COMPETENCIES NEEDED FOR VIRTUAL WORKERS

by

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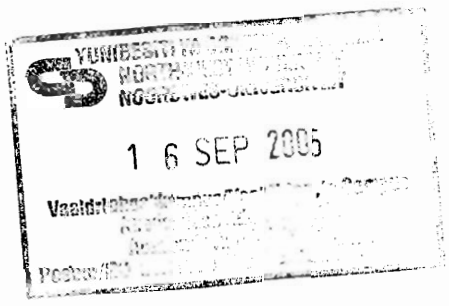

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COMMENTS

The reader is reminded of the following:

- The text citations and reference list in this mini-dissertation are done in accordance with the regulations set down by the American Psychological Association (APA). The programmme in Industrial Psychology at the North-West University prescribes this style of reference.

- The editorial style specified by the *South African Journal of Psychology* (which agrees largely with the APA style) was used, but the APA guidelines were followed in constructing tables.

- All the participants in this study are Business Dealer Officers working at a financial institution in South Africa.

- This dissertation will be submitted in the form of an article.

SUMMARY

Title: **Competencies needed for virtual workers**

Keywords: Virtual competencies, virtual organisations, worldwide trends in virtual organisations, virtual skills, virtual work, advantages of virtualness, dangers of virtualness, occupational profiles and questionnaires, virtual training.

The changing world of work that we live in is characterised by forming part of globalisation and virtualness. The previous era managers focused on how to make money and how this money can work for them. The changing world of work is characterised by global competitiveness in delivering quality products quicker and cheaper. Globalisation presents continuous advancements in technology, which requires a new mindset. These technological advancements have a profound effect on culture, training and management of staff. This brings about change in flexible working arrangements and the traditional office made space within certain organisations for virtual offices. The move towards virtualness causes companies to work more closely with their customers to be able to coordinate rapid changes in products (Schuh, Millarg & Görannson, 1998; Weissenfeld, Fisscher, Pearson & Brockhoff, 2001).

The financial institution referred to in this study was also driven by globalisation and technological advancements to re-engineer the current way in which they do business. It became evidently clear that there was a need for a shift towards virtualness, which called for the identifying of relevant competencies; needed by employees for working in a virtual environment. These competencies will enable the organisation to select the right employees and provide them with information that could be utilised in training the current virtual employees according to the competencies identified.

The objectives of this research were firstly to conduct a job analysis to determine the important competencies needed by virtual workers, in a specific job at a financial institution in South Africa. Secondly to compare the current competencies of the

virtual workers (who took part in the research) with the competencies identified by the job analysis to be important for this specific job. Thirdly to determine the skills required for virtual workers and compare these skills with the skills ranked by the current virtual workers to be important. Fourthly to identify how these virtual workers experienced the effect of virtualness on their performance. Lastly to make recommendations regarding future training and selection purposes.

A survey design (cross-sectional) was used to determine competencies needed by virtual workers for a specific job at a financial institution in South Africa. The study population consisted of (*N=71*) employees in a virtual job at a financial institution in South Africa. The Work Profile Systems (WPS), Occupational Personality Questionnaire (OPQ), Performance Assessment Questionnaire (PAQ) and a Skills Audit (SA) were administered.

Results of the research indicated that 44% of the study population exhibits the competencies needed by virtual workers as indicated by the Inventory of Management Competencies (IMC) Profile of the WPS. The results of the Performance Assessment Questionnaire (PAQ) indicated that the current virtual workers experienced the greatest impact of virtualness on improving the attainment of personal goals, as well as improving the achievement of organisational goals. The results from the Skills Audit (SA) identified skills that were essential for virtual workers in a specific job within a virtual environment, according to the feedback received from the current virtual workers. They compared favourably with the skills identified by literature as being important.

Recommendations to the organisation and for future research have been made and limitations were also discussed.

OPSOMMING

Titel: **Bevoegdhede benodig deur virtuele werkers**

Sleutelwoorde: Virtuele bevoegdhede en vaardighede, virtuele organisasies, wêreld tendensies ten opsigte van virtualitiet, virtuele vaardighede, virtuele werk, voordele en nadele van virtualiteit, beroepsprofiele en vraelyste, virtuele opleiding.

Die veranderende arbeidswêreld waarin ons leef word gekenmerk deur die tot standkoming van globalisasie en virtualiteit binne organisasies. Die bestuurders van die vorige era het gefokus op hoe om geld te maak en hoe om diè geld te laat werk vir hulle. Diè huidige veranderende arbeidswêreld word gekenmerk deur globilisering en kompetisie wat tot gevolg het dat kwaliteitprodukte vinniger, beter en teen laer koste gemaak kan word. Globalisering en die voortdurende toename in tegnologie het aanleiding gegee daartoe dat 'n paradigma-skuif binne die organisasie ten opsigte van kultuur, opleiding, bestuur en personeel-aangeleenthede, nodig is. Hierdie veranderende arbeidswêreld het 'n verandering in organisasies te-weeg-gebring ten opsigte van die implementering van meer buigbare werksooreenkomste wat tot gevolg het dat die tradisionele kantoor plek begin maak het vir 'n meer virtuele opset. Die beweging na virtualiteit het veroorsaak dat organisasies nader beweeg aan hul kliënte. Sodoende word dit moontlik om enige veranderinge wat plaasgevind het ten opsigte van produkte, vinniger aan hul verskaffers te kommunikeer en met hul kliënte te koördineer (Schuh, Millarg & Görannson, 1998; Weissenfeld, Fisscher, Pearson & Brockhoff, 2001).

Die finansiële instansie waarna in die studie verwys word, is ook gedryf deur globalisering en tegnologiese vooruitgang om die wyse waarop hul huidiglik hul besigheid bedryf opnuut in oënskou te neem. Die behoefte het ontstaan om meer te beweeg na 'n virtuele omgewing waarin besigheid bedryf word. Hierdie beweging na virtualiteit het tot gevolg dat nuwe bevoegdhede waaroor werkers, spesifiek in 'n virtuele omgewing moet beskik, geidentifiseer moet word om

effektiwiteit te verseker. Hierdie bevoegdhede sal die organisasie in staat stel om die regte werkers te selekteer asook om die inligting te inkorporeer by hul opleiding.

Die doelstellings van hierdie navorsing was eerstens om 'n werksanalise uit te voer om sodoende die bevoegdhede te identifiseer waaroor virtuele werkers in 'n spesifieke pos binne 'n finansiële instansie in Suid Afrika moet beskik. Tweedens om die huidige werkers se bevoegdhede te vergelyk met die bevoegdhede wat as belangrik geïdentifiseer is vir virtuele werkers. Derdens om vaardighede te identifiseer waaroor virtuele werkers moet beskik en die vaardighede van huidige virtuele werkers daar-teenoor te vergelyk. Vierdens om die huidige virtuele werkers se ervaring ten opsigte van die impak wat virtualitiet op hul prestasies het, te identifiseer. Laastens om aanbevelings te maak vir toekomstige opleiding en seleksie doeleindes.

'n Navorsingsontwerp (kruis-seksie) is gebruik om bevoegdhede te identifiseer waaroor virtuele werkers moet beskik. Die studiepopulasie het uit (*N=71*) werknemers binne 'n virtuele werksomgewing van 'n finansiële instansie in Suid Afrika, bestaan. Drie vraelyste is in die ondersoek gebruik, naamlik die "Work Profile Systems (WPS)", "Occupational Personality Questionnaire (OPQ)" en Prestasie-evalueringsvraelys (PAQ). 'n Vaardigheidsoudit (SA) is ook afgeneem.

Die resultate van die studie het getoon dat 44% van die studiepopulasie oor bevoegdhede beskik wat as belangrik vir virtuele werkers deur die "Inventory of Management Competencies (IMC)" profiele van die WPS geïdentifiseer is. Die Prestasie-evaluaeringsvraelys (PAQ) het aangedui dat die huidige virtuele werkers die grootste impak van virtualiteit ervaar het op die verbetering van die bereiking van persoonlike asook organisasiedoelstellings. Die Vaardigheidsoudit (SA) het die vaardighede geïdentifiseer wat volgens die huidige virtuele werkers as belangrik beskou is vir 'n spesifieke pos binne 'n finansiële instansie in Suid-Afrika en het goed vergelyk met die vaardighede wat deur die literatuur aanbeveel is.

Aanbevelings aan organisasies asook vir toekomstige navorsing is aan die hand gedoen. Leemtes ten opsigte van die studie is ook bespreek.

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CHAPTER 1

INTRODUCTION, PROBLEM STATEMENT, RESEARCH OBJECTIVES AND METHODOLOGY

1.1 INTRODUCTION

The purpose of this mini-dissertation is to identify competencies needed for virtual workers in a specific job at a financial institution in South Africa and to make recommendations regarding future training and selection purposes.

This chapter focuses on the problem statement, objectives, research method and research design. A division of chapters is also provided.

1.2 PROBLEM STATEMENT

Every era has its' own characteristics. In the 1960's they focused on mergers and acquisitions. During the 1970's the focus was on diversification and conglomeration, while in the 1980's the focus shifted to decluttering and delayering (Hammel & Prahaland, 1990; Haynes, 1991). During the 1990s, organisations experienced one of the most disruptive types of organisational change, namely the engaging in downsizing and restructuring (French & Bell, 1995; Holmqvist, 2003). At the onset of the new millennium (2000) organisations moved towards more flexible working arrangements replacing the traditional office with virtual offices (Furnham, 2000; Robbins, Odendaal & Roodt, 2003).

Tsoukas (1994) and Werr, Docherty and Stjernberg (1997) state that in future, the ability to be future-orientated will determine the sustainability of organisations. In the changing world of work the emphasis has turned to globalisation and virtualness for some organisations. Organisations worldwide were faced with the need to cope with the growing competitiveness that globalisation brought in terms of costs, quality and time pressures. In the changing world of work this organisational world, has become characterised by uncertainties and unpredictability in the internal and external

environments. This growing uncertainty in the internal and external environment has driven organisations to search for a new world organisation form that would direct companies in the changing world of work (Weissenfeld, Fisscher, Pearson & Brockhoff, 2001).

Continuous changes and the application of technology at organisations in the changing world of work, are forcing organisations to become more flexible in their work arrangements. This pursuit for flexibility, excellence and a focus on customer satisfaction leads to the emergence of the "virtual" organisation as a possible solution to accommodate changes in certain organisations especially within the financial industries (Arnison & Miller, 2002; Furnham, 2000).

The virtual organisation stands in contrast to the typical bureaucracy that had many vertical levels of management. However, the virtual organisations are highly centralised, with little or no departmentalisation while they outsourced many of their non-core activities and only focus on their core activities, in other words, what a company does best (Robbins, Odendaal & Roodt, 2003).

A virtual organisation is an organisation that relies heavily on information technology to link people, assets and ideas and exploit fast-changing business opportunities (Rahman, 2002). It is a network of independent suppliers, customers and sometimes-even competitors that are tied together by technology (Bosch-Sejtsema, 2002). The World Wide Web and other information technology support the development of the virtual organisation because of the access to information that is utilised to the benefit of the virtual organisation (Denton & Vloegsberghs, 2003; Gordon, 1999). These researchers state further that this concept of virtual organisations suggests that organisations are moving towards a new form, namely the "borderless world". This corresponds with Mcluhan's "global village", which he predicted in 1993 to be the new form of the future organisation. This new form of virtual organisations is essentially "people-driven", "knowledge-intensive" and mainly facilitated by information technology (Gordon, 1999).

According to Bosch-Sejtsema (2002) the reasons why some organisations are moving towards "virtualness" are because of the changing nature of competitiveness in

business environments. Virtual organisations have the advantage to save time when developing and delivering products to the market, which results in gaining a competitive advantage (Fisscher, Pearson & Brockhoff, 2001). O'Brien (2004) identifies the following reasons why virtualness is becoming so popular in the changing world of work: firstly, due to its flexibility that enhances new ways to seize new business opportunities, and secondly, because it is one of the best ways to implement key business strategies and alliances that could ensure success in today's turbulent business climate. Furthermore, "virtualness" could be one of the most strategic changes organisations could make in the new world to ensure their sustainability in future (Arnison & Miller, 2002). Organisations in the changing world of work may not have the time or resources to develop and distribute infrastructure, competence and information technologies needed in order to exploit this fast-changing market. By forming a virtual organisation it can assemble the components needed through networking to provide a world-class solution for customers and be able to capture the market opportunities before the competition does (Fisscher, Pearson & Brockhoff, 2001).

The aim of the virtual organisation is to reduce risks and enhance opportunities for development and production (Rahman, 2002). The virtual organisation makes use of ongoing networks and offers various kinds of resources. On the one hand advantages are gained from stable relationships while having flexible work arrangements, and on the other hand from relying on network partners to raise productivity and reduce transaction costs. These aspects of collaboration make the virtual organisation very attractive (Greengard, 2001).

According to Weisenfeld, Fisscher, Pearson and Brockhoff (2001), virtual companies are faced with two special problems; firstly finding the balance between keeping information confidential and giving only necessary information for customers (relevance of information is time-dependent, which means that even the smallest leak of information could result in the competition being first on the market); secondly, discovering whether members and customers can identify themselves with the virtual company as a reliable business partner. The lack of a physical office can give rise to certain questions such as professionalism and the ability to do business, which will have a direct impact on the reliability as a business partner. If these problems are not

addressed the advantages of the virtual organisation cannot be grasped. Furthermore, Weisenfeld, Fisscher, Pearson and Brockhoff (2001) identified in their results that commitment; managing information effectively as well as interface management could be the key in solving these two problems in the virtual organisation. Virtualness also has an impact on the employees within these virtual organisations to adapt to the new ways in which business will be conducted.

The increasing numbers in virtual workers suggest that there is a need to understand the experience of virtual workers and devise methods for managing this new growing phenomenon. DeSanctis and Monge (1999) as well as Weisenfeld, Raghuram and Guarud (2001) identified two problems that virtual workers are faced with, and that need to be managed to ensure their success within a virtual organisation: Firstly, virtual employees are faced with the scenario that they can work anytime and anywhere. This results in the inability to rely on traditional methods such as direct supervision as means of coordination and control (DeSanctis & Monge, 1999). The discretion lies with the employee to seek out and provide cooperative behaviours that will motivate them to perform and meet the goals of the organisation. Self-managing is one of the key competencies identified to drive the virtual employee to reach the goals of the organisation (Weisenfeld, Raghuram & Guarud, 2001). Secondly, distance and dispersion weaken the relationship between organisation and employee. Virtual workers tend to report concern about being "out of sight, out of mind", which has a huge impact on organisational citizenship. Organisational citizenship refers to how individuals define the self with respect to their organisation (Robbins, Odendaal & Roodt, 2003). Distance creates isolation and independence, which could threaten to fragment the organisation. The more social support virtual workers receive across the constituencies in the organisation, the more powerful the social cues become regarding their relationship with their organisation. This will result in increasing the employee's likeliness to identify with the organisation.

The biggest challenge for South African organisations is their capacity to compete in this changing world of work, which is characterised by continuous advancements in technology, knowledge sharing and customised relationships with stakeholders (Avolio & Maritz, 2000). Arnison and Miller (2002) state that organisations in South Africa are faced with new pressures with which to cope, developing greater flexibility

and less dependence on the traditional office concept, as well as focussing on new innovative and creative ways. The latter is not only to exploit these new ways but also to manage these advancements in technology and to create faster-paced workflow, which will result in customer growth. A study conducted by Hoffman (2002) in South Africa, indicated that organisations started to look at virtual work through the implementation of telework arrangements especially in the financial sectors. Financial institutions were the first to evaluate telework as an alternative working arrangement (Hoffman, 2002). "Tele" means distance and in combination with work implies that work is executed from a distance, away from the traditional office, for a part of the workweek, in other words, bringing work to the worker and not the worker to the work (Hoffman, 2002). Research done by Hoffman (2002) and Kemp (2000) further indicated that telework programmes presented distinct benefits such as an increase between 15% – 25% in productivity, a decrease in absenteeism by 80% and cost savings of up to 38% in office space.

Employees must realise how competence relates to the business success in order to be productive and successful in the new virtual environment where personal contact with supervisor and feedback are limited (Vinassa, 2001). One of the best ways to develop, teach and assess competences is to understand how competences are linked with success in the workplace. Performance assessments within a virtual environment must be continuous and regular feedback is necessary due to the lack of physical contact between manager and employee (Vinassa, 2001).

According to Rahman (2002) the virtual organisation is using competent employees to ensure that they are able to cope with the challenges and demands set within the virtual organisation. Coetsee (2002) defines "competencies" as the underlying individual's traits that lead to superior performance. "Competence" refers to the application of knowledge and the interpersonal, decision-making, and psychomotor skills expected for a specific job while "competent" means properly or well-qualified and capable to do the job effectively. In other words, "competence" indicates "what" is needed for a certain job and "competencies" indicates "how" the job is done. Saville and Holdsworth (2002) refers to competencies as human attributes needed to perform the duties of the job. These attributes include skills and personality characteristics.

Knowledge, skills and personality characteristics are essential factors for successful on-the-job performance. Skills on the other hand constitute core competencies and it is important to recognise opportunities whereby it is necessary to blend the functional expertise of a person together with those of other people in new and interesting ways. Knowledge refers to what an individual has already learned and can apply to relevant situations. Personality refers to individual differences in characteristics that are expressed in a relatively consistent manner (Coetsee, 2002). General competencies such as conscientiousness, assertiveness, loyalty, adaptability, flexibility, innovativeness and creativity, orientation to learning and emotional stability are consistently linked to successful job performance within a virtual environment (Denton & Vloegsberghs, 2003).

Yearout, Miles, Koonce, Benette, Barton and Allert (2001) emphasise the importance to hire the right kind of people for virtual work. Employees in a virtual organisation perform their work outside the definition of place, in other words they execute their duties from a remote location other than the traditional office place. These researchers identified the following characteristics of a successful virtual employee; the need to be internally motivated, to have strong communication skills specifically on the phone and on e-mail, to be confident in making decisions and to have excellent problem-solving skills, and lastly to be "techno wise" enough to do their own troubleshooting on computer system to find the help they need.

People prefer situations in which they can perform and avoid situations where the demands will exceed their abilities. In other words, a person would like to be in control of the situation and determining its outcome rather than the situation controlling a person's outcome. Therefore it is essential to develop skills such as decision-making, critical thinking and self-management to be able to cope with the economic changes in South Africa and the rest of the world (Newell, 2002). To survive in the changing world of work requires advanced cognitive and self-management competencies, as well as being able to manage the maze of demands of the contemporary life effectively (Albertyn, 2001).

Nearly 18 million US workers spend 80% of their workweek in virtual mode. This number is increasing almost by 100% (Fitzpatrick, 2000). Virtual work has only

begun to attract research attention recently. According DeSanctis and Monge (1999) as well as Weisenfeld, Raghuram and Guarud (2001), there is relatively little theory regarding the effects of virtual work and even less empirical research exploring this phenomenon. South Africa only recently joined the virtual realm. Therefore the need increases for exploratory research on virtual work since it has been identified as the new organisation form to adapt, ensuring organisations to be sustainable in the new changing world of work (Weisenfeld, Raghuram & Guarud, 2001).

Globalisation and advancements in technology also influenced the financial institution where this study was conducted to reengineer the way they do business. Customer satisfaction is the core business strategy of this financial institution. To be able to ensure that the customer's needs are met within this new world of work and stay abreast of the competition (such as other financial institutions), is it crucial for this particular financial institution to identify other ways to serve their customers and meeting their needs. This focus on customer satisfaction drives the financial institution to move towards virtualness as the new way of conducting business (Hoffman, 2002; Kemp, 2000 & O'Brien, 2004). The flexibility that virtualness brings will enable employees not only to build close relationships with their customers, which will enhance customer satisfaction but will also help them to build bigger network partners (Arnison & Miller, 2002 as well as Rahman, 2002). This will increase productivity and enable the financial institution to enhance their customer satisfaction. The growing importance of virtual work within this financial institution and the possible enhancing effect it could have on customer satisfaction, called for identifying competencies virtual workers will need in this new virtual business environment. Self-management, being able to nurture relationships from afar, self-motivation, good communication and ability to solve problems are some of the most important competencies emphasised by literature as important for virtual workers (Denton & Vloegsberghs, 2003; DeSanctis & Monge; 1999; Gordon, 1999 & Newell, 2002). It is crucial to select competent employees to ensure that they are able to cope with the new challenges virtualness demands.

To be able to successfully select competent employees to cope in this new virtual environment, this study aims to identify specific competencies virtual workers will need within a specific job (Business Dealer Officer) in this financial institution. The

need also was raised to identify how the current virtual workers experience the effect of virtualness on their performance to emphasise certain aspects that need to be taken into consideration for future training purposes, which could increase their productivity. The information gathered from this study will be provided to the organisation to be utilised for future selection and training purposes. This information will ensure that the right people are selected in future and that the current virtual workers receive the appropriate training that will enhance their productivity. This will enable this financial institution to stay ahead of its competition in the new world of work that is characterised by globalisation and continuous advancements in customer satisfaction.

According to the literature research the following research questions can be formulated:

- How is virtual work conceptualised in the literature?
- How is competencies conceptualised in the literature?
- What specific competencies are relevant according to the literature for virtual workers in a specific job, at a financial institution in South Africa?
- What competencies are important for this specific job (Business Dealer Officer) at a financial institution in South Africa?
- What are the current competencies of virtual work in this specific job (Business Dealer Officer) at a financial institution in South Africa?
- What skills are needed according to literature in order to become effective in a virtual environment?
- What skills are ranked as important by the current virtual workers in this specific job (Business dealer Officer) at a financial institution in South Africa?
- How do virtual workers experience the effect of virtualness on their performance within this specific job (Business Dealer officer) at a financial institution in South Africa?

1.3 RESEARCH OBJECTIVES

The following general and specific objectives were formulated for this research.

1.3.1 General objective

The objective of this research study was to identify competencies needed for virtual workers in a specific job (Business Dealer Officer) at a financial institution in South Africa and to make recommendations for future training and selection purposes.

1.3.2 Specific objectives

The specific research objectives are:

- To conceptualise virtual work.
- To conceptualise competencies.
- To identify competencies needed within a virtual environment according to literature.
- To determine the important competencies needed for virtual workers, in a specific job (Business Dealer Officer), at a financial institution in South Africa.
- To determine the difference between the current competencies that the virtual workers (who took part in the research) have, and the competencies identified through the job analysis as being important, for this specific job (Business Dealer officer), at a financial institution in South Africa.
- To determine the skills required for virtual workers to be effective in a virtual environment indicated by literature.
- To identify the skills ranked as important by the current virtual workers, in the specific job (Business Dealer Officer) at a financial institution in South Africa and to compare these skills with the skills that the literature emphasises as being important.
- To identify how the current virtual workers experience the effect of virtualness on their performance.
- To make recommendations regarding future selection and training.

1.4 RESEARCH METHOD

The research method consists of a literature review and an empirical study.

1.4.1 Literature review

The literature review will focus on previous research that has been done on competencies needed in a virtual environment.

The following resources have been used in the literature research:

- Library
- Internet
- Repertoire of South African Journals as well as International Journals of Business, Education, Management, Industrial Psychology, Organisational Development, Information Technology and Training and Development.
- Previous research thesies and dissertations
- National and International articles.

1.4.2 Empirical study

The empirical study will consist out of three parts. The first part will consist of conducting a job analysis by utilising the Work Profile System (WPS). The competencies identified from the IMC profile of the WPS will be used as the important competencies needed by virtual workers in this specific job.

