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APPENDIX A

10 APPENDIX A –TERMINOLOGY

10.1 TERMINOLOGY

Table 10-1 contains the list of abbreviations and acronyms used in this document.

Table 10-1: Abbreviations and acronyms

Abbreviation	Meaning
BARS	Behaviourally Anchored Rating Scales
BOS	Behavioural Observation Scales
CEO	Chief Executive Officer
CIO	Chief Information Officer
CIT	Critical Incident Technique
DC	Data Centre
ERP	Enterprise Resource Planning
HR	Human Resource (as in Human Resource Management)
HRIMS	Human resource information management systems
ICT	Information and Communication Technology
IF / INFRA	Infrastructure
IPA	Individual Performance Agreement
IT	Information Technology (normally in the context of the IT representative or IT department)
ITIL	Information Technology Infrastructure Library
KPI	Key Performance Indicator
MBO	Management By Objectives
MSS	Mixed standard scales
PAQ	Position-Analysis Questionnaire
PM	Project Management Services
PMBOK	Project Management Body of Knowledge
PRINCE2™	PRojects IN Controlled Environments
ROx e.g. RO2	Research Objective
SA	South Africa
SLA	Service Level Agreement
SS	Software Unit
US	United States of America
VOIP	Voice Over Internet Protocol
WFMS	Workflow management systems

Table 10-2 contains formal referenced definitions and explanations for terminology relating to the services provided by the companies included in this study, as well as explanations for terminology specific to this thesis.

Table 10-2: Formal definitions and terms used

Term	Definition	Reference
Human capability	"...people's unique sets of skills, knowledge, and personal values and beliefs."	Brache (2003:61)
Individual abilities	Physical (for example, strength, dexterity, and stamina) (Barrier: Physical disability) Intellectual (for example, analytical ability, creativity, and memory) (Barrier: Cannot multitask; Cannot remember if not written – impact on specific job environment) Psychological (for example, personality traits, emotional makeup, and motivators) (Barrier: Avoiding social settings; Changing priorities; Pressure of interruptions; Attitude)	Brache (2003:65)
Knowledge	"Knowledge is an intangible privately produced public good, and is today the key determinant of economic and social progress."	Chichilnisky (1998:51)
Knowledge worker	"An employee whose major contribution depends on his employing his knowledge rather than his muscle power and coordination, frequently contrasted with production workers who employ muscle power and coordination to operate machines."	Drucker (1974:564)
Knowledge worker	"Knowledge workers own the means of production. It is the knowledge between their ears. And it is a totally portable and enormous capital asset. Because knowledge workers own their means of production, they are mobile."	Drucker (1999:149)
Knowledge worker	"...employees who carry knowledge as a powerful resource which they, rather than the organisation, own."	Drucker (In Sutherland, 2004:14)
Knowledge worker	"...the term knowledge worker will refer to any white-collar professional who works with, or uses, knowledge in order to complete his or her job efficiently and effectively and who attends to the importance of continuously upgrading their knowledge base."	Sutherland (2004:15)
Knowledge worker	"Knowledge workers have high degrees of expertise, education, or experience, and the primary purpose of their jobs involves the creation, distribution, or application of knowledge." "Knowledge workers think for a living."	Davenport (2005:10)
Nonstandard worker	"...the definition of nonstandard work as a combination of the nature of work arrangement along the three continua specified by Pfeffer and Baron (1988) and the fact of how work in that occupation has been traditionally arranged..."	Ashford, George and Blatt (2007:74)

Term	Definition	Reference
Outsource / Outsourcing	The process whereby one organisation gives the accountability and responsibility for certain non-core business processes to another external organisation.	Used in thesis
Performance	Performance is "...the results or outcomes of work", thereby opposing it to behaviour. They state that "... performance is the end result and behaviour is the means to that end" therefore performance is an accomplishment or output.	Dunnette and Fleishman (1982:xx)
Performance	"The desired results of behaviour"	Ivancevich and Matteson (2002:678)
Performance appraisal	"After these expectations have been established, it is possible to measure and evaluate behaviour, assessing how well it meets the expectations. This is the process of performance appraisal."	Miner (1992:379)
Performance appraisal	"A performance appraisal is any personnel decision that affects an employee's retention, termination, promotion, demotion, transfer, salary increase or decrease, or admission into a training program."	Latham and Wexley (1994:4)
Performance appraisal	"Performance appraisal, the systematic description of job-relevant strengths and weaknesses within and between employees or groups..."	Cascio (1998:58).
Performance Appraisal	"Performance appraisal (PA) is the ongoing process of evaluating and managing both the behaviour and outcomes in the workplace."	Grobler, Warnich, Carrell, Elbert and Hatfield (2006, 262)
Performance Appraisal (Performance evaluation)	"Performance evaluation....provides important feedback about how well the individual is getting along in the organization." (In the context of socialisation)	Ivancevich and Matteson (2002:79)
Performance Appraisal (Performance review)	"In observing, evaluating, and documenting on-the-job behaviour, we are essentially evaluating the degree of success attained by the individual jobholder in reaching organizational objectives."	Cascio (1998:40)
Performance appraisal importance	"Staffing, performance appraisal, training, and motivation principles are four key systems necessary for ensuring the proper management of an organization's human resources. Of these four systems, performance appraisal is perhaps the most important because it is a prerequisite for establishing the other three."	Latham and Wexley (1994:3)
Performance appraisal process	"The core of the performance appraisal process is the definition of effective employee behaviour."	Latham and Wexley (1994:3)
Performance appraisal purpose	"The primary purpose of performance appraisal is to counsel and develop employees on ways to increase their productivity."	Latham and Wexley (1994:45)
Performance Management	"Performance management, a broader term than performance appraisal, became popular in the 1980s as total quality management (TQM) programmes emphasised using all the management tools, including performance appraisal , to ensure achievement of performance goals."	Grobler, Warnich, Carrell, Elbert and Hatfield (2006:262)

Term	Definition	Reference
Persuasion	"Persuasion is trying to influence other people to our point of view or to take some action."	Severin and Tankard (1979:4)
Shared Service Model (HR)	"We have a shared services model and it is centralised. We basically have it in 3 compartments. We have the shared services part of it, then we have the competency centre which is HR development, your assessments, your performance management, talent management and then you have the HR BP model. So your HR BP is the Strategic Business Partner, which provides most of the strategic business delivery to business. You have the shared services that do the administration, leave, payroll, recruitment, all the shared services. And then the competency centre which basically includes Jane's whole environment. That provides from a competence and development perspective, the support for that. It is called the Dave Ulrich model." – P49(48)	Used in the thesis
Standby	Standby is a term used in outsourcing when technical support staff need to be available after hours should an incident occur that needs immediate attention.	Used in the thesis
Teamness	This implies a sense of teamwork and relates to the cohesion and interdependence amongst team members which is created through the communication of feelings, sensory information, as well as roles and identities in written or verbal communication.	Knoll and Jarvenpaa (1998:10)
Telework	"an alternative work arrangement whereby employees regularly spend at least part of their work hours away from the traditional office location."	Duxbury and Higgins (2002) as quoted by Schweitzer and Duxbury (2006:105)
Virtual knowledge worker	". . . workers who are removed from the direct sphere of influence of management and co-workers." Synonymous with the term "Teleworker"	Jackson, Gharavi and Klobas (2006:219)
Virtual performance	Performance where the individual is working remotely from the manager. The act of performing takes place remote from the manager who is directly accountable for the outcomes or performance.	Used in the thesis
Virtuality	Virtual status of the individual	Used in the thesis



APPENDIX B

11 APPENDIX B – SEMI-STRUCTURED QUESTIONNAIRES

11.1 MANAGER SEMI-STRUCTURED INTERVIEW

Table 11-1 contains the questions that were asked during the semi-structured interviews with the managers in the form of an interview guide. The columns represent firstly the number of the related research objective (RO), then the sequence (Seq) in which the questions were asked, followed by the questionnaire component as defined in the initial framework, an additional category of question and the actual question. The next column shows if the question was deemed to be compulsory or optional. The compulsory question is structured in a more open-ended way, while the optional question is more probing, should the manager not understand or not answer the question satisfactorily. The next two columns assist with the timing of the interview, showing firstly how much time should be spent on the question, and secondly the time elapsed for the interview. This was used to assist with the timekeeping in the interview. The last column was used for notes during the interview. Only the columns for the sequence, questions timing and notes were printed as part of the interview schedule.

Table 11-1: Manager semi-structured interview guide

RO	Seq.	Questionnaire Component	Category	Question	Incl?	Time (Min)	Time Total	Notes
RO1	1.00	(1) Demographics	Team Composition	Tell me about your team, how they work and what the main deliverables are?	Yes	15	15	
RO1	1.10	(1) Demographics	Team Composition	Team size; do they all work remote; do they work as individuals or in team; What is the basic deliverable; Is this line manager or project manager responsibility?	Opt	0	15	

RO	Seq.	Questionnaire Component	Category	Question	Incl?	Time (Min)	Time Total	Notes
RO1	1.20	(1) Demographics	Team Composition	How often do you see the individuals? Do not go into performance measurement necessarily. (This will give indication of who are virtual knowledge workers.)	Opt	0	15	
RO1	1.30	(1) Demographics	Reason for Virtual Work	Why do you let them work in this way?	Opt	0	15	
RO4	3.00	(3) Individual Participation	Selection	How do you select individuals to work as virtual knowledge workers? Why? (When you recruit, do you take this requirement into consideration?)	Yes	5	20	
RO1	4.00	(2) Management of Performance	Performance	Describe for me how you manage the performance of the virtual knowledge workers? (What metrics do you use? What technologies do you use? How do you define performance? How often do you meet with them to check performance.)	Yes	10	30	
RO1	4.10	(2) Management of Performance	Performance	Are there specific metrics that you have (or would like to) define that would apply to the measurement of performance of virtual knowledge workers?	Opt	0	30	
RO1	4.20	(2) Management of Performance	Technology	What technologies (information systems) do you use to support performance measurement of your team members? Is it working for you?	Opt	0	30	
RO1	4.30	(2) Management of Performance	Performance	How do you ensure productivity for the virtual knowledge workers in your team? How do you ensure they have delivered what was required?	Opt	0	30	
RO1	4.40	(2) Management of Performance	Performance	How do you measure or define <u>quality</u> ? How do you compare the outputs for the individual team members?	Yes	5	35	

RO	Seq.	Questionnaire Component	Category	Question	Incl?	Time (Min)	Time Total	Notes
RO2b	5.00	(7) Own perceptions of success	Performance	How does your management of performance differ between onsite (co-located) and virtual knowledge workers? Why? What is different? What is missing	Yes	5	40	
RO4	6.00	(3) Individual Participation	Performance	How does your management of performance differ between different remote workers? Why?	Yes	5	45	
RO3a	7.00	(2) Management of Performance	Mindset	How has your management approach changed since team members have started working virtually?	Yes	5	45	
RO3a	6.00	(2) Management of Performance	Mindset	What are the main challenges you face, working with or managing the performance of people you cannot see?	Yes	5	50	
RO2b	7.00	(7) Own perceptions of success	Management Approach	What part of your management approach is most successful in ensuring performance of virtual knowledge workers?	Yes	5	55	
RO2b	7.10	(7) Own perceptions of success	Performance	How does the way you manage (performance) enhance the performance of virtual knowledge workers?	Opt	0	55	
RO3a	7.20	(7) Own perceptions of success	Management Approach	How successful do you think you are with managing the performance of the virtual knowledge workers?	Opt	0	55	
RO4	8.00	(3) Individual Participation	Selection	What do you expect of the individual to show that he/she is remaining on task?	Yes	5	60	
RO4	8.10	(3) Individual Participation	Performance	What characteristics do individuals have that perform well in remotely managed scenarios?	Opt	0	60	
RO2a	10.00	(6a) Organisational Support - HR	Policies	How do you understand the organisation's view on flexi or remote work? (Aware of policies?)	Yes	5	65	
RO2a	10.10	(6a) Organisational Support - HR	Policies	What organisational support for virtual knowledge workers (and specifically the management of their performance) from an HR perspective do you get?	Yes	5	70	

RO	Seq.	Questionnaire Component	Category	Question	Incl?	Time (Min)	Time Total	Notes
RO2a	11.00	(6a) Organisational Support - IT	Technology	How do you perceive the organisational support for virtual knowledge workers (and specifically the management of their performance) from an IT perspective. (Technology, Training, Policies) ?	Yes	5	75	
RO2a	11.10	(6b) Organisational Support - IT	Technology	What technologies are supported from an organisational perspective?	Opt	0	75	
RO3b	12.00	(6c) Organisational Support - General	General	What else is needed from organisational perspective to improve the management of performance of virtual knowledge workers? What is missing? Why?	Yes	10	85	
RO3a	13.00	(7) Own perceptions of success	Performance	Do you think that you could do anything differently to improve your management of the performance of the individuals working remotely (virtual knowledge workers) ?	Yes	5	90	
RO3a	14.00	(8) Other Impacts	General	Is there anything else that you would like to share or that you deem relevant to the management of performance of virtual knowledge workers?	Yes	10	100	

11.2 HR REPRESENTATIVE SEMI-STRUCTURED INTERVIEW

The questions that were asked during the semi-structured interviews with the HR representatives are listed in Table 11-2 in the form of an interview guide. The columns represent firstly the number of the related research objective (RO), then the sequence (Seq) in which the questions were asked, followed by the questionnaire component as defined in the initial framework, an additional category of question and the actual question. The next two columns assist with the timing of the interview, showing firstly how much time should be spent on the question and secondly the time elapsed for the interview. This was used to assist with the timekeeping in the interview. The last column was used for notes during the interview. Only the columns for the sequence, questions timing and notes were printed as part of the interview schedule.

Table 11-2: HR Representative semi-structured interview guide

Obj	Seq.	Questionnaire Component	Category	Question	Time (Min)	Time (Total)	Notes
RO2a	1.00	(1) Demographics	Context	To start with, I would just like to get a general view of the approach to HR in the company? How is the HR department structured? (Centralised or decentralised models; Title of HR Group Manager? "Head of HR" or "Talent Director / Chief Talent officer")	7.5	7.5	
RO2a	1.10	(1) Demographics	Context	How would you describe the organisation's view towards virtual/flexi work from an HR perspective? (Link to Flexi work policies)	7.5	15	
RO2b	2.00	(4) Management Participation	Performance	How much flexibility do managers have in deciding over the virtual work arrangements of their resources?	5	20	
RO1	3.00	(1) Demographics	Context	Who in the company is currently making use of the virtual work / flexi work policy (if they exist)?	5	25	

Obj	Seq.	Questionnaire Component	Category	Question	Time (Min)	Time (Total)	Notes
RO1	4.10	(2) Management of Performance	Performance	How is performance in general managed in the organisation? (Refer to Performance management policy)	5	30	
RO1	4.20	(2) Management of Performance	Performance	Does the organisational prescriptions for management of performance of virtual knowledge workers differ? (Why?)	5	35	
RO3a	5.00	(2) Management of Performance	Performance Metrics	Are there specific metrics that HR has (or would like to) define that would apply to the measurement of performance of virtual knowledge workers?	5	40	
RO2b	6.00	(4) Management Participation	Performance	How well do you think managers are managing performance of their virtual knowledge workers? Why (is there a particular reason for your answer?)	5	45	
RO4	7.00	(3) Individual Participation	Performance	How would HR like to see individual employees contributing to managing performance when working virtually? Why?	5	50	
RO3b	8.10	(7) Own perceptions of success	Performance	Do you think that organisational support from HR side is sufficient / effective in supporting management of performance of virtual knowledge workers? Why?	5	55	
RO3b	8.20	(8) Other Impacts	General	Is there anything that you think could be added from an organisational level to assist with the management of performance of virtual knowledge workers?			
RO1	9.00	(8) Other Impacts	General	What is your personal experience around virtual work and management of performance in this context?	10	65	
RO3b	10.00	(8) Other Impacts	General	And in closing this interview, is there anything else that you would like to share which you deem relevant to the management of performance of virtual knowledge workers from an HR perspective, in your organisation?	5	70	

11.3 IT REPRESENTATIVE SEMI-STRUCTURED INTERVIEW

The questions that were asked during the semi-structured interviews with the IT representatives are listed in Table 11-3 in the form of an interview guide. The columns represent firstly the number of the related research objective (RO), then the sequence (Seq) in which the questions were asked, followed by the questionnaire component as defined in the initial framework, an additional category of question and the actual question. The next two columns assist with the timing of the interview, showing firstly how much time should be spent on the question and secondly the time elapsed for the interview. This was used to assist with the timekeeping in the interview. The last column was used for notes during the interview. Only the columns for the sequence, questions timing and notes were printed as part of the interview schedule.

