DETERMINING THE REQUIREMENTS FOR E-SELECTION IN A SMALL RECRUITMENT COMPANY – USING THE REGULATIVE CYCLE

Abstract

The requirements for e-selection, in order for that technology to be of practical use for Company T, have been investigated. With their main business in the secondments of personnel, especially in the technical sector, Company T has been expecting a shortage in the supply of candidates. This anticipated problem has served as the initial problem definition for this research. In order to cope with the expected situation, speed and accuracy have been reckoned to be of major importance. Using interviews, eleven problems have been identified across two topics, namely the use of web-based technologies, i.e. speed, and the use of other personal characteristics (O), i.e. accuracy. These eleven problems have been ranked using a focus group. Then, based on contemporary literature, solutions have been proposed to counter these problems. Combining these solutions has led to a design in which it has been proposed that valid psychological instruments should be applied and interpreted by skilled professionals. Furthermore, extensive knowledge sharing has been proposed to be vital when dealing with the large amount of tacit knowledge associated with the work at Company T. Lastly, the web-based technologies should support the core day-to-day work activities rather than be user-friendly or providing additional functionality.

Keywords: (e-)selection, psychological testing, response distortion, applicant reactions, knowledge management, competence management.

Preface

Processes of dividing labour amongst individuals can be traced back to dates even before the Gregorian calendar started. In the 18th century, Adam Smith (1776) capitalized on the subject and noted that increased skills lead to increased performance. However, since then, a shift has occurred in which the emphasis has moved from knowledge, skills and abilities solely, to the more "soft" aspects of a person. Furthermore, the development of web-based technologies has led to interesting combinations of selection employees and deploying such new technologies. As a result, a look was taken at how such new technologies might be deployed in order to enable the selection process at Company T. Just a handful of practice-based studies were found by the author and, therefore, I hope contributions were made to the field of e-selection, albeit in raising interesting points or, if possible, true new insights.

This master thesis has been written in order to graduate from the master study Industrial and Organizational psychology at the University of Twente. A pleasant period of two years comes to an end with the completion of this thesis, which also heralds a new era. I can no longer avoid the inevitable, which I have done so for the last two years; I am going to be part of the employed population. I do not resent the idea of starting my working career; instead I am looking forward to the challenges which await me.

Being able to complete yet another master thesis successfully has, first, to do with the opportunity provided by ing. Bob van den Berg, founder of Company T. Since it concerned a study which originated from practice, the opportunity to conduct this thesis at his organization was cardinal for its success. In addition, having a mindset of being open to new ideas, as well as being extremely enthousiastic, was very well appreciated and has helped me staying motivated, especially when times got rough. Moreover, seeing that actual endeavours were undertaken, partially, based on my ideas and research has been heart warming to say the least.

In addition, I would like to thank dr. Tanya Bondarouk for having me as a master student under her care. During this thesis she has provided excellent guiding and support, both being scrupulous as well as constructive in the provision of the feedback, which has helped me stay on track when in doubt, but also to achieve a greater understanding about the topic as well as doing practice-based research. The countless revisions made to refine my grammar, sentence structure in addition to content have been appreciated a lot.

Last, but not least, I would like to thank dr. Huub Ruël for taking on the job of reviewing, and discussing, my work within such a short time span. The constructive feedback provided by him has helped me in taking another viewpoint to look at my work, and to create a more readable text. My thanks also go to those at Company T who showed concern for me and interest in my work while writing my thesis as well as those participating in my research.

Finally, my appreciation goes out to all those who have supported me along the way. First of all, I would like to thank my parents for providing the opportunity to complete a second master programme, and stimulating me to use my own approach; urging not to rush but rather to enjoy. Secondly, I would like to thank my sister, brother-in-law, girlfriend and all my friends for their support.

Paul Timmermans.

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1 Introduction

The application of new technologies regarding human resource management (HRM) has shown an increasing trend and it was expected that HRM will continue to be affected by the ever increasing technological changes (Ruël, Bondarouk & Looise, 2004; Strohmeier, 2007). However, most of such new technologies are applied to basic HRM practices (Lepak & Snell, 1998; Wright & Dyer, 2000; Ruël, Bondarouk & Looise, 2004). Reasons to implement new technologies were mainly to save costs, by improving efficiency and effectiveness, and to remove recruiter bias, by far-reaching automation (Chapman & Webster, 2003; McManus & Ferguson, 2003).