The second part of the empirical study will focus on the administering of OPQ 32n questionnaires on virtual workers (*N=71* workers). The competencies of the current virtual workers will be gathered from these profiles and will be used to compare with the competencies identified by the IMC profile of the WPS (in the first part) to be important for this specific job. This information will then be utilised for future training and selection purposes.

Lastly, the researcher developed the Performance Assessment Questionnaire (PAQ) and Skills Audit (SA). Both these instruments incorporate the ten most important skills and performance outcomes identified by the literature research as being important for effectiveness in a virtual environment (Attaram & Attaram, 2003; Garfoot & Labrow, 2003; Mclntosh, 1995; Pitts & Lei, 2003; Revenbark & Frost, 2003; Sisk, 2003 & Skyrme, 1994). The Performance Assessment Questionnaire (PAQ) will be given to the participants to determine how they experienced the impact virtualness has had on their performance since they went virtual in October 2002. The Skills Audit (SA) will be used as a supporting tool to verify the skills rated by the current virtual workers as being important for success within a virtual environment, for this specific job.

Based on the results from these instruments, recommendations will then be made to the organisation to use as a benchmark when undertaking selection and training of potential employees for this specific job.

1.4.2.1 Research design

For the purpose of this study a survey design (cross-sectional) will be used to develop a competency profile for virtual workers in a specific job at a Financial Institution in South Africa. Both the WPS and OPQ instruments are approved instruments that are currently used at the financial institution that was selected for this research, as part of their selection process. The Performance Assessment Questionnaire (PAQ) and Skill Audit (SA) that were developed by the researcher will also be used to offer additional support to the results gathered from literature and above-mentioned WPS and OPQ.

1.4.2.2 Study population

The study consists of a total population of ($N=71$).

1.4.2.3 Measuring instruments

The following measuring instruments will be used in the research.

1.4.2.3.1 Work Profiling System

The **Work Profiling System** (WPS) is a job analysis technique and is based upon an analysis of the tasks, activities and work context of the job. The WPS consists of "Job Description Report" that provides fundamental information about a job such as a clear description of the job title, location, reporting structure, main purposes, responsibilities and objectives of the job. Essential work activities are defined as task statements taking into account the importance of the task and the time spent performing the tasks. The "Person Specification Report" identifies the most job relevant competencies based on the analysis of the tasks, activities and work context of the job that is being evaluated. This profile is based on SHL's competency model called "Inventory of Management Competencies (IMC)". This system will be used to identify important competencies needed for a virtual worker in a specific job, at a financial institution in South Africa. This information will also further be utilised as a benchmark for the future selections and training purposes.

1.4.2.3.2 Questionnaires

The **Occupational Personality Questionnaire (OPQ)** will be used to determine the competencies that the current virtual workers have. The OPQ instrument is based upon the candidate's perception of their behaviour at work. The OPQ identifies a broad range of competencies. The OPQ will be given to each of the participants to complete. These OPQ profiles will be used to identify the broad range of competencies the current virtual workers have and compare the competencies with the competencies identified by the WPS (in the first part) to be important for this specific job. Research done by Saville and Holdsworth (2002) indicated the reliability score for the OPQ of 0,75 and a validity score of 0,3. The OPQ has been tested on 11 665 individuals to determine these scores and has been used in over 50 countries. According to Nunnally and Bernstein (1994) these scores are acceptable to be used in research.

A **Performance Assessment Questionnaire (PAQ) and Skills Audit (SA)** was developed by the researcher. The **Performance Assessment Questionnaire (PAQ)** will be used to determine how the current virtual workers experienced the impact

virtualness had on their performance as Business Dealer Officers, since they went virtual.

The **Skills Audit (SA)** will be used as a supporting tool to verify the most essential skills ranked by the current virtual workers as being important for success in a virtual environment and to compare these skills with the skills identified as being important in literature.

1.4.2.4 Research procedure

The measuring instruments will be administered. A letter requesting participation and motivating the research will be included. Ethical aspects regarding the research will be discussed with the participants. The selected instruments will be administered at the workplace on suitable dates. The results will be analysed and feedback will be given to all individuals who requested feedback.

1.4.2.5 Statistical analysis

The statistical analysis will be carried out with the help of the Statistical Consultation Services of the North-West University (Vaal Triangle Campus) and SHL statistical consultancy division. Descriptive statistics will be used to identify the mean, standard deviations, skewness, kurtosis as well as frequency statistical analysis. The S.A.S (2000) program was utilised to determine the descriptive statistics. The information gathered from the statistical analysis will be used to compile an ideal competency profile for virtual workers in a specific job at a financial institution in South Africa. The results gathered from the comparison between the current competency profiles of the study population and the ideal competency profile for virtual workers will be used to make recommendations for future selection and training purposes. Confirmatory factor analysis will be included to determine on which factors virtualness had the most impact.

1.5 DIVISION OF CHAPTERS

The chapters are presented as follows:

CHAPTER 1: Introduction, problem statement and research objective
CHAPTER 2: Research Article
CHAPTER 3: Conclusions, limitations and Recommendations

1.6 CHAPTER SUMMARY

In this chapter, the motivation for the present study and the steps in the research process were stated. The problem statements, aims of the study, and research method have been discussed. A prospective chapter division was indicated.

In chapter 2 the research article is presented.

REFERENCES

Albertyn, R. (2001). Increase the accountability through empowerment. *People Dynamics, 17*, 21-22.

Arnison, L., & Miller, P. (2002). Virtual teams: A virtue for the conventional team. *Journal of Workplace Learning, 14,* 166-173.

Attaram, M., & Attaram, S. (2003). The coming age of virtual teaming: Guidelines for managers. *International Journal of Management, 20*, 171 – 178.

Avolio, B., & Maritz, D. (2000). E-Leading: Leadership any where, any time, at any level. *Management Today, 16*, 15 –16.

Bosch-Sejtsema, P. (2002). A structure of roles within virtual organisations. *International Journal of Information Technology & Decision Making, 1*, 371 - 385.

Coetsee, L. D. (2002). *Peak performance and productivity: Practical guide for the creation of a motivational climate*. Vanderbijlpark: Ons Drukkers.

Denton, M., & Vloegsberghs, D. (2003). Leadership challenges for organisations in the new South Africa. *Leadership and Organisation Development Journal,* 24(2), 84 – 2495.

DeSanctis, G., & Monge, P. (1999). Communication processes for virtual organisations. *Organisation Science, 10,* 1693 – 1703.

Fisscher, O., Pearson, A., & Brockhoff, K. (2001). Managing technology as a virtual enterprise. *R & D Management, 31*, 1 – 13.

Fitzpatrick, W. A. (2000). Form, function and financial performance for the virtual organisation. *S.A. M. Advanced Management Journal, 65*, 1-15.

French, W. L., & Bell, C. H. (1995). *Organizational Development Behavioral Science Interventions for Organization Improvement* (5th ed). Englewood Cliffs, NJ: Prentice-hall.

Furnham, A. (2000). Work in 2020: Prognostications about the world of work 20 years into the millennium. *Journal of Managerial Psychology, 15,* 242 – 254.

Garfoot, A., & Labrow, P. (2003). The reality of virtual teams. *IT Training, 5,* 32 – 35.

Gordon, J. R. (1999). *Organisational behaviour: A diagnostic approach.* (6th ed). Englewood Cliffs, NJ: Prentice Hall.

Greengard, S. (2001). Make smarter business decisions: Know what employees can do. *Workforce, 80*, 42 - 46.

Hammel, G., & Prahaland, C. K. (1990). Core competencies of the corporation. *Harvard Business Review. 68,* 79 – 91.

Haynes, P. (1991). Change, then change again. *Economist, 318,* 7-9.

Hoffmann E. (2002). *Telework in South Africa: Effectively managing workers who aren't there.* Paper presented at OCM conference.

Holmqvist, M. (2003), Virtual organisations and Beyond. *Academy of Management Executive, 17,* 129 – 130.

Kemp, A. (2000). *An evaluation of the success of telecommuting as a job design strategy.* Pretoria: University of Pretoria.

McIntosh, S. S. (1995). Envisioning the virtual training organization. *Training & Development, 49,* 45 – 51.

Newell, S. (2002). *Creating the healthy organisation: Well-being, diversity and ethnics at work.* USA: Thomson Learning.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory.* (3rd ed). New York: Mc Craw-Hill.

Pitts, R. A., & Lei, D. (2003). *Strategic Management: Building and sustaining competitive advantage.* Canada: Thomson learning, 404 – 410.

O'Brien, J. A. (2004). *Managing information technology in the business enterprise.* (6th ed). Northern Arizona: McGraw-Hill.

Rahman, Z. (2002). Virtual organisation: A Stratagem. *Singapore Management Review, 24,* 2 – 29.

Revenbark, L., & Frost, M. (2003). Virtual teams that work. *HR Magazine, 48,* 121 – 123.

Robbins, S. P., Odendal, A., & Roodt, G. (2003). *Organisational Behaviour.* South Africa: Pearson Education South Africa.

Saville, P., & Holdsworth, R. (2002). *The Occupational Personality Questionnaire in South Africa: Psychometric research perspective.* SHL Group plc, Pretoria.

Sisk, M. (2003). Telecommuting promises BCP benefits but also back-office challenges. *Security Industry News, 15,* 26 – 29.

Skyrme, D. J. (1994). Ten ways to add value to your business. *Managing Information, 1,* 20 – 25.

Tsoukas, H. (1994). *New thinking in organizational behaviour.* Butterworth, Heineman, Oxford.

Vinassa, A. (2001). Mind the gap. *People Dynamics, 19,* 30-31.

Weisenfeld, U., Fisscher, O., Pearson, A., & Brockhoff, K. (2001). Managing technology as a virtual enterprise. *R & D Management, 31*, 323-334.

Weisenfeld, B. M., Raghuram, S., & Guarud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based social support. *Journal of Management, 27*, 213 –229.

Werr, A., Docherty, P., & Stjernberg, T. (1997). The functions of methods of change in management consulting. *Journal of Organisational Change Management, 10*(4), 288-307.

Yearout, S., Miles, G., Koonce, R. H., Benette, J. L., Barton, T., & Allert, J. L (2001). Success in business. *Training and Development, 55*, 83-85.

CHAPTER 2

ARTICLE 1

COMPETENCIES NEEDED FOR VIRTUAL WORKERS

COMPETENCIES NEEDED FOR VIRTUAL WORKERS

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ABSTRACT

The objectives of this research were to identify competencies needed by virtual workers in a specific job in a financial institution in South Africa. The information gathered from the research will be utilised to make recommendations regarding future selection and training. A survey design (cross-sectional) was used in this research to meet the set objectives. The study population consisted of *(N=71)* employees in a virtual environment. The Work Profile Systems (WPS), Occupational Personality Questionnaire (OPQ), Performance Assessment Questionnaire (PAQ) and Skill Audit (SA) were administered. The results of the study indicated that 44% of the current virtual workers exhibited the competencies identified as important. Furthermore the results indicated that the current virtual workers experienced that virtualness had the greatest effect on the improvement of achieving personal as well as organisational goals. In this research self-discipline, good organisation and self-motivation were identified as the most essential skills needed by virtual workers. The limitations of the research as well as the recommendations for the organisation and future research were also identified.

OPSOMMING

Die doelstellings van hierdie navorsing was om bevoegdhede te identifiseer waaroor virtuele werkers vir 'n spesifieke pos in 'n finansiële instansie in Suid-Afrika moet beskik. Die resultate van die navorsing sal aangewend word om aanbevelings te maak in verband met toekomstige opleiding en seleksies. 'n Navorsingsontwerp is gebruik om die doelstellings van die navorsing te bereik. Die studiepopulasie het bestaan uit *N=71* werknemers wat binne a virtuele werksomgewing werksaam was. Die "Work Profile Systems" (WPS), "Occupational Personality Questionnaire" (OPQ), Prestasie Evalueringsvraelys (PAQ) asook die "Skill Audit (SA)" is in die ondersoek gebruik. Die resultate van die studie het getoon dat slegs 44% van die huidige virtuele werkers oor die bevoegdhede beskik wat as belangrik geïdentifiseer is. Verder het die resultate daarop gewys dat virtuele werkers die grootste impak deur virtualitiet ervaar het ten opsigte van die bereiking van persoonlike en organisatoriese doelwitte. In die studie blyk dit dat self-dissipline, georganiseerdheid en self-gemotiveerdheid die belangrikste vaardighede is waaroor 'n virtuele werker moet beskik. Die leemtes bevind asook die aanbevelings is geidentifiseer in die navorsing.

Globalisation, advances in technology and the changing nature of competitive environments brought along profound changes within organisations (Cleaver, 2000; Conner, 2003 & O'Brien, 2004). As organisations move into the changing world of work the new trends in organisations are to streamline operations, cut cost, and operate in non-traditional ways with fewer people (Conner, 2003). These new trends that emerged with the advancements in globalisation, encouraged organisations to evolve through various forms, from downsizing and mergers, flatter organisational hierarchy structures to the development of virtual work environments, which lead to the establishing of the new world form, virtual organisations (Conner, 2003; Fitzpatrick & Burke, 2000).

Recent technology advances such as video conferencing, internet accessibility and mobile phones made it possible for employees to exchange their traditional workplace for a workplace "without walls". Cleaver (2000), Weisenfeld, Raghuram and Guarud (2001) comment that the new virtual workplace enables people to work together independent of time or place to obtain a certain outcome without even meeting each other. According to Weisenfeld, Raghuram and Guarud (2001), this changing world of work's virtual workplace where operations operate in cyberspace will require new knowledge and skills such as information literacy and critical thinking skills from employees, and new management styles from organisations to keep everyone motivated over long distances without physical interaction.

Fisscher, Pearson and Brockhoff (2001) emphasise that the growing awareness of the need to focus on core competencies, the changing nature of competitive environments and the emphasising of the ability to leverage scarce resources reduce the time for developing and delivering products to the market. According to Fisscher, Pearson and Brockhoff (2001), this fact also results in gaining a competitive advantage over the competitors. O'Brien (2004) states that the flexibility within virtual organisations, enhances new ways to seize new business opportunities. It becomes one of the best ways to implement key business strategies and alliances that could ensure success in today's turbulent business climate. By forming a virtual organisation it can assemble the components needed (virtual organisations are working closely with their customers enabling them to identify the needs of the customers before the competition) through networking to provide a world-class solution for customers and

being able to capture the market opportunities before the competition. These facts are the most common reasons why organisations, especially within the financial sector, are moving towards "virtualness" (Hoffman, 2001& Kemp, 2000).

The biggest challenge for South African organisations is their capacity to compete in this new changing world of work, which is characterised by continuous advancements in technology, knowledge sharing and customised relationships with stakeholders (Avolio & Maritz, 2000). Arnison and Miller (2002) state that organisations in South Africa are faced with new pressures to cope with, and new challenges such as developing greater flexibility and less dependence on the traditional office concept. The focus is on new innovative and creative ways to not only exploit, but to manage these advancements in technology to create faster-paced workflow, which will result in customer growth. A study conducted by Hoffman (2002) in South Africa, found that organisations started to consider virtual work through the implementation of telework arrangements especially in the financial sector. The financial institutions were the first to start implementing and evaluating telework as an alternative in working arrangements (Avolio & Maritz, 2000).

Moving towards an age where intellectual differentiation of products is clearly the design to offer a more competitive advantage, organisations are beginning to drop their walls as partnerships and alliances emerge. In the following section the concept "virtual work" will be conceptualised.

Virtual work

"Virtual" means that work is executed from a distance or away from the traditional workplace through the utilisation of information technology (Hoffman, 2002). Gibson and Cohen (2003) suggest through their research that the utilisation of "asynchronous technologies" such as e-mail is more appropriate in cases for less complex tasks while the utilisation of "synchronous tools" such as phones and videoconferencing is best for more highly complex assignments. The best virtual collaboration tool is a simple phone call or e-mail (Gibson & Cohen, 2003).

Gaswirth (2003) identifies the changing world of work's "virtual workplace" as a workplace where employees are telecommuting and having flexible scheduling arrangements. Eight to five jobs are replaced by more flexible working arrangements. Greengard (2001), on the other hand, refers to the accessibility virtual employees have to venture online and receive information on which skills and competencies are required to receive the next promotion or to change job tracks within organisations. The employees know where they stand at any given moment through the integration of technology.

Conner (2003) and Crandall, and Wallace (1997) identify three stages of "virtualness" for the workplace that will be discussed shortly. The first stage is called the "Telecommuting" stage. In this stage employees operate from distant locations where the focus is on increased flexibility, reduction of time and costs and allowing employees to work from home. According to Goldsborough (2000), Bloomfield, Coombs, Knight and Littler (1997) telegraph and telephones were the most radical innovations supporting tele-access and the viability of virtual organisations. Networking technologies such as call distribution centres have increased the utility and convenience of telephone links with consumers by the offering of 24-hour access to office distribution throughout the world. Financial institutions were the first companies in South Africa who started implementing virtual work through the implementation of call centres (Avolio & Maritz, 2000). Research done by Hoffman (2002) and Kemp (2000) showed that telework programmes presented distinct benefits such as an increase of between 15% – 25% in productivity, a decrease in absenteeism of 80% and cost savings of up to 38% in office space.

The second stage refers to the "Front-line" stage. In this stage the employees work from mobile, remote or customer locations where the focus is on sales and customer services (Cleaver, 2000; Goldsborough, 2000; Weisenfeld, Raghuram & Guarud, 2001). Halpin (2001) estimates that roughly 19 million people around the world are currently engaged in this stage of virtualness and expects that the number will increase six-fold over the next three years due to improved communications and technologies and the reduction of costs in utilising these technologies. Many organisations will move towards these remote locations to gain advantage of

compressed time, especially organisations where delivery forms their key factor of business (Kumar, 2003).

The third stage is known as the "Cyber link" stage. The links to a physical office are loosened and the employees work in a virtual manner between various organisational entities. The virtual organisation externalises all other activities and gives them the opportunity to focus more on their core business and strengthening customer relations. Massey, Montoya and Yu-Thing (2003) agreed with Crandall and Wallace (1997) as well as Werther (1999), that the cyber link stage is the highest form of "virtualness" where employees and customers remain virtually linked, exchanging ideas and information via electronic medium (sometimes never even meeting each other in person).

For the purpose of this study virtual work could be conceptualised as work that is done from home by the utilisation of cell phones and internet to communicate with the organisation.

It is important to look at the characteristics of the "virtual organisation" to be able to determine which competencies and skills are needed to function optimally within a virtual organisation. These characteristics will be discussed shortly:

The characteristics of a Virtual Organisation

Denton and Vloegsberghs (2003), DeSanctis and Fulk (1999) as well as Dutton (1999) define a virtual organisation as an organisation that is composed of private firms or public agencies that have utilised "Information and Communication Technologies (ICT)" to transform business processes within the organisation or among themselves and other organisations, enabling new kinds of joint ventures, alliances or outsourcing arrangements. According to Robbins, Odendaal and Roodt (2003) networking forms the central characteristic of virtual organisations and they are often referred to as "networked organisations". Dutton (1999) further identifies three essential dimensions of a virtual organisation: "networking" through the use of information and communication technologies, "restructuring" into a decentralised network of companies and building a "team culture".

Pitts and Lei (2003) have found that virtual organisations have the following three characteristics: high specialisation of knowledge, rapid assembly/disassembly of project-based teams and the ability to interconnect quickly with other organisations. These characteristics will be discussed shortly.

High specialisation of knowledge: Virtual organisations will focus on one or two core value-creating activities to drive their strategies. They will concentrate their resources to dominate a central knowledge-driven activity such as product or process design, highly refined manufactory skills or specialised marketing skills. Building a core capability or skill in a central knowledge-based activity will enable the virtual organisation to become an important participant in influencing production or services to customers in the earliest stage of the life cycle. This will give the organisation a more competitive advantage in business. Continuing investing and refining the knowledge base and human capital will allow organisations to compete on the basis of agility and nimbleness through the rapid transformation of knowledge into valuable products and services. The virtual organisation is only as competitive as the quality and resourcefulness of the people that work for it (Greengard, 2001; Pitts & Lei, 2003).

Rapid assembly/disassembly of project-based teams: The ability to bring together people with different insights into project-based teams that work exclusively on a given product, service or technology, places a high premium on fostering open communications among people. Combining individuals from suppliers and customers can promote the development of products and technology even faster, and that provides a better competitive advantage to organisations. The key to success lies in the effective coordination of the different individuals in the team and stimulating them to perform optimally, enhancing the team's performance at the end of the day (Pitts & Lei, 2003; Queyssac, 1998).

Ability to interconnect quickly with other organisations: Virtual organisations need not only to coordinate their activities with a wide variety of different suppliers, customers and partners but also need to be able to connect and link up with other organisations quickly and adjust easily to different product development time schedules, product development practices, design formats, communication patterns,

customers order fulfilment systems and technology processes. The virtual organisation needs to be more flexible and compatible and is specially designed to promote faster coordination and communication within its own organisations as well as among other organisations (Pitts & Lei, 2003; Weisenfeld, Raghuram & Guarud (2001). Conner (2003) and Queyssac (1998) state that the virtual organisation's focus is on higher quality products, lower cost of products and faster delivering of products to the market, before their competitors. As competition increases and technology advances more fluid and flexible entities evolve that result in adapting more virtual elements to be able to respond rapidly to customers' changing demands.

Cleaver (2000) and Mclntosh (1995) emphasise that companies are remaking themselves internally to adapt to the new virtual reality in the following ways; Structures become more versatile and hierarchies become more flat, flexible and coupled together. The ability to expand and contract according to the needs of the customer will differentiate the success rate from that of traditional organisations. Suppliers are involved in designing and developing new products. Strategic direction is focused on customer service and becomes the core business of the organisation. Bureaucratic barriers to change are toppled. Accountability for results is revised. Processes are revised on a regular basis rather than focusing on tasks alone. Teamwork is rewarded and performance-based incentives (pay according to the employee's performance and outcomes achieved) are tied to obtain the desired outcomes.

During the past 20 years, information and communication technologies have been associated with what Freedman (1996) called "a new techno-economic paradigm", in contrast to the "Fordist" paradigm that dominated mass production-oriented organisations. The information and communication technology (ICT) paradigm is information intensive and relies heavily on technology as mean for communication. The virtual organisation is in line with many characteristics associated with the new ICT paradigm, however, seeks to create more flexibility by being anchored in networks rather than ownership of a single organisation (Arnison & Miller, 2002).

Virtual organisations promise to reduce hierarchical patterns of communication in favour of a flatter organisation as stipulated by Cleaver (2000) and Mclntosh (1995).

The virtual organisation's structures consist out of project teams and ad hoc teams that cut across departmental boundaries. Table 1 below illustrates the changing paradigm experience during the past 20 years within organisations that include the fordist-, post fordist information and communication technology (ICT) paradigm, right through to the changing world of work's virtual organisation.

Table 1

Changing paradigms and the virtual organisation (Freedman, 1996 and Miles and Robins, 1992 as illustrated in Desanctis and Fulk, 1999, p481).