Table 11-3: IT representative semi-structured interview guide

RO	Seq	Questionnaire Component	Category	Question	Time (Min)	Time (Total)	Notes
RO1	1.00	(1) Demographics	Context	Please give me an overview of the IT department (Size, services, products supported) and how it services the organisation?	7.5	7.5	
RO2a	2.00	(6b) Organisational Support - IT	Technology	What technologies exist to support the work of virtual knowledge workers?	7.5	15	
RO2a	3.00	(6b) Organisational Support - IT	Technology	How does training for these tools take place?	5	20	
RO2a	4.00	(1) Demographics	Policies	In terms of the IT policies of your organisation, how do they link to the technologies provided for virtual knowledge workers?	5	25	
RO2b	5.00	(4) Management Participation	General	What is the biggest requirement managers have presented to IT in terms of virtual workers?	5	30	

RO	Seq	Questionnaire Component	Category	Question	Time (Min)	Time (Total)	Notes
RO4	6.00	(3) Individual Participation	General	What is the biggest requirement individuals have presented to IT in terms of virtual work?	5	35	
RO4	7.00	(3) Individual Participation	Technology	What is the take-up of the technologies (that support virtual work) under individual team members? How do you know this? Why this kind of take-up?	5	40	
RO3b	8.00	(7) Own perceptions of success	Technology	Do you think that the technologies provided from an organisational level are effective / efficient for managing performance (and metrics) of virtual knowledge workers? Why?	5	45	
RO2b	9.00	(4) Management Participation	Technology	Do managers use the technologies when managing the performance of their individual team members (especially virtual knowledge workers)? (WHY?)	5	50	
RO1	10.00	(7) Own perceptions of success	General	What is your personal experience around virtual work and management of performance in this context?	10	60	
RO3b	11.00	(8) Other Impacts	General	Is there anything else that you would like to share which you deem relevant to the management of performance of virtual knowledge workers from an IT perspective?	5	65	



APPENDIX C

12 APPENDIX C – ONLINE QUESTIONNAIRES

12.1 INDIVIDUAL QUESTIONNAIRE

12.1.1 Email Notification

Dear Peter,

I have interviewed your manager, Johnson, and in this context you are being invited to participate in the following survey. The survey relates to an academic research study conducted by myself, Karen Luyt, as Doctoral student from the Department Human Resource Management at the University of Pretoria.

The survey is titled: "Individual VKW Questionnaire: Questionnaire for Individual Virtual Knowledge Workers".

The purpose of the study is to investigate, analyse and describe the ongoing or continual measurement and management of the performance of individuals who often work away from the direct control and influence of their managers and colleagues, with the aim of constructing a managerial framework for the management of performance of virtual knowledge workers.

Please note the following:

- 1) Your participation in this study is very important, and each completed questionnaire contributes to a higher degree of validity. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- 2) Should you wish to continue, please answer the questions in the online questionnaire as completely and honestly as possible. This should take less than 20 minutes of your time.
- 3) The results of the study may be used for academic purposes as well as for lay articles and conference proceedings. A summary of the results of the study will be made available on request.
- 4) Academic support:

* Supervisor: Prof K. Stanz (012 420 3074; karel.stanz@up.ac.za)

* Co-supervisor: Prof S.M. Nkomo (012 420 4664; stella.nkomo@up.ac.za)

By clicking on the URL below, you will indicate that you have read and understand the information provided above and that you give your consent to participate in the study on a voluntary basis.

Do not hesitate to contact me if you have further questions or suggestions.

Sincerely,

Karen Luyt

Student Number: 86423623

Registered for: PhD (Organisational Behaviour)

University of Pretoria

Tel: 082-895-2289

Fax: 086-606-0405

Email: karenluyt@tuks.co.za

Click here to do the survey:

<http://www.up.ac.za/hrresearch/index.php?lang=en&sid=69523&token=TEST>

12.1.2 Questionnaire Introduction

Dear Team Member

Thank you for agreeing to participate in the academic research study conducted by Karen Luyt, a Doctoral student from the Department Human Resource Management at the University of Pretoria. The research study seeks to investigate, analyse and describe the management of the performance of individuals who often work away from the direct control and influence of their managers and colleagues, with the aim of constructing a managerial framework for the management of performance of virtual knowledge workers.

The questions pertain to how your performance is managed by your direct manager (who was mentioned in the email), and the survey consists of the following sections:

- 1) **Demographics:** General information regarding yourself and the way you work.
- 2) **Management of Performance:** How your performance is managed in your current position.
- 3) **Managerial Support:** The support your manager provides in terms of achieving performance in your work situation.
- 4) **Organisational Support:** The support provided to you on organisational level from a Human Resources (HR) and Information Technology (IT) perspective.
- 5) **Other items:** This section pertains to your own perceptions of how successful you are in achieving work performance. Some final open questions are also added.

Any further questions or suggestions can be directed at:

- * Karen Luyt (082 895 2289; karenluyt@tuks.co.za)
- * Supervisor: Prof K. Stanz (012 420 3074; karel.stanz@up.ac.za)
- * Co-supervisor: Prof S.M. Nkomo (012 420 4664; stella.nkomo@up.ac.za)

By clicking on "**Next**" below, you will start the survey.

12.1.3 Questionnaire Start

Questionnaire for Individual Virtual Knowledge Workers

There are 32 questions in this survey

Section 1: Demographics

General information regarding the way of work.

1 What is your employment status in your current organisation? *

Please choose **only one** of the following:

- Permanent Employee - Full time
- Permanent Employee - Part time
- Contractor - hourly paid
- Contractor - fixed term
- Third Party representative or consultant
- Temporary Worker
- Other

2 Does your current role include line management responsibilities? *

Please choose **only one** of the following:

- Yes
- No
- Uncertain

A line manager would be responsible for managing and controlling resources from an organisational structure perspective, and may amongst others, give work direction, do performance appraisals and approve leave.

3 How long have you been employed in / or contracting at the current organisation? *

Please write your answer(s) here:

Years: _____
Months _____

Please enter the number of years (and/or months if applicable) in the space next to each item respectively. Please enter 0 if the item does not apply.

4 What is your current age in years? *

Please choose **only one** of the following:

- 21 or younger
- 22-26
- 27-31
- 32-36
- 37-41
- 42-46
- 47-51
- 52-61
- 62 and older

5 What is your normal start time for a working day? *

Please choose **only one** of the following:

- 05:00 am
- 05:30 am
- 06:00 am
- 06:30 am
- 07:00 am
- 07:30 am
- 08:00 am
- 08:30 am
- 09:00 am
- 09:30 am
- 10:00 am
- 10:30 am
- 11:00 am
- 11:30 am
- 12:00 am
- Other _____

6 What is your normal end time for a working day? *

Please choose **only one** of the following:

- 05:00 am
- 05:30 am
- 06:00 am
- 06:30 am
- 07:00 am
- 07:30 am
- 08:00 am
- 08:30 am
- 09:00 am
- 09:30 am



- 10:00 am
- 10:30 am
- 11:00 am
- 11:30 am
- 12:00 am
- Other _____

7 Of the total time worked per week, how many days do you work away from your manager?

Please write your answer here:

Enter a value greater than 0 if you do work away from your manager. A blank answer will be deemed to be 0. (Only Monday to Friday). You can enter a portion of a day as well.

8 For the time worked away from your manager, where is MOST of this work performed? *

Please choose **only one** of the following:

- Satellite Office
- Client Site
- Home
- Internet Cafe
- Coffee Shop
- Other

Pick the most used location

9 Would you classify yourself as a knowledge worker? *

Please choose **only one** of the following:

- Yes
- No
- Uncertain

Knowledge Worker Definitions

"...expert workers in jobs whose primary purpose is to create, distribute, or apply knowledge." (Davenport, 2005:24).

These individuals are expected to provide "insights, expertise, designs and know-how" (Houger, 2006:26).

10 Would you classify yourself as a virtual worker? *

Please choose **only one** of the following:

- Yes
- No
- Uncertain

Virtual Worker Definition

(Knowledge) workers who work geographically remote from the traditional work place (Ashford et al. 2007:69; Luyt, 2007:13), which results in them being "...removed from the direct sphere of influence of management and co-workers." (Jackson et al., 2006:219).

11. How long have you been working as virtual knowledge worker (i.e. remote from manager)? *

[Only answer this question if you answered 'Yes' to question 'D10 - Logic built into online questionnaire.]

Please write your answer(s) here:

Years : _____
Months : _____

Please enter the number of years (and/or months if applicable) in the space next to each item respectively. Please enter 0 if the item does not apply.

Section 2: Management of Performance

This section pertains to how your performance is managed in your current position. (You need to answer these questions in relation to the manager who directly controls your performance - this could be the project manager if you are working on projects, or else this would be your line manager.)

12 Please select the most appropriate answer for each statement. *

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
There are objective criteria whereby my performance can be measured.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy to measure and quantify my performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The measures of my job performance are clear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
My manager communicates goals and sets priorities with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager assesses my performance based on the results I achieve rather than how I spend my time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a lot to say about how to do my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Only one answer can be given per statement. All statements must be answered.

13 How satisfied are you with the amount of control you have in your work? *

Please choose **only one** of the following:

- Extremely Satisfied
- Satisfied
- Somewhat Satisfied
- Somewhat Dissatisfied
- Dissatisfied
- Extremely Dissatisfied

Select the most appropriate answer.

14 How is your performance measured? *

Please choose **all** that apply:

- Time spent working
- Number of products produced/delivered in given time
- Quality of work produced
- Level of customer satisfaction
- Management perceptions only
- Meeting financial targets
- Meeting objective criteria
- Progress on allocated tasks
- Novelty of solutions produced
- Complexity of solution produced

Other: _____



15 How would you like your performance to be measured? *

Please choose **all** that apply:

- Time spent working
- Number of products produced/delivered in given time
- Quality of work produced
- Level of customer satisfaction
- Management perceptions only
- Meeting financial targets
- Meeting objective criteria
- Progress on allocated tasks
- Novelty of solutions produced
- Complexity of solution produced

Other: _____

16 How is your attendance measured or checked? *

Please choose **all** that apply:

- Agreed start and end times
- Agreed total number of hours per day
- Presence Tool
- Shared Calendar
- Workflow in emails
- Online availability
- Not measured or checked explicitly (based on trust)

Other: _____

17 How would you like your attendance to be measured or checked? *

Please choose **all** that apply:

- Agreed start and end times
- Agreed total number of hours per day
- Presence Tool
- Shared Calendar
- Workflow in emails
- Online availability
- Not measured or checked explicitly (based on trust)

Other: _____

19 How often should your performance be measured? *

Please choose **only one** of the following:

- Daily
- Weekly
- Monthly
- Bi-Annually
- Per job or objective
- Combination of frequencies stated above
- Only during formal Performance Appraisal
- Other

Select the most appropriate frequency.

20 How do you receive feedback from your manager on your performance? *

Please choose **all** that apply:

- Face-to-Face (Informal)
- Face-to-Face (Formal appointment)
- Online Meeting (Formal)
- Online chat or email (Informal)
- Via IT system (automated)

Other: _____

21 Indicate who all evaluates your performance: *

Please choose **all** that apply:

- Peer review (Same level)
- Subordinate level (Lower level)
- Self-evaluation or rating (Self)
- Manager (Higher Level)
- Team or Group
- External Customer

Other: _____

22 How long have you been working as subordinate for your immediate manager?*

Please choose **only one** of the following:

- 6 months or less
- 6+ months to 1 year
- 1+ to 2 years
- 2+ to 3 years
- 3+ to 5 years
- More than 5 years

23 Please select the most appropriate answer for each statement regarding your manager.*

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
I trust my manager.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager trusts me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager allows me to work flexible hours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager allows me to select my location of work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of control my manager exerts over my day-to-day activities is acceptable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been trained by my manager to work remotely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager uses available information technology tools effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager supports my information technology needs with equipment, financial support, and training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Select the most applicable answer. Please review and provide answer for each statement.



Section 3: Organisational Support

This section pertains to the support provided to you on organisational level from a Human Resources (HR) and Information Technology (IT) perspective.

24 Does your company have a formal "work from home" policy? *

Please choose **only one** of the following:

- Yes
- No
- Uncertain

May also be referred to as a telecommuting policy

25 Does your company have a flexible work hours policy? *

Please choose **only one** of the following:

- Yes
- No
- Uncertain

Flexible work hours normally allows you to make arrangement to work outside of normal office hours.

26 Please select the most appropriate answer for each statement. *

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
The organisational culture supports virtual knowledge workers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The HR procedure to evaluate my performance is fair.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have had some training from organisational level on how to use technologies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organisational IT systems provided are sufficient to support virtual knowledge workers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Select the most applicable answer. Please review and provide answer for each statement.

27 What Information Technologies or systems does your company provide to enable your performance while working remotely?

Please choose **all** that apply:

- SMS / MMS
- Document Libraries
- Communicator type tools (e.g. MSN, Skype)
- Company portals
- Desktop sharing and collaboration tools
- Virtual meeting tools
- Video Conferencing
- Team Blogs
- Social networking forums
- Emails

Other: _____

28 What Information Technologies or systems do you use to enable your performance while working remotely? *

Please choose **all** that apply:

- SMS / MMS
- Document Libraries
- Communicator type tools (e.g. MSN, Skype)
- Company portals
- Desktop sharing and collaboration tools
- Virtual meeting tools
- Video Conferencing
- Team Blogs
- Social networking forums
- Emails

Other: _____

These systems do not necessarily have to be provided by the organisation you work for.



Section 4: Other Items

This section pertains to your own perceptions of how successful you are in achieving work performance. Some final open questions are also added.

29 Please review the statements below and select the most appropriate answer.

*
—

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
My manager does not have to monitor me in order for me to perform up to standard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am frequently interrupted by requests for information from others in my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my job, I am frequently called on to provide information and advice to others in my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way I perform my job has a significant impact on others in my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My performance does not depend on working with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To perform my best, I need to work independently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that I can achieve the goals I set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my own performance and deliverables are according to standard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my manager thinks that my performance and deliverables are according to standard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my colleagues and team members think that my performance and deliverables are according to standard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Select the most applicable answer. Please review and provide an answer for each statement.



30 What could be done to measure and manage your performance in terms of day-to-day output in a more effective and efficient way (or are there items that should not be measured)?

Please write your answer here

Your opinion will be highly appreciated.

31 What could you do more of, or differently, to ensure that your performance can be managed effectively? *

Please write your answer here

Your opinion will be highly appreciated.

32 How could changes on organisational level help you to enhance your performance as virtual knowledge worker? *

Please write your answer here

Your opinion will be highly appreciated.

----- Thank you for completing this survey. -----

12.1.4 Email Reminder

Dear Peter,

You were recently invited to participate in a survey, related to an interview with your manager, Johnson.

If you have not completed the survey yet, I would like to remind you that the survey is still available should you wish to take part. Your contribution is valuable and your participation would be appreciated. The completion of the survey should take less than 20 minutes of your time.

The survey is titled:

"Questionnaire for Individual Virtual Knowledge Workers"

For more information and to participate, please click on the link below.

Sincerely,

Karen Luyt

Student Number: 86423623

Registered for: PhD (Organisational Behaviour)

University of Pretoria

Tel: 082-895-2289

Fax: 086-606-0405

Email: karenluyt@tuks.co.za

Click here to do the survey:

<http://www.up.ac.za/hrresearch/index.php?lang=en&sid=69523&token=TEST>

12.2 MANAGER ONLINE QUESTIONNAIRE

12.2.1 Email Invitation

Dear Joan,

This is the survey referred to during the recent interview held with you, regarding the PhD research for "A managerial framework for the management of performance of virtual knowledge workers".

The survey is titled:

"Virtual Knowledge Worker Questionnaire for Managers"

To participate, please click on the link below.