These trends were also experienced at a small recruitment company in the eastern part of the Netherlands, hereafter named Company T. Their main business is in the secondments of personnel, especially in the technical sector, i.e. mechanical engineering and electrical engineering. In addition, they offer a wide variety of HRM consultancy to organisations, again, mainly in the technical sector. With five full-time employees and two part-time employees they were considered a rather small player in the business of secondments. However, by being rather small, they do not suffer from bureaucracy. This allows them to react quickly to changes in the market, as well as being able to quickly adopt new technologies and applying them to their business processes (Anderson, 2003).

Indeed, they have already applied various web-based technologies in order to enhance their business processes. The first of such technologies was the use of an extensive database, and database management tools, alongside a customer relations management tool. Then, they have expanded their armamentarium to the use of e-recruitment and web portals. However, the founder of Company T was expecting difficulties in the near future; a great shortage of properly educated employees, or candidates, with technical skills. Furthermore, Company T does not believe their current set of instruments is sufficient to cope with the expected difficulties. As such, Company T was trying to find a way to adapt and to survive.

As a result, Company T needs to be more flexible to secure a steady supply of candidates in order to stay alive and thrive (Bartram, 2000; Spector, 2008), while at the same time, they need to work more efficiently and effectively. First of all, new HRM technologies might be deployed in order to assist Company T in these times of change. Secondly, an increased emphasis on other personal characteristics (O) of candidates, e.g. personality and ambition, in combination with deploying new technologies, might be beneficial as well. Effects of personality, and other latent aspects of candidates, on work-related aspects, e.g. performance, have been mapped quite extensively over the last few years (e.g. Gellatly, 1996; Gevers, Rutte & van Eerde, 2006; McAdams, 2009). Also, two trends have put a greater emphasis on the more soft-aspects of an individual; working in teams (e.g. O'Leary-Kelly, Martocchio & Frink, 1994; Keller, 2001) and the assertive employee in charge of their own career (Baruch, 2004). Thus, greater emphasis is put on the other personal characteristics (O) in addition to the more traditional components of a candidate: the knowledge, skills and abilities (KSA) (Spector, 2008).

However, the use of other personal characteristics in the selection process was not yet applied in a mature way at Company T. In turn, (web-based) technologies were not deployed to the full extent to support the measurement of other personal characteristics, i.e. psychological testing. As such, it was cardinal to select those technologies which show fit with the other applications they already have running as well as with the current business process (Kehoe, Dickter, Russell & Sacco, 2004). Here, attention was placed on e-selection. This concept was defined as the application of (web-based) information technology for the execution and support of the personnel selection practice by the employee and/or organisation (Chapman & Webster, 2003; Ruël, Bondarouk & Looise, 2004; Strohmeier, 2007). The main research question was:

What are the requirements of an e-Selection tool that contributes to improving the selection process at Company T?

Based on two major topics in e-selection, psychological testing and web-based technologies, two sub questions were derived.

- What are the requirements for psychological testing that contribute to improving the selection process at Company T?
- What are the requirements for web-based technologies that contribute to supporting psychological testing as well as the selection process at Company T?

By answering these research questions, contributions were made to Company T and their quest to explore e-selection. To begin with, a list of problems associated with e-selection at Company T was constructed, and these problems were prioritized. With such a prioritization, Company T can allocate their resources efficiently, and effectively, when addressing these problems during the implementation of e-selection. Regarding the two main topics, i.e. the increased use of personal characteristics and web-based technologies in the selection process, it was recommended that valid psychological tests were to be deployed and that specific knowledge was to be added to the web-based technologies in use. In addition, knowledge sharing was found to be instrumental in the transfer of tacit knowledge, which was present to a large extent in the day-to-day work at Company T, amongst employees. More practical, it was suggested that Company T should move into two, non-exclusive, directions in order to stay competitive in the future; deploying a wide array of e-recruitment and e-selection tools in order to select suitable candidates for their customers and/or offering consultancy services for their customers in deploying far-reaching e-services. In all, the manner in which Company T makes use of access to digitally stored measure of KSAO will determine their life expectancy.

In addition, contributions were made to contemporary literature. First of all, drivers for applying e-selection in this context were not improved efficiency and effectiveness. Rather, the main focus in this context was on the availability of the core functionality of the tools applied. Perhaps the driver to reduce costs, by increasing efficiency and effectiveness, is not a true driver of the implementation of e-selection after all. Other factors may determine the degree to which cost reduction is a driver. In addition, deploying e-selection in order to reduce recruiter bias was also found to be influenced by other factors since it was not considered a real driver in this context. Perhaps issues such as enforced laws or the culture of a particular country might influence the degree to e-selection will be deployed as a driver to reduce recruiter bias. Another contribution was made by highlighting the gap between research and practice, which is still present. For example, issues such as response distortion in psychological testing were thought to be of influence by the interviewees, whereas