Structures and Processes	Fordist	Post-Fordist ICT Paradigm	Examples of Virtual Organisation
Technology	Low technology, energy intensive	High technology, information intensive	Organisation is a network
Focus of ICTs	Automation and mechanisation	Systematisation	Electronic data interchange (EDI)
Design and production process	Sequential	Concurrent	Collaborative work, screen sharing
Production	Standardised mass production of fixed product lines	Customised production of changing products	Organised for innovation, mass customisation
Plant and equipment	Dedicated plant and equipment	Flexible production systems	Outsourcing production to maintain flexibility
Ownership	Single large integrated organisation	Networks, profit centrers, internal markets	Outsourcing, spin-offs to maintain lean organisations
Management control structures	Hierarchical, vertical chain of command	Flat horizontal structures, lateral communication	Coordination through the marketplace, competition
Work process	Departmentalised	Integrated in teams across departments	Project and ad hoc teams
Learning and development process	Centralised	Distributed intelligence	Strategic protection of core tactic knowledge
Job skills required	Specsialised and bureaucratic	Multi-skilling, professional and entrepreneurial	Employees involved in more aspects of the business

According to Arnison and Miller (2002) organisations in South Africa find themselves in making the shift from the post-fordist ICT paradigm to the new virtual paradigm. This paradigm shift is still in its initial stage. The democratic selections in 1994, brought along that organisations were faced in South Africa with a lot of new challenges. More technology is being incorporated into the organisations with the focus on intranetworking. Organisations focus more on their core business and outsource other functions. Project and ad hoc teams are being used more frequently and involving employees in more aspects of business are new phenomena that are growing rapidly within South African businesses.

On the other hand, internet technology has driven a process of supply chain virtualisation, transforming conventional work practices across organisations in an effort to provide a better understanding of this emerging phenomenon (virtualness). Ho, Au and Newton (2003) presented three key elements of the supply chain that form a crucial part of the virtualisation in organisations, namely formation of virtual trading communities, emergence of virtual knowledge communities and relocation and integration of inter-organisational business processes in cyberspace. These three elements of the supply chain virtualisation will be discussed briefly.

The development of "virtual trading communities" represents a structural change of marketplace where economic agents adopt different strategies in three distinct phases such as intermediation, disintermediation and reintermediation. In the intermediation phase organisations pursue electronic intermediation strategies, and develop themselves only to create value in the marketplace by leveraging their middleman position to deliver services and products that have not been available before. The "disintermediation" phase only seeks to disintermediate the traditional middleman for gaining a bigger market share by acting as provider of a technological solution. "Reintermediate" phase fights back where the traditional middleman whose interest has been harmed re-establishes himself as an e-commerce-able intermediary (Bosch-Sejtsema, 2002 and Chircu & Kauffman, 1999).

In the emergence of virtual knowledge communities supply chain members actively engage in intellectual discourse and knowledge sharing. Hamburg and Rehfeld (2002) and Kollock (1999) point out that individuals may be motivated to contribute valuable

information and advice to virtual communities if the communities will provide them with useful help in return, if individuals desire to enhance their reputation in the community and if the individuals want to enhance a sense of efficacy, as they believe that changes in the community are attributed to their contributions.

Relocation and integration of inter-organisational business processes in the cyberspace refer to business processes that took place in the physical space and are now undertaken in the virtual space (cyberspace). With the new online trading and business alliances of virtual economic agents and supply chains, members can perform these business processes in a more integrated manner by the digitising of information that flows through these inter-organisational processes, which ensure speedy exchange among related parties via the electronic linkages (Ho, Au & Newton, 2003).

If virtual organisations are the new way of doing business in future, it is crucial then to know what the advantages entail for business. In the next section the advantages of virtual work within organisations will be discussed.

Advantages of virtual work and virtual organisations

Gaswirth (2003) and Sisk (2003) state that virtual work enables employees to perform duties from their home offices by accessing their private networks. Virtual work enables organisations to cut costs such as reducing the need for floor space and allows them to offer in return more competitive pricing to their customers. "Virtualness" took on an increased importance after the events of September 11th 2001 in New York. Some organisations came to a standstill due to the lack of accessibility to offices and people started working from homes. This resulted in the realisation that people could execute their work away from the office. Companies such as King Financial Services and Watson Wyatt Worldwide considered virtual work as an added guarantee that if something goes wrong business could carry on (Gaswirth, 2003).

According to Hoffman (2002) and Kemp (2000) the following advantages were found in their research on virtual work in South Africa. The productivity of employees increased between 15% and 25%. Client support improved due to the fact that

employees were responsible to resolve client's problems as quickly and sufficiently as possible. Employees became more organised in their work because they needed to plan in advance to meet customer needs. Absenteeism decreased by 80% and the employee's quality of worklife, morale and motivation increased. Employees were able to balance family and worklife that led to the decrease in absenteeism. Most of absenteeism in organisations was due to family responsibilities (Mondy, Noe, & Premeaux, 2002).

Virtual work and virtual organisations will enable customers to choose between several outstanding solutions and weed out weak solutions due to the high priority virtual organisations place on networking for the best-talented people, newest information on product developing and customer services. According to Mclntosh (1995), the virtual organisation gives rise to strengthening talent pools and exploiting fleeting but lucrative business opportunities.

Hagel and Armstrong (1997) emphasise that the combination of accelerating growth and improving profitability that is created by virtual organisations should have a huge impact on the potential shareholder value. Based on this high profitability and projected growth rate of 20%, Fitzpatrick (2000) suggests that shareholder value for ten years in the future is estimated to be more than US $4 billion, given the opportunity that a broad range of entrants providing different kinds of products and services to the customers at low costs will be crowding into the virtual organisation.

Having highly competent people with the right competencies will definitely ensure the sustainability of the organisation, as well as provide a competitive edge for future business. The ability of management to address factors such as morale, quality of worklife and motivation will influence the success rate of "virtualness" in organisations. According to the literature on virtual work the following disadvantages and problems facing virtual organisations can be identified and will be discussed briefly.

Disadvantages and problems virtual organisations are faced with

One of the biggest disadvantages facing virtual organisations, according to Blau and Wolff (1997) and Garfoot and Labrow (2003), are overestimating the power of technology and assuming that it facilitates virtual working. It can hinder good communication when used incorrectly.

According to Weisenfeld, Fisscher, Pearson and Brockhoff (2001), virtual organisations are faced with two special problems: firstly it is finding the balance between keeping information confidential and giving only information necessary for customers. The smallest leak of information could result in the competition utilising the information to its own benefit. Secondly, the ability of members and customers to identify themselves with the virtual company as a reliable business partner will determine the effectiveness of virtual organisation. If these problems are not addressed the advantages of the virtual organisation cannot be grasped. Weisenfeld, Fisscher, Pearson and Brockhoff (2001) identified in their research that commitment; managing information effectively as well as interface management could be the key to solving these two problems in the virtual organisation.

Virtual organisations often make use of virtual teams to meet their objectives. One of the disadvantages in virtual organisations in relation to virtual teams is the lack of physical contact. Virtual teams are often managed from remote locations. A manager's inability to address problems in these circumstances and a lack of maintaining ongoing interactions can damage working relationships. If the team loses the mutual trust that builds the reputation of individuals, the virtual team will lose its commitment and performance and will result in disintegration of teamwork (Gaswirth, 2003). According to Jerry Klawitter, chairman of the Securities Industry Association the ability to control the virtual teams effectively could be seen as one of the biggest problems to be addressed in a virtual organisation (Sisk, 2003).

Researchers such as Cleaver (2000) and Alexander (1997) note that there is a lack of physical proximity that changes the interactions between management and employees in a virtual organisation. Managing the lack of physical proximity effectively through

video-conferencing or telephoning can motivate employees towards integrity and honesty.

Virtual organisations outsourced almost all their no-core activities and that resulted in not having the same size as compared with larger more vertically integrated organisations. The virtual organisation will be faced with the disadvantage of being "out muscled" by larger organisations that will likely compete on the basis of low-cost leadership and economies of scale that form the important drivers of competitive advantages for standardised products and services (Pitts & Lei, 2003).

Virtual organisations specialises in gathering information from their customers so that they can provide personalised recommendations and solutions, and build close, lasting relationships with a vast number of different distributors and manufacturers that will ensure speedy and smooth fulfilment of customer's needs. Training is crucial in virtual organisations to ensure the speedy and smooth fulfilment of customers' needs It is important to acknowledge the difference between training within a traditional organisation and that in a virtual organisation. The next section will focus on how training is done in a virtual organisation.

Training in virtual organisations

According to Humes (2003) and Mclntosh (1997) the way in which training is conducted in virtual organisations differs a lot from that in traditional organisations. Virtual organisations involve every employee while the line manager within traditional organisations decides who will go for what type of training (Humes, 2003). The focus of the training outcomes within virtual organisations is delivering "just-in-time" training through frequent consultation with customers to analyse their problems, determining appropriate solutions, and establishing schedules for relevant courses to address the solutions (Johnson, 2003). The firm, Service Master, stated why they involve all the employees in training and developing. Their vision through this is to promote a commitment for continuous improvement, to exceed the needs set by customers before their competitors do: to establish measurable standards for evaluating success and to provide processes to adapt to change (Mclntosh, 1995).

Allert (2001) and Cohen (1997) state that employees of virtual organisations understand that the marketplace determines the lifecycles of products as well as training programmes. At traditional organisations their success for training is often measured according to how many employees complete the specific training, and not necessarily to how successful they are in utilising the information learned. At virtual organisations the managers often compete for participants by using written proposals to "bid" for jobs against external consultants. The best candidate for the best job as quick as possible is the focus in the new virtual world. Allert (2001) further states that using mentorship as a training tool in virtual organisations can enhance not only the productivity of a newly appointed virtual employee but also increase the feeling of connectivity to the organisation where personal contact is nearly "non-excistent".

Mclntosh (1995) and Queyssac (1998) state that virtual organisations use competency-based (acquiring the right knowledge and skills needed to perform in the job) learning that enables managers and employees to create meaningful plans for career development. Hewlett-Packard, one of the leaders in competency-based learning, indicated that their employees move through the education system according to the outcomes of their competency-based growth training system. This refers to knowledge, skills and attitudes that the employees need to master, and traits they need to cultivate at each stage before they can move forward to the next level (Mclntosh, 1995). According to Pitts and Lei (2003) this distinctive level of specialisation gives the organisation considerable negotiating power with its suppliers. Customers and partners become obsolete if there are new entrants or competitors that can match the organisation's resources and skill level. Greengard (2001) found in his research that organisations now offer corporate universities or e-learning in the new virtual realm. This fact enables employees to venture on line and to have instant information available on which courses, skills and competencies are required to receive promotion or to change jobs. The employee can sign up at any given time without waiting for vacancies or when the course will be presented again even management approval is not necessary.

Virtual organisations make use of staff members as training facilitators to provide on-the-job training to deliver the required expertise, because time is crucial. This work-site training and delivering enhances teamwork (Allert, 2001). Attaram and Attaram

(2003) reported further that General Electric used the strategy to turn current problems into learning opportunities through the utilisation of case studies, team pilot projects and simulation exercises. The traditional organisation's menu for learning consists of manuals with specific time frames and interaction with the course facilitator while the virtual organisation's learning menu consists of different methods such as interactive computer technology, self-directed learning tools and customised printed materials (Humes, 2003).

Virtual organisations differ from traditional organisations in the way they view their customers. Customers are seen as partners. Feedback received from customers are utilised to form the basis of training programmes (Pitts & Lei, 2003). To be able to cope with the challenges in virtual organisations it is important to acquire the right competencies. In the next section the emphasis will be on competencies needed within a virtual organisation.

Skills and competencies in the virtual organisations

Greengard (2001) and Allert (2001) state that virtual organisations select people on the basis of their competencies and how they will fit in the virtual environment. Coetsee (2002) defines "competencies" as the individual's traits that lead to superior performance. "Competence" refers to the application of knowledge and the interpersonal, decision-making, and psychomotor skills expected for a specific job while "competent" means properly or well-qualified and capable to do the job effectively. In other words, "competence" indicates "what" is needed for a certain job and "competencies" indicates "how" the job must be done. Saville and Holdsworth (2002) refers to competencies as human attributes needed to perform the duties of the job. These attributes include knowledge, skills and personality characteristics (Saville & Holdsworth, 2002).

According to Saville and Holdsworth (2002) skills refer to a person's abilities and experience to do the job successfully. Skills constitute core competencies and it is important to recognise opportunities whereby they are necessary for blending the functional expertise with that of other people in new and interesting ways. Knowledge

refers to what an individual has already learned and can apply to relevant situations (Mondy, Noe, & Premeaux, 2002). Personality refers to individual differences in characteristics that are expressed in a relatively consistent manner (Louw, 1998). General dimensions of personality such as conscientiousness, assertiveness, loyalty, adaptability, flexibility, innovativeness and creativity, learning-orientated and emotional stability are consistently linked to successful job performance within a virtual environment (Denton & Vloegsberghs, 2003).

Utilising a personality questionnaire is a mean of determining the broad range of competencies on which the individual impacts. One of the well-researched questionnaires available within the occupational field is the Occupational Personality Questionnaire (OPQ) of SHL (Saville & Holdsworth, 2002). This questionnaire is used in over 50 countries and has been translated into 20 languages. The popularity of the OPQ is due to its culture fairness, comprehensiveness, flexibility, and relevance as well as its having been proven to be valid and reliable. These characteristics make the OPQ to be one of the leading Occupational Personality Questionnaires in the world (Nienaber, 2003 & Saville & Holdsworth, 2002).

Yearout, Miles, Koonce, Benette and Barton (2001) emphasise the importance to employ the right kind (being able to cope with the challenges in the virtual environments) of people for virtual work. Employees in a virtual organisation perform their work outside the definition of place, in other words they execute their duties from a remote location in comparison with the traditional office place. These researchers identified the following characteristics of a successful virtual employee to look for when hiring employees for virtual work: The employees need to be internally motivated, have strong communication skills specifically on the phone and on e-mail, be confident in making decisions and have excellent problem-solving skills, and lastly should be "techno wise" enough to do their own troubleshooting on computer systems to find the help they need.

Holmqvist (2003) found in his research on virtual organisations that the leader in a virtual organisation should take an ongoing responsibility for the whole extended enterprise, which includes partners and customers. The leader should have the ability to inspire and motivate employees as well as trusting the operations of customers,

partners and employees without having direct authority or personal control over them. Attaram and Attaram (2003) as well as Massey, Montoya and Yu-Thing (2003) state that strong leadership becomes critical in the role of managing information technology through being able to utilise information effectively as well as sufficiently to customers and stakeholders involved.

Garfoot and Labrow (2003) as well as Revenbark and Frost (2003) state that companies learned to utilise interdepartmental teams to work together on short-term initiatives through integration of technology. This gave rise to "virtual teams" and could be defined as members that are interdependent in their tasks, share the same responsibilities for obtaining common objectives and collectively manage their relationships across organisational boundaries. Gibson and Cohen (2003) as well as Rivenbark and Frost (2003) suggested three "enabling conditions" that need to be present for virtual teams to perform with excellence. The first condition refers to "shared understanding" because people tend to have different ways in which they perceive tasks. To be successful in a team the members should develop a shared understanding of their goals, work, tasks and the work process. The challenge lies in the ability to bridge the gaps effectively (Rivenbark & Frost, 2003). The second condition focuses on "integration" whereby people in virtual teams are clustered together according to coupled centrers of competencies (COCs'). These COCs refer to competency groups such as managerial qualities, entrepreneurial qualities, professional qualities and personal qualities. The success of the team will rely on the manner that these competencies are integrated to create value, develop products and deliver services. The challenge for managers is to recruit the right persons with the right kind of competencies for the right job. Massey, Mitzi, Montoya and Yu-Thing (2003) state that through the content and clusters analysis, distinctive patterns of interaction are identified and then examined to determine how these patterns are associated with the differential levels of the performance of global virtual project teams' (GVPT). The third condition refers to "mutual trust". When mutual trust is established, an environment is created where team members feel safe and are willing to explore new ways and taking risks. This might put the virtual organisation in a more competitive advantage over their competitors (Gibson & Cohen, 2003).

Pitts and Lei (2003) state that for working together and being able to coordinate people with different cultures, mind-sets, backgrounds, expertise and age groups, managers need the ability to manage these diversities effectively. Managing cultural diversity effectively has not only become a vital core competence for traditional organisations but even more vital for virtual organisations whereby personal contact is most of the time non-existent. Coordinating these complex tasks and at the same time being able to stay receptive to new ideas, technologies, creative techniques and market trends are sone of the biggest challenges virtual organisations are faced with. This might form the basis for future organisations' visions to rather shift towards incorporating virtual teams than relying on individual performance. These virtual project teams are rising in importance in almost every technical and professional endeavour. Utilising virtual project teams will enable organisations to share and bring together different insights and technologies to create new product concepts faster. Concerning the effectiveness of these teams, a high premium is placed on fostering open communications among people and emphasising the importance to possess strong interpersonal and relationship skills so that work could proceed smoothly (Denton & Vloegsberghs, 2003).

Gibson and Cohen (2003) as well as Attaram and Attaram (2003) state that the ability to communicate and share information through the electronic network will sustain and improve interpersonal relations without meeting the team members in person. The challenge lies in developing communication norms that will facilitate technology and bridge the differences. Research showed that, when available, video-based conferencing is most effective and that telephone communication fosters a better mutual understanding than only relying on e-mail. Managers should remember to be effective during video-based conferencing: they need to be far better prepared and more actively involved than in regular meetings (Gibson & Cohen, 2003).

Furthermore, managers should not only recognise each team member's competencies but also understand their roles and added value by utilising their competencies in such a way as to obtain optimal functioning. The members should be selected, supported and trained according to their distinctive knowledge and skills as a team. By incorporating incentives and rewards the outcomes of the teams functioning could be enhanced as a whole. Managers should gather information regarding the

environment, attitudes towards virtual work, job performance, job satisfaction and travel patterns in order to evaluate the success of "virtualness". Rewards given due to the outcomes of the individual's performance should be utilised to motivate personal satisfaction (Attaram & Attaram, 2003; Massey, Mitzi, Montoya & Yu-Thing, 2003).

Rivenbark and Frost (2003) showed that virtual managers needed to manage less and lead more. They should be visionaries by envisioning the organisation five years ahead, creative in directing management expectations in that direction and should be able to withstand any organisational ripples by cauterising them effectively. Gibson and Cohen (2003) focused on the virtual managers' ability to understand their markets, while assessing the value various products add to the organisation, addressing different issues of customers and drafting effective strategies to customise products and provide timely, cost-effective services. These key management competencies refer to having knowledge of the industry in which the organisation operates, awareness of business issues and pressures, effective communication and interpersonal skills (Gibson & Cohen, 2003).

Garfoot and Labrow (2003) and Mclntosh (1995) emphasise the following competencies needed by employees to be successful within virtual organisations. The employees should be able to identify their own strengths and weaknesses and gain knowledge on the current as well as future skills necessary for being successful. Employees should be able to evaluate their own performance and potential on a monthly basis against the current organisational standards and to envision performance and potential necessary for future success. Furthermore, employees should be able to select appropriate training techniques from various learning opportunities, assessing their own career goals, implementing their development plans and continuously evaluating their own progress in comparison with global standards.

Hancock (1995) and Humes (2003) emphasise in their research the importance to have information literacy as the key competency needed to function optimally in a virtual world. Information is everywhere available and being information literate is the key to helping employees to keep up with changes in their jobs, careers, self-improvement and upgrading of their skills. "Information literacy" refers to the ability to access, evaluate, organise and use information from a variety of sources.

Information literacy is not the same as computer literacy that refers to requiring a technological know-how to manipulate computer hardware and soft-ware. Being information literate requires being able to define a subject or area of investigation, select appropriate terminology that expresses the subject under investigation, formulate a search strategy, analyse the data collected for value, relevancy, quality and suitability and at the end being able to turn this required information into knowledge. Darch, Karelse, and Underwood (1997) emphasise that information literacy requires some level of critical thinking that forms the dynamic link between information needed and the sources required satisfying that need.

Greengard (2001) identifies skills that virtual employees need to function optimally such as clear business thinking, creative thinking, conflict resolution, good interpersonal relations, ability to work effectively in a team, excellent verbal communication skills, integrity and honesty and effective negotiation and marketing skills. These skills will enable virtual employees to work effectively in a virtual organisation where there is no physical contact with the manager and customers.

To summarise, it can be said, according to Hoffman (2002), Kemp (2000) and Montana State personnel division (2000), that the following competencies can be identified that will determine success in a virtual environment. Employees in a virtual organisation should be self-sufficient. Furthermore, employees should familiarise themselves with job requirements, have a high level of technical competency and computer literacy, be able to nurture relationships from afar, as well as be organised and self-disciplined, result-orientated, self-motivated and responsible.

One of the best ways to develop, teach and assess competencies is to demonstrate how competencies are the link to good business performance. Vinassa (2001) state that competencies must be measurable and easy to understand. Employees must realise how competencies relate to the business.

Feedback from clients, coaches, competitors, business intelligence and decisions can be utilised to benchmark and appraise individual core competence profiles as well as pointing out the specific learning areas in which employees need training and development (Gibson & Cohen, 2003).

The opportunity to use already developed skills and also develop new skills will help employees to achieve their goals and aspirations (Goleman, 1998). Virtual organisations need to cultivate human resource practices that promote innovation, experimentation and willingness to risk (Pitts & Lei, 2003).

Virtual work is becoming an increasingly important mode of work with the integration of information technology. The ability of a virtual organisation to employ the right people with the right competencies emphasises the importance of determining competencies for virtual workers to be effective within the virtual work. For this reason the researcher identified competencies needed for virtual workers for.

This will be discussed shortly in the next section.

METHOD

Research design

For the purpose of this study a survey (cross-sectional) design will be used to identify competencies needed for virtual workers in a specific job (Business dealer Officer) at a financial institution in South Africa and to make recommendations for future training and selection purposes. Both the Work Profiling System (WPS) and Occupational Personality Questionnaire (OPQ) instruments are currently used at this financial institution as part of their selection process. The Performance Assessment Questionnaire (PAQ) and Skill Audit (SA) that were developed by the researcher will also be used to offer additional support to the results gathered from literature and above-mentioned WPS and OPQ.

Participants

The participants were staff members of a financial institution in South Africa. The total population consisted out of 185 Business Dealer Officers (BDO) working at a financial institution in South Africa. A sample of 80 Business Dealer Officers was selected according to the following criteria, BDO within a ± 100km radius from the

head office based in Johannesburg. This included the Gauteng and Vaal Triangle regional offices. The real study population ($N = 71$) made up 38 % of the total Business Dealer Officer's population at the financial institution selected for this research.

In Table 2 the proposition of the participants is given.

Table 2

Proposition of the participants

Proposition	Percentage
1. Gender	
• Male	84,52%
• Female	15,49%
2. Ethnic groups	
• Coloured	8,45%
• Asian	2,82%
• White	88,73%
3. Age	
• 20-30years	32,39%
• 30-40 years	42,25%
• 40-50 years	18,31%
• 50 years+	7,04%
4. Educational Qualifications	
• Matric	43%
• Diploma	33%
• Degree	17%
• Post Degree	7%

A total of 84,52% were females and 15,49% of the sample consisted of males indicating that females dominated the study population. According to the financial institution participating in this research, this specific position (Business Dealer Officer) attracts more females than males due to the outline of the job enabling them to balance work and family life. The sample further consisted of the following three

ethnic groups, Coloured (8,45%), Asian (2,82%) and White (88,73%). The White ethnic group composed the greatest part of the study population.

The following age distribution was found within the sample that indicated a more even distribution, namely: 32,39% of the study population was between the ages of 20 – 30 years, 42,25% between 30 – 40 years, 18, 31% between 40 – 50 years, while 7, 04 % was older than 50 years. The highest percentage was found in the age group between 30 – 40 years. Educational Qualifications of the participants reflected the following: 43% were matriculated, 33% had diplomas, 17% had degrees, whereby 7% obtained a post degree qualification. It was noted that most of the study population had matric, which could be explained by the fact that matric is the minimum qualification required for the position of a Business Dealer Officer.