Sincerely,

Karen Luyt

Student Number: 86423623

Registered for: PhD (Organisational Behaviour)

University of Pretoria

Tel: 082-895-2289

Fax: 086-606-0405

Email: karenluyt@tuks.co.za

Click here to do the survey:

<http://www.up.ac.za/hrresearch/index.php?lang=en&sid=78987&token=MngTest>

12.2.2 Questionnaire Introduction

Dear Manager

You are invited to continue your participation in the academic research study conducted by Karen Luyt, a Doctoral student from the Department Human Resource Management at the University of Pretoria. This questionnaire is in addition to the semi-structured interview already held with you.

Any further questions or suggestions can be directed at:

Karen Luyt (082 895 2289 or email at karenluyt@tuks.co.za)

Supervisor: Prof K. Stanz (012 420 3074; karel.stanz@up.ac.za)

Co-supervisor: Prof S.M. Nkomo (012 420 4664; stella.nkomo@up.ac.za)

By clicking on "Next" below, you will indicate that you give your consent to continue participating in the study on a voluntary basis.

12.2.3 Questionnaire start

Performance of Virtual Knowledge Workers - Manager Questionnaire

There are 13 questions in this survey

Section 1 – Demographics

This section contains some background questions

1 Please confirm your name and surname. *

Please write your answer here:

This is important to be able to link your survey answers back to the interview, as well as the individual team member questions

2 How long have you been the manager for your current team? *

Please write your answer(s) here:

Years : _____

Months : _____

Please enter the number of years (and/or months if applicable) in the space next to each item respectively. Please enter 0 if the item does not apply.

3 What is your current age in years? *

Please choose **only one** of the following:

- 21 or younger
- 22-26
- 27-31
- 32-36
- 37-41
- 42-46
- 47-51
- 52-61
- 62 and older

4 How long have you been allowing individuals to work as virtual workers (i.e. remote from you as manager and/or their colleagues)? *

Please write your answer(s) here:

Years _____

Months _____

Please enter the number of years (and/or months if applicable) in the space next to each item respectively. Please enter 0 if the item does not apply.

4 How long have you been allowing individuals to work as virtual workers (i.e. remote from you as manager and/or their colleagues)? *

Please write your answer(s) here:

Years _____

Months _____

Please enter the number of years (and/or months if applicable) in the space next to each item respectively. Please enter 0 if the item does not apply.



5 What is your normal start time for a working day? *

Please choose **only one** of the following:

- 05:00 am
- 05:30 am
- 06:00 am
- 06:30 am
- 07:00 am
- 07:30 am
- 08:00 am
- 08:30 am
- 09:00 am
- 09:30 am
- 10:00 am
- 10:30 am
- 11:00 am
- 11:30 am
- 12:00 am
- Other _____

6 What is your normal end time for a working day? *

Please choose **only one** of the following:

- 05:00 am
- 05:30 am
- 06:00 am
- 06:30 am
- 07:00 am
- 07:30 am
- 08:00 am
- 08:30 am
- 09:00 am
- 09:30 am
- 10:00 am
- 10:30 am
- 11:00 am
- 11:30 am
- 12:00 am
- Other _____



Section 2 - Management of Performance

This section pertains to how you manage the performance of your current team members. You need to answer these questions in relation to the individual team members discussed in the interview.

7 Please select the most appropriate answer for each statement. *

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
There are objective criteria whereby the performance of my team members can be measured.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy to measure and quantify the performance of my team members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I communicate goals and set priorities with my team members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I assess the performance of team members based on the results they achieve rather than how they spend their time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team members have a lot to say about how they do their job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Only one answer can be given per statement. All statements must be answered.

8 In your opinion, how satisfied are your team members about the amount of control they have in their work? *

Please choose **only one** of the following:

- Extremely Satisfied
- Satisfied
- Somewhat Satisfied
- Somewhat Dissatisfied
- Dissatisfied
- Extremely Dissatisfied

Select the most appropriate answer.



9 How do you measure the performance of your team members? *

Please choose **all** that apply:

- Time spent working
- Number of products produced/delivered in given time
- Quality of work produced
- Level of customer satisfaction
- Management perceptions only
- Meeting financial targets
- Meeting objective criteria
- Progress on allocated tasks
- Novelty of solutions produced
- Complexity of solution produced

Other: _____

10 How do you measure or check the attendance of your team members? *

Please choose **all** that apply:

- Agreed start and end times
- Agreed total number of hours per day
- Presence Tool
- Shared Calendar
- Workflow in emails
- Online availability
- Not measured or checked explicitly (based on trust)

Other: _____



Section 3 - Managerial Support

This section pertains to the support you provide your individual team members in terms of achieving performance in their work. (*You need to answer these questions in relation to the individual team members who were discussed during the interview.*)

11 Please select the most appropriate answer for each statement regarding your team members. *

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
I trust my team members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team members trust me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I allow my team members to work flexible hours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I allow my team members to select their location of work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of control I exert over my team members' day-to-day activities is acceptable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trained my team members to work remotely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use available information technology tools effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I support team members' information technology needs with equipment, financial support, and training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Select the most applicable answer. Please review and provide answer for each statement.



Section 4 - Other Items

This section pertains to general questions. Final comments are allowed.

12 Please review the statements below and select the most appropriate answer*

Please choose the appropriate response for each item:

	Strongly Disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
I do not have to monitor my team members in order for them to perform up to standard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, the performance and deliverables of my team members are according to standard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Select the most applicable answer. Please review and provide an answer for each statement.

13 Is there anything else that you would like to add that has not been shared before?

Please write your answer here:

Any additional contribution will be highly appreciated.

----- Thank you for completing this survey. -----

12.2.4 Email Reminder (Example)

Hi Rita

I hope you are keeping well. I am just trying to finalise all the necessary data before starting on the analysis of the questionnaire data, and I saw that your answers on the manager questionnaire were still missing. I would really appreciate it if you could complete this it will really not take more than 10 minutes of your time, and will assist me in my data analysis of your team.

The link is given below again for easy access.

Thanking you in advance,

Karen Luyt

Student Number: 86423623

Registered for: PhD (Organisational Behaviour)

University of Pretoria

Tel: 082-895-2289

Fax: 086-606-0405

Email: karenluyt@tuks.co.za

Click here to do the survey:

{SURVEYURL}



APPENDIX D

13 APPENDIX D – CASE STUDY PROTOCOL

13.1 ORGANISATIONAL LETTER OF APPROVAL

A template letter was created for the companies, and signed by the respective organisational representatives.

Figure 13-1:Letter for organisational approval (template – page 1)

 <p>UNIVERSITEIT VAN PRETORIA UNIVERSITY OF PRETORIA YUNIBESITHI YA PRETORIA <small>Denkleiers • Leading Minds • Dikgopolo tla Dihlatleli</small></p> <p>Departement Menslikehulpbronbestuur Nagraadse programme www.up.ac.za/mhb</p> <p>Department of Human Resource Management Postgraduate programmes www.up.ac.za/hrm</p> <p>+27(0) 12-420-3108 +27(0)12-420-3574</p> <p><Date> <Representative Title, Name and Surname> <Company Name></p> <p>Permission for your organisation to participate in an academic research study</p> <p>Topic: A Managerial Framework for the Management of Performance of Virtual Knowledge Workers</p> <p>Dear <Name of representative></p> <p>Your company is invited to participate in an academic research study conducted by Karen Luyt (Student number 86423623; contact number 082 895 2289), a Doctoral student from the Department Human Resource Management at the University of Pretoria.</p> <p>The purpose of the study is to investigate, analyse and describe the ongoing or continual measurement and management of the performance of individuals who often work away from the direct control and influence of their managers and colleagues. This is a case study of the phenomenon in your organisation and will include interviews on management level, surveys on team member level, and review of organisational level support structures on human resource and information technology level.</p> <p>Please note the following:</p> <ul style="list-style-type: none">▪ All components of the study will be treated as strictly <u>confidential</u>. Any results will be of such a nature that it will not be possible to identify your organisation or any individuals in the organisation.▪ Your participation in this study is very important to us. Your organisation may, however, choose not to participate and you may also stop the participation of your <u>organisation</u> at any time without any negative consequences.▪ The individual participants in the study will be selected in collaboration with <u>yourself</u> and will also be given the option to participate on a voluntary basis.
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Figure 13-2:Letter for organisational approval (template – page 2)

- The results of the study will be used for academic purposes and may be published in an academic journal or other lay articles. We will discuss interim results of the specific case study with you, and provide you with a summary of our findings on request.
- Please contact my supervisor, Prof K. Stanz (012 420 3074; karel.stanz@up.ac.za) or my co-supervisor, Prof S. Nkomo (012 420 4664; stella.nkomo@up.ac.za) if you have any questions or comments regarding the study.
- The study has started and the aim is to submit the thesis by August 2012.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent for your organisation to participate in the study on a voluntary basis.

Initials and Surname

Position in the organisation

Division of Organisation for which the study will apply

Signature

Date

13.2 INTERVIEW PROTOCOL COMPONENTS

Examples of the protocol elements as discussed in Chapter 4 are included below. For the interview component, they include:

- an email for the company representative to assist in selection of managers and teams;
- online folder structure for each case;
- interview file contents;
- template letter (manager example included);
- informed consent form (manager example included);
- the interview schedules for the managers, as well as HR and IT representatives;
- an example page of the interview guide for the semi-structured interviews; and
- table of contents for the field notes template in MS Word that was created for each case.

Table 13-1: Email to company representative

Hi Janet
Herewith some more information regarding the meeting I have requested for <Date> and how your company can be involved in the research. The individuals to cover the following will have to be identified:
1) Interview with <u>one</u> IT Representative. This should be somebody who can speak about IT systems and support from an organisational perspective, especially pertaining to the teams selected. The requirement from an IT perspective includes the following: <ul style="list-style-type: none">• A semi-structured interview regarding the topic (planned 1.5 hours)• Providing of IT policy documents relating to the use of mobile technologies or other related policy documents.• Being available for follow up questions (telephonic / email) while the data is being analysed.
2) Interview with <u>one</u> HR Representative. This should be an individual who can speak about performance management in the organisation as a whole, as it would pertain to the teams selected. The requirements from an HR perspective include the following: <ul style="list-style-type: none">• A semi-structured interview regarding the topic (planned 1.5 hours)• Providing of policy documents relating to work from home or other alternative working arrangements.• Providing policy documents regarding performance management.• Providing example performance appraisal templates.• Being available for follow up questions (telephonic / email) once the data is being analysed.

- 3) Interview with three to five Managers of Teams – we can start with 3 managers, and if the storyline varies distinctly, then I would have to interview more managers/teams.
- The managers should have individuals in their teams that work remote from them and/or their colleagues, i.e. virtual knowledge workers.
 - The manager could be the line manager or the project manager, but should be the individual directly responsible for the performance of the individual team members.
 - The individuals reporting to the manager may also be managers, but preferably team members should be individuals who do not have a line management responsibility.
 - Team sizes should be at least 5 or more members
 - The requirements for the Manager include the following:
 - A semi-structured interview regarding the topic (planned 1.5 hours), which will relate to how the manager manages the performance of the team/individuals in the team.
 - Additional online questionnaire which will take not more than 10 minutes.
 - Providing the names and email addresses of the individuals in the team, since they will receive a separate online questionnaire to fill in (+-20 minutes).
 - Providing an example performance appraisal document that you use to measure your team members on.
 - Being available for follow up questions (telephonic / email) while the data is being analysed.

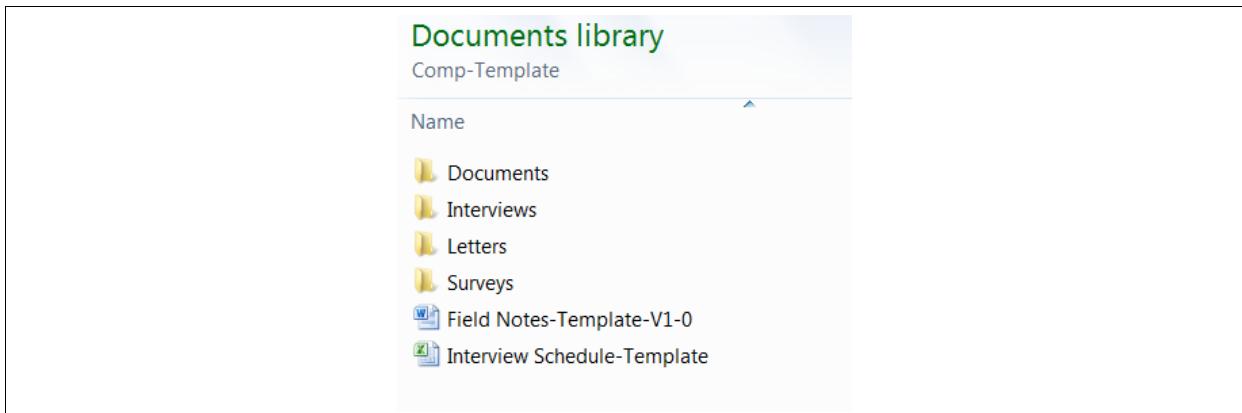
I also include the sample letters for the different type of individuals that contain the requirements above. We can discuss this in more detail on the <Date>.

Regards

Karen Luyt
Student Number: 86423623
Registered for: PhD (Organisational Behaviour)
University of Pretoria
T +27 (0) 11 266 6792
F +27 (0) 86 606 0405
C +27 (0) 82 895 2289

Once the interviews had been set up, a directory was created on the computer under the research folder where all the company documents per case were stored.

Figure 13-3: Online folder structure per company



Documents library

Comp-Template

Name

- Documents
- Interviews
- Letters
- Surveys
- Field Notes-Template-V1-0
- Interview Schedule-Template

A hard-copy interview file was also created, in which the spreadsheet with contact details, manager letters, informed consent forms (either the signed copy or some extra forms), interview schedule and semi-structured questions were placed in sequence in the interview file. The high-level information pertaining to the research study was also printed and added to the file for reference. The file layout is provided in Table 13-2. This table also indicates the figure numbers relating to examples of the relevant documents.

Table 13-2: Interview file contents

1. Research information (Figure 13-4)
 - a. Research objectives
 - b. Diagram for levels of analysis
 - c. Diagram for design elements
2. Company interviewee details
3. HR Manager documents
 - a. HR Manager letter (refer manager example)
 - b. Informed consent (refer manager example)
 - c. Interview schedule (Figure 13-7)
 - d. Interview guide / questions (refer manager example)
4. IT Manager documents
 - a. IT Manager letter (refer manager example)
 - b. Informed consent (refer manager example)
 - c. Interview schedule (Figure 13-8)
 - d. Interview guide / questions (refer manager example)
5. Manager documents (printed per manager)
 - a. Manager letter (Figure 13-5)
 - b. Informed consent (Figure 13-6)
 - c. Interview schedule (Figure 13-9)
 - d. Interview guide / questions (Figure 13-10)

Figure 13-4:Research information

Objective	Sub-Objective
1) To critically review the current state of knowledge and understanding of how the performance of virtual knowledge workers is managed.	RO1: To critically review the current state of knowledge and understanding of how the performance of virtual knowledge workers is managed .
2) To analyse and describe how the organisational context and the approach of managers affect the behaviours and outputs of virtual knowledge workers.	RO2a: To analyse and describe how the organisational context affects the performance and outputs of virtual knowledge workers. RO2b: To analyse and describe how the approach of managers affects the performance and outputs of virtual knowledge workers.
3) To create a new conceptual framework or intellectual tool to help managers to manage and enable the performance of virtual knowledge workers, and suggest what organisational context would be required to support this.	RO3a: To create a new conceptual framework or intellectual tool to help managers to manage and enable the performance of virtual knowledge workers. RO3b: To determine what organisational context would be required to support this new conceptual framework. RO3c: To determine how individual factors might influence the definition of the intellectual tool.

--

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Figure 13-5:Letter for manager page 1 and 2 (example)


UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Denkleiers • Leading Minds • Dikgopolo Ho Dihlatleli

Department of Human Resource Management
Postgraduate programmes
www.up.ac.za/hrm

Research conducted by:
Mrs. K. Luyt (86423623)
Cell: 082 895 2289
<Date>

<NAME SURNAME>
Manager of Team
<THE COMPANY>

Introduction to Study: A Managerial Framework for the Management of Performance of Virtual Knowledge Workers

Dear <NAME>

You are invited to participate in an academic research study conducted by Karen Luyt, a Doctoral student from the Department Human Resource Management at the University of Pretoria. Written approval to perform the study in <THE COMPANY> has been obtained from <COMPANY APPROVAL NAME>.

Performance management principles and measures in modern organisations have not adapted sufficiently to measure the performance of knowledge workers both effectively and efficiently. With the advent of mobile technologies, management now face a double dilemma of not only having to manage the performance of knowledge workers that work within their direct sphere of influence, but they also need to manage the performance of virtual knowledge workers whom they cannot see on a day-to-day basis. This often leads to management's perceptions of low productivity, especially where trust is low. It can also lead to reduced productivity on the side of the virtual knowledge workers where tasks and deliverables are not defined or agreed sufficiently, or when too many controls are instituted. In short, the problem that this study addresses is that managers in general have great difficulty with managing the performance of virtual knowledge workers.

The purpose of the study is therefore to investigate, analyse and describe the ongoing or continual measurement and management of the performance of individuals who often work away from the direct control and influence of their managers and colleagues. The detailed research objectives of the study are listed below.

- To critically review the current state of knowledge and understanding of how the performance of virtual knowledge workers is managed.
- To analyse and describe how the organisational context as well as the approach of managers impact the behaviours and outputs of virtual knowledge workers.
- To create a new conceptual framework or intellectual tool of how managers should manage the performance of virtual knowledge workers, and what organisational context would be required to support this new conceptual framework
- To determine what individual factors play a major role in the performance of VKW, and how this might influence the definition of the intellectual tool.

The research takes place in the form of a multiple case study, where the phenomenon will be studied through interviews on management level, surveys on team member level, and review of organisational level support structures from both an HR and IT perspective. <THE COMPANY> will be used as one of the cases for this research.

1 of 3 | Page



The requirements from you as Manager include the following:

- 1) Participating in a semi-structured interview regarding the topic (planned 1.5 hours), which will relate to how you manage the performance of your team.
- 2) Answering an additional online questionnaire which will take not more than 10 minutes of your time. (This will be a named questionnaire and linked to your interview.)
- 3) Providing the names and email addresses of the individuals in your team, since they will receive a separate online questionnaire to fill out. This will be anonymous, but group them as a team.
- 4) Providing an example performance appraisal document that you use to measure your team members on.
- 5) Being available for follow up questions (telephonic/ email) while the data is being analysed.

Please note the following:

- Your participation in this study is very important. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Your name will not appear in any quotes used from the interview and the answers you give will be treated as strictly confidential. Any results will be of such a nature that it will not be possible to identify you in person.
- Questions will be used to guide the interview, and you are urged to answer the questions of the interview as honestly and complete as possible. You may also volunteer additional information as you see applicable.
- All documents provided will be treated as confidential. Your answers will not be discussed with the team members, and the answers of team members will not be discussed with you directly.
- The results of the study may be used for academic purposes as well as for lay articles and conference proceedings; however, identities of individuals will be kept confidential. A summary of the findings will be provided on request.

If you agree to participate, and in the interest of time, I would appreciate it if you could sign the attached informed consent form, and have the information as requested above, ready at the interview.

Looking forward to your participation.

Kind Regards

Karen Luyt

Further questions can also be directed to:

- Supervisor: Prof Karel Stanz (012 420 3074; karel.stanz@up.ac.za)
- Co-supervisor: Prof Stella Nkomo (012 420 4664; stella.nkomo@up.ac.za)

SOME DEFINITIONS

Performance: Based on the dimensions of performance as identified by Neely, Adams and Kennerley (2002:30), performance is how efficient ("economy of utilisation") and effective ("achieving the set goals") an activity is performed.

Knowledge Worker: "...expert workers in jobs whose primary purpose is to create, distribute, or apply knowledge" (Davenport, 2005:24). These individuals are expected to provide "insights, expertise, designs and know-how" (Houger, 2002:20).

Virtual Knowledge Worker: Knowledge workers who work geographically remote from the traditional work place (Ashford, George & Blatt, 2007:60; Luyt, 2007:13), which results in them being "...removed from the direct sphere of influence of management and co-workers." (Jackson, Gharayev & Hobbs, 2006:210).



Figure 13-6: Manager informed consent form (example)

<p style="text-align: center;"> UNIVERSITEIT VAN PRETORIA UNIVERSITY OF PRETORIA YUNIBESITHI YA PRETORIA</p> <p style="text-align: center;">Informed consent for participation in an academic research study</p> <p style="text-align: center;">Dept. of Human Resource Management</p> <p style="text-align: center;">A MANAGERIAL FRAMEWORK FOR THE MANAGEMENT OF PERFORMANCE OF VIRTUAL KNOWLEDGE WORKERS</p> <p style="text-align: right;">Research conducted by: Mrs. K. Luyt (86423623) Cell: 082 895 2289</p> <p>I _____ herewith agree to participate in the study to research a managerial framework for the management of performance of virtual knowledge workers. I have read the description of the goals of the research and understand its purpose. Participation in the Research Study will require me to provide information about how I manage the performance of my team members through an interview and filling in a short online questionnaire. The contact details of my team members are required for distribution of an online questionnaire. Additional information may be collected via secondary sources such as documents.</p> <p>The researcher and any assistants agree to be bound by the research ethics of the University of Pretoria to protect the interest of research subjects including allowing me to review the case study (prior to publication) of my organisation resulting from the Research Study. The identity of me and my organisation will remain anonymous in any journal articles or other academic publications. I understand my organisation will be provided with a feedback report on its initiatives as well as the results of the overall project once they become available.</p> <p>_____ Authorised Signature and Title</p> <p>_____ Date</p> <p>_____ Karen Luyt, Investigator</p> <p>_____ Date</p> <p>3 of 3 Page</p>	
---	--



Figure 13-7: HR interview schedule

VKW RESEARCH: HR INTERVIEW					
Name		Date		Duration	
Place		Start Time		End Time	

Interview Schedule:

```
graph LR; A([Interview Schedule - HR Manager]) --> B[1. Introduction]; B -- "Timing: 10 minutes" --> C[Open-ended questions]; C --> D[2. Work through Questions]; D -- "Timing: 70 minutes" --> E[Performance Appraisal Example]; E --> F[Policy documents Work from Home]; F --> G[Policy for Performance Management]; G --> H[3. Closing]; H -- "Timing: 10 minutes" --> I[Will be analysing the data]; I --> J[Is the individual available for additional questions? How?]; J --> K[What will be shared in future]; K --> L[Confirm time available (pre-arranged time would have been 1.5 hours)]; L --> M[Confirm background of the study]; M --> N[Obtain informed consent form]; N --> O[Confirm if interview can be recorded]; O --> P[Refer to documents during interview]; P --> Q[Thank the HR manager for participation]; Q --> R[Confirm next steps]; R --> S[Will be analysing the data]; S --> T[Is the individual available for additional questions? How?]; T --> U[What will be shared in future];
```

POST INTERVIEW NOTES

|

Figure 13-8: IT interview schedule

VKW RESEARCH: IT REPRESENTATIVE INTERVIEW					
Name		Date		Rec Dur	
Place		Start Time		End Time	

```
graph LR; A([Interview Schedule - IT Manager]) --> B[1. Introduction]; B -- "Timing: 10 minutes" --> C[Open-ended questions]; C --> D[2. Work through Questions]; D -- "Timing: 60 minutes" --> E[Review documents]; E --> F[IT Policy]; F --> G[Mobile technology policy?]; G --> H[3. Closing]; H -- "Timing: 10 minutes" --> I[Will be analysing the data]; I --> J[Is the individual available for additional questions? How?]; J --> K[What will be shared in future]; K --> L[Confirm time available (pre-arranged time would have been 1.5 hours)]; L --> M[Confirm background to the study]; M --> N[Obtain informed consent]; N --> O[Confirm if interview can be recorded]; O --> P[Thank the IT manager for participation]; P --> Q[Will be analysing the data]; Q --> R[Is the individual available for additional questions? How?]; R --> S[What will be shared in future];
```

POST INTERVIEW NOTES



Figure 13-9: Manager interview schedule

VKW RESEARCH: MANAGER INTERVIEW					
Name		Date		Duration	
Place		Start Time		End Time	

Interview Schedule - Manager

```
graph LR; A[1. Introduction Timing: 5 minutes] --> B[2. Work through Questions Timing: 60-80 minutes]; B --> C[3. Closing Timing: 5 minutes]; C --> D[Confirm time available (pre-arranged time would have been 1.5 hours)]; D --- E[Confirm background and definitions]; D --- F[Obtain informed consent]; D --- G[Obtain IPA example]; D --- H[Obtain list of names & email addresses]; D --- I[Confirm if interview can be recorded]; E --- J[Thank the manager for participation]; J --- K[Sending of Questionnaire]; K --- L[Will be analysing the data]; K --- M[Is the manager available for additional questions? How?]; K --- N[What will be shared in future];
```

POST INTERVIEW NOTES

Figure 13-10: Example page of the interview guide

Seq.	Question	Ind?	Time (Min)	Time (Total)	Notes	More Notes
1.00	Tell me about your team, how they work and what the main deliverables are?	Yes	15	15		
1.10	Team size; do they all work remote; do they work as individuals or in team; What is the basic deliverable; is this line manager or project manager responsibility?	Opt	0	15		
1.20	How often do you see the individuals? Do not go into performance measurement necessarily. (This will give indication of who are virtual knowledge workers.)	Opt	0	15		
1.30	Why do you let them work in this way?	Opt	0	15		
3.00	How do you select individuals to work as virtual knowledge workers? Why? (When you recruit, do you take this requirement into consideration?)	Yes	5	20		

aaaVkw-QuestionnairePlanning-V3-0-SemiStructuredMANAGER INTERVIEW

1 of 6

Figure 13-10 contains only an example page of the questionnaires, since the full questionnaires are provided in Appendix B – Semi-Structured Questionnaires.

Once the interview was completed and post-interview notes made, the handwritten notes and initial ideas were conveyed to the field-notes document for the company in MS Word.

Table 13-3: Document TOC for case field notes

- | |
|--|
| <ol style="list-style-type: none"> 1. IT Interview: IT Manager (Date) <ol style="list-style-type: none"> a. Notes on content b. Notes on questions c. General Notes d. Documents received 2. HR Interview: Name (Date) <ol style="list-style-type: none"> a. Notes on content b. Notes on questions c. General Notes d. Documents received 3. Business Units: Business Unit 1 <ol style="list-style-type: none"> a. Manager1 Interview: Name (Date) <ol style="list-style-type: none"> i. Notes on content ii. Notes on questions iii. General Notes iv. Documents received b. Manager2 Interview: Name (Date) <ol style="list-style-type: none"> i. <Repeat of Manager 1> c. Notes: Business Unit 1 4. Organisational Level <ol style="list-style-type: none"> a. Notes from Interviews b. Company Background c. Company Structure 5. Managerial Framework based on Company 6. Recommendations for Company |
|--|

13.3 DATA ANALYSIS – TEXTUAL DATA PROTOCOL

13.3.1 File Management

The recorded interviews on both manager and organisational level were transcribed in full using MS Word. After the initial transcription, and before uploading into ATLAS.ti for open coding, each interview transcription was checked again for accuracy in relation to the recorded version. This also gave an overview of the full interview, which assisted with the coding process. The process given below has been used for versioning of the transcription files for each case, in preparation for uploading of documents for ATLAS.ti.

Versions and meanings

V0-1: Busy Transcribing (Use this to get timing for own work; Save & close the document when taking a break) (Some of these files are in DropBox as well.)

V0-x: Different versions during transcriptions

V1-0: First version after transcription (Raw transcription) (Copy back to DropBox, so that offsite version is kept)

V1-1: Modifications after checking of transcription file for correctness; May add some notes (using comments) and codes in the word document

V1-2: Additional notes and codes added in the form of underline; colours; etc. (Only did this in the earliest versions, before working on ATLAS.ti)

V2-0: Completed spelling and grammar. (This copy is best to print)

Confirmed with Supervisor that it is OK to change the spelling and grammar as long as the meaning is not changed. (Copy in note from Stella)

V2-0A.docx: Prepared for Atlas.ti (See below)

V2-0A.rtf: Resaved the last version as Rich Text Format

Copy the file to the RTF folder under

C:\VKW-Performance\CaseX\RTF Documents

Now the document should be imported into ATLAS.ti

Use the demographic info to link the document to the same

(1) Document Families

(2) Demographic Codes

Specific preparation was done to ensure that the format of the file was optimal for ATLAS.ti. These steps were based on some of the recommendations by Archer (2012) and are provided on the next page.

Preparation for ATLAS.ti in V2-0A

- 1) Remove names of individuals / Companies / Departments (See memo on anonymity)
 - 1a) Keep data dictionary in the Schedule list of the case.
- 2) General
 - 2a) Remove all notes and colours.
 - 2b) Add in the following demographical at the top of the document:

DEMOGRAPHICS
CASE: COMPANY 1 to 4
BUSINESS UNIT: Name of the Business Unit, if multiple areas in the organisation included
MANAGER: Coding name of the manager
INTERVIEW DATE: DD Month YYYY
DURATION: In minutes
INTERVIEW TYPE: Face-to-Face/Teleconference
HOME LANGUAGE: Afrikaans/English
- 3) Reformatting the tables
 - 3a) Do not remove the timing of column 1, but make sure that there is not a timing in the middle of the column
 - 3b) Convert the table to text (paragraphs)
 - 3c) Justify the text (or left-justify)
- 4) Spacing and font
 - 4a) Select the whole document and change font to Calibri (Body) 12 (Some font ARIAL which is similar)
 - 4b) Select whole document and set to double spacing.
- 5) Save this version as V2-0A.docx

13.3.2 Anonymity

One of the issues that needed to be addressed in this study was the anonymity of the companies and the individuals. In addition, certain information needed to be kept confidential. Anonymity refers to ensuring that the company or individual cannot be recognised, while confidentiality refers to information that should not be disclosed (Saunders, 2009:188).

Confidentiality was discussed as part of the elements of research ethics in Chapter 2. Further to this, agreement was reached with the company representative in terms of what documents, quotes and case descriptions could be disclosed as part of the study, during member checking. Further to the aspect of confidentiality, when individuals asked "Is this confidential?" or indicated that the information could be sensitive, that part was removed from the transcript. This included specific measurement percentages, names of customers and specific phrases that the organisational representative could identify individuals by.

In terms of anonymity, the company firstly had to be kept anonymous. To this end, the companies were given pseudonyms, and names of senior personnel in these companies were changed, or role descriptions were used. The descriptions of the companies were also kept on a high level, in order not to reveal the specific identity of the organisation. Where the company was owned by an overseas company, reference was made to "an international parent", and the specific country was not given. On the second level, the identity of the managers participating in the interviews needed to be protected. What made this particularly challenging was the fact that team information needed to be disclosed, and in particular the information relating to specific deliverables. In the greater context of the study, this is not a problem, since there are many Project Management units, and Software Support Units (as an example), but when presenting the case for member checking, it could have been easier to identify or guess at the name of the individual. Printed quotes were adjusted to disguise the identity of individuals as far as possible, and confidential information that was shared was removed.

A data dictionary was used for each case for the replacement of elements that could identify the individual or the company. Some of the rules used for the data dictionary are presented below.

Aspects taken into consideration when creating the data dictionary:

- Replace company name with the pseudonym
- Using roles instead of names (even if names have been changed)
- Substituting more rather than less (i.e. list of customer names just become "various customers" instead of trying to translate to the industries. (As long as the meaning does not change)
- Where the individual seems uncomfortable with what is being shared, rather remove if it could compromise the individual.
- Where specific numbers/percentages/figures are shared, change the numbers.

13.3.3 Coding steps and issues

Once a file was imported as a primary document (PD) into ATLAS.ti, the same steps were followed for each transcript. These are explained below.

The following steps were followed for each transcript:

- 1) Code the demographics first.
- 2) Code words normally used often: Communication, Trust, Maturity, Control/Rules (This was changed after Alpha, since the codes were split into sub-codes)
- 3) Code by keeping the codes window open and use drag-and-drop, working through document start to finish.
- 4) In the first company, quote comments were used, but they are difficult to get in a report later, so reverted to memos with particular comments per quote. This facilitated the identification of themes, where quotes were similar between individuals.
- 5) Populate the case memos as the coding of each transcript progresses. (Organisational, Manager, Team, Per Theme – see templates below.) (In the first company, the memos were created last, but from Company 2, the memos were populated as the coding of the transcript progressed.)
- 6) Create “Code Comments” describing the use of the code as soon as a new code is created.

The detail of the case memo templates is given below, and formed a worksheet for linking of quotes, and populating of case-relevant data, as proposed by Stake (2006).

The Organisation (Organisational parameters)	
Industry ~ Number of employees ~ HR Function ~ IT Function ~ Presence ~ Mother Company ~ Performance Management ~	The company structure is xxx In terms of virtual work, xxx In terms of performance management, xxx In terms of the IT function, xxx

Per manager consolidate quotes and descriptions

- 1) Definitive "I am" statement
- 2) Definitive statement on Remote Work Assumption
- 3) Experience the manager has on remote work (Changes since virtual)
- 4) Does the manager work from home him/herself (Also link to venues the manager uses - Location of manager)
- 5) Technical experience the manager has in his/her field ("Manager: Experience")
- 6) How much of the team's work can be measured precisely? Also ask why it is important to measure. (I.e. Customer SLA reports; monitor and track; invoice the customer)
- 7) Reason for Virtual work - reason why virtual work required in the team.

Team comparison memos included quotes and descriptions for:

- a) Type of work
- b) Collaboration type
- c) Performance measures
- d) Main reason for remote work
- e) Client requirement / impact
- f) Naming convention
- g) Remoteness and frequency (Arrangements)
- h) Meetings / interaction
- i) Manager view on virtual work
- j) Type of knowledge work

Memos for themes per company

- a) Redefining Virtual Work
- b) Communication
- c) Manager as enabler / trust
- d) Visual Theme
- e) Importance of the customer

When initially using the ATLAS.ti tool, it was difficult to decide how much of a paragraph to include in a quotation. There were two issues at hand, namely coding for specific words or fragments or coding for a concept.

A question that needed to be answered that needed analysis on single-word level, included "What are all the tools used in managing performance?" The methods listed below were considered.

- 1) The word-count tool in ATLAS.ti
 - Advantage - do not have to code;
 - Disadvantage - need to know what you are looking for afterwards)
- 2) Selecting the word only, and coding it with e.g. "Performance: Tool" , then creating a report with all the quotes for this code, would give a list of systems, which could be further manipulated in Excel
 - Advantage - quick report on all tools only and minimising on codes;
 - Disadvantage - no context of the tool or how used.
- 3) Selecting the paragraph, and coding with a specific code "Performance: Tool: Excel", then using the "Codes->Output->Quotation-Primary-Documents-Table->Quotation Count (Excel); a quick count per document can be obtained for the different tools.
 - Advantage - Have context of quotes and codes give the names of the tools already;
 - Disadvantage - many additional codes created.

In the execution of the study, method 3 was used. Although there were many additional codes used, it facilitated the analysis process. It was also found that when coding a concept, it was important to select as much as possible of the paragraph to ensure that the context of the quote could be interpreted without looking at the document again. The quote was trimmed in the final document, once the context had been used as part of the description.

Certain checks were done at the end of a transcript coding session. They are described below.

Ending a coding session for a company:

- Make sure that the quote memos are also used when documenting the case (Create "Memo" rtf per individual - all linked into one family of memos for the manager!!!)
- At the end of each document coding session, review all the "case" memos - have they been populated sufficiently for the case; have all best quotes been identified. (Also, has everything been coded for the manager? Are the quotes coded correctly? Often do this last step while writing up the case.)
- Save documents / reports for:
 - a) Memo family per manager
 - b) Code list for this company only
 - c) Codes with quotes (Quotes filtered on family of Case; Codes not filtered)
 - d) Quotes per code matrix for the whole company - use this to check what codes not used. Has everything been coded for the manager?

13.3.4 Coding for Open-ended Questions

The open-ended questions of the online questionnaires were uploaded into ATLAS.ti per team, or if there was more than one team per business unit, then per business unit. The rules listed below were mainly used to allocate codes.

Question 1: What could be done to measure and manage your performance in terms of day-to-day output in a more effective and efficient way (or are there items that should not be measured)? Please motivate your answer.

(MANAGER Level)

Manager: Responsibilities: *

Manager: Approach: Manage differently in future: * (Since this had to do with the changes required)

Performance: Manage: * (Reviewed the codes allocated to these documents.)

Performance: Metrics: *

Question 2: What could you do more of, or differently, to ensure that your performance can be managed effectively?

(INDIVIDUAL Level)

Performance: Individual Contribution: *

Question 3: How could changes on organisational level help you to enhance your performance as virtual knowledge worker?

(ORGANISATIONAL Level)

Org Level: Help VKW Perform: *

IT Technology: Requirements: *

There were however cases where individuals did not stay within the boundaries of a specific code for the question, and in those cases the codes were used interchangeably. Also, it was important that these primary documents (in other words the codes that were re-used on individual level) were excluded when reviewing how managers managed their teams. Filtering on primary documents was facilitated by using the document families. .



APPENDIX E

14 APPENDIX E – INITIAL CODE LISTS AND NETWORK DIAGRAMS

14.1 LIST OF INITIAL CODES CREATED

Code-Filter: All

HU: VKW-Performance
File: [C:\VKW-Performance\VKW-Performance.hpr6]
Edited by: Super
Date/Time: 2011-12-27 14:44:35

aaalIndex: Case
aaalIndex: Duration
aaalIndex: Interview Date
aaalIndex: Manager
aaalIndex: Business Unit
General Statements:<Define>
General Statements: Manager remote work
General Statements: Review processes and communication
HR Assistance: Received
HR Assistance: Requirements
HR Policies: Manager View
HR Policies: Types
IT Policies: Manager View
IT Policies: Types
IT Technology: Requirements
IT Technology: Systems
IT Technology: Training
Management Approach: Changes since virtual
Management Approach: Co-located vs remote
Management Approach: I am
Management Approach: Manage differently
Management Approach: Remote vs Remote
Management Approach: Successes for virtual performance
Organisational Support: Extra Requirements
Organisational Support: Manager View
Performance: Handling Non-performance
Performance: Individual Characteristics
Performance: Individual Contribution
Performance: IPA relationship
Performance: Main Challenges
Performance: Managing performance
Performance: Metrics
Performance: Metrics:Future
Performance: Productivity Measure
Performance: Quality:Comparisons
Performance: Quality:Definition
Performance: Rewards given
Performance: Specific Deliverables
Performance: Specific Deliverables:Managers
Performance: Technology:Organisation
Performance: Technology:Own
Performance: Timing
Performance: Training by Manager
Selection: Individual Charactaristics
Selection: Manager Criteria
Team Composition: Collaboration Type
Team Composition: Deliverables:General
Team Composition: Management Relationship



- Team Composition: Meetings
 - Team Composition: Office Location Individual
 - Team Composition: Office Location Manager
 - Team Composition: Reason for virtual work
 - Team Composition: Team Size
 - Team Composition: Virtual Work arrangements
-
- NEW: Actual performance becomes apparent over time
 - NEW: Communication with all
 - NEW: Impact of context
 - NEW: Impact of Overall Strategy
 - NEW: Impact Owning Company
 - NEW: Impact Senior Manager
 - NEW: Importance of the Visual
 - NEW: Inherent social aspect of people
 - NEW: Knowledge Work Contribution
 - NEW: Limitations and challenges for virtual work
 - NEW: Org Impact:Cost Cutting
 - NEW: Parameters impacting performance
 - NEW: Team vs Org level differences
 - NEW: Words often used: Control
 - NEW: Words often used: Maturity
 - NEW: Words often used: Trust



14.2 NETWORK DIAGRAMS

14.2.1 Code: Virtual Work

Figure 14-1: Code network: "Virtual work: Arrangements"

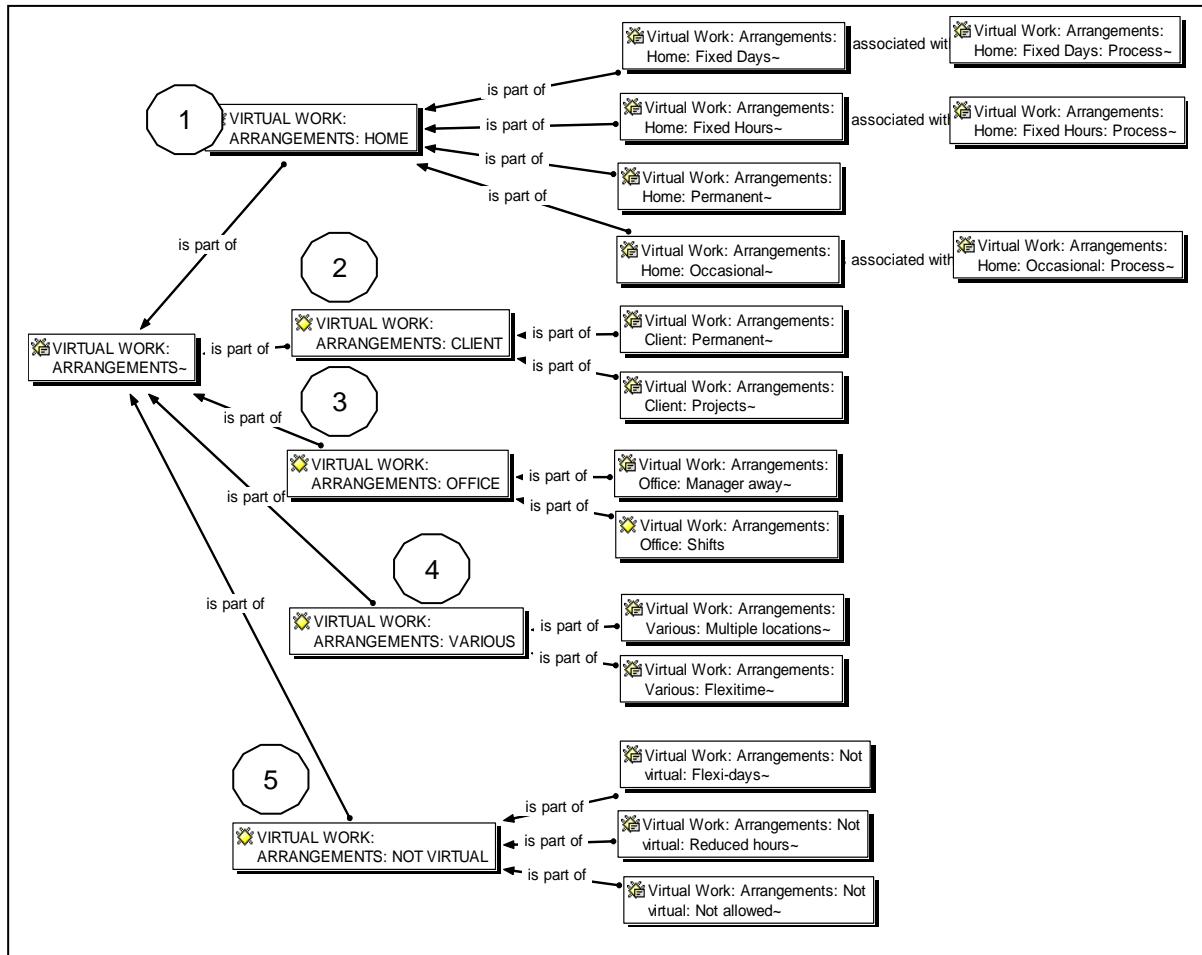


Figure 14-2: Code network: "Limitations and Challenges" - Impossible

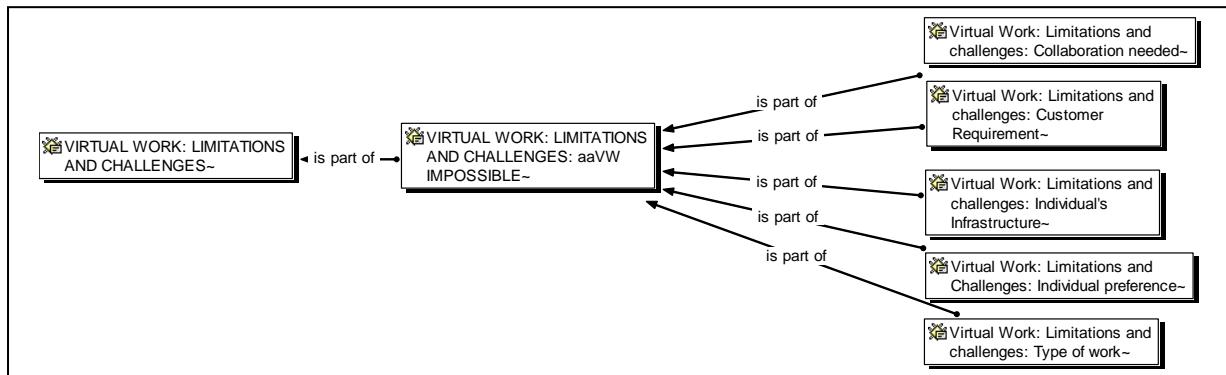
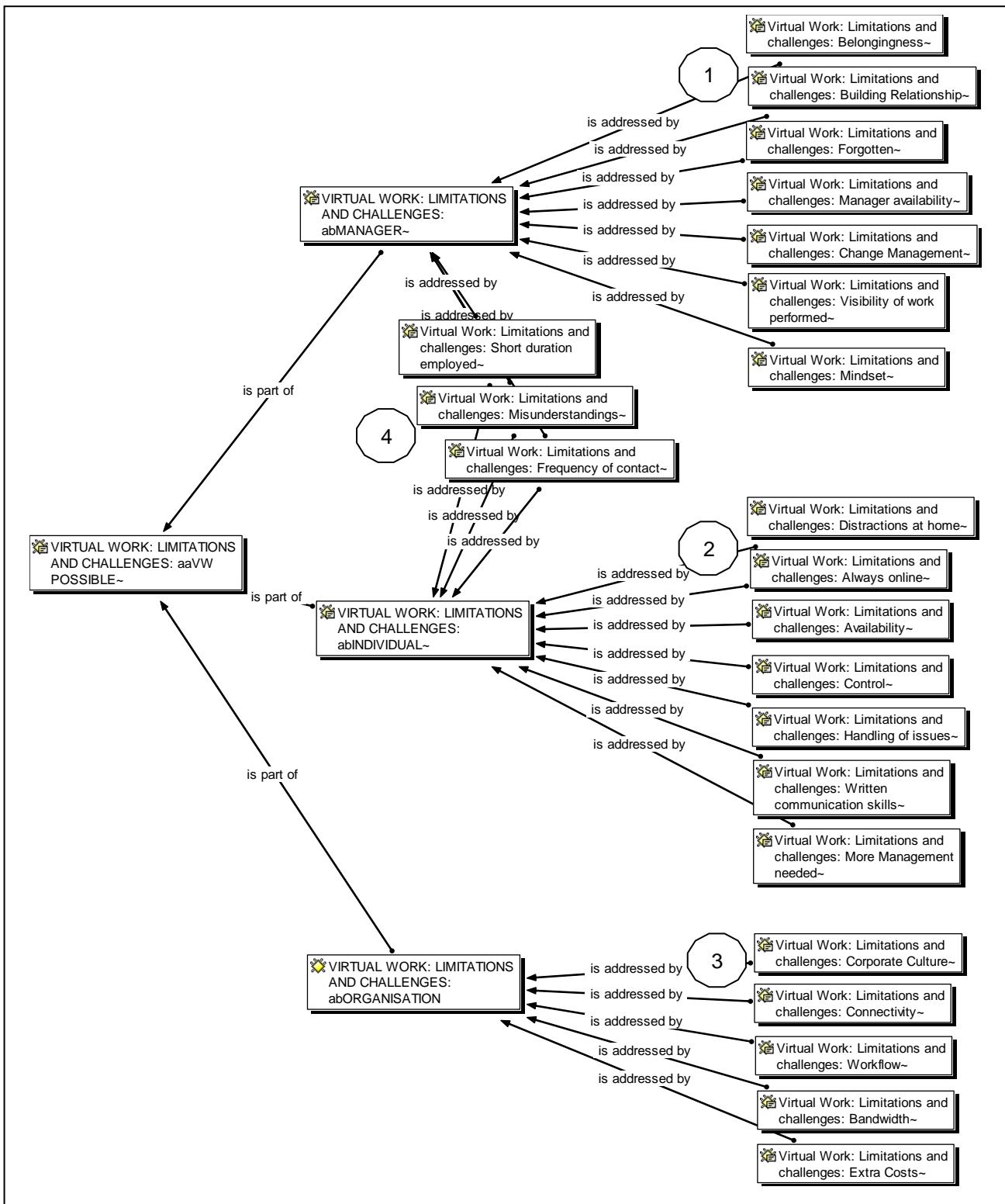


Figure 14-3: Code network: “Limitations and Challenges” – Possible

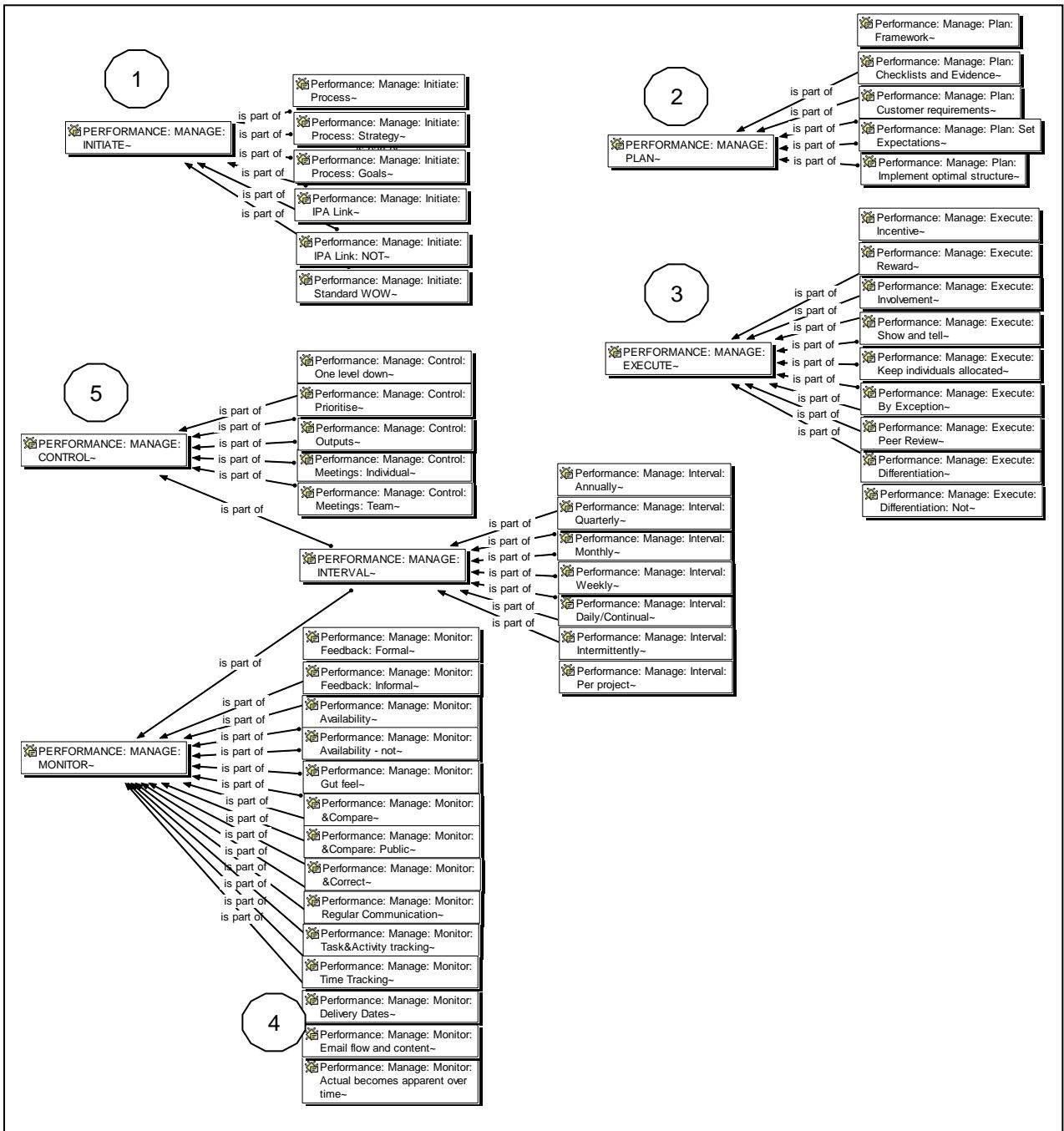


Note: The numbers indicate challenges to be addressed by (1) The manager (2) Individual (3) Organisation (4) Manager & Individual combined



14.2.2 Code: Manage Performance

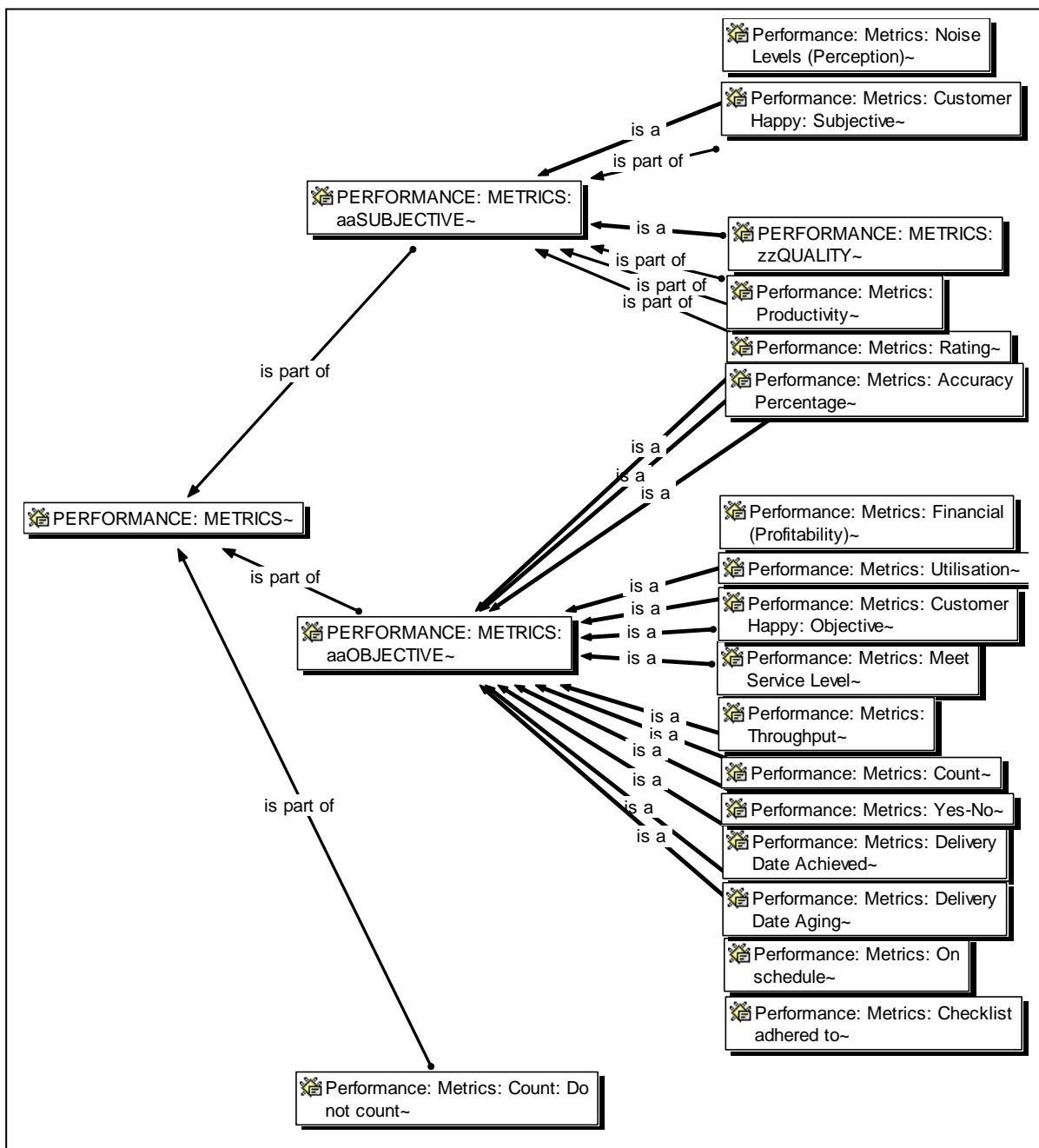
Figure 14-4: Code Network: “Manage performance” – Detail



Note: the numbers indicate (1) Initiating; (2) Planning; (3) Executing (4) Monitoring and (5) Controlling



Figure 14-5: Code network: “Manage performance: Metrics”





14.2.3 Code: Specific Deliverables

Figure 14-6: Code network: “Specific deliverables” (Timing)

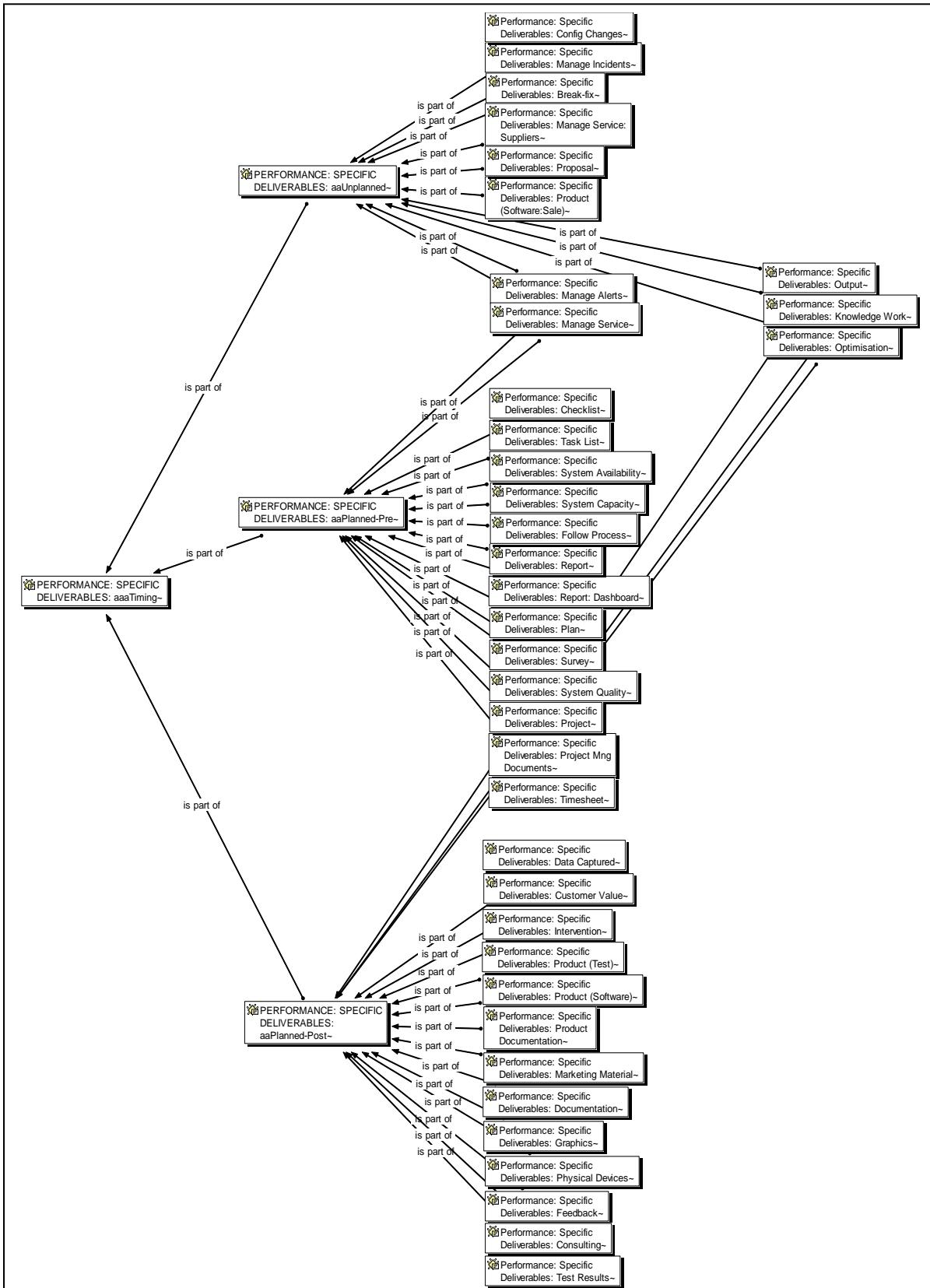




Figure 14-7: Code network: “Specific deliverables” (Location)

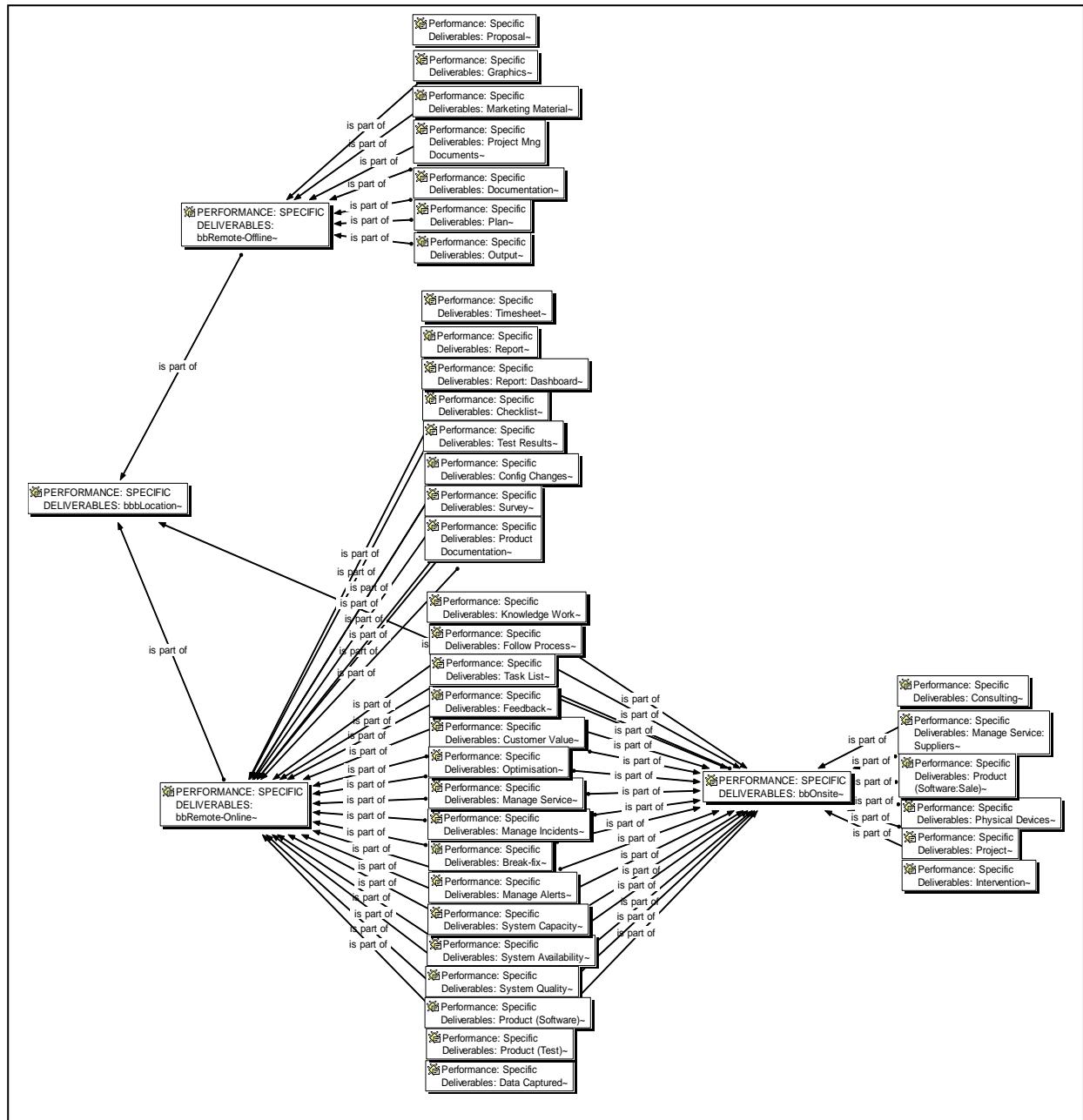
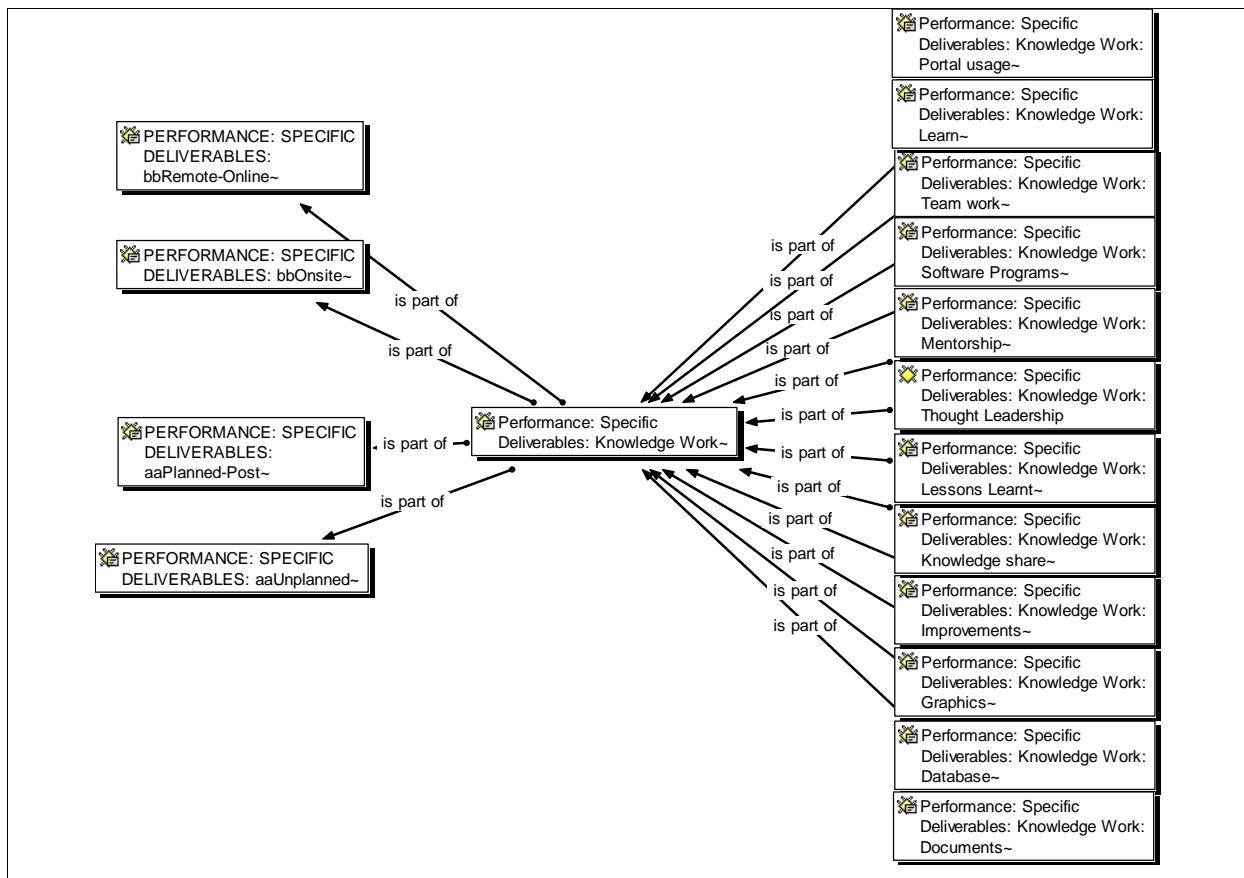


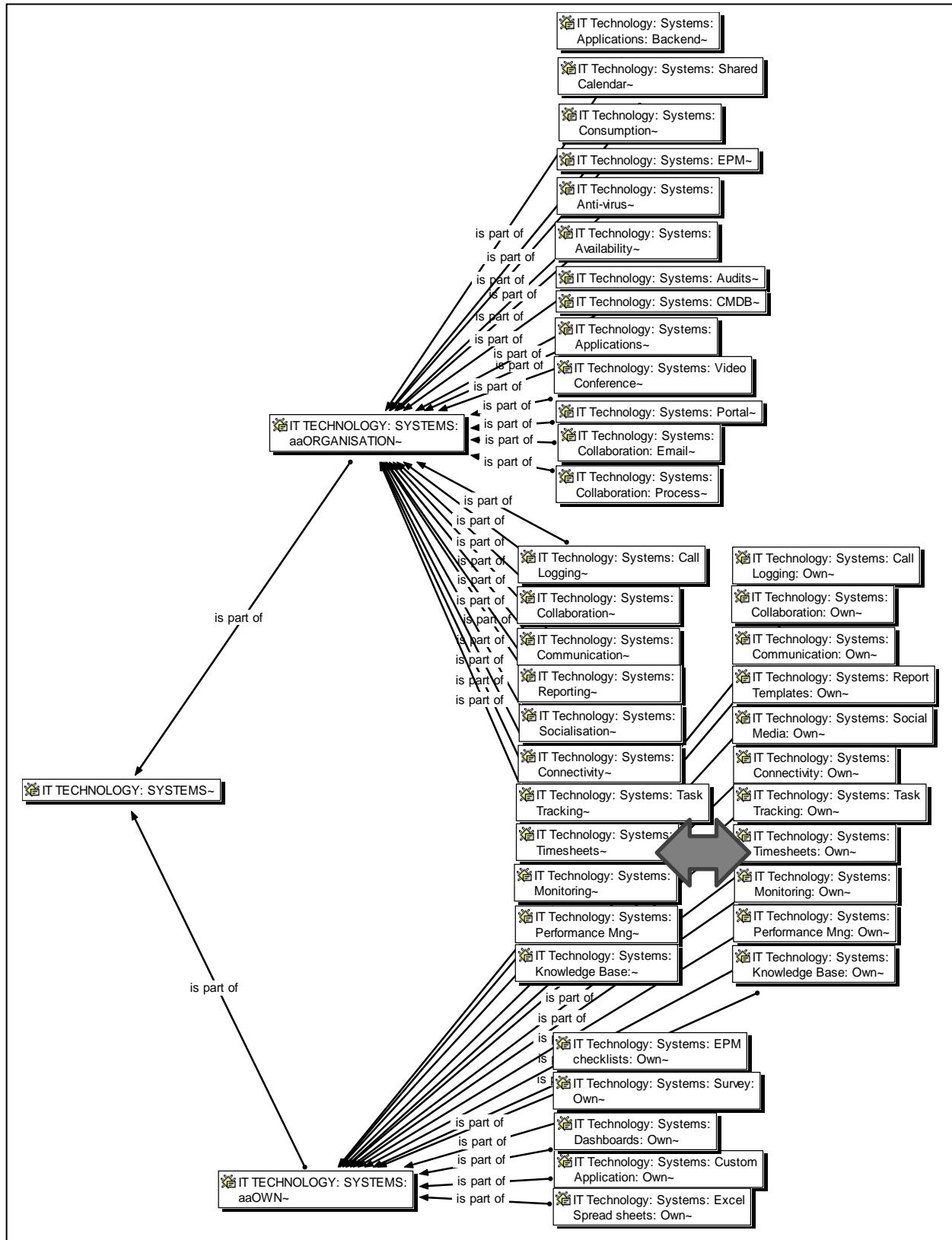


Figure 14-8: Code network: “Specific Deliverables: Knowledge Work”



14.2.4 Code: IT Technology

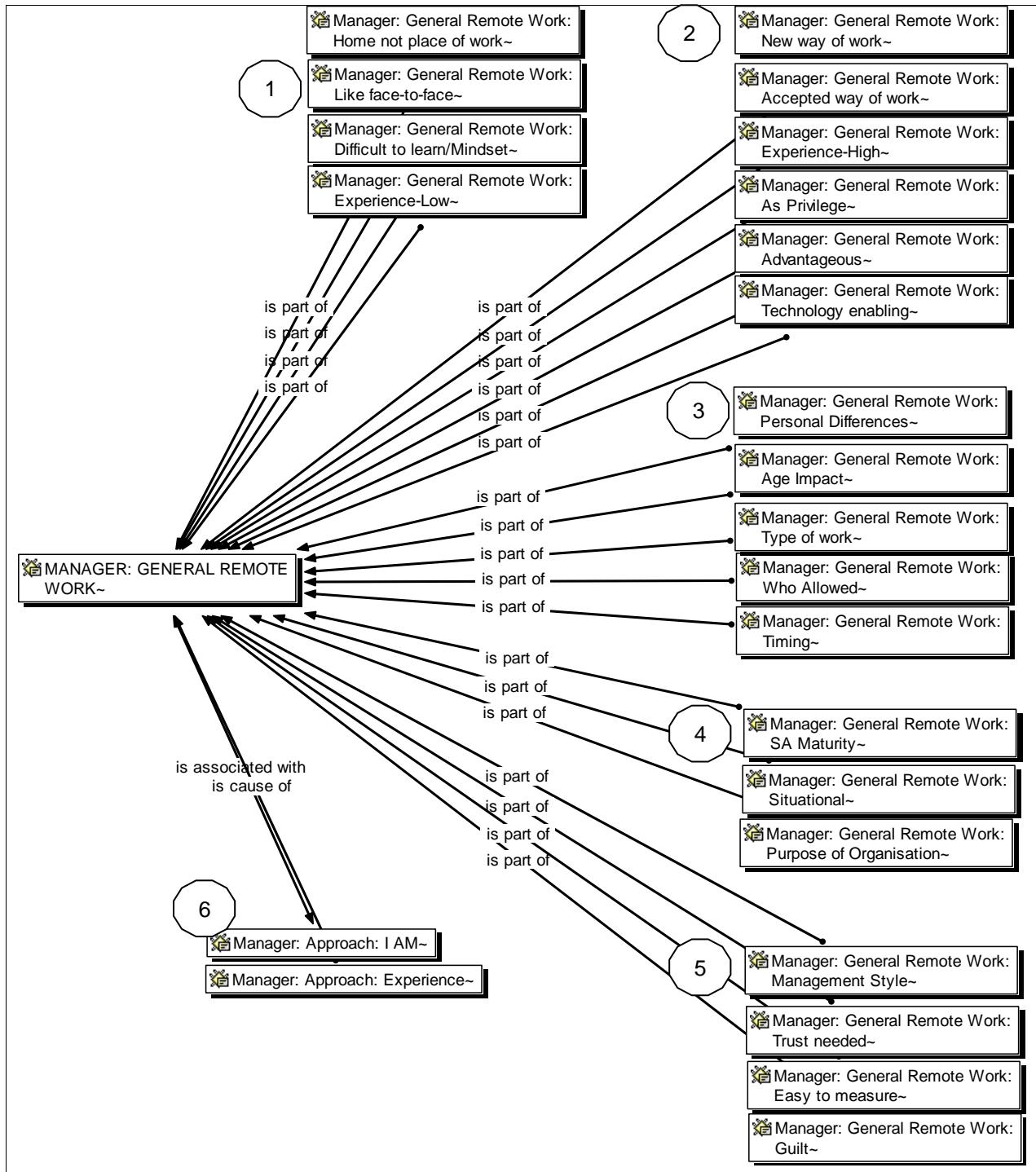
Figure 14-9: Code network: “IT Technology: Systems”



Note: The arrow indicates technologies provided by the organisation and enhanced by the manager or individual.

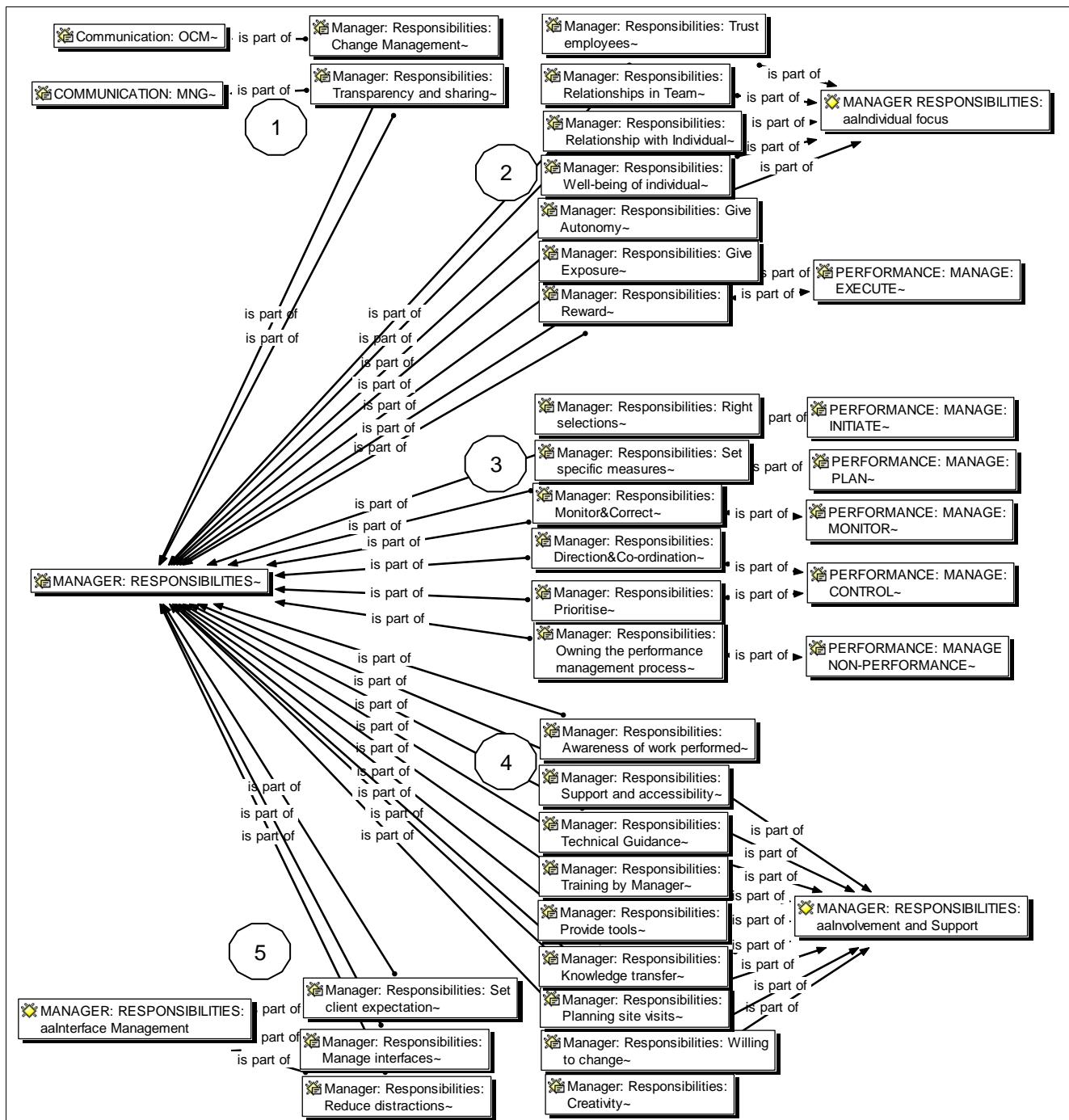
14.2.5 Code: Manager

Figure 14-10: Code network: Manager: General remote work”



Note: The numbers indicate the selective codes, namely (1) Reasons why not remote; (2) New way of work; (3) Remote work parameters; (4) Contextual; (5) Management style; and (6) Manager's approach

Figure 14-11: Code network: “Manager: Responsibilities”



Note: The numbers indicate the selective codes, namely (1) Communication and organisational change management; (2) Focus on the individual and teamness; (3) Direction and co-ordination; (4) Manager involvement and support; and (5) Interface management.

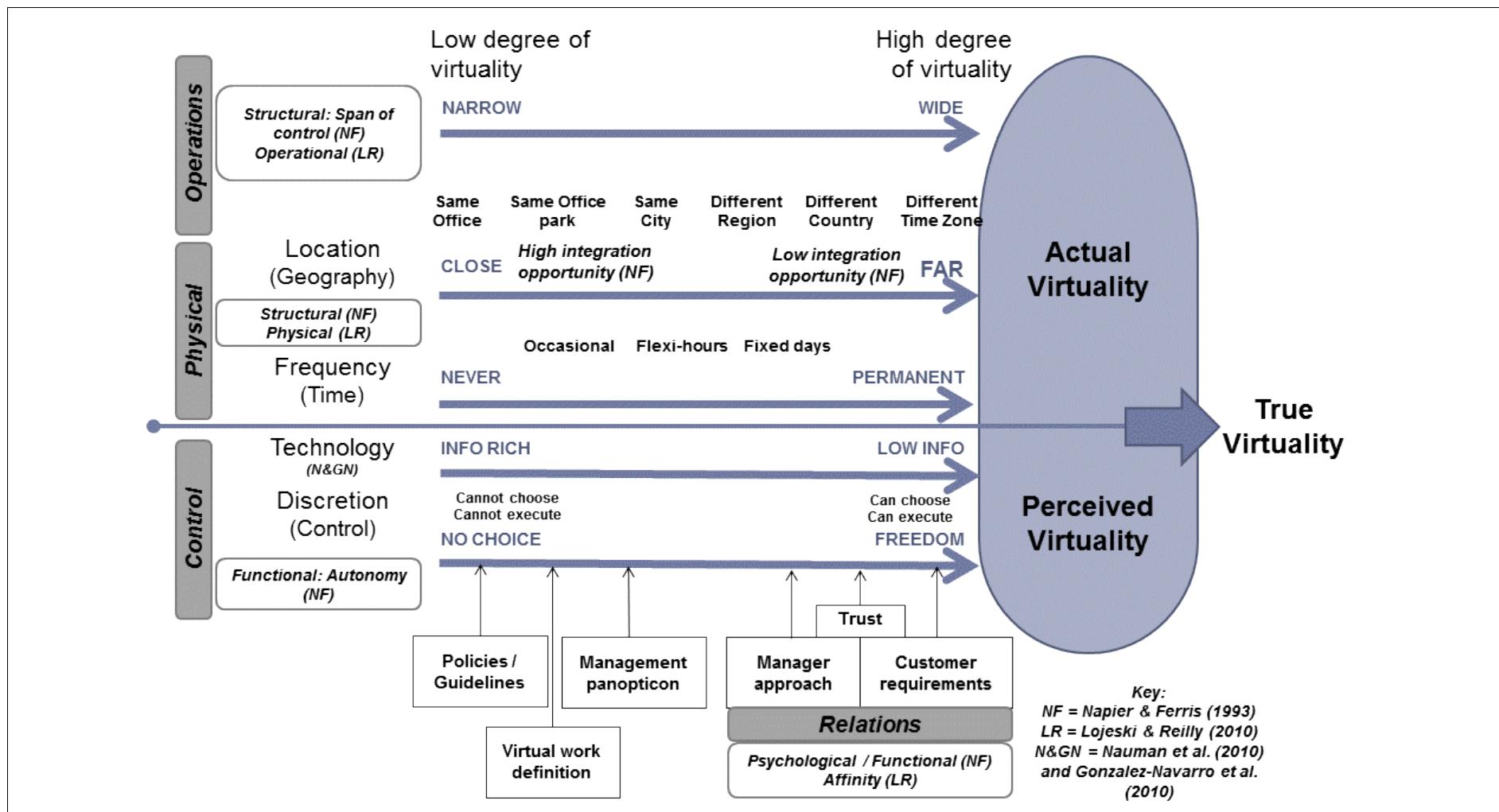


APPENDIX F

15 APPENDIX F – ENLARGED THEORETICAL MODELS

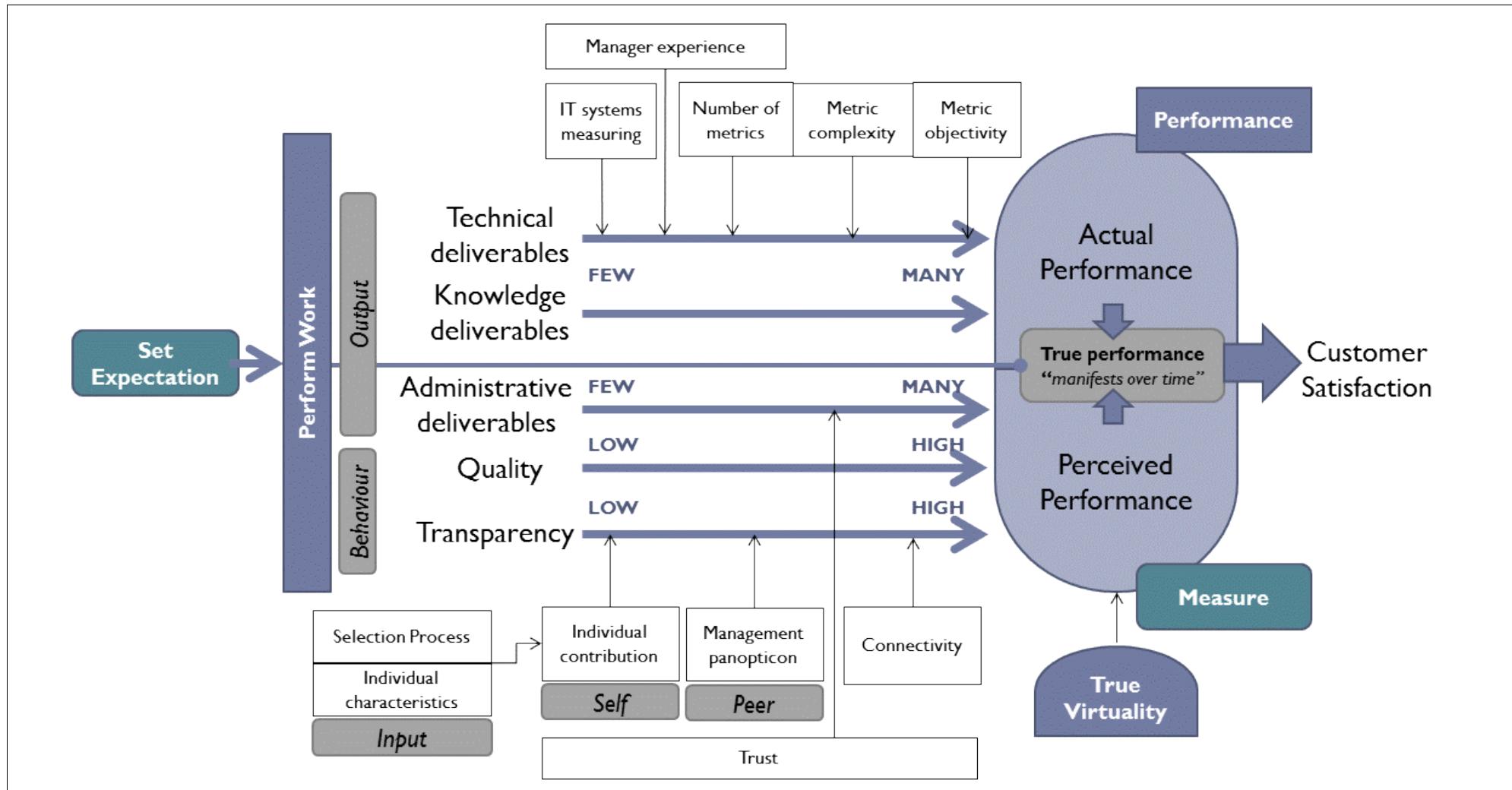
15.1 THEME 1: TRUE VIRTUALITY

Figure 15-1: Actual vs. perceived virtuality – theory map (“True Virtuality”)



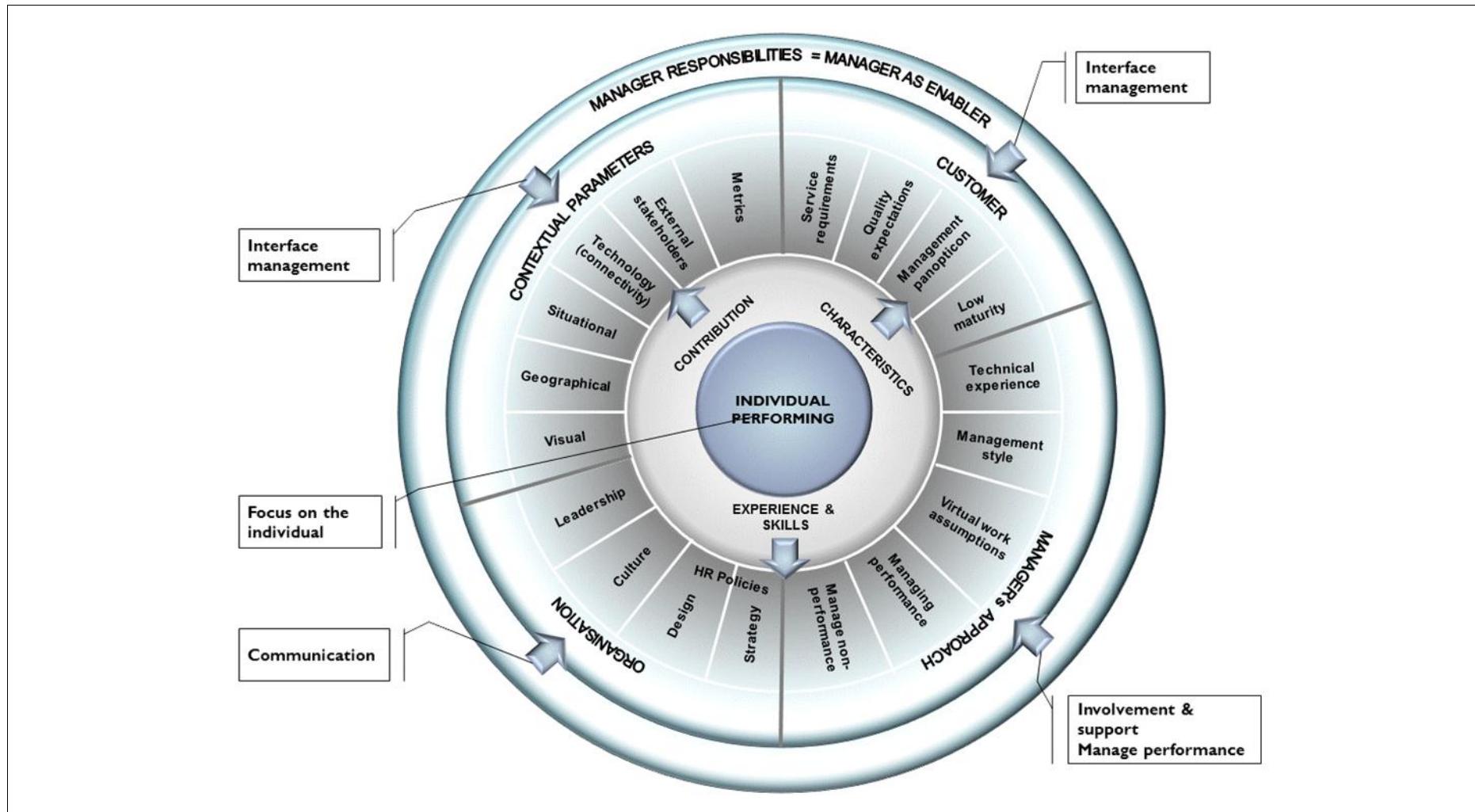
15.2 THEME 2: TRUE PERFORMANCE

Figure 15-2: Actual vs. perceived performance model (“True Performance”)



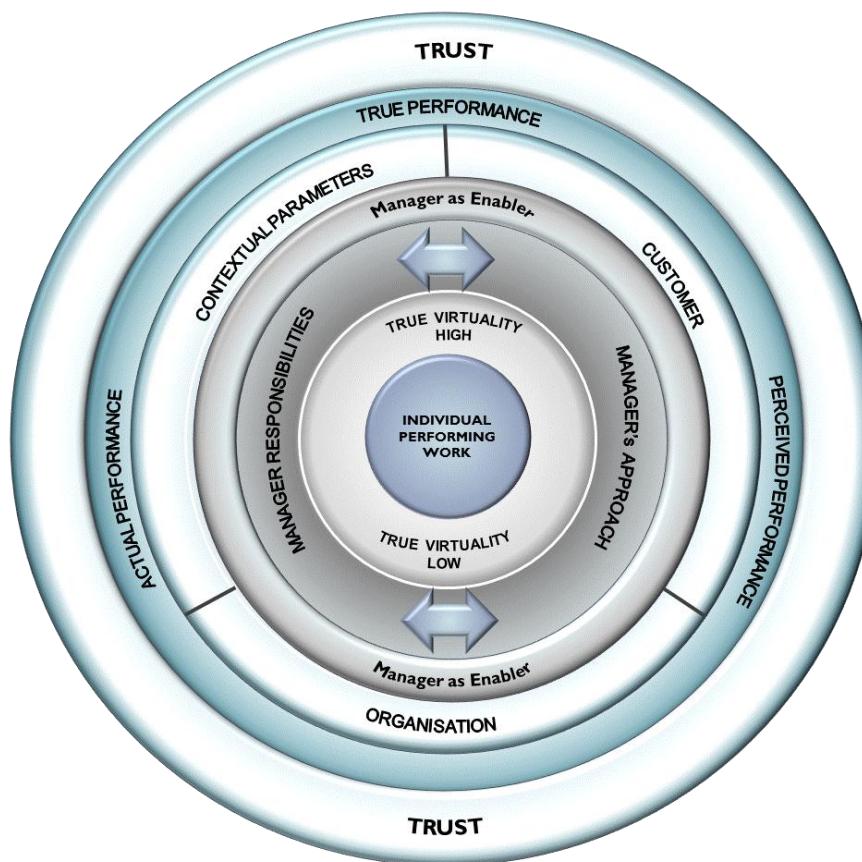
15.3 THEME 3: IMPACT PARAMETER MODEL

Figure 15-3: Impact Parameter Model: Consolidated



15.4 COMBINED MODEL

Figure 15-4: Concentric performance enablement model for virtual knowledge workers





APPENDIX G

16 APPENDIX G – SUPPLEMENTARY DOCUMENTATION

16.1 SUPPLEMENTARY DOCUMENTATION

The additional documentation, as referred to in this thesis, has been supplied on a CD and contains the following information:

- 1) The PDF version of this thesis document.
- 2) The PDF versions of all the case documents:
 - a. Case 1: Alpha
 - b. Case 2: Echo
 - c. Case 3: Foxtrot
 - d. Case 4: Tango
 - e. Case 5: Delta
- 3) The information populated from ATLAS.ti:
 - a. General (Date Hermeneutic unit created)
 - b. Statistics (Statistics for the Hermeneutic unit)
 - c. Primary Documents (List of the transcriptions with list of codes per document)
 - d. Codes Summary (List of codes; Sorted alphabetically; Sorted on groundedness; Sorted on density)
 - e. Commented Codes (All codes that have comments loaded)
 - f. Memos (All memos created in ATLAS.ti)
 - g. Primary Document Families (Used for filtering of documents)
 - h. Code Families (Some code families generated from the network diagrams)
 - i. Memo Families (Used to group memos)
 - j. Network Views (Link to EMF file provided)
 - k. Code Neighbor List (Thesaurus)
 - l. Code Hierarchy

Additional spreadsheets/documents generated from ATLAS.ti:

- a. Quotes per Code (List of all quotes per code)
- b. Co-occurrence Table (Deliverables vs Metrics)
- c. Word Count Table ("Word cruncher" results)

d. Codes Primary Documents Table (Counts of quotes per code per primary document)

- Sheet “VKW-Performance_CPD_Matrix-2012”: Quote count per code per primary document
- Sheet “SUM-1”: Quote count per organisation and Manager, Organisational and Individual level
- Sheet “SUM-2”: Quote count total per organisation with conditional formatting using colour scales

The “How to use me” file on the CD explains how to access the information.

HOW TO USE ME

The CD represents the supplementary documentation and audit trail for the data analysis of:

“A managerial framework for the enablement of the performance of virtual knowledge workers”

as completed by Karen Luyt (86423623) for the PhD (Organisational Behaviour) in the Faculty of Economic and Management Sciences.

It is presented in the format of a web page. It can easily be navigated through the use of the navigation bar of the browser. In order to access the program follow these steps:

1. Insert the disk in the CD/DVD drive
2. Navigate to “..\\VKW-Framework\\Extra.html”
3. Double-Click on the file “Extra.html” to open the web page
4. Use the index with hyperlinks under the “Table of Contents” at the top of the page to navigate to the different sections on the page and to the linked files

You can also run this from your computer’s hard disk by copying the whole folder “VKW-Framework” directly to the C: drive.

Kind Regards
Karen Luyt
(kluyt01@gmail.com / 082-895-2289)

Further questions can also be directed to:

Supervisor: Prof K. Stanz (012 420 3074; karel.stanz@up.ac.za)
Co-supervisor: Prof S.M. Nkomo (012 420 4664; stella.nkomo@up.ac.za)

(The web page has been prepared for Microsoft Internet Explorer 6 and higher.)