coordination of knowledge management policy, strategy, projects and effective management of tacit and explicit

knowledge as well as the continuous reviewing and development of IT tools and systems in the information technology section of the organisation. The review and development of IT system and tools must ensure that knowledge management and sharing permeates throughout the organisational sections and divisions so as to help in policy and strategy development processes.

In an effort to assign knowledge management functions with the view to build knowledge management capacity, the current traditional roles of HR Section, IT Section and the Business Planning and Strategy Unit should be reviewed with knowledge management objectives of facilitating knowledge codification, storage and sharing.

The management of tacit and explicit knowledge presupposes the formalization of all the processes associated with the creation, codification, sharing and transfer of knowledge. This will require systems and tools for the management of explicit knowledge and enabling conditions for the sharing of knowledge. For the parliamentary service to succeed in knowledge management, it has to view knowledge as an asset and to develop organisational norms and values, which support the creation and sharing of knowledge.

In an absence of organisational knowledge management policy and strategy, a knowledge management capacity is really needed to promote knowledge sharing related to service delivery, improve the manner knowledge is created, develop strategies for knowledge codification and retention and the management of codified knowledge existing organisational policies, manuals and reports.

In the context of demands for skills development and loss of tacit knowledge due to employees' resignation or retirement, knowledge sharing should be used as a means to reduce training costs, retaining knowledge, increasing productivity and provide efficient services. As knowledge sharing among individuals or groups within the organisation is one of the most important human interaction processes, what should be noted in an effort to acquire external knowledge is the fact that without knowledge sharing, new knowledge cannot be created.

What is now needed to develop knowledge management capacity at parliamentary service is to develop knowledge management policy, strategy, invest in knowledge-based tools and systems and, assign knowledge management responsibilities so as to provide solutions to current technological, cultural and organisational barriers inhibiting knowledge storing, sharing and management. As the services provided by parliamentary service are knowledge intensive, the strategic objective of developing knowledge management capacity at parliamentary service should focus on enhancing the creation, codification, storage, sharing, transfer and application of tacit and explicit knowledge to improve organisational productiveness and competitiveness.

### **5.2.3. CONCLUSION**

The analysis provide in this chapter has demonstrated that despite the progress made in parliamentary service to facilitate the creation, codification and transfer of knowledge of performance management system through institutionalisation of mechanisms such as performance management forum, training of trainers, managers, staff, workshops, coaching, publications of manuals, reports and newsletter, lack of knowledge database system, cultural existence of hoarding knowledge, lack of knowledge sharing incentives and non assignment of knowledge management roles posed critical technological, cultural and organizational challenges to the storage of codified knowledge, sharing of tacit knowledge and development, coordination and implementation of knowledge management policies, strategies and projects across all the sections and divisions of the organization.

Notwithstanding the lessons gained from the creation, codification, transfer and sharing of knowledge related to the design and implementation of performance management system, this study concludes that within the context of developing organizational policies to ensure the implementation of an integrated human

resource development plan, demands for service delivery, need to develop skills development plans and training programs and loss of tacit knowledge due to early retirements or resignations, there are several knowledge management challenges facing the administration of parliamentary service.

The first challenge is to integrate knowledge management policy with vision, mission and operations of the administration of parliamentary service. The second challenge is to develop knowledge management strategy to codify and share tacit knowledge. The third challenge is ensure that information technology tools and systems are effectively and efficiently used to support integration, collaboration, storage, dissemination and management codified knowledge. The fourth challenge is to assign knowledge management responsibilities, roles so as to ensure development, coordination, implementation and accountability of knowledge management functions. The fifth challenge is to address the cultural barriers that inhibit knowledge sharing within the sections and divisions of the organization.

The assumptions made in this chapter assume that knowledge within the administration of parliamentary service whether tacit or explicit must be viewed as organizational asset like any asset and must thus be managed and used strategically. It is really about promoting the creation, sharing, capturing and, retention of knowledge across the sections and divisions of the organisation so as to facilitate access to the right knowledge and right people at the appropriate time and convenient format.

# CHAPTER 5

## MANAGING ORGANISATIONAL KNOWLEDGE AT THE ADMINISTRATION OF PARLIAMENTARY SERVICE

“Organisational knowledge creation is a spiral process, starting at the individual level and moving up through expanding communities of interaction, that crosses sectional, departmental, divisional and organisational boundaries”.

I Nonaka & H Takuechi

“Middle managers synthesize the tacit knowledge of both front-line employees and top management, make it explicit, and incorporate it into new technologies and products. They are the true knowledge engineers of the knowledge creating organisations”.

I Nonaka & H Takuechi

“Knowledge management as a cross –organisational process, should be comprehensively owned and managed, and full-time responsibility assigned for an organisation’s knowledge management architecture. Organisations are creating a Chief Knowledge Officer to handle this responsibility ”.

M H Zack

The ability of parliamentary service to be successful in meeting its strategic objectives, service delivery demands and implementing integrated human resource development strategy will depend on its capacity to leverage the vast amount of knowledge that it has in documents, people and processes. Within the context of skills development, employment equity, use of consultants' tacit knowledge to design knowledge intensive systems and projects and, loss of organizational knowledge due to staff turnover, there is a need to recognise knowledge as critical asset, convert employees knowledge into organisational knowledge and provide an enabling technological, cultural and organisational conditions for the management of tacit and explicit knowledge.

The six recommendations proposed in this study recognize the importance of linking knowledge management with numerous policy developments such as performance management system, employment equity, skills development, career management, succession planning that have important tacit and explicit knowledge requirements for successful implementation and, the need to provide solutions to technological, cultural and organisational barriers inhibiting knowledge storage, sharing and management within the administration of parliamentary service.

The recommendations to be considered and implemented by the management of parliamentary service include codification of employees 'tacit knowledge, creation of knowledge repository, promotion of knowledge sharing culture, provision of knowledge sharing incentives, establishment of knowledge management unit and, appointment of chief knowledge officer.

## **5.1. CODIFYING EMPLOYEE KNOWLEDGE (CEK)**

In order to facilitate the conversion and sharing of knowledge, it is recommended that knowledge codification strategy be adopted within the administration of parliamentary service to codify employees' tacit knowledge. Mechanisms such as manuals or CD ROM should be used to extract employees' tacit knowledge and facilitate knowledge codification. Both manual-based approach and system-based approach should be used in facilitating knowledge codification. In the context of skills development and loss of tacit knowledge due to resignations or early retirements, there are numerous strategic and operational benefits parliamentary service could acquire from codifying employees' tacit knowledge.

Firstly, it will ensure that tacit knowledge is converted into explicit knowledge thus facilitate the externalisation mode of knowledge creation, transfer and sharing across the sections and divisions of the organisation. Secondly, it will ensure that codified knowledge generated in various sections and divisions becomes organisational knowledge. Thirdly, it will ensure that tacit knowledge gained by employees as the result of organisational investment in skills development and long service of work within the organisation is not lost due to resignations or early retirements. Fourthly, it will ensure that tacit knowledge is shared and used to achieve the strategic mission, vision and goals of the organisation. Fifthly, it will demonstrate organisational commitment to treating knowledge as strategic resource.

In order to encourage employees to codify tacit knowledge in the form that can be accessed by other employees, senior managers must demonstrate commitment to knowledge management and provide tools, systems and enabling environment for knowledge codification in all the sections and divisions of the organisation.

## **5.2. CREATING A KNOWLEDGE REPOSITORY (KR)**

In order to improve the management of codified knowledge generated internally by organisational employees and externally by consultants, it is recommended that a parliamentary service's knowledge repository be created to store existing and new codified knowledge contained in knowledge sources such as manuals, reports, procedural guides and organisational policies. The strategic and operational benefits of creating parliamentary service knowledge repository can be outlined and described in several ways.

Firstly, it will facilitate mapping, combination and electronic storage of inaccessible codified knowledge generated in different units, sections and divisions of the organisation. Secondly, it will ensure that the stored codified knowledge can be classified into procedural, operational, systematic and contextual knowledge and, made electronically accessible to any employee within the organisation. Thirdly, it will ensure that codified knowledge in the form of procedures, manuals, and organisational policies such training and development, performance management, promotion, career management, succession planning, labour relations, conditions of service, recruitment and selections, health and safety, record management, research, library and language services can be validated, amended when and where necessary and, centrally stored, retrieved and managed. Fourthly, it will facilitate the conversion of codified knowledge into tacit knowledge and thus the internalisation mode of knowledge creation, sharing and transfer within the organisation.

In order to ensure that the creation of knowledge repository add value on the storage and management of codified knowledge within the administration of parliamentary service, employees within the different sections and divisions of the organisation must be trained on how to search and retrieve codified knowledge in the knowledge repository. The IT Section in collaboration with other important role players such as the proposed knowledge management unit and the HR Section, must develop an in-house training program aimed at providing employees with tacit knowledge of the use parliamentary service's knowledge repository.

### **5.3. DEVELOPING AND PROMOTING KNOWLEDGE**

#### **SHARING CULTURE (KSC)**

In order to deal with the cultural barriers such as hoarding knowledge among parliamentary service staff that inhibit on knowledge sharing, it is further recommended that a knowledge sharing culture be developed and promoted across all the sections and divisions of the organisation. There are various strategic and operational benefits that could be derived from the creation and promotion of knowledge sharing culture within the sections and divisions of the administration of parliamentary service.

Firstly, it will encourage employees to participate in the processes of creating organisational knowledge. Secondly, it will facilitate the socialisation mode of knowledge creation and sharing through mechanisms such as on the job training, mentoring, coaching and workshops. Thirdly, it will motivate knowledgeable and experienced employees to codify their tacit knowledge and make explicit for the benefit of other employees. Fourthly, it will ensure that knowledge hoarding practices are discouraged and knowledge sharing through mechanisms such as mentoring, training of trainers, coaching and

learner ships, rotations, workshops and seminars is encouraged across all the sections and divisions of the organisation.

In order for employees to understand the importance of sharing knowledge, the Human Resource Section in collaboration with middle managers should play an active role in communicating the importance of creating knowledge sharing culture within the sections and divisions of the organisation and coordinate the training of staff on how employees could share their knowledge through mechanisms such as coaching, induction, on the job training and mentoring. In order to ensure that institutionalised knowledge sharing culture does not fail, senior management support and employees' cooperation will be needed for successful promotion of knowledge sharing culture and formalization of knowledge sharing mechanisms across the sections and division.

#### **5.4. INSTITUTIONALISING KNOWLEDGE SHARING INCENTIVES (KSI)**

In order to motivate parliamentary service' employees to share their knowledge codification of tacit knowledge, contribute explicit knowledge into the knowledge repository or through knowledge sharing and transfer mechanisms such as coaching, mentoring, on the job training, it is further recommended that knowledge sharing incentives or rewards system be institutionalised. The strategic and operational benefits of institutionalising knowledge sharing incentives within the environment where employees hoard their tacit knowledge and perceive knowledge as power will ensure that employees who have accumulated tacit knowledge through years of

service and training are encouraged, motivated and rewarded for sharing knowledge with other employees whether in the form of codification, or through knowledge sharing mechanisms such as mentoring, on the job training and, coaching.

Like the promotion of knowledge sharing culture, the successful institutionalisation of knowledge sharing incentive system will depend on support of senior managers within the administration of parliamentary service.

In order to get senior management support, the HR Section should look at how the components of performance management system such as performance contract, performance review, performance assessment could be linked with knowledge sharing incentive system to reward any employees who shares tacit knowledge with other employees.

As knowledge incentives do not only refer to money, the HR section should also explore example of incentives used in other organisations to reward or acknowledge an employee or employees who willing and capable of sharing their knowledge. The benchmarking of other organisation will assist the parliamentary service to decide on what form of incentives will be required when employees share knowledge through codification or personalization strategy of knowledge management.

## **5.5. ESTABLISHING KNOWLEDGE MANAGEMENT UNIT**

### **(KMU)**

In order to build internal capacity and assigning responsibilities for managing organisational knowledge, it is further recommended that a Knowledge Management Unit be established within the Office of the of the Secretary to Parliament who is currently the Chief Executive Officer. In an absence of

knowledge management policy, strategy and non-assignment of knowledge management functions, the establishment of the knowledge management unit will provide numerous strategic and operational benefits to the administration of parliamentary service.

Firstly, the unit will provide administrative, coordinative and integrative service for all knowledge management activities such as knowledge creation, capturing, sharing and transfer across the units, sections and divisions of the organization. Secondly, the unit will ensure that parliamentary service has an internal capacity to develop, coordinate and implement knowledge management policies, strategies and projects across the sections and divisions of the organization.

Thirdly, the unit will ensure that a centralized electronic knowledge repository is created to store codified knowledge and that knowledge stored in the repository is periodically and systematically audited, validated, updated, made accessible in accurate and understandable format. Fourthly, the KM unit will enable auditing and mapping of both tacit and explicit knowledge within the different sections and divisions of the organization and assist the senior managers to make strategic decisions about what knowledge should be retained as part of corporate memory.

In order to ensure the realization of the above-mentioned strategic and operational benefits, the Knowledge Management Unit must work closely, HR and IT Sections provide an enabling environment for knowledge creation, capturing, sharing.

## **5.6. APPOINTING CHIEF KNOWLEDGE OFFICER (CKO)**

In order to provide management and leadership to the knowledge management unit recommended in 5.5, it is recommended that a Chief Knowledge Officer be appointed to head the Unit. There are many strategic and operational benefits that could be gained in appointing chief knowledge officer. Firstly, it will ensure that at the central level of the Administration of Parliamentary Service there is an internal capacity to develop, coordinate and

champion the implementation of knowledge management strategies and policies across the sections and divisions of the organisation. Secondly, it will ensure that codified knowledge in form of policies, manuals and reports stored in knowledge repository is properly managed, validated and updated. Thirdly, it will ensure the accountability of investment to knowledge management IT tools, system and projects.

In order to ensure proper development, coordination and implementation of policies and strategies related to knowledge codification, knowledge repository, knowledge sharing culture and knowledge sharing reward systems across the sections and divisions of the Administration of Parliamentary Service, the Chief Knowledge Officer must collaborate with Human Resource and Information, Communication and Technology Sections to develop enabling conditions that encourage knowledge codification and identification and deployment of knowledge management tools required to meet parliamentary service' business objectives

## **5.7. CONCLUSION**

As stated in the introduction of this chapter, the recommendations made in this concluding chapter recognize the importance of linking knowledge management policies and strategies with numerous policy developments such as performance management system, employment equity, skills development, career management, succession planning that have important tacit and explicit knowledge requirements for successful implementation and, the need

to address technological, cultural and organisational barriers inhibiting knowledge storage, sharing and management within the administration of parliamentary service.

It is assumed in this chapter of recommendations that any effort by the administration of parliamentary service to start treating knowledge as a strategic resource must first codify employees tacit knowledge, create knowledge repository, create knowledge sharing culture, institutionalize knowledge sharing incentives, establish knowledge management unit and appoint chief knowledge officer. Within the internal policy developments of re-engineering, contracting of consultants in knowledge intensive projects, employees' culture of hoarding knowledge, loss of knowledge due to staff resignation or retirement and, external pressure to develop workplace skills plans and invest money for training staff in order to meet the requirements of skills development Act, there is a need to manage both tacit and explicit knowledge at parliamentary service as a strategic resource.

Codifying employees tacit knowledge in the context of requirements for skills development and loss of knowledge due to employees' resignations will ensure that parliamentary service does not lose critical knowledge when employees resign and that knowledge acquired by any employee as the consequence of skills development programmes, attendance to conferences and workshops is converted into explicit form to be accessed at both individual, group and organizational levels.

Within the environment of advanced information, communication and technology system, creating a parliamentary service knowledge repository will ensure that explicit knowledge created in different sections and divisions of the organization is no longer stored in inaccessible cabinet offices but captured in an electronic format that can be accessed, searched and retrieved by any employee in the organization.

In the context of employees hoarding both tacit and explicit knowledge, promoting an organizational knowledge sharing culture will ensure that employees are discouraged to hoard their tacit knowledge and officially encouraged to share knowledge at sectional and divisional levels through institutionalization of

knowledge sharing mechanisms such as mentoring, coaching, on the job training, inductions and attachments or rotations.

Within the internal policy initiatives of developing an integrated human resource development plan and lack of incentives to reward knowledge sharing practices, institutionalizing knowledge sharing rewards will ensure that the system of performance management is used to reward employees who are willing to share their knowledge through codification means or personalization mechanisms such as coaching, mentoring and on job –training.

In an absence of assigned roles, policy and strategy for managing knowledge within the administration of parliamentary service, creating a Knowledge Management Unit and appointing a chief knowledge officer will firstly, ensure the provision of a central administrative, coordinative and integrative service for all knowledge management activities and, secondly, ensure that knowledge management unit is managed by knowledgeable person who could develop knowledge management policy, strategy, convince senior managers about the importance of investing in knowledge management projects and account on knowledge management activities within the administration of parliamentary service.

The benefit of adopting and applying the codification strategy within the parliamentary service will ensure that employees' tacit knowledge is converted into explicit knowledge, sections and divisions of the organization do not loss tacit knowledge when an employee leaves the organization, operational knowledge is codified in accessible form and, budget for training is not spend on tacit knowledge that already exists within the organization.

The implementation of recommendations made in this study suggests a more fundamental challenge, namely, determining which knowledge within the organisation could be explicit and which should be left tacit. Three strategic considerations are needed for implementing knowledge management strategy for parliamentary service. First, the role of information communication technology must not be overemphasized. The limitation of technology to transfer tacit knowledge

must also be recognized. Second, managerial interventions must take place to remove barriers that restrict knowledge codification, storage, transfer and sharing.

The role of information communication technology must not be overemphasized, limitations of technology to transfer tacit knowledge must be recognised and that management must intervene to remove all the barriers that inhibit sharing of knowledge. The implementation of knowledge management should be planned for a stage when the ICT of parliamentary service has sufficiently evolved.

The managing organisational knowledge at parliamentary service implies firstly the need to deal with the cultural barriers that inhibit knowledge sharing through the application of knowledge codification method, sharing of tacit knowledge through mentoring, coaching and on the job training. Secondly, it implies addressing the technological barriers that inhibit the storage of codified knowledge through the creation of knowledge repository and application of modern information technology tools and system. Thirdly, it asks that the organisational barriers inhibiting the development of knowledge management policy and strategy be addressed through the creation of knowledge management unit and appointment of chief knowledge officer.

Any organisational attempt to address the above-mentioned technological, cultural and organizational barriers will ensure that knowledge within the parliamentary service is treated as strategic resource, tacit knowledge acquired by employees is retained, codified knowledge contained in manuals, reports policies is electronically managed accessed, employees are encouraged to share knowledge and knowledge management policies, strategies and projects are developed coordinated, implemented, monitored.

## Appendix 1:

# KNOWLEDGE CREATION AND TRANSFER IN THE PARLIAMENTARY SERVICE IN 2001

The following questions were used during the interview. They were used as a guide to gather data and generate discussion. The first set of questions was semi-structured with an interview guide. They covered issues pertaining to knowledge creation, knowledge transfer mechanisms and knowledge capture and storage. Semi-structured interviews were conducted with (1) the HR Manager, (2) the IT Manager, (3) the Training and Development Practitioner, (4) the Parliamentary Trainer on Performance Management (5) the Co-ordinator of Performance Management Forum and (6) the Senior Consultant. All the interviews conducted were recorded and transcribed.

### Interviews with HR Manager

1. How are HR policies created, captured, stored and transferred within the organisation?
2. How has the knowledge of the performance management system been created, captured, stored and transferred within the organisation?
3. Was knowledge and skills transfer part of the consultants' terms of reference?
4. What are the examples of knowledge and skills specifically transferred within HR Section and, more generally, to other sections of the organisation?
5. What mechanisms were used to ensure knowledge and skills transfer within the parliamentary service?

7. How has the transfer of knowledge and skills been monitored and evaluated during the design of the performance management system?
8. What general problems were encountered in relation to the creation and transfer of knowledge of the performance management system

## **2. Interview with IT Manager**

1. What information and technology services does the IT Section provide to all the sections and divisions of the parliamentary service?
2. Do the parliamentary service have an IT policy and strategy in place?
3. How has the IT policy and strategy been developed and disseminated to all the sections and divisions of the organisation?
4. Does the parliamentary service have a website and a database where internal policies, reports and manuals can be stored?
5. What kind of information communication tools does parliamentary service use?
6. What information technology tools were used to transfer knowledge of performance management system?
7. What are the challenges facing the parliamentary service in managing knowledge

### **3. Interview with the HR Training and Development Practitioner**

1. How does the HR training and development Unit co-ordinate and facilitate training within the parliamentary service?
2. With reference to the design of the performance management system, what training role did the unit play?
3. How many training sessions were conducted and how many staff members received training on the performance management system?
4. What were the knowledge components of the training sessions conducted with the rest of the parliamentary staff?
5. What organisational barriers were encountered in facilitating knowledge transfer through the training sessions?

#### **4. Interview with Parliamentary Internal Trainer**

1. How were you selected as a trainer for the performance management system?
2. Did you have any experience of training prior your nomination?
3. What kind of skills and knowledge did you acquire during the training of trainers program?
4. How did you transfer the acquired skills and knowledge within the sections and divisions of the parliamentary service?
5. What sources or materials did you use in helping you to transfer and share knowledge of the system of performance management?
6. What problems did you face in transferring and sharing knowledge of the system with other parliamentary staff members?
7. Were you rewarded for transferring and sharing the knowledge you acquired?

## **5. Interview with the Co-ordinator of the Performance Management Forum**

1. What role did performance management forum play in creating knowledge of performance management system?
2. What kind of knowledge performance management system was created?
3. How was the knowledge of performance management system shared within the sections and divisions of the organisation?
4. What mechanisms were used in transferring and sharing knowledge within the sections and divisions of the organisation?
5. What organisational barriers were encountered in facilitating knowledge creation and transfer?
6. What could be done in future to facilitate knowledge transfer and sharing within the parliamentary service

## **6. Interview with HR Outsource Consultant**

1. What was the main purpose, nature and deliverables of the project of performance management system?
2. Was knowledge capturing and transfer part of the terms of reference?
3. How was knowledge of the project being captured and transfer?
4. What mechanisms were used to facilitate knowledge transfer related to the project?
5. What organisational barriers were encountered in capturing and transferring the knowledge?
6. In your opinion what knowledge management challenges are facing the organisation?

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## **TRANSCRIPTIONS OF INTERVIEWS**

Interview with HR Outsource Consultant

Interview with Parliamentary HR Section Manager

Interview with Parliamentary HR Training and Development Practitioner

Interview with Parliamentary IT Section Manager

Interview with Parliamentary Performance Management Co-ordinator

Interview with Parliamentary Trainer and Job Evaluation and Remuneration  
Practitioner