Measuring instruments

The **Work Profiling System (WPS)** is a job analysis method that is widely used in providing a thorough and systematic basis for a job analysis. The WPS provides a job description, person specification information as well as a person-job matching (Mondy, Noe & Premeaux, 2002). The Work Profiling System (WPS) was used to identify the most relevant competencies needed within a specific virtual job. The WPS is based on an analysis of the tasks, activities and work context that comprised by the job. The WPS requires a "Job Description Report" that provides fundamental information about a job, such as a clear description of the job title, location, reporting structure, main purposes, responsibilities and objectives of the job. Essential work activities are defined as task statements taking into account the importance of the task and the time spent performing the tasks. The selection of employees that participated in the WPS knew the specific job well and provided ratings on the essential activities that comprise the new virtual job. The following employees were selected on the basis of their knowledge of the job and their excellent performance, a Relationship Manager (top performer for 2003) two male Business Dealer Officers (top performers for 2003 in their region) and one female Business Dealer Officer (top performer in her region for 2003). The "Person Specification Report" identifies the most job relevant competencies needed, based on the analysis of the tasks, activities and work context

of the job that is being evaluated. These competencies are based on SHLs competency model called "Inventory of Management Competencies (IMC)".

The **Occupational Personality Questionnaire (OPQ)** is a self-report personality questionnaire. The OPQ indicates the persons' work preference and gives an overview of the individual's "likely way" of behaving at work (Saville & Holdsworth, 2002). The results of the OPQ profiles can indicate a range of competencies in which the typical way the individual behave is likely to impact on. Information gathered from the Occupational Personality Questionnaires (OPQ) will be used to identify the broad range of competencies the current virtual workers have and compare the competencies with the competencies identified by the IMC profile of the WPS to be important for virtual workers. The OPQ 32i was used in this research as it relates to success factors in the world of work (Saville & Holdsworth, 2002). The structure of the OPQ 32i includes three broad domains, namely relationships with people, thinking styles and feelings as well as emotions that can be subdivided into 32 work-related characteristics. The OPQ 32i has an ipsative (forced choice) format whereby the individual has to choose from options indicated in a block of four statements those which are most and least like them. The OPQ was originally developed in the United Kingdom as a part of a multinational research project under the leadership of Prof. Peter Saville and became available in South Africa in 1994 under the leadership of Prof. Hennie Kriek. The OPQ version 32i was launched in July 1999 and can be successfully used for the following applications: selection, assessment and development centres, performance management, team building, counselling, operational change and redesign as well as for research purposes. According to Saville and Holdsworth (2002) the OPQ has undergone thorough development to ensure that the questionnaire is reliable and indicated the average alpha reliability for the OPQ to be 0,75. According to Nunally and Bernstein (1994) these scores are acceptable for research purposes.

The **Performance Assessment Questionnaire (PAQ)** was developed by the researcher according to the information gathered from the literature regarding the effect of virtualness on performance. The (PAQ) instrument was developed to determine how the current virtual workers experienced the impact virtualness had on their performance as Business Dealer Officers, since they went virtual in October

2002. The individual had to use a 4-point rating scale (1 = Slightly worse, 2 = Remain the same, 3 = Slightly improved and 4 = Greatly improved) to evaluate the 15 statements according to the change in performance that was experienced since he/she went virtual (see annexure 1). The Cronbach alpha indicated a 0,94 validity and an average inter-item correlation of 0,53. According to Nunnally and Bernstein (1994) these scores are acceptable. The reliability according to the factor analysis indicated two factors that explained 65% of the validity for the PAQ questionnaire. A second-order factor analysis indicated factors with eigenvalues higher than one. These factors can be grouped together and can be labelled as Personal goals (8,40) and Organisational goals (1,39).

The **Skill Audit** (SA) was developed by the researcher according to the ten skills identified in literature to be essential for virtual workers and to be used as a supporting tool to verify the skills needed by virtual workers to be successful. The Skill Audit consists of ten items that reflect the ten most important skills needed to be successful within a virtual environment, which were identified by Attaram and Attaram (2003), Garfoot and Labrow (2003), McIntosh (1995), Pitts and Lei (2003), Revenbark and Frost (2003), Sisk (2003), Skyrme (1994). The individuals used a 10-point rating scale (1 for most important and 10 for least important) to indicate which of these ten skills is most important or least important to perform optimally within a virtual environment (see Annexure 2).

In using these four instruments, competencies for virtual workers within the specific job will be compiled which will then be given to the organisation to use as a benchmark when doing selection of potential employees for this specific job, and the experience of current virtual workers on how virtualness influenced their performance will be used to make recommendations for future training.

Research procedure

The Work Profiling System (WPS) was conducted and the IMC profile of the WPS was used to indicate the competencies needed for virtual workers in a specific job. The Occupational Personality Questionnaire (OPQ) was administered to a total study population of (*N=71*) Business Dealer Officers. Over a two-month period five

participants per day were scheduled from Monday to Friday to complete the Occupational Personality Questionnaire (OPQ). Some of the Performance Assessment Questionnaires (PAQ) and Skill Audits (SA) were completed on the same day as the Occupational Personality Questionnaire (OPQ), while the rest were e-mailed to the different regions for completion and later forwarded to the researcher. The rationale for this was to identify competencies needed for virtual workers and to compare the current competencies of virtual workers with the competencies identified by the IMC profile of the WPS as being important for virtual workers in this specific job. Further, to identify how the current virtual workers experienced the influence virtualness had on their performance and to identify the skills needed for virtual workers to be effective, and compare them with the skills rated by the current virtual workers to be important.

Statistical analysis

The S.A.S (2000) was used in determing the following descriptive statistics, Cronbach alpha coefficients, inter-item correlation coefficients and confirmatory factory analysis will be used to assess the reliability and validity of the measuring instruments. Nunnally and Bernstein (1994) indicated Cronbach alpha coefficients of $\alpha > 0,75$ to be useful for research purposes. According to Clark and Watson (1995) the average interitem correlation coefficient (which is a straightforward measure of internal consistency) of $0,30< r < 0,50$ is a useful index to supplement information supplied by coefficient alpha. Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) will be used to analyse the data. Descriptive statistics rather than inferential statistics were used to analyse the data to decide on the significance of the findings. Factor analysis was used to indicate the factors that explain most of the results. By utilising the eigenvalues higher than one, factors could be identified that had an impact on the research (Cohen, 1998).

RESULTS

Table 3 shows the descriptive statistics, the Cronbach alpha coefficients and the mean inter-item correlation coefficients of the Performance Assessment Questionnaire (PAQ).

Table 3

Descriptive Statistics, alpha coefficients and inter-item correlation coefficients of the Performance Assessment Questionnaire (PAQ)

Item	Mean	SD	r (Mean)	α
Work goals	35,42	8,43	0,76	0,94
Time management	35,31	8,35	0,70	0.94
KPA's	35,54	8,55	0,64	0,94
Planning	35,33	8,43	0,71	0,94
Organisation	35,44	8,33	0,73	0,94
Productivity	35,41	8,29	0,86	0,93
Relationship with manager	35,57	8,57	0,57	0,94
Management confidence	35,39	8,54	0,54	0,94
Organisational liaison	35,43	8,44	0,71	0,94
Product improvement	35,52	8,37	0,82	0,94
Customer orientation improvement	35,39	8,50	0,61	0,94
Attitude	35,28	8,38	0,77	0,94
Balancing family & work	35,59	8,46	0,66	0,94
Challenges	35,26	8,43	0,73	0,94
Career development	35,33	8,49	0,68	0,94

The Cronbach alpha coefficients of the Performance Assessment Questionnaire (PAQ) in Table 3 are considered to be good compared to the guideline of $\alpha > 0,75$ (Nunnally & Bernstein, 1994). The inter-item correlations for the Performance Assessment Questionnaire (PAQ) are higher than the guideline of $0,30< r < 0,50$ (Clark & Watson, 1995). The assumption could be made that the study population was not really honest in the completion of the Performance Assessment Questionnaire (PAQ). This might also explain the high Cronbach alpha coefficients of $\alpha = 0,94$.

Table 3 shows that the highest inter-item correlations for the Performance Assessment Questionnaire (PAQ) are productivity (0,86) and product improvement (0,82). The Cronbach alpha coefficient of productivity is slightly lower than the rest of the items of the PAQ. The inter-item correlation coefficients vary between 0,54 (Management confidence) and 0,86 (Productivity).

Factor analysis was used to indicate the factors that explain most of the results. By utilising the eigenvalues higher than one (Cohen, 1998), factors could be identified.

Table 4 indicates the Factor Analysis of the Performance Assessment Questionnaire (PAQ).

Table 4

Factor Analysis of the Performance Assessment Questionnaire (PAQ)

Item	Factor 1	Factor 2
Work goals	0,45	0,70
Time management	0,81	0,21
KPA's	0,30	0,70
Planning	0,81	0,22
Organisation	0,59	0,51
Productivity	0,67	0,59
Relationship with manager	0,22	0,70
Management confidence	0,02	0,88
Organisational liaison	0,70	0,35
Product improvement	0,79	0,39
Customer orientation improvement	0,80	0,09
Attitude	0,45	0,70
Balancing family & work	0,48	0,53
Challenges	0,66	0,42
Career development	0,53	0,50
Expl. variance	5,36	4,43
Prp. total	0,36	0,30

Fifteen performances related questions were asked. Using the above-mentioned ratings, the study population had to indicate, to what extent virtualness impacted on their performance. According to the study population's feedback, the first order factor analysis indicated that virtualness had a profound impact on time management, planning, customer orientation improvement, product improvement and organisational liaison. The questions asked for these items could be summarised under personal goals. According to the study population's feedback, the second-order factor analysis indicated that virtualness had a profound impact on improving management confidence, work goals, KPA's, relationship with manager and attitude towards work. The questions asked for these items could be summarised under organisational goals.

Table 5 reflects the descriptive statistics of the study population's current competencies that were extracted from the Occupational Personality Questionnaire (OPQ).

Table 5

Descriptive Statistics of the study population's current competencies that were extracted from the Occupational Personality Questionnaire (OPQ) Competencies

Item	Mean	SD	Skewness	Kurtosis
Leadership	3,352	1,109	0,095	-0,614
Planning & organising	2,676	1,079	0,124	-0,349
Quality orientation	3,028	1,068	-0,129	-0,306
Persuasiveness	3,633	0,914	-0,467	-0,008
Specialist knowledge	2,704	0,884	0,115	0,275
Problem solving & analysis	2,507	0,734	-0,693	-0,191
Oral communication	3,507	0,983	-0,622	0,232
Written communication	2,521	0,842	0,668	0,137
Commercial awareness	3,915	0,874	-0,228	-0,889
Creativity & innovation	2,239	0,977	0,062	-1,158
Action orientation	3,732	1,068	-0,379	-0,212
Strategic	2,929	0,899	-0,585	0,839
Interpersonal sensitivity	2,464	1,025	0,424	-0,036
Flexibility	2,464	0,983	-0,131	-0,05
Resilience	3,112	0,887	-0,099	0,331
Personal motivation	3,591	0,871	0,510	-0,883

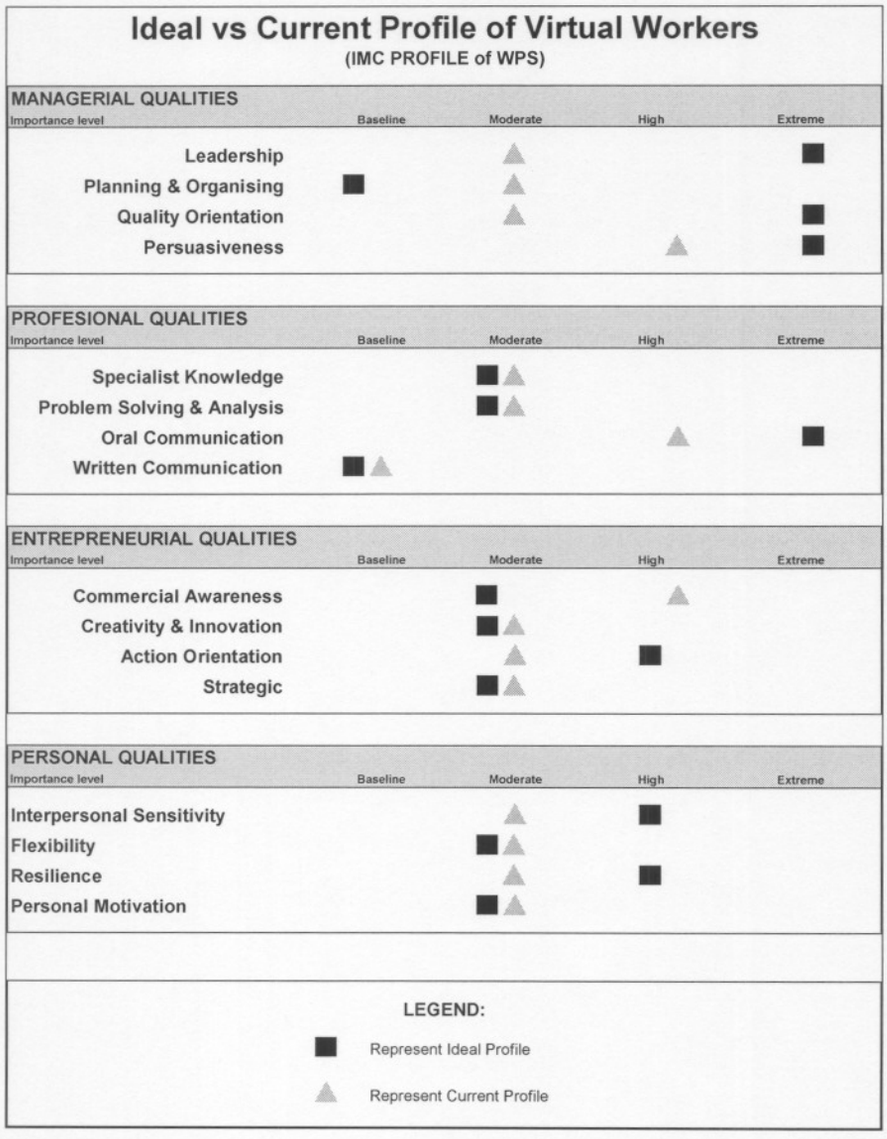
The relationship between the IMC competencies of the OPQ distribution's mean and standard deviation in Table 5 lies within 0,73 and 1,11 standard deviation of the mean score. A distribution is said to be skew when scores are massed at one or the other end of the score scale. In this case the skewness of the IMC competencies distribution scores indicates a positive skewness.

The kurtosis refers to the peakness or flatness of a frequency distribution. The scores of the IMC competencies OPQ indicated a tendency towards a more leptokurtic (very peaked) distribution.

In the following section the competencies identified by the IMC of the WPS as being important will be compared with the competencies exhibited by the current virtual workers (identified from the OPQ) that participated in the research.

Table 6

Competencies identified by the IMC of the WPS versus the Competencies of current virtual workers identified from the OPQ



The Inventory of Management Competencies (IMC) of the WPS in the Person Specification Report identifies the most job relevant competencies needed in the specific job. This IMC profile shows each competency organised by groups of competencies, which comprise of managerial qualities, professional qualities, entrepreneurial qualities and personal qualities. Each competency's level of importance within these competency groups is indicated by a bar graph.

In Table 6 the competencies identified as important, as indicated by the IMC of the WPS, are matched with the competencies exhibited by the current virtual workers who took part in this study.

In Table 6 it could be seen that seven of the 16 competencies indicated by the IMC profile of the WPS for Business Dealer Officers (BDO) in the current virtual environment, matched with the competencies identified as important for BDOs. This means that 44% of the study population exhibit competencies that were identified by the IMC profile of the WPS as important for BDOs.

Comparing the competencies identified as important with the competencies exhibited by the current virtual workers, the results indicated that a relative match between three of the four different competency groups was found. Managerial Quality competency group was the only competency group whereby the current virtual workers competencies showed a poor match. This indicates that future training for the current BDO s should focus more on developing and enhancing managerial qualities.

In the following sections the results of the IMC competency profiles will be discussed with specific reference to the frequency scores.

Table 7 indicates the Competency frequency scores of the current virtual workers for the Managerial Qualities competency group. To be able to understand the criteria used in the tables, the following definition for importance according to competency level could be explained as:

1 = **None** indicates no importance of competency needed in this job.
2 = **Baseline** indicates that only a basic level of competency to meet the objectives of the job is expected in this job.
3 = **Moderate** implies that slightly more importance for this competency is expected in this job.
4 = **High** identifies a more important level of competency is needed to meet most of the job objectives in this specific job.
5 = **Extreme** determines that this competency is essential to meet nearly all of the job objectives in this specific job.

The **count** reflects to the actual amount of the study population (*N=71*) who rated themselves on that specific competency indicating how important that specific competency was to meet the objectives of the job. The **percentage** indicates the percentage of the study population that indicated that that specific competency was their preference.

Table 7

Competency frequency scores of the current virtual workers for the Managerial Qualities competency group

Leadership			
Criteria	Count	Cumulative	Percent
1	3	3	4,225
2	10	13	14,084
3	33	46	46,478
4	9	55	12,676
5	16	71	22,535
Missing	0	71	0,000
Planning & Organising			
Criteria	Count	Cumulative	Percent
1	12	12	16,901
2	16	28	22,535
3	30	58	42,253
4	9	67	12,676
5	4	71	5,633
Missing	0	71	0,000
Quality Orientation			
Criteria	Count	Cumulative	Percent
1	7	7	9,859
2	12	19	16,901
3	30	49	42,253
4	16	65	22,535
5	6	71	8,450
Missing	0	71	0,000
Persuasiveness			
Criteria	Count	Cumulative	Percent
1	1	1	1,408
2	7	8	9,859
3	20	28	28,169
4	32	60	45,070
5	11	71	15,492
Missing	0	71	0,000

In Table 6 the competencies identified as important indicated that leadership is extremely important to meet nearly all the objectives of the job. Only 22% of the study population currently employed in the job, as indicated in Table 7, reported that leadership is extremely (rating of a 5) important while 46% indicated leadership to be only of moderate importance for meeting the job objectives.

Planning and organising was reported by 42% of the study population to be of moderate (rating of a 3) importance in the execution of their job, while the IMC of the WPS indicated this competency to be only of a baseline level of importance for BDOs.

Quality orientation was also indicated by the IMC of the WPS to be of extreme importance in the job whereby only 8% of the study population indicated it to be extremely important. Most (42%) of the study population indicated quality orientation to be of moderate importance for the job.

On the other hand, most (45%) of the study population indicated persuasiveness to be highly important in their job while the IMC of the WPS showed that persuasiveness should be extremely important to meet the objectives in the job.

Thus the conclusion could be made that the comparison between the competencies identified by the IMC of the WPS and the competencies identified by the current virtual workers indicated that there is a great need for training in managerial qualities to enhance the following competencies: leadership, quality orientation and persuasiveness. This will enhance the function of the current virtual workers.

Table 8

Competency frequency scores of the current virtual workers for the Professional Qualities competency group

Specialist Knowledge			
Criteria	Count	Cumulative	Percent
1	6	6	8,450
2	21	27	29,577
3	34	61	47,887

4	8	69	11,267
5	2	71	2,816
Missing	0	71	0,000

Problem Solving & Analysis

Criteria	Count	Cumulative	Percent
1	8	8	11,267
2	21	29	29,577
3	40	69	56,338
4	2	71	2,816
Missing	0	71	0,000

Oral Communication

Criteria	Count	Cumulative	Percent
1	3	3	4,225
2	7	10	9,859
3	21	31	29,577
4	31	62	43,661
5	9	71	12,676
Missing	0	71	0,000

Written Communication

Criteria	Count	Cumulative	Percent
1	4	4	5,633
2	37	41	52,112
3	20	61	28,169
4	9	70	12,676
5	1	71	1,408
Missing	0	71	0,000

In the **Professional Qualities** competency group in Table 8, relative matches were found for specialist knowledge, problem solving and analysis as well as for written communication competencies between the competencies identified by the IMC of the WPS and the competencies of the current virtual workers. The following competencies identified by the IMC of the WPS were also indicated by the current virtual workers as competencies to be of moderate importance in the execution of the job; specialist knowledge (48% of study population), problem solving and analysis (56% of study population). Furthermore, 52% of the current virtual workers indicated written communication competency to be of basic importance for meeting the objectives of a Business Dealer Officer.

Oral communication was identified by the IMC of the WPS to be extremely important to meet the objectives of a Business Dealer Officer while the current virtual workers indicated this competency to be of high importance.

Table 9

Competency frequency scores of the current virtual workers for the Entrepreneurial Qualities competency group

Commercial Awareness			
Criteria	Count	Cumulative	Percent
2	3	3	4,225
3	21	24	29,577
4	26	50	36,619
5	21	71	29,577
Missing	0	71	0,000
Creativity & Innovation			
Criteria	Count	Cumulative	Percent
1	21	21	29,577
2	18	39	25,352
3	26	65	36,619
4	6	71	8,450
Missing	0	71	0,000
Action Orientation			
Criteria	Count	Cumulative	Percent
1	3	3	4,225
2	1	4	1,408
3	31	35	43,661
4	13	48	18,309
5	23	71	32,394
Missing	0	71	0,000
Strategic			
Criteria	Count	Cumulative	Percent
1	8	8	11,267
2	5	13	7,042
3	44	57	61,971
4	12	69	16,901
5	2	71	2,816
Missing	0	71	0,000

The **Entrepreneurial Qualities** competency group in Table 10 reported two matches between the competencies identified by the IMC of the WPS and what the current virtual workers indicated as important. Creativity and innovation were indicated by 37% of the current virtual workers to be of moderate importance while 69% reflected strategy to be of moderate importance for the Business Dealer Officer in their job.

On the other hand commercial awareness was identified to be moderately important, while 37% of the current virtual workers indicated commercial awareness to be of high importance in the execution of their job. Action orientation was reported by 44% of the current virtual workers to be of moderate importance while the IMC of the WPS reflected it to be of high importance in meeting the objectives as a Business Dealer Officer.

It seems that professional qualities and entrepreneurial qualities competency groups reported the highest matches between the competencies identified by the IMC of the WPS and those identified by the current virtual workers to be important. This could mean that the current training's focus in the organisation was more on these two competency groups.

Table 10

Competency frequency scores of the current virtual workers for the Personal Qualities competency group

Interpersonal Sensitivity

Criteria	Count	Cumulative	Percent
1	13	13	18,309
2	24	37	33,802
3	25	62	35,211
4	6	68	8,450
5	3	71	4,225
Missing	0	71	0,000

Flexibility

Criteria	Count	Cumulative	Percent
1	16	16	22,535
2	14	30	19,718
3	34	64	47,887
4	6	70	8,450

5	1	71	1,408
Missing	0	71	0,000

Resilience

Criteria	Count	Cumulative	Percent
1	3	3	4,225
2	11	14	15,492
3	36	50	50,704
4	17	67	23,943
5	4	71	5,633
Missing	0	71	0,000

Personal Motivation

Criteria	Count	Cumulative	Percent
2	3	3	4,225
3	38	41	53,521
4	15	56	21,126
5	15	71	21,126
Missing	0	71	0,000

The **Personal Qualities** competency group showed in Table 10 that interpersonal sensitivity and resilience should be considered as highly important for Business Dealer Officers to function optimally in their job. Flexibility and personal motivation were reported by the IMC of the WPS as well as the current virtual workers to be of moderate importance in the execution of their job. Flexibility was indicated by 48% of the current virtual workers to be of moderate importance and 54% indicated personal motivation to be of moderate importance.

In Table 11 the results of the Skill Audit will be discussed.

Table 11

Results of the Skill Audit

Skills	Percentage
Well-organised	96%
Self-disciplined	96%
Result orientated	90%
Self-motivated	96%
Time management	86%
Goal orientated	90%

Computer literate	90%
Effective communication	93%
Adaptable and flexible	80%
Innovative and creative	80%

The **Skill Audit** (SA) was used as a supporting tool to verify the most essential skills needed by these virtual workers to be successful in a virtual environment. The Skill Audit (SA) consisted of ten items that reflect the ten most important skills needed to be successful within a virtual environment. The study population had to rate these skills according to importance (as indicated above). The results from the Skill Audit (SA) in Table 11 showed that 96% of the study population indicated that the following skills: self-discipline, good organisation and self-motivation are most essential for virtual workers to be effective. In Table 11 it can be further seen that the scores are high and closely related. Thus it could be said that the study population believed that all ten skills are essential to function effectively within the new virtual environment.

In the following section the results of the statistical analysis will be discussed.

DISCUSSION

The Performance Assessment Questionnaire, in Table 3 indicated Cronbach alpha coefficients α = 0,94 and inter-item correlations which vary between 0,54 (Management confidence) and 0,86 (Productivity) that compare favourably with the guideline of Clark and Watson (1995) and Nunnally and Bernstein (1994). The results of the factor analysis (table 4) indicated that the current virtual workers experienced that virtualness had the most profound effect on their performance in improving management confidence. Time management and planning of the participants increased as well. These results suggest that virtualness leads to great improvement and experience towards customer orientation. The first order factor analysis for the Performance Assessment Questionnaire (PAQ) indicated a variance of 56% (organisational goals) while the second order factor analysis reported a variance of 65,31% (personal goals). Furthermore, it could be said that virtualness had a positive impact on both personal and organisational goals. Thus it could be argued that, bearing in mind the variance of 65,31%, virtualness had the greatest impact towards

increasing personal goals. These results can be confirmed by research undertaken by Kemp (2000) and Hoffman (2001). They found in their research on virtual work that the productivity of employees increased between 15% and 25%. Client support improved, as employees were responsible to resolve client's problems as quickly and efficiently as possible. Employees became more organised in their work because they needed to plan in advance and set goals in order to meet with customer's needs and demands.

The **Inventory of Management Competencies Profile** (see Annexure 2) of the WPS, identified the most job relevant competencies. The **Managerial Quality** competency group results indicated leadership, quality orientation and persuasiveness to be the most essential Managerial Qualities needed. Revenbark and Frost (2003) showed it to be important that managers needed to manage less and lead more. Gibson and Cohen (2003) focused on the leader's ability to understand their business markets and be able to render quality service to their customers. This could be associated with the competency that was identified by the WPS as Quality Orientation. Furthermore, Skyrme (1994) and Gibson and Cohen (2003) state that building effective partnerships needs strong persuasiveness from a person within a virtual environment.

The **Professional Qualities** competency group of the WPS indicated that oral communication should be considered as the most essential professional quality needed while action orientation came out as the most essential **Entrepreneurial Quality** needed. Furthermore, the results from the **Personal Qualities** competency group indicated that interpersonal sensitivity and resilience are the most essential personal qualities needed for a Business Dealer Officer to function optimally within a virtual environment. The findings of this study confirm the results of previous studies such as Attaram and Attaram (20003) and Sisk (2003) who state that the ability to communicate and share information would sustain and improve interpersonal relations. Skyrme (1994) and Gibson and Cohen (2003) state that building effective partnerships needs strong persuasiveness from a person within a virtual environment.

Results from the **Job Description Report** (see Annexure 1) of the WPS, indicated the essential activities with ratings equal to or greater than 60 on a 100-point scale of task importance relating to meeting job objectives. These results indicated the following

eight essential work activities presenting or selling, deciding, influencing or advising, motivating, informing/discussing or interviewing, checking, problem solving or designing and integrating/coding or estimating. Researchers such as Queyssac (1998) and Mclntosh (1995) view that managers as well as employees within a virtual environment need skills such as self-regulatory and self-discipline. This fact also confirms the results that were found in the Performance Assessment Questionnaire (PAQ) indicating self-discipline to be the most essential skill needed to function optimally within a virtual environment. Garfoot and Labrow (2003) and Hoffman (2002) indicate that employees who are emotionally controlled are able to identify their own strengths and weaknesses and evaluate their own performance and potential, which also correlates with self-motivation of the Performance Assessment Questionnaire (PAQ).

The **Person Specification Report** (see annexure 3) of the WPS, identified the following abilities and skills essential for this specific job, namely verbal skills, numeric skills and creative thinking skills. The personality indicators are based upon the personality attributes that can be found in the OPQ profile of the WPS (see annexure 4). The personality profile that was identified showed the attributes of persuasiveness and social confidence to be the most essentially needed for optimal functioning within a virtual environment. According to May and Sieberhagen (2000) and Slivinski and Miles (1996) a person's confidence, for example, may affect their ability to demonstrate their knowledge, communicate orally or perform at their physical peak. Greengard (2001) and Darch, Karelse, and Underwood (1997) identified skills such as clear business thinking and creative thinking that require some level of critical thinking, which can be associated with forward thinking.

The **Skill Audit** (see Table 11) indicated the ten skills that were identified by the researcher in literature by the following authors: Attaram and Attaram (2003), Garfoot and Labrow (2003), Mclntosh (1995), Pitts and Lei (2003), Revenbark and Frost (2003), Sisk (2003), as well as Skyrme (1994) to be essential for optimal functioning. The participants had to rate these ten skills according to importance. The results of this Skill Audit indicated self-discipline, good-organisation and self-motivation to be most important skills needed, while adaptability/flexibility and innovativeness/creativity are the skills to be least important. In Table 11 the scores are

closely related and the assumption can be made that the study population anticipated that all ten skills are necessary to be effective within the new virtual environment.

In the organisation where this study was conducted no competencies that were applicable to the new virtual environment for Business Dealer Officers existed. The research was able to identify these competencies for virtual workers that can be utilised in future selections as well as for training purposes. In the following section recommendations will be made for both the organisation and future research.

RECOMMENDATIONS

Firstly, managers and employees should become aware of the impact of virtualness on future business. This can help them become aware of their own strength and weakness as well as those of others. Secondly, individuals can be selected who possess the personality attributes, skills and competencies needed to function optimally within a virtual environment, and work out effective strategies to retrain them for future business. This will ensure that the organisation will be sustainable in future and will have the right manpower to be ahead of the competition. However, before individuals are selected on the basis of these characteristics, further research is required, especially as these characteristics were studied only for a specific job within a financial environment and the characteristics may differ form one profession to another.

Thirdly, the competencies that were identified in this study can be utilised in practice to prevent the wrong people being appointed for this specific job. Fourthly, these results can also be utilised for the implementation of development programmes directed at the stimulation of personal growth to make sure that all the Business Dealer Officers are equipped with these competencies that were identified by the WPS to ensure optimal functioning within the new virtual environment.

The limitations of this research were firstly that only a small study population of (N=71) were used and secondly, that not all participants were working on a virtual basis over a one year period some only started two months prior to the research.

Thirdly, some of the participants in the research were not positive towards the completion of the Occupational Personality Questionnaire (OPQ), Performance Assessment Questionnaire (PAQ) as well as the Skill Audit (SA), which might have influenced the reliability and validity of the statistical analysis results.

Future research needs to explore the underlying mechanisms of personality (e.g. such as self-efficacy, locus of control and sense of coherence) that produce different coping preferences (personality attributes, skills and competencies). The relationship between personality attributes, skills and competencies should be investigated in a wider variety of virtual organisations, using larger samples. Further research is necessary to better understand the antecedents and correlates of virtualness in South African organisations.

REFERENCES

Alexander, M. (1997). Getting to grips with the virtual organization. *Long Range Planning, 30, 122-124.*

Allert, J. L. (2001). You're hired, now go home. *Training and Development, 55,* 54 60.

Arnison, L., & Miller, P. (2002). Virtual teams: A virtue for the conventional team. *Journal of Workplace Learning, 14,* 166-173.

Attaram, M., & Attaram, S. (2003). The coming age of virtual teaming: Guidelines for managers. *International Journal of Management, 20,* 171 – 178.

Avolio, B., & Maritz, D. (2000). E-Leading: Leadership any where, any time, at any level. *Management Today, 16,* 15 –16.

Blau, J., & Wolff, M. F. (1997). Global networking poses management challenge / risk. *Research Technology Management, 40,* 4 – 6.

Bloomfield, B. R. P., Coombs, D., Knight, D., & Littler, D. (1997). *Information technology and organisations: Strategies, network and integration.* UK: Oxford University Press.

Bosch-Sejtsema, P. (2002). A structure of roles within virtual organisations. *International Journal of Information Technology & Decision Making, 1,* 371 - 385.

Chircu, A. M., & Kauffman, R. J. (1999). Strategies for internet middlemen in the intermediation-disintermediation-reintermediation cycle. *Electronic Markets, 9,* 109 -117.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment, 7,* 309-319.

Cleaver, J. (2000). Out of sight. *Crain's New York Business, 16,* 31- 46.

Coetsee, L. D. (2002). *Peak performance and productivity: Practical guide for the creation of a motivational climate.* Vanderbijlpark: Ons Drukkers.

Cohen, S. (1997). On becoming virtual. *Training and Development, 51,* 30 – 32.

Cohen, J. (1998). *Statistical power analysis for behavioural sciences.* (2nd ed). Hillsdale, NJ: Erlbaum.

Conner, D. S. (2003). Social comparison in virtual work environments: An examination of contemporary referent selection. *Journal of Occupational and Organizational Psychology, 76,* 133 – 148.

Crandall, N. F., & Wallace, M. J. (1997). Inside the virtual workplace: Forging a new deal for work and rewards. *Compensation and Benefits Review, 29*, 27–36.

Darch, C., Karelse, C., & Underwood, P. (1997). Alternative routes on the super highway. *Independent Online-Higher Education Review*. Independent educational media.

Denton, M., & Vloegsberghs, D. (2003). Leadership challenges for organisations in the new South Africa. *Leadership and Organisation Development Journal, 24(2),* 84–95.

DeSanctis, G., & Fulk, J. (1999). *Shaping organisation form: Communication, connection and community*. USA: SAGE Publications Ltd.

Dutton, W. H. (1999). *Society on the line: Information politics in the digital age*. UK: Oxford University Press.

Fisscher, O., Pearson, A., & Brockhoff, K. (2001). Managing technology as a virtual enterprise. *R & D Management, 31*, 1–13.

Fitzpatrick, W. A. (2000). Form, function and financial performance for the virtual organisation. *S.A. M. Advanced Management Journal, 65*, 1-15.

Fitzpatrick, W. A., & Burke, D. R. (2000). Form, functions, and financial performance realities for virtual organisation. *Advanced Management Journal, 65*, 13–20.

Freedman, C. (1996). *The factory of the future and the productivity paradox*. UK: Oxford University Press.

Garfoot, A., & Labrow, P. (2003). The reality of virtual teams. *IT Training, 5*, 32– 35.

Gaswirth, R. (2003). FLSA: An old law that can cost companies millions. *Texas Lawyer, 18*, 1–3.

Gibson, C. B., & Cohen, S. (2003). *Virtual teams that work: Creating conditions for virtual team effectiveness*. San Francisco: Jossey-Bass.

Goldsborough, R. (2000). Making telecommuting work. *Commercial Law Bulletin, 15*, 34–35.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam.

Greengard, S. (2001). Make smarter business decisions: Know what employees can do. *Workforce, 80*, 42-46.

Hagel, J., & Armstrong, A. G. (1997). *Net gain: Expanding markets through virtual communities*. MA: Harvard Business School Press.

Halpin, J. R. (2001). Get to telework. *PC Magazine, 20*(6), 73-74.

Hamburg, I., & Rehfeld, D. (2002). Digital experiments to improve knowledge based economic development-strengthening local nodes. *European Planning Studies,10*, 133-137.

Hancock, V. E. (1995). Information literacy, brain-based learning and technological revolution: Implications for education. *School Library Media Activities Monthly, 12.*

Hoffmann E. (2002). *Telework in South Africa: Effectively managing workers who aren't there.* Paper presented at OCM conference.

Ho, D. C. K., Au K. F., & Newton, E. (2003). The process and consequences ofsupply chain virtualisation. *Industrial Management and Data Systems, 103*, 1-11.

Holmqvist, M. (2003), Virtual organisations and Beyond. *Academy of Management Executive, 17*, 129 – 130.

Humes, B. (2003). Understanding information literacy.
http://www.libraryinstruction.com/infolit.html

Johnson, K. (2003). Cutting costs through managed services. *New Straits Times-Management Times, 4*, 1-3.

Kemp, A. (2000). *An evaluation of the success of telecommuting as a job design strategy*. Pretoria: University of Pretoria.

Kollock, P. (1999). *The economies of online cooperation: Gifts and public goods in cyberspac*e. London: Routledge, 220 – 230.

Kumar, S. (2003). Managing human capital supply chain in the Internet era. *Industrial Management & Data Systems, 103*, 1 – 13.

Massey, A. P., Mitzi, M., Montoya, W., & Yu-Thing, H. (2003). Because time matters: Temporal coordination in global virtual project teams. *Journal of Management Information Systems, 19*, 129 – 155.

May, E. A., & Sieberhagen, G. V. D. M. (2000). *Self-management of female managers working at tertiary educational institutions: A Fortigenic approach.* Paper presented at the 6th Annual PsySSA Conference, Johannesburg.

Mclntosh, S. S. (1995). Envisioning the virtual training organization. *Training & Development, 49*, 45 – 51.

Monatana State personnel division, Department of administration. (2000). *Telework program guide.* http://www2.state.mt.us/doa/spd/css/resources/Telework.doc

Mondy, R. W., Noe, R. M., & Premeaux, S. R. (2002). *Human Resource Management*. NJ: Prentice Hall.

Nienaber, M. (2003). *An Occupational Personality Profile of a fuel station franchisee.* Unpublished masters dissertation. Northwest University, Vaal Triangle Campus.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory.* (3rd ed). New York: Mc Craw-Hill.

Pitts, R. A., & Lei, D. (2003). *Strategic Management: Building and sustaining competitive advantage*. Canada: Thomson learning, 404 – 410.

O'Brien, J. A. (2004). *Managing information technology in the business enterprise.* (6th ed). Northern Arizona: McGraw-Hill.

Queyssac, D. G. (1998). The virtual corporation emerges. *Solid State Technology, 41*, 172 - 174.

Revenbark, L., & Frost, M. (2003). Virtual teams that work. *HR Magazine, 48*, 121 – 123.

Robbins, S. P., Odendal, A., & Roodt, G. (2003). *Organisational Behaviour*. South Africa: Pearson Education South Africa.

Saville, P., & Holdsworth, R. (2002). *The Occupational Personality Questionnaire in South Africa: Psychometric research perspective.* SHL Group plc, Pretoria.

Sisk, M. (2003). Telecommuting promises BCP benefits but also back-office challenges. *Security Industry News, 15*, 26 – 29.

Skyrme, D. J. (1994). Ten ways to add value to your business. *Managing Information, 1*, 20 – 25.

Slivinski, L. W., & Miles, J. (1996). The holistic competency profile: A model. Public service commission. Retrieved June 4, 2002, from the World Wide Web:http://www.psc-cfp.gc.ca/ppc/en_competencies_part1.htm.

Vinassa, A. (2001). Mind the gap. *People Dynamics, 19*, 30-31.

Weisenfeld, U., Fisscher, O., Pearson, A., & Brockhoff, K. (2001). Managing technology as a virtual enterprise. *R & D Management, 31*, 323-334.

Weisenfeld, B. M., Raghuram, S., & Guarud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based social support. *Journal of Management, 27*, 213 –229.

Werther, W. B. (1999). Structure-driven strategy and virtual organization design. *Business Horizon, 42*, 13 –18.

Yearout, S., Miles, G., Koonce, R. H., Benette, J. L., Barton, T., & Allert, J. L (2001). Success in business. *Training and Development, 55*, 83-85.

CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

CHAPTER 3

CONCLUSION AND RECOMMENDATIONS

The purpose of this chapter is to conclude this study regarding the literature study and the results of the empirical research. The limitations of the research as well as the recommendations for the organisation and future research will be addressed.

3.1 CONCLUSION

The objective of this research study was to identify competencies needed for virtual workers in a specific job (Business Dealer Officer) at a financial institution in South Africa and to make recommendations for future training and selection purposes. The conceptualisation of the specific theoretical objectives together with the results of the empirical research will now be discussed.

3.1.1 Conclusions regarding the specific theoretical objectives

The first and second specific objectives stated in chapter 1 refer to the conceptualisation of competencies and virtual work.

Competencies were conceptualised from literature as follows: Firstly, researchers make a distinction between "competence" which refers to aspects of a job that a person is competent in, like task description, functions and objectives, while "competencies" refer to behaviours that are needed to achieve certain outcomes. In other words, "competence" gives the "**what**" is needed for a specific job and "competencies" give the "**how**" that specific job is done (Allert , 2001 & Coetsee, 2002). Secondly "competencies" were conceptualised as clearly defined sets of behaviours that indicate the ability of a person in a specific position to perform tasks and functions (Greengard, 2001). In conclusion it can be said that competency plus opportunity and experience equals competence.

Virtual work was conceptualised as work that is executed from a distance or away from the traditional workplace (Hoffman, 2002). The work is done in a remote way

away from home, in cars, at hotels or from satellite centres (Gibson & Cohen , 2003). In other words, technology such as the internet and mobile phones enable employees to perform their work at locations other than the traditional office spaces.

The third specific objective identified competencies needed within a virtual environment according to literature research. These competencies were identified as follows: information and computer literacy, self-sufficiency, self-discipline, self-motivation and orientation towards results.

The sixth specific objective determined skills required for virtual workers to be effective in a virtual environment indicated by research. The following skills were identified: clear business thinking, creative thinking, conflict resolution, good interpersonal relations, ability to work effectively in a team, excellent verbal communication skills, integrity and honesty, effective negotiation and marketing skills and critical thinking skills. These skills identified can be confirmed by research that were done by Attaram and Attaram (2003), Garfoot and Labrow (2003), Mclntosh (1995), Pitts and Leis (2003), Revenbark and Frost (2003), Sisk (2003) and Skyrme (1994).

3.1.2 Conclusions regarding the specific empirical objectives

The Work Profiling System (WPS), Occupational Personality Questionnaire (OPQ), Performance Assessment Questionnaire (PAQ) and Skills Audit (SA) were administered in this study.

The fourth specific objective referred to determining the important competencies needed for virtual workers in a specific job (Business Dealer Officer) at a financial institution in South Africa. The Work Profiling System (WPS) is a job analysis method that was used in this research to identify the competencies needed for virtual workers. The WPS consists of a "Job Description Report" that provides fundamental information about a job and the "Person Specification Report" identifies the most job relevant competencies required. This profile is based on SHL's competency model called "Inventory of Management Competencies (IMC)" and consists of managerial qualities, professional qualities, entrepreneurial qualities and personal qualities. The

Inventory of Management Competencies Profile (IMC) of the WPS, identified the following competencies that are most relevant for Business Dealer Officers (the specific job used in this study). The managerial quality competency group results indicated leadership, quality orientation and persuasiveness to be the most essential managerial qualities needed. Oral communication has to be considered as the most essential professional quality needed while action orientation came out as the most essential entrepreneurial quality needed. Furthermore, the results from the personal qualities indicated that interpersonal sensitivity and resilience are the most essential personal qualities needed for a Business Dealer Officer to function optimally within a virtual environment.

The fifth specific objective compared the current competencies that virtual workers (who took part in the research) have, with the competencies identified in objective four. The Occupational Personality Questionnaire (OPQ) was used and showed an average alpha reliability to be approximately 0,75 and a validity of 0,3. The OPQ 32i was used to identify the current competencies of virtual workers in this study. The information gathered from the study population's OPQ 32i together with the competencies identified by the IMC of the WPS, made it possible to determine the important competencies needed by a Business Dealer Officer to be effective and successful within a virtual environment. The structure of the OPQ 32i includes three broad domains, Relationships with People, Thinking Styles, and Feelings and Emotions. They can be subdivided into 32 work-related characteristics. The results of the comparison between the competencies identified by the IMC of the WPS and those competencies identified by the current virtual workers as important, indicated that 44% of the current virtual workers exhibit the competencies needed to be successful in a virtual environment as a BDO.

The seventh specific objective was to identify the skills ranked by the current virtual workers in the specific job at a financial institution in South Africa and to compare these skills with the skills that the literature emphasised as being important. The Person Specification Report of the WPS, identified the following abilities and skills essential for this specific job: verbal skills, numeric skills and creative thinking skills. The personality indicators are based upon the personality attributes that could be found in the OPQ profile. The Skill Audit (SA) was developed by the researcher and

was used to identify the skills ranked by the current virtual workers as being important within a virtual environment. The results from the Skill Audit (SA) indicated that self-discipline, being well-organised and self-motivation were regarded as the most important skills needed for virtual workers in this research. These identified skills compared favourably with the skills identified by literature as being important for virtual workers as mentioned above in the conclusion regarding the specific theoretical objectives.

The eighth specific objective focused on identifying how the current virtual workers have experienced the effect of virtualness on their performance since they went virtual in October 2002. The Performance Assessment Questionnaire (PAQ) was developed by the researcher to identify how the current virtual workers experience the effect of virtualness on their performance. The Cronbach alpha indicated a α=0,94 validity and an average inter-item correlation of 0,53. A second-order factor analysis indicated two factors that explained 65% of the validity of the questionnaire. The results of the factor analysis indicated that virtualness had the most profound improvement on Management Confidence. Time management and planning of the participants increased too. These results suggested that virtualness led to great improvement experienced towards customer orientation. Furthermore, it could be said that virtualness had a positive impact on both personal and organisational goals. Thus it could be argued that bearing in mind the variance of 65,31%, virtualness had the most impact towards increasing Personal goals.

The last specific objective anticipated to use the information gathered from the research to make recommendations to the organisation regarding future selection and training. Thus it can be said that if a comparison could be made between competencies needed for virtual workers and the current competencies the study population exhibits, that the study population needs training in managerial qualities to enhance the following competencies: leadership, quality orientation and persuasiveness to be able to function optimally in their virtual job.

The diversity among the respondents with specific reference to ethnic group, was not equally distributed. White females were predominant. Participants in the age group

30 – 40 years took up 42,25%. However, the educational qualifications showed a more even distribution of 43% whereby most of the participants had grade 12 certificates.

3.2 LIMITATIONS OF THE RESEARCH

The following limitations can be identified in this study:

- Only 54 participants of the 71-study population completed the Performance Assessment Questionnaire.
- Not all the participants had been working on a virtual basis for a whole year. Some started between four and six months prior to the research. This could have had an influence on the results of the empirical study.
- The research group consisted of Business Dealer Officers only and due to the scope of the study a limitation was placed on the number of participants who could be included in the study.
- The utilisation of self-report questionnaires had an impact on the reliability of the statistical results.
- The specific use of a cross-sectional design limited the findings only to the specific group (Business Dealer Officer) in the financial institution that was selected for this research.

3.3 RECOMMENDATIONS

The following recommendations can be made regarding the applicability to the specific organisation, as well as for future research.

3.3.1 Recommendations for the organisation

Feedback should be communicated to virtual workers on a weekly basis. The virtual worker does not get informal feedback such as a smile or a nod in comparison with office-based workers. The fact that virtual work is executed away from the traditional office, the virtual employee could easily experience a feeling of "out of sight, out of

mind". Therefore is it important to find new ways to reassure the virtual employees that their work meets or exceeds the standards. By utilising verbal messages through a telephone call or written messages via email on a regular basis, will ensure the virtual employee of the acceptable standards that are required.

It is important that, before actual implementation, a feasibility study be conducted to determine the application and estimated costs and cost savings when virtualness is considered.

3.3.2 Recommendations for future research

The relationship between the levels of organisational commitment and job satisfaction between male and female can provide interesting information in connection with gender as a moderator for optimal functioning within a virtual environment.

Interpersonal trust has specific significance in a virtual context due to the physical distance which virtual work creates, making space for uncertainties such as "out of sight out of mind". The relationship between interpersonal trust and organisational commitment could be studied to predict the functionality of a person within a virtual environment.

While technological and organisational changes have triggered the emergence of virtual work, its growth and the ability of organisations to benefit from it depend upon how effective employees are able to adjust to the transition from traditional to virtual work modes. The relationship between the different factors associated with adjustment and optimal functioning within a virtual environment could be studied.

The limitations of the research were highlighted and recommendations were made regarding the organisation where the study was conducted. Recommendations for future research were also discussed. All the theoretical and empirical objectives formulated for this research have been achieved and therefore this study is concluded.

REFERENCES

Albertyn, R. (2001). Increase the accountability through empowerment. *People Dynamics, 17,* 21-22.

Alexander, M. (1997). Getting to grips with the virtual organization. *Long Range Planning, 30,* 122-124.

Allert, J. L. (2001). You're hired, now go home. *Training and Development, 55,* 54 60.

Arnison, L., & Miller, P. (2002). Virtual teams: A virtue for the conventional team. *Journal of Workplace Learning, 14,* 166-173.

Attaram, M., & Attaram, S. (2003). The coming age of virtual teaming: Guidelines for managers. *International Journal of Management, 20,* 171-178.

Avolio, B., & Maritz, D. (2000). E-Leading: Leadership any where, any time, at any level. *Management Today, 16,* 15-16.

Blau, J., & Wolff, M. F. (1997). Global networking poses management challenge / risk. *Research Technology Management, 40,* 4-6.

Bloomfield, B. R. P., Coombs, D., Knight, D., & Littler, D. (1997). *Information technology and organisations: Strategies, network and integration.* UK: Oxford university press.

Bosch-Sejtsema, P. (2002). A structure of roles within virtual organisations. *International Journal of Information Technology & Decision Making, 1,* 371-385.

Chircu, A. M., & Kauffman, R. J. (1999). Strategies for internet middlemen in the intermediation-disintermediation-reintermediation cycle. *Electronic Markets, 9,* 109-117.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment, 7,* 309-319.

Cleaver, J. (2000). Out of sight. *Crain's New York Business, 16,* 31-46.

Coetsee, L. D. (2002). *Peak performance and productivity: Practical guide for the creation of a motivational climate.* Vanderbijlpark: Ons Drukkers.

Cohen, S. (1997). On becoming virtual. *Training and Development, 51,* 30-32.

Cohen, J. (1998). *Statistical power analysis for behavioural sciences.* (2nd ed). Hillsdale, NJ: Erlbaum.

Conner, D. S. (2003). Social comparison in virtual work environments: An examination of contemporary referent selection. *Journal of Occupational and Organizational Psychology, 76*, 133-148.

Crandall, N. F., & Wallace, M. J. (1997). Inside the virtual workplace: Forging a new deal for work and rewards. *Compensation and Benefits Review, 29*, 27-36.

Darch, C., Karelse, C., & Underwood, P. (1997). Alternative routes on the super highway. *Independent Online-Higher Education Review*. Independent educational media.

Denton, M., & Vloegsberghs, D. (2003). Leadership challenges for organisations in the new South Africa. *Leadership and Organisation Development Journal,* 24(2), 84-95.

DeSanctis, G., & Fulk, J. (1999). *Shaping organisation form: Communication, connection and community*. USA: SAGE Publications Ltd.

DeSanctis, G., & Monge, P. (1999). Communication processes for virtual organisations. *Organisation Science, 10,* 1693-1703.

Dutton, W. H. (1999). *Society on the line: Information politics in the digital age*. UK: Oxford university press.

Fisscher, O., Pearson, A., & Brockhoff, K. (2001). Managing technology as a virtual enterprise. *R & D Management, 31*, 1-13.

Fitzpatrick, W. A. (2000). Form, function and financial performance for the virtual organisation. *S.A. M. Advanced Management Journal, 65*, 1-15.

Fitzpatrick, W. A., & Burke, D. R. (2000). Form, functions, and financial performance realities for virtual organisation. *Advanced Management Journal, 65*, 13-20.

Freedman, C. (1996). *The factory of the future and the productivity paradox*. UK: Oxford University Press.

French, W. L., & Bell, C. H. (1995). *Organizational Development Behavioral Science Interventions for Organization Improvement* (5th ed). Englewood Cliffs, NJ: Prentice-hall.

Furnham, A. (2000). Work in 2020: Prognostications about the world of work 20 years into the millennium. *Journal of Managerial Psychology, 15,* 242 – 254.

Garfoot, A., & Labrow, P. (2003). The reality of virtual teams. *IT Training, 5,* 32-35.

Gaswirth, R. (2003). FLSA: An old law that can cost companies millions. *Texas Lawyer, 18*, 1-3.

Gibson, C. B., & Cohen, S. (2003). *Virtual teams that work: Creating conditions for virtual team effectiveness.* San Francisco: Jossey-Bass.

Goldsborough, R. (2000). Making telecommuting work. *Commercial Law Bulletin, 15,* 34-35.

Goleman, D. (1998). *Working with emotional intelligence.* New York: Bantam.

Gordon, J. R. (1999). *Organisational behaviour: A diagnostic approach.* (6th ed). Englewood Cliffs, NJ: Prentice Hall.

Greengard, S. (2001). Make smarter business decisions: Know what employees can do. *Workforce, 80,* 42-46.

Hagel, J., & Armstrong, A. G. (1997). *Net gain: Expanding markets through virtual communities.* MA: Harvard Business School Press.

Halpin, J. R. (2001). Get to telework. *PC Magazine, 20*(6), 73-74.

Hammel, G., & Prahaland, C. K. (1990). Core competencies of the corporation. *Harvard Business Review. 68,* 79-91.

Hamburg, I., & Rehfeld, D. (2002). Digital experiments to improve knowledge based economic development-strengthening local nodes. *European Planning Studies, 10,* 133-137.

Hancock, V. E. (1995). Information literacy, brain-based learning and technological revolution: Implications for education. *School Library Media Activities Monthly, 12.*

Haynes, P. (1991). Change, then change again. *Economist, 318,* 7-9.

Hoffmann E. (2002). *Telework in South Africa: Effectively managing workers who aren't there.* Paper presented at OCM conference.

Ho, D. C. K., Au K. F., & Newton, E. (2003). The process and consequences ofsupply chain virtualisation. *Industrial Management and Data Systems, 103,* 1-11.

Holmqvist, M. (2003), Virtual organisations and Beyond. *Academy of Management Executive, 17,* 129-130.

Humes, B. (2003). Understanding information literacy. http://www.libraryinstruction.com/infolit.html

Johnson, K. (2003). Cutting costs through managed services. *New Straits Times-Management Times, 4,* 1-3.

Kemp, A. (2000). *An evaluation of the success of telecommuting as a job design strategy.* Pretoria: University of Pretoria.

Kollock, P. (1999). *The economies of online cooperation: Gifts and public goods in cyberspace*. London: Routledge, 220-230.

Kumar, S. (2003). Managing human capital supply chain in the Internet era. *Industrial Management & Data Systems, 103*, 1-13.

Massey, A. P., Mitzi, M., Montoya, W., & Yu-Thing, H. (2003). Because time matters: Temporal coordination in global virtual project teams. *Journal of Management Information systems, 19*, 129-155.

May, E. A., & Sieberhagen, G. V. D. M. (2000). *Self-management of female managers working at tertiary educational institutions: A Fortigenic approach.* Paper presented at the 6th Annual PsySSA Conference, Johannesburg.

McIntosh, S. S. (1995). Envisioning the virtual training organization. *Training & Development, 49*, 45-51.

Monatana State personnel division, Department of administration. (2000). *Telework program guide.* http://www2.state.mt.us/doa/spd/css/resources/Telework.doc

Mondyy, R. W., Noe, R. M., & Premeaux, S. R. (2002). *Human Resource Management.* NJ: Prentice Hall.

Newell, S. (2002). *Creating the healthy organisation: Well-being, diversity and ethnics at work.* USA: Thomson Learning.

Nienaber, M. (2003). *An Occupational Personality Profile of a fuel station franchisee.* Unpublished masters dissertation. Northwest University, Vaal Triangle Campus.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory.* (3rd ed). New York: Mc Craw-Hill.

Pitts, R. A., & Lei, D. (2003). *Strategic Management: Building and sustaining competitive advantage*. Canada: Thomson learning, 404-410.

O'Brien, J. A. (2004). *Managing information technology in the business enterprise.* (6th ed). Northern Arizona: McGraw-Hill.

Queyssac, D. G. (1998). The virtual corporation emerges. *Solid State Technology, 41*, 172-174.

Rahman, Z. (2002). Virtual organisation: A Stratagem. *Singapore Management Review, 24*, 2-29.

Revenbark, L., & Frost, M. (2003). Virtual teams that work. *HR Magazine, 48*, 121-123.

Robbins, S. P., Odendal, A., & Roodt, G. (2003). *Organisational Behaviour.* South Africa: Pearson Education South Africa.

Schuh, G., Millarg, K., & Görannson, A. (1998). Virtuelle fabrik: Neue marktechancen durch dynamisch netzwerke. München.

Saville, P., & Holdsworth, R. (2002). *The Occupational Personality Questionnaire in South Africa: Psychometric research perspective.* SHL Group plc, Pretoria.

Sisk, M. (2003). Telecommuting promises BCP benefits but also back-office challenges. *Security Industry News, 15*, 26-29.

Skyrme, D. J. (1994). Ten ways to add value to your business. *Managing Information, 1*, 20-25.

Slivinski, L. W., & Miles, J. (1996). The holistic competency profile: A model. Public service commission. Retrieved June 4, 2002, from the World Wide Web:http://www.psc-cfp.gc.ca/ppc/en_competencies_part1.htm.

Tsoukas, H. (1994). *New thinking in organizational behaviour.* Butterworth, Heineman, Oxford.

Vinassa, A. (2001). Mind the gap. *People Dynamics, 19*, 30-31.

Weisenfeld, U., Fisscher, O., Pearson, A., & Brockhoff, K. (2001). Managing technology as a virtual enterprise. *R & D Management, 31*, 323-334.

Weisenfeld, B. M., Raghuram, S., & Guarud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based social support. *Journal of Management, 27*, 213-229.

Werr, A., Docherty, P., & Stjernberg, T. (1997). The functions of methods of change in management consulting. *Journal of Organisational Change Management, 10*(4), 288-307.

Werther, W. B. (1999). Structure-driven strategy and virtual organization design. *Business Horizon, 42*, 13-18.

Yearout, S., Miles, G., Koonce, R. H., Benette, J. L., Barton, T., & Allert, J. L (2001). Success in business. *Training and Development, 55*, 83-85.

ANNEXURE 1

PERFORMANCE ASSESSMENT QUESTIONNAIRE (PAQ)

VIRTUAL PERFORMANCE ASSESSMENT QUESTIONNAIRE

OBJECTIVE: The objective of this survey is to provide feedback that will be useful in determining ways to improve the effectiveness of virtual performance. Your responses to these questions will be regarded as confidential.

COMPLETION INFORMATION: After completion of this survey you need to take it along and hand in the day of your testing.

INSTRUCTIONS: When responding to the following biographical information please mark the appropriate block with an X.

1. BIOGRAPHICAL INFORMATION

GENDER:	MALE	FEMALE		
AGE:	20 – 30	30 - 40	40 - 50	50 >
ETHNIC GROUP:	Black	Coloured	Asian	White
EDUCATIONAL QUALIFICATIONS:	Matric	Diploma	Degree	Post Degree
LENGTH OF SERVICE:	<1 year	1-2year	3-4year	5 > year
LENGTH OF SERVICE IN CURRENT ROLE:	< 6 month	6-9 month	9-12month	12 > month
DATE OF VIRTUAL:	< 6 month	6-9month	9-12month	12 > month
JOB LEVEL:	CC			
AREA:	BDO			

2. VIRTUAL PERFORMANCE ASSESSMENT

INSTRUCTIONS: When responding to the following questions, please mark an X in the appropriate block that best indicates your opinion.

	Slightly Worse 1	**Remain the same 2**	**Slightly improved 3**	**Greatly improved 4**
2.1 To what extend did virtual work helped you to obtain your work goals?				
2.2 To what extend did virtual work helped you to manage your time better?				
2.3 To what extend did you meet your KPA's?				
2.4 To what extend did virtual work helped you to plan better?				
2.5 To what extend did virtual work help you to organise your work better?				
2.6 To what extend did virtual work helped you to be more productive?				
2.7 To what extend did virtual work affected the relationship between you and your manager?				

	Slightly Worse 1	**Remain the same 2**	**Slightly improved 3**	**Greatly improved 4**
2.8 To what extend has your manager shown confidence in you since you've been working virtually?				
2.9 To what extend has virtual work enable you to be more involved with organisational liaison?				
2.10 To what extend has virtual work enable you to be more involved with product improvement research?				
2.11 To what extend has virtual work enable you to be more involved with customer improvement research?				
2.12 To what extend did virtual work improve your attitude towards your work?				
2.13 To what extend did virtual work help you to gain a sense of balance between work and family life?				
2.14 To what extend did virtual work help you to tackle challenging problems or tasks?				
2.15 To what extend did virtual work help you to develop your career?				

ANNEXURE 2

SKILL AUDIT
(SA)

3. SKILL AUDIT

INSTRUCTIONS: Prioritise the following skills that are needed to be successful in virtual work according to your own opinion, from 1 –10, by adding a **1 for most important** and **10 for least important** next to the applicable skill.

SKILLS	**PRIORITIES**
Well-organised	
Self-disciplined	
Results orientated	
Self-motivated	
Time management	
Goal orientated	
Computer literate	
Effective communication	
Adaptable and Flexible	
Innovation and Creativity	

Thank you for your participation in the project and completion of this questionnaire!

ANNEXURE 3

JOB DESCRIPTION REPORT OF THE WORK PROFILE SYSTEM

(WPS)

WORK PROFILING SYSTEM
JOB DESCRIPTION REPORT

INTERNATIONAL EDITION - Version 1.5

Business Dealer Officer

Purpose of the Job Description Report

The job description report is a short report that identifies key activities and behaviours relevant to a job's objectives. Information is also provided regarding important job context information. This information is based directly upon the ratings provided by subject matter experts.
This report provides inputs to a wide variety of human resource decisions, from job evaluation to selection as it is clearly laid out and easy to use. The Job Description report provides clear descriptions of the job's title, location, reporting structure, main purpose, responsibilities, objectives and other important information about the specific job.

WORK INFORMATION

This section provides fundamental information about a job. Beyond a person's ability to perform tasks, which make up the job, other issues may impact a person's motivation or interest in a job, such as work location, salary and reporting relationships. These details are specified directly by the WPS user.

Job Title:	Business Dealer Officer
Organisation:	ABSA Vehicle & Asset Finance
Department:	Not provided ...
Location:	Gauteng
Salary Range:	R Not provided ...
Upward Reporting Relationships:	Not provided ...
Downward Reporting Relationships:	Not provided ...

MAIN PURPOSE OF JOB

To obtain a fair part of the vehicle and asset finance market, by being viseable in the market through personal contact with dealers and retaining of good relationship.

JOB OBJECTIVES

Meeting of production goals.
Reaching of market share goals.
Achieving of SLA's
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...

BACKGROUND REQUIREMENTS

Background requirements refer to the education, training and work experience necessary for a person to be a successful performer. Specific knowledge requirements and other requirements (e.g. willingness to relocate) may be specified by the WPS user to provide a more complete profile.

	Essential	Desirable
Education: Formal Qualifications		
Education involves the acquisition of knowledge and skills through learning where subject matter is imparted systematically. Formal qualifications are obtained by studying at formal institutions e.g. universities, technikons, colleges, etc.		
Level of Education: Standard 10/Grade 12/University Entrance - NQF 4		
Not provided ...		
Not provided ...		
Not provided ...		
Not provided ...		

	Duration / Time required to become competent in this area	Essential	Desirable
Attainments: Job related Work Experience			
Experience is obtained through opportunities for exposure and practice at work. It includes all working experience that has some bearing on the job and is not restricted to the current organisation. Supervised on-the-job training, internships and learnerships are incorporated within this category.			
Work Experience: 1 to 3 years			
1 to 3 years			
Not provided ...			
Not provided ...	Not provided ...		
Not provided ...			

	Duration / Time required to become competent in this area	Essential	Desirable
Attainments: Training Requirements (Knowledge and Skills)			
Formal Training	1 to 3 months		
Job related Knowledge Job-related knowledge is typically gained through formal or informal training programs (these exclude programs through which Formal Qualifications are attained). It includes knowledge of facts, data and information and understanding the rationale behind models, theories and principles.			

	Duration / Time required to become competent in this area	Essential	Desirable
Job related Skills Job-related skills are typically gained through formal or informal training programs (these exclude programs through which Formal Qualifications are attained). Skills refer to how to do things. They are demonstrated in the application of techniques and procedures.			
37786			

___ IMPORTANT NOTICE ___

This report was generated using the Work Profiling System module of the SHL® Human Resource Management System. The report is computer-generated from the results of one or more job analysis questionnaires answered by subject matter experts and substantially reflects the answers provided by them. Due regard of this must be taken in the interpretation of this data. This report has been generated electronically

ESSENTIAL WORK ACTIVITIES

Essential activities are defined as task statements with ratings equal to or greater than 60 on a 100 point scale of task criticality. Criticality ratings take into account the importance of the task in meeting job objectives and the time spent performing the task. These ratings were provided by people who know this job well. See WPS Technical Report for details.

F5: REPRESENTING / SELLING

Picking up cues to satisfaction from personal contact
Selling: known customer - customer makes contact
Selling: known customer - seller makes contact
Contacting a customer to check satisfaction
Negotiating price with customers
Answering enquiries verbally about a product or service

E7: DECIDING

Deciding a course of action in conjunction with others
Deciding a course of action on own initiative
Making quick decisions under time pressure
Mentally reacting quickly to emergency situations

F1: INFLUENCING / ADVISING

Offering professional advice
Making a spoken case for a course of action
Advising on everyday points of procedure
Summarising salient points in debate or disagreement
Negotiating on points of dispute
Making a case to superiors for resources or support
Setting out arguments for/against a course of action
Defending a position against critical attack
Arguing a case in a formal meeting or session

B3: MOTIVATING

Creating a good team spirit
Understanding the personal needs or motives of others
Encouraging co-operation between team members
Encouraging a faster rate of work
Gaining willing co-operation
Sustaining interest of others in projects or continuing tasks
Stimulating interest in activities
Emphasising the importance of reaching a work objective

F3: INFORMING / DISCUSSING / INTERVIEWING

Interviewing informally to establish facts
Answering critical questions about activities
Discussing issues for clarification or explanation
Making a verbal report to a supervisor or manager
Making constructive verbal criticism

E6: CHECKING

Checking work has been carried out to specification
Checking all materials are available for a project
Checking work completion to a set standard
Inspecting by eye to assess machine performance

D2: PROBLEM SOLVING / DESIGNING

Brainstorming for new ideas
Suggesting new solutions to production problems
Finding new ways to improve the efficiency of an operation
Thinking up new systems or procedures

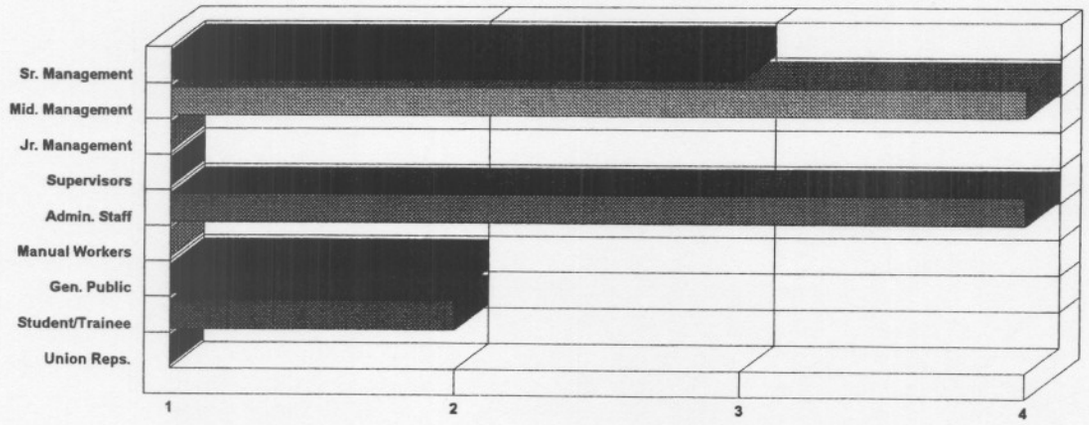
E3: INTEGRATING / CODING / ESTIMATING

Estimating risk associated with a course of action

INTERPERSONAL CONTACT

The graphs below show the nature, type and frequency of interpersonal contact required by the job.

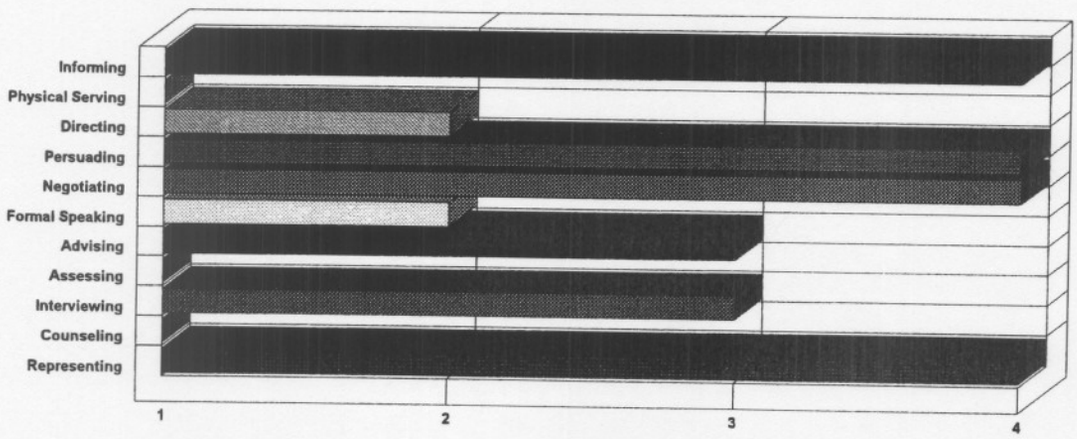
CONTACT WITH WHOM?



Key

1: None
2: Occasional (1-9% of time)
3: Moderate (10-20% of time)
4: Frequent (21% + of time)

TYPE OF CONTACT

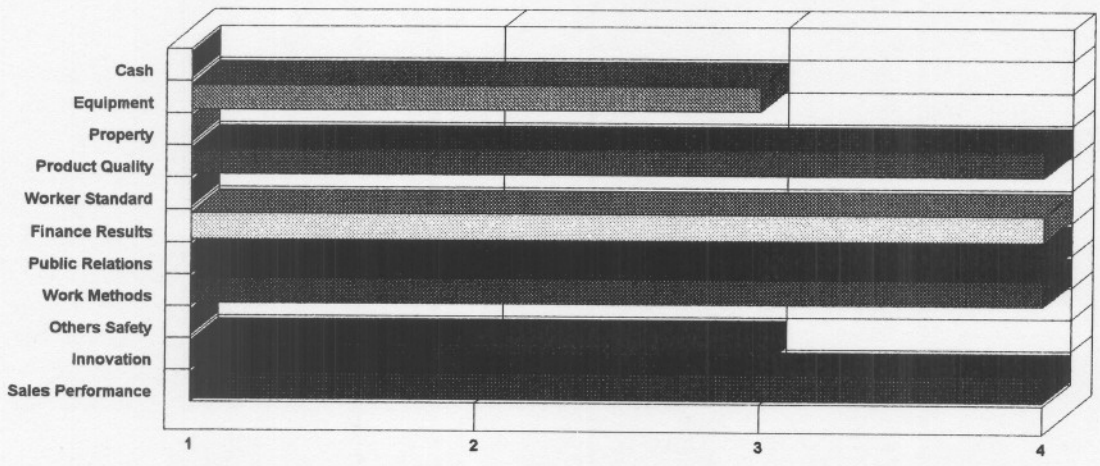


RESPONSIBILITIES

Responsibility for Resources:	None
Financial Impact:	Large impact, R60 000 - R599 000
Functional Impact:	Carries out routine operations which, in relation to the organisation's objectives, are a large part
Breadth of Job Knowledge:	Where there is one main job function, substantial knowledge of other functions
Demands of Change:	The job occasionally has new situations to deal with
Time Span of Impact:	Moderate term - within 1 to 3 months

SPECIFIC ACCOUNTABILITIES

The graph below shows the level of specific accountabilities for this job.



Key

1: None
2: Low
3: Moderate
4: High

WORK CONTEXT AND ENVIRONMENT

Type of Working Hours

Regular
Usually day time working

Working Hours

Normal weekly hours 0
Paid overtime hours 0
Unpaid overtime hours 0
Total weekly hours 0

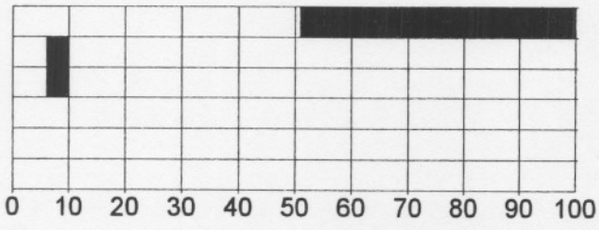
Travel

Time spent travelling (excl. from/to work) ..... 51% to 75%

Time Away from Home

Nights within home country ..... None
Nights in other countries ..... None

Posture: Percent Time Spent ...

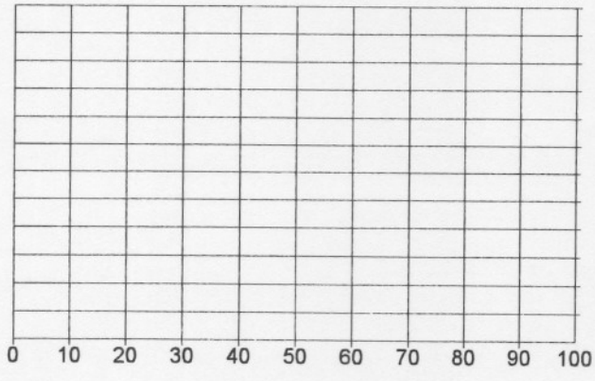


sitting
standing
walking
running
stooping/kneeling
climbing

Physical Danger

Minor physical injury ..... Almost no risk
Serious physical injury ..... Almost no risk

Physical Environment: Percent Time Spent ...



out of doors
at high temperature
at low temperature
in contaminated air
in noisy conditions
in dirty environment
in a restricted space
with inadequate lighting
with machine vibration
with ear protection
with eye protection
with breathing apparatus

PROJECT DETAILS SECTION

DESCRIPTION

The Project Details Section contains the most important details of this WPS Project, including the List of JAQs and any applicable project caveats. This information is important for documentation purposes.

Project Name	Business Dealer Officer
Project Id. Number	34
Project Description	Business Dealer Officer
Job Title	Business Dealer Officer
Questionnaire Type	101
Created by WPS User	1
Created on	28/10/2003 11:09:49 AM
Last Edited on	28/10/2003 11:11:16 AM
Task Sections Reranked	Reranked (default)

ANALYST CONTEXT VARIABLES

Type of Organisation	Banking, finance, insurance, business services and leasing
Size of Organisation	20000 or More
Ease of Finding Qualified Staff	Moderate supply of qualified people
Regional Availability	Moderate regional variations in availability
Site Locations	No demographic constraints

JAQS IN THIS PROJECT

Total JAQs in this Project: 1

JAQ Id.	Respondent Name	Respondent Job Title	Last edit:
35	Moller P	Unnamed Job	28/10/2003

QUESTIONNAIRE

Below are the Activity Categories of this Questionnaire, Task Categories are grouped according to this structure.

1	SECTION A: MANAGING TASKS
2	SECTION B: MANAGING PEOPLE
3	SECTION C: RECEIVING INFORMATION
4	SECTION D: THINKING CREATIVELY
5	SECTION E: WORKING WITH INFORMATION
6	SECTION F: COMMUNICATING
7	SECTION G: ADMINISTERING

SYSTEM INFORMATION

Report generated on:	28/10/2003 11:41:00
WPS User:	SuperUser

END OF REPORT

ANNEXURE 4

INVENTORY OF MANAGEMENT COMPETENCIES PROFILE (IMC) OF THE WORK PROFILE SYSTEM (WPS)

PERSON SPECIFICATION (IMC)

INTERNATIONAL EDITION - Version 1.5

Business Dealer Officer

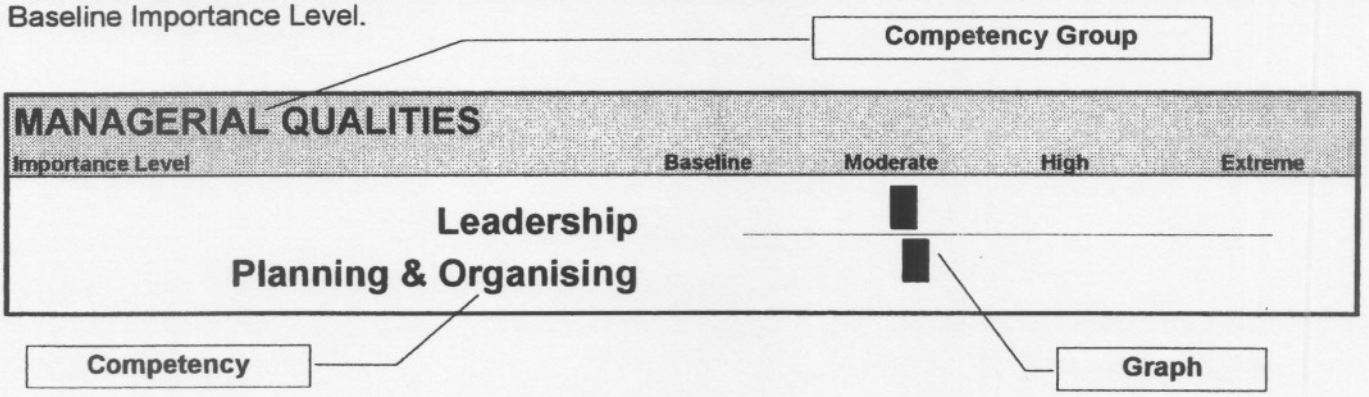
The Person Specification Report - IMC Profile identifies the most job relevant competencies based upon an analysis of the tasks, activities and work context that comprise this job. The profile is based upon SHL's competency model called **Inventory of Management Competencies** (or IMC).

The IMC Profile is based upon an analysis of the content and context of this job. It does not take account of the current relationships among employees or the prevailing culture of the organisation.

HOW TO USE THIS REPORT

The IMC Profile shows each competency organised by groups of competencies. Definitions of the competencies follow the IMC Profile. The importance level of each competency for this job is shown in the bar graph according to the scale definitions below:

Review the bar graph to see which competencies are relatively more important for this job. Note that most management jobs require nearly all of these competencies to some degree. This is shown by the Baseline Importance Level.



Definitions of Importance Levels used in the IMC Profile.

Baseline ..... Basic level of competency expected in all jobs, not unique to this job or directly linked to job objectives.

Moderate ..... Slightly more important for this job - relatively more important for meeting at least *some* job objectives.

High ..... More important for this job - relatively more important for meeting *most* job objectives.

Extreme ..... Much more important for this job - essential for meeting *nearly all* job objectives.

___ IMPORTANT NOTICE ___

WORK INFORMATION

This section provides fundamental information about a job. Beyond a person's ability to perform tasks, which make up the job, other issues may impact a person's motivation or interest in a job, such as work location, salary and reporting relationships. These details are specified directly by the WPS user.

Job Title:	Business Dealer Officer
Organisation:	ABSA Vehicle & Asset Finance
Department:	Not provided ...
Location:	Gauteng
Salary Range:	R Not provided ...
Upward Reporting Relationships:	Not provided ...
Downward Reporting Relationships:	Not provided ...

MAIN PURPOSE OF JOB

To obtain a fair part of the vehicle and asset finance market, by being viseable in the market through personal contact with dealers and retaining of good relationship.

JOB OBJECTIVES

Meeting of production goals.
Reaching of market share goals.
Achieving of SLA's
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...

BACKGROUND REQUIREMENTS

Background requirements refer to the education, training and work experience necessary for a person to be a successful performer. Specific knowledge requirements and other requirements (e.g. willingness to relocate) may be specified by the WPS user to provide a more complete profile.

		Essential	Desirable
Education: Formal Qualifications Education involves the acquisition of knowledge and skills through learning where subject matter is imparted systematically. Formal qualifications are obtained by studying at formal institutions e.g. universities, technikons, colleges, etc.			
Level of Education:	Standard 10/Grade 12/University Entrance - NQF 4		
Not provided ...			
Not provided ...			
Not provided ...			
Not provided ...			

		Duration / Time required to become competent in this area	Essential	Desirable
Attainments: Job related Work Experience Experience is obtained through opportunities for exposure and practice at work. It includes all working experience that has some bearing on the job and is not restricted to the current organisation. Supervised on-the-job training, internships and learnerships are incorporated within this category.				
Work Experience:	1 to 3 years			
1 to 3 years				
Not provided ...				
Not provided ...		Not provided ...		
Not provided ...				

	Duration / Time required to become competent in this area	Essential	Desirable
Attainments: Training Requirements (Knowledge and Skills)			
Formal Training	1 to 3 months		
Job related Knowledge Job-related knowledge is typically gained through formal or informal training programs (these exclude programs through which Formal Qualifications are attained). It includes knowledge of facts, data and information and understanding the rationale behind models, theories and principles.			

	Duration / Time required to become competent in this area	Essential	Desirable
Job related Skills Job-related skills are typically gained through formal or informal training programs (these exclude programs through which Formal Qualifications are attained). Skills refer to how to do things. They are demonstrated in the application of techniques and procedures.			
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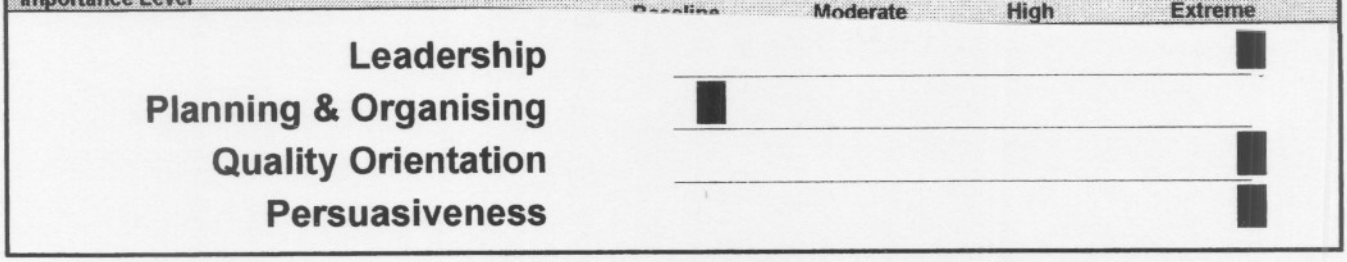
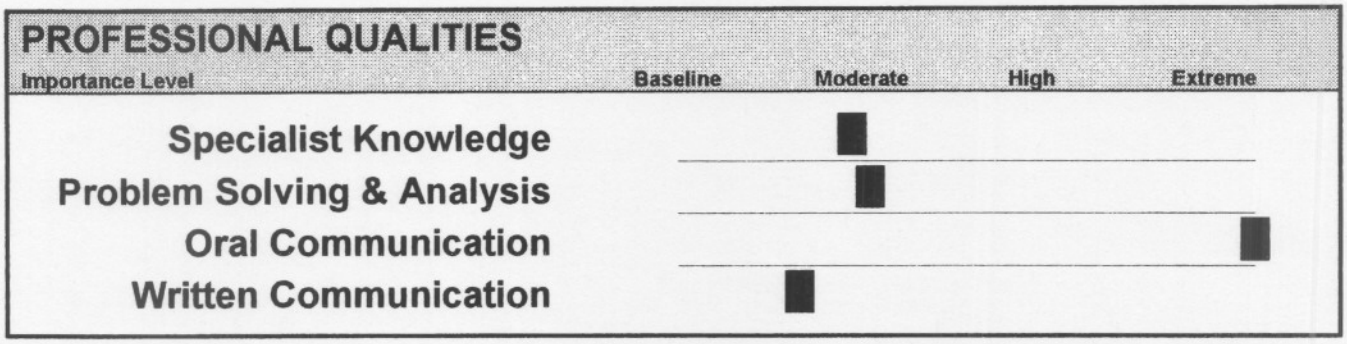
IMC PROFILE

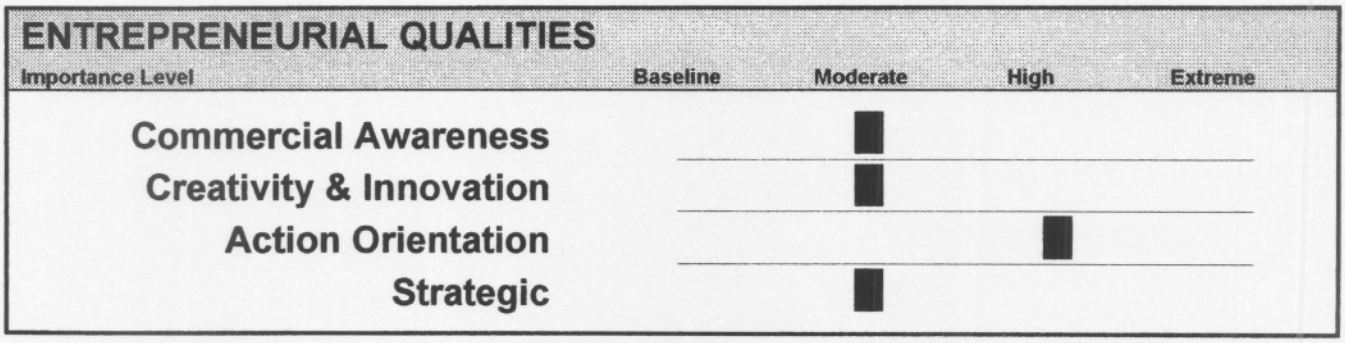
MANAGERIAL QUALITIES



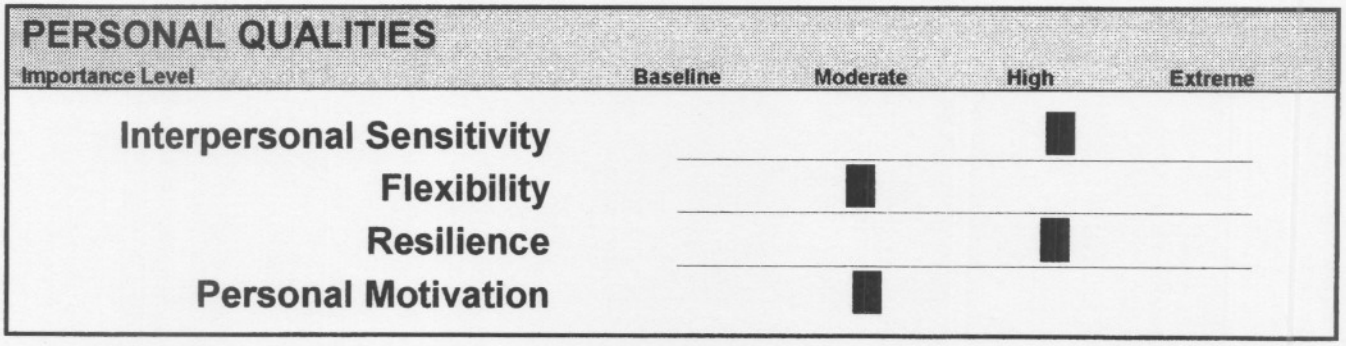
PROFESSIONAL QUALITIES



ENTREPRENEURIAL QUALITIES



PERSONAL QUALITIES



IMC SCALE DEFINITIONS

MANAGERIAL QUALITIES	
Leadership	Motivates and empowers others in order to reach organisational goals.
Planning & Organising	Organises and schedules events and activities and resources. Sets up and monitors timescales and plans.
Quality Orientation	Shows awareness of goals and standards. Follows through to ensure that quality and productivity standards are met.
Persuasiveness	Influences, convinces or impresses others in a way that results in acceptance, agreement or behaviour change.

PROFESSIONAL QUALITIES	
Specialist Knowledge	Understands technical or professional aspects of work and continually maintains technical knowledge.
Problem Solving & Analysis	Analyses issues and breaks them down into their component parts. Makes systematic and rational judgments based on relevant information.
Oral Communication	Speaks clearly, fluently and in a compelling manner to both individuals and groups.
Written Communication	Writes in a clear and concise manner, using appropriate grammar, style and language for the reader.

ENTREPRENEURIAL QUALITIES	
Commercial Awareness	Understands and applies commercial and financial principles. Views issues in terms of costs, profits, markets and added value.
Creativity & Innovation	Creates new and imaginative approaches to work-related issues. Identifies fresh approaches and shows a willingness to question traditional assumptions.
Action Orientation	Demonstrates a readiness to make decisions, take the initiative and originate action.
Strategic	Demonstrates a broad-based view of issues, events and activities and a perception of their longer term impact or wider implications.

PERSONAL QUALITIES	
Interpersonal Sensitivity	Interacts with others in a sensitive and effective way. Respects and works well with others.
Flexibility	Successfully adapts to changing demands and conditions.
Resilience	Maintains effective work behaviour in the face of set-backs or pressure. Remains calm, stable and in control of themselves.
Personal Motivation	Commits self to work hard towards goals. Shows enthusiasm and career commitment.

PROJECT DETAILS SECTION

DESCRIPTION

The Project Details Section contains the most important details of this WPS Project, including the List of JAQs and any applicable project caveats. This information is important for documentation purposes.

PROJECT DETAILS

Project Name	Business Dealer Officer
Project Id. Number	34
Project Description	Business Dealer Officer
Job Title	Business Dealer Officer
Questionnaire Type	101
Created by WPS User	1
Created on	28/10/2003 11:09:49 AM
Last Edited on	28/10/2003 11:11:16 AM
Task Sections Reranked	Reranked (default)

ANALYST CONTEXT VARIABLES

Type of Organisation	Banking, finance, insurance, business services and leasing
Size of Organisation	20000 or More
Ease of Finding Qualified Staff	Moderate supply of qualified people
Regional Availability	Moderate regional variations in availability
Site Locations	No demographic constraints

JAQS IN THIS PROJECT

Total JAQs in this Project: 1

JAQ Id.	Respondent Name	Respondent Job Title	Last edit:
35	Moller P	Unnamed Job	28/10/2003

QUESTIONNAIRE

Below are the Activity Categories of this Questionnaire, Task Categories are grouped according to this structure.

1	SECTION A: MANAGING TASKS
2	SECTION B: MANAGING PEOPLE
3	SECTION C: RECEIVING INFORMATION
4	SECTION D: THINKING CREATIVELY
5	SECTION E: WORKING WITH INFORMATION
6	SECTION F: COMMUNICATING
7	SECTION G: ADMINISTERING

SYSTEM INFORMATION

Report generated on:	28/10/2003 11:41:43
WPS User:	SuperUser

____ END OF REPORT ____

ANNEXURE 5

PERSON SPECIFICATION REPORT OF THE WORK PROFILE SYSTEM (WPS)

WORK PROFILING SYSTEM

PERSON SPECIFICATION

INTERNATIONAL EDITION - Version 1.5

Business Dealer Officer

Purpose of the Person Specification Report

The Person Specification Report identifies the human characteristics that are most job-relevant based upon an analysis of this project's key work activities and the work. The attributes shown are from SHL's comprehensive Human Attribute Model. This information is useful for personnel selection and placement decisions, person-job matching, and identifying similarities and differences between the person requirements of jobs.

WORK INFORMATION

This section provides fundamental information about a job. Beyond a person's ability to perform tasks, which make up the job, other issues may impact a person's motivation or interest in a job, such as work location, salary and reporting relationships. These details are specified directly by the WPS user.

Job Title:	Business Dealer Officer
Organisation:	ABSA Vehicle & Asset Finance
Department:	Not provided ...
Location:	Gauteng
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MAIN PURPOSE OF JOB

To obtain a fair part of the vehicle and asset finance market, by being viseable in the market through personal contact with dealers and retaining of good relationship.

JOB OBJECTIVES

Meeting of production goals.
Reaching of market share goals.
Achieving of SLA's
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...
Not provided ...

BACKGROUND REQUIREMENTS

Background requirements refer to the education, training and work experience necessary for a person to be a successful performer. Specific knowledge requirements and other requirements (e.g. willingness to relocate) may be specified by the WPS user to provide a more complete profile.

	Essential	Desirable
Education: Formal Qualifications Education involves the acquisition of knowledge and skills through learning where subject matter is imparted systematically. Formal qualifications are obtained by studying at formal institutions e.g. universities, technikons, colleges, etc.		
Level of Education: Standard 10/Grade 12/University Entrance - NQF 4		
Not provided ...		
Not provided ...		
Not provided ...		
Not provided ...		

	Duration / Time required to become competent in this area	Essential	Desirable
Attainments: Job related Work Experience Experience is obtained through opportunities for exposure and practice at work. It includes all working experience that has some bearing on the job and is not restricted to the current organisation. Supervised on-the-job training, internships and learnerships are incorporated within this category.			
Work Experience: 1 to 3 years			
1 to 3 years			
Not provided ...			
Not provided ...	Not provided ...		
Not provided ...			

	Duration / Time required to become competent in this area	Essential	Desirable
Attainments: Training Requirements (Knowledge and Skills)			
Formal Training	1 to 3 months		
Job related Knowledge Job-related knowledge is typically gained through formal or informal training programs (these exclude programs through which Formal Qualifications are attained). It includes knowledge of facts, data and information and understanding the rationale behind models, theories and principles.			

	Duration / Time required to become competent in this area	Essential	Desirable
Job related Skills Job-related skills are typically gained through formal or informal training programs (these exclude programs through which Formal Qualifications are attained). Skills refer to how to do things. They are demonstrated in the application of techniques and procedures.			
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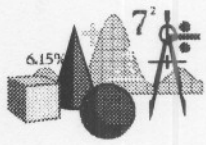
ABILITIES AND SKILLS INDICATORS



The Abilities and Skills Indicators are based upon SHL's Model of Human Attributes.

This model includes physical skills and cognitive abilities. The attributes below have been identified as significant and sorted into the categories: Essential Attributes, Important Attributes and Other Relevant Attributes. The decision rules used to identify these job-relevant attributes are shown at the end of this report.

Essential Attributes

Attribute Name	Ability/Skill Type
Speak in a clear and articulate manner	VERBAL SKILLS

Important Attributes

Attribute Name	Ability/Skill Type
Use grammatically correct speech	VERBAL SKILLS
Be expressive in oral communications	VERBAL SKILLS
Understand gestures, body language	VERBAL SKILLS

Other Relevant Attributes

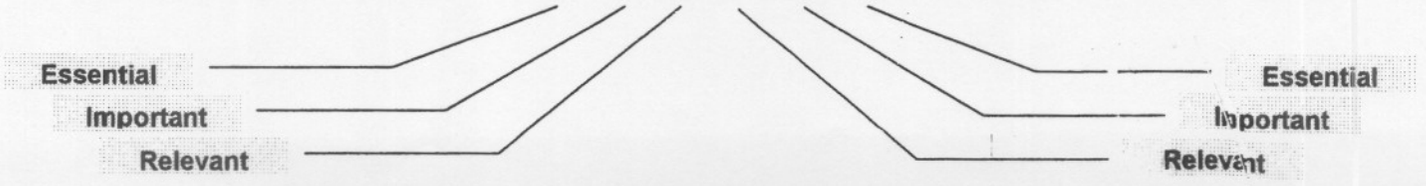
Attribute Name	Ability/Skill Type
Calculate using simple formulae	NUMBER SKILLS
Generation of varied ideas	CREATIVE THINKING SKILLS
Generation of original ideas	CREATIVE THINKING SKILLS

PERSONALITY INDICATORS

The Personality Indicators are based upon a combination of personality attributes that can be found in the various OPQ versions. **For the operationalisation of these attributes please refer to the next pages for the different OPQ versions.** The Personality Indicators are based upon the Work Profile generated for this project. It does not take account of the current relationships among employees nor the prevailing culture of the organisation. The decision rules used to identify these job-relevant attributes are shown at the end of this report.

Conflicting job demands can put pressure on a job holder. Conflicts are indicated below by Criticality Indices (displayed as ☒) that extend both to the low level and to the high level of an attribute. See the WPS Manual for more detail.

Low Level of Attribute							High Level of Attribute
Dislikes persuading/negotiating						☒	Enjoys selling & negotiating
Happy to let others take charge					☒		Likes to be in charge
Unprepared to put forward own opinions					☒		Freely expresses opinions
Accepts majority decisions				☒			Prefers to follow own approach
Quiet and reserved in groups							Lively and talkative in groups
Seldom misses the company of others				☒			Likes to be around people
(no lower level for this attribute)						☒	Feels comfortable when first meeting people
Talks about personal success							Keeps quiet about personal success
Prefers to make decisions alone					☒		Involves others in decision making
Selective with sympathy and support					☒		Sympathetic & considerate towards others
Prefers dealing with opinions and feelings					☒		Likes working with numbers
Dislikes critically analysing information						☒	Critically evaluates information
Tends no to analyse others' behaviour					☒		Enjoys analysing others' behaviour
Favours changes to work methods							Follows conventional approach
Dislikes dealing with abstract concepts							nterested in theories
Less inclined to be creative and inventive				☒			njoys being creative
Is prepared to do repetitive work				☒			eeks change/variety in work
Behaves consistently across situations					☒		anges behaviour to suit the situation or people
Operates without pre-planning				☒			E oys forming short term plans
Operates without pre-planning				☒			En ys forming long term plans
Dislikes tasks involving detail				☒			Is oncerned about details
Sees deadlines as flexible				☒			Foc ses on getting things finished
Not restricted by rules and procedures							Follows rules and regulations
Finds it difficult to relax				☒			Gene ally calm and untroubled
Feels calm before important occasions							Feels nervous before important occasions
Easily hurt by criticism							Not e ily offended
Expects the worst to happen					☒		Keeps n optimistic outlook
Finds it difficult to trust others				☒			Sees o ers as reliable & honest
Openly expresses emotion							Rarely splays emotion
Dislikes excessive work demands							Enjoys h ving a lot to do
Dislikes competing with others				☒			Enjoys c petitive activities
Sees career progression as less important					☒		Ambitious and career-centred
Likes to take time to reach conclusions							Makes fast decisions
Avoids practical activities							Enjoys repairing things
Not concerned with artistic matters							Shows artistic appreciation
Accepts points without question					☒		Critically evaluates ideas
Prepared to compromise & keeps views to self				☒			Argues strongly for opinions & has strong views
Copes easily with inactive jobs							Enjoys active jobs/activities



OCCUPATIONAL PERSONALITY QUESTIONNAIRE PROFILE (OPQ32i/OPQ32n)

The Personality Profile is based upon the Occupational Personality Questionnaire (OPQ32i/OPQ32n). These are divided into three major areas: Relationships with Others, Thinking Styles, and Feeling and Emotions. This page shows the relationship between the OPQ32 and the WPS attributes. The Personality Profile is based upon the Work Profile generated for this project. It does not take account of the current relationships among employees nor the prevailing culture of the organisation. The decision rules used to identify these job-relevant attributes are shown at the end of this report.

Conflicting job demands can put pressure on a job holder. Conflicts are indicated below by Criticality Indices (displayed as ☒) that extend both to the low level and to the high level of an attribute. See the WPS Manual and User's Guide for more detail.

Low Level of Attribute								High Level of Attribute
Dislikes persuading/negotiating				**Persuasive**			☒	Enjoys selling & negotiating
Happy to let others take charge				**Controlling**		☒		Likes to be in charge
Unprepared to put forward own opinions				**Outspoken**		☒		Freely expresses opinions
Accepts majority decisions				**Independent Minded**	☒			Prefers to follow own approach
Quiet and reserved in groups				**Outgoing**				Lively and talkative in groups
Seldom misses the company of others				**Affiliative**	☒			Likes to be around people
(no lower level for this attribute)				**Socially Confident**			☒	Feels comfortable when first meeting people
Talks about personal success				**Modest**				Keeps quiet about personal success
Prefers to make decisions alone				**Democratic**		☒		Involves others in decision making
Selective with sympathy and support				**Caring**		☒		Sympathetic & considerate towards others
Prefers dealing with opinions and feelings				**Data Rational**		☒		Likes working with numbers
Dislikes critically analysing information				**Evaluative**			☒	Critically evaluates information
Tends no to analyse others' behaviour				**Behavioural**		☒		Enjoys analysing others' behaviour
Favours changes to work methods				**Conventional**				Follows conventional approach
Dislikes dealing with abstract concepts				**Conceptual**				Interested in theories
Less inclined to be creative and inventive				**Innovative**	☒			Enjoys being creative
Is prepared to do repetitive work				**Variety Seeking**	☒			Seeks change/variety in work
Behaves consistently across situations				**Adaptable**		☒		Changes behaviour to suit the situation/people
Operates without pre-planning				**Forward Thinking**	☒			Enjoys forming long term plans
Dislikes tasks involving detail				**Detail Conscious**	☒			Is concerned about details
Sees deadlines as flexible				**Conscientious**	☒			Focuses on getting things finished
Not restricted by rules and procedures				**Rule Following**				Follows rules and regulations
Finds it difficult to relax				**Relaxed**	☒			Generally calm and untroubled
Feels calm before important occasions				**Worrying**				Feels nervous before important occasions
Easily hurt by criticism				**Tough Minded**				Not easily offended
Expects the worst to happen				**Optimistic**		☒		Keeps an optimistic outlook
Finds it difficult to trust others				**Trusting**	☒			Sees others as reliable & honest
Openly expresses emotion				**Emotionally Controlled**				Rarely displays emotion
Dislikes excessive work demands				**Vigorous**				Enjoys having a lot to do
Dislikes competing with others				**Competitive**	☒			Enjoys competitive activities
Sees career progression as less important				**Achieving**		☒		Ambitious and career-centred
Prepared to compromise & keeps views to self				**Decisive**				Makes fast decisions

Relevant

Important

Essential

OPQ CONCEPT MODEL PROFILE
(OPQ4.2/OPQ5.2)

The Personality Profile is based upon the OPQ Concept Model (OPQ4.2/OPQ5.2). These are divided into three major areas: Relationships with Others, Thinking Styles, and Feeling and Emotions. This page shows the relationship between the CM and the WPS attributes. The Personality Profile is based upon the Work Profile generated for this project. It does not take account of the current relationships among employees nor the prevailing culture of the organisation. The decision rules used to identify these job-relevant attributes are shown at the end of this report.

Conflicting job demands can put pressure on a job holder. Conflicts are indicated below by Criticality Indices (displayed as ☒) that extend both to the low level and to the high level of an attribute. See the WPS Manual and User's Guide for more detail.

Low Level of Attribute							High Level of Attribute
Dislikes persuading/negotiating			**Persuasive**			☒	Can sell and be persuasive
Prefers others to take control			**Controlling**		☒		Prefers to direct or take control
Prepared to compromise & keeps views to self			**Independent**	☒			Argues strongly for opinions
Is quiet and reserved			**Outgoing**				Is talkative and outgoing
Prefers to work alone			**Affiliative**	☒			Likes to work with groups/teams
(no lower level for this attribute)			**Socially Confident**			☒	Is confident with people
Is concerned for status			**Modest**				Avoids talking about self
Decides without consultation			**Democratic**		☒		Consults others before deciding
Tends to disregards people issues			**Caring**		☒		Is empathetic and tolerant
Avoids practical activities			**Practical**				Enjoys repairing things
Judges on basis of intuition			**Data Rational**		☒		Judges on basis of data/logic
Not concerned with artistic matters			**Artistic**				Shows artistic appreciation
Avoids analysing others' behaviour			**Behavioural**		☒		Likes analysing others' behaviour
Prefers non-traditional work culture			**Traditional**				Follows conventional approach
Seeks little change/variety in work			**Change Orientated**	☒			Seeks change/variety in work
Avoids theoretical approaches			**Conceptual**				Enjoys working with theory
Sticks to prevalent ideas/solutions			**Innovative**	☒			Enjoys creating novel solutions
Operates without pre-planning			**Forward Planning**	☒			Enjoys forming short & long term plans
Leaves details to others			**Detail Conscious**	☒			Is concerned about details
Leaves routine completion to others			**Conscientious**	☒			Sees routine tasks through
Worries about work problems			**Relaxed**	☒			Can switch off work pressures
Stays cool at important events			**Worrying**				Gets keyed up for big events
Is sensitive to comments about self			**Tough Minded**				Does not suffer hurt feelings
Openly expresses emotion			**Emotional Control**				Keeps feelings hidden
Expects the worst to happen			**Optimistic**		☒		Keeps an optimistic outlook
Accepts points without question			**Critical**		☒		Critically evaluates ideas
Copes easily with inactive jobs			**Active**				Enjoys active jobs/activities
Compromises without having to win			**Competitive**	☒			Likes to compete and win
Wants security more than success			**Achieving**		☒		Is ambitious for success
Takes time to weight up decisions			**Decisive**				Likes to make quick decisions

Relevant

Important

Essential

CUSTOMER CONTACT STYLES QUESTIONNAIRE PROFILE (CCSQ5.2/CCSQ7.2)

The Personality Profile is based upon the Customer Contact Styles Questionnaire (CCSQ5.2/CCSQ7.2). These are divided into three major areas: Relationships with People, Thinking Styles, and Emotions. This page shows the relationship between the CCSQ and the WPS attributes. The Personality Profile is based upon the Work Profile generated for this project. It does not take account of the current relationships among employees nor the prevailing culture of the organisation. The decision rules used to identify these job-relevant attributes are shown at the end of this report.

Conflicting job demands can put pressure on a job holder. Conflicts are indicated below by Criticality Indices (displayed as ☒) that extend both to the low level and to the high level of an attribute. See the WPS Manual and User's Guide for more detail.

Low Level of Attribute								High Level of Attribute
Dislikes persuading/negotiating				**Persuasive**			☒	Enjoys selling and negotiating
Open and frank; may show irritation				**Self-Control**				Restrained in showing irritation or annoyance
Task- rather than people-orientated				**Empathic**		☒		Interested in people and behaviour
Tends to talk about success				**Modest**				Avoids talking about self
Self-sufficient and prefers working alone				**Participative**	☒			Enjoys teamwork and builds on relationships
Prefers own company and is shy in groups				**Sociable**		☒		Likes being in groups and is socially confident
Dislikes probing facts and problem solving				**Analytical**			☒	Enjoys analysing information/data
Sticks to straight forward ideas/solutions				**Innovative**	☒			Enjoys creating novel solutions
Prefers familiar and established work patterns				**Flexible**	☒			Readily adapts to different circumstances
Dislikes structure and planning				**Structured**	☒			Enjoys planning, prioritising and structuring
Tends to leave details to others				**Detail Conscious**	☒			Is concerned about details
Deadlines seen as flexible and not absolute				**Conscientious**	☒			Sees routine tasks through
Affected by criticism, anxious, less relaxed				**Resilience**	☒			Copes with pressure and stress
Compromises without having to win				**Competitive**	☒			Likes to compete and win
Prefers less demanding tasks and goals				**Results Orientated**		☒		Stimulated by challenging targets
Difficulty to sustain high levels of energy				**Energetic**				Sustains a high level of energy over a long time

Relevant

Important

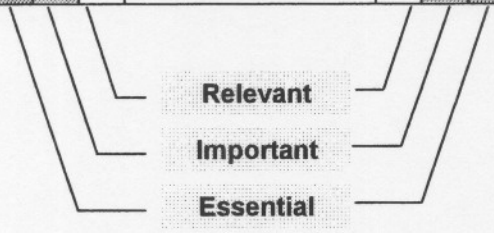
Essential

WORK STYLES QUESTIONNAIRE PROFILE (WSQn)

The Personality Profile is based upon the Work Styles Questionnaire (WSQn). These are divided into five major areas: Relationships with People, Thinking Styles, Feeling and Emotions, Energies, and Compliance. This page shows the relationship between the WSQ and the WPS attributes. The Personality Profile is based upon the Work Profile generated for this project. It does not take account of the current relationships among employees nor the prevailing culture of the organisation. The decision rules used to identify these job-relevant attributes are shown at the end of this report.

Conflicting job demands can put pressure on a job holder. Conflicts are indicated below by Criticality Indices (displayed as ☒) that extend both to the low level and to the high level of an attribute. See the WPS Manual and User's Guide for more detail.

Low Level of Attribute								High Level of Attribute
Less persuasive and dislikes taking charge				**Assertive**			☒	Persuasive and able to take charge
(no lower level for this attribute)				**Socially Confident**			☒	Is confident with people
Feels more productive when working alone				**Team Orientated**				Prefers to work in a team
Tends to be insensitive towards others				**Considerate**		☒		Shows consideration and sympathy to others
Tends to avoid practical activities				**Practical**				Enjoys repairing things
Sticks to straight forward ideas/solutions				**Innovative**				Enjoys creating novel solutions
Traditional and use conventional methods				**Adaptable**	☒			Readily adapts to different circumstances
Spends little time on planning or preparation				**Forward Thinking**	☒			Prepares well in advance and likes structure
Tends to leave detail to others				**Detail Conscious**	☒			Meticulous, precise and accurate
Affected by criticism, anxious, less relaxed				**Resilient**	☒			Can deal with pressure and criticism
Tends to show feelings				**Emotionally Controlled**				Restrained on showing emotions
Tends to expect the worst to happen				**Optimistic**		☒		Keeps an optimistic outlook
Copes easily with inactive jobs				**Active**				Energetic, restless, prefers to keep busy
Compromises without having to win				**Competitive**	☒			Likes to compete to win
Less ambitious, does not crave success				**Achieving**		☒		Is ambitious and results orientated
Takes time to weigh up decisions				**Decisive**				Likes to make quick decisions
May be less conscientious				**Dependable**				Hardworking, conscientious and trustworthy

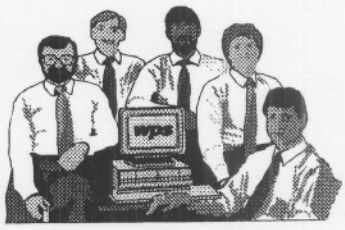


BEHAVIOUR TYPES PROFILES

Team Types Profile

Team types indicate preferred "team-role" behaviours of an individual. The profile below identifies the team role(s) most likely to be adopted by someone who matches the Personality Profile.

The Team Types Profile does not take account of your actual team needs, the current mix of your team's behavioural types nor the prevailing culture of your organisation. When determining the relevance of a particular team type, you will want to investigate which type(s) your team actually needs. Indicate the team type(s) your team actually needs in the specified column.



How likely?	*Team Type*	*Team Type Definitions*	*Is this who your team needs?*
Likely	**Co-ordinator**	Sets the team goals and defines roles. Co-ordinates team efforts and leads by eliciting respect.	YES ☐ NO ☐
Equal Likelihood	**Shaper**	Task leader who brings competitive drive to the team. Makes things happen but may be thought abrasive.	YES ☐ NO ☐
Unlikely	**Plant**	Imaginative, intelligent and the team's source of original ideas. Concerned with fundamentals.	YES ☐ NO ☐
Equal Likelihood	**Monitor - Evaluator**	Offers measured, dispassionate critical analysis. Keeps team from pursuing misguided objectives.	YES ☐ NO ☐
Equal Likelihood	**Resource Investigator**	Salesman, diplomat, resource seeker. Improviser with many external contacts. May be easily diverted.	YES ☐ NO ☐
Unlikely	**Completer**	Worries about problems, personally checks details and intolerant of careless work. Sees projects through.	YES ☐ NO ☐
Equal Likelihood	**Team Worker**	Promotes team harmony. Good listener who builds on the ideas of others. Likeable and unassertive.	YES ☐ NO ☐
Equal Likelihood	**Implementer**	Turns decisions and strategies into manageable tasks. Brings logical, methodical approach to team.	YES ☐ NO ☐

Selling/Influencing Styles Profile

Selling/Influencing styles indicate preferred "selling" behaviours of an individual. The profile below identifies the selling/influencing style(s) most likely to be adopted by someone who matches the Personality Profile.

The Selling/Influencing Styles Profile does not take account of your actual personnel needs, the current mix of your existing employee's behavioural types nor the prevailing culture of your organisation. When determining the relevance of a particular style, you will want to investigate which style(s) your staff actually needs. Indicate the needed selling/influencing style(s) in the specified column.

How likely?	*Sell/Influence Styles*	*Selling/Influencing Style Definitions*	*Is this who your staff needs?*
Likely	**Confident Communicator**	Copes will with more formal situations.	YES ☐ NO ☐
Likely	**Rapport Creator**	Quickly builds warm, friendly relations.	YES ☐ NO ☐
Unlikely	**Culture Fitter**	Identifies with prevailing customer culture.	YES ☐ NO ☐
Equal Likelihood	**Culture Breaker**	Valued for new ideas against prevailing norm.	YES ☐ NO ☐
Unlikely	**Enthusiast**	Infects customers with energetic enthusiasm.	YES ☐ NO ☐
Unlikely	**Persevere**	Succeeds by determined persistence to achieve a sale.	YES ☐ NO ☐
Unlikely	**Business Winner**	Thrives on competition and competitive situations.	YES ☐ NO ☐
Equal Likelihood	**Technician**	Enjoys a thinking, technical case style of selling.	YES ☐ NO ☐
Unlikely	**Admin Supporter**	Reassures customers who seek administrative quality.	YES ☐ NO ☐
Likely	**Team Manager** ✓	Understands how to assign, motivate and advise.	YES ☐ NO ☐

Leadership and Subordinate Styles Profiles

Leadership styles and Subordinate styles indicate preferred "reporting relationship" behaviours of an individual. The profiles below identify the styles most likely to be adopted by someone who matches the Personality Profile.

These profiles do not take account of the current mix of your existing employee's behavioural types nor the prevailing culture of your organisation. When determining the relevance of a particular style, you will want to investigate which styles your staff actually needs. Indicate the needed leadership/subordinate styles in the specified column.

LEADERSHIP STYLES

How likely?	*Leadership Styles*	*Leadership Style Definitions*	*Is this who your staff needs?*
Equal Likelihood	**Directive Leader**	Maintains responsibility for planning and control. Issues instruction in line with own perception of priorities.	YES ☐ NO ☐
Unlikely	**Delegative Leader**	Minimal personal involvement. Believes in delegation of task and responsibility.	YES ☐ NO ☐
Equal Likelihood	**Participative Leader**	Favours consensus decision making. Prepared to take time over decisions. Ensures involvement of all relevant individuals.	YES ☐ NO ☐
Equal Likelihood	**Consultative Leader**	Pays genuine attention to opinions and feelings of subordinates but maintains a clear sense of task objectives and makes the final decisions.	YES ☐ NO ☐
Equal Likelihood	**Negotiative Leader**	Makes "deals" with subordinates. Influences others by identifying their needs and using these as a basis for negotiation.	YES ☐ NO ☐

REPORTING STYLES

How likely?	*Subordinate Styles*	*Subordinate Style Definitions*	*Is this who your staff needs?*
Unlikely	**Receptive Subordinate**	Adheres to instructions and deadlines. Prefers to work with a clear direction from above.	YES ☐ NO ☐
Equal Likelihood	**Self-reliant Subordinate**	Prefers to work without constraints. Has own ideas and enjoys the opportunity to develop them with minimal intervention.	YES ☐ NO ☐
Likely	**Collaborative Subordinate**	Many ideas to contribute. Enjoys the collaborative process and prefers progressive ideas to conventional.	YES ☐ NO ☐
Equal Likelihood	**Informative Subordinate**	Likes to be involved in decision making but accepts final decisions even if contrary to personally held views.	YES ☐ NO ☐
Equal Likelihood	**Reciprocating Subordinate**	Not afraid to speak up and undeterred by status. Responds less well to direction than persuasion. May be stubborn but is task oriented.	YES ☐ NO ☐

PROJECT DETAILS SECTION

DESCRIPTION

The Project Details Section contains the most important details of this WPS Project, including the List of JAQs and any applicable project caveats. This information is important for documentation purposes.

PROJECT DETAILS

Project Name	Business Dealer Officer
Project Id. Number	34
Project Description	Business Dealer Officer
Job Title	Business Dealer Officer
Questionnaire Type	101
Created by WPS User	1
Created on	28/10/2003 11:09:49 AM
Last Edited on	28/10/2003 11:11:16 AM
Task Sections Reranked	Reranked (default)

ANALYST CONTEXT VARIABLES

Type of Organisation	Banking, finance, insurance, business services and leasing
Size of Organisation	20000 or More
Ease of Finding Qualified Staff	Moderate supply of qualified people
Regional Availability	Moderate regional variations in availability
Site Locations	No demographic constraints

JAQS IN THIS PROJECT

Total JAQs in this Project: 1

JAQ Id.	Respondent Name	Respondent Job Title	Last edit:
35	Moller P	Unnamed Job	28/10/2003

QUESTIONNAIRE

Below are the Activity Categories of this Questionnaire, Task Categories are grouped according to this structure.

1	SECTION A: MANAGING TASKS
2	SECTION B: MANAGING PEOPLE
3	SECTION C: RECEIVING INFORMATION
4	SECTION D: THINKING CREATIVELY
5	SECTION E: WORKING WITH INFORMATION
6	SECTION F: COMMUNICATING
7	SECTION G: ADMINISTERING

SYSTEM INFORMATION

Report generated on:	28/10/2003 11:51:02
WPS User:	SuperUser

__ Criteria Used to Identify Essential, Important and Other Relevant Attributes __

Essential Attributes: Criticality Index >= 80

Important Attributes: Criticality Index >= 60

Other Relevant Attributes: Criticality Index >= 30

____ END OF REPORT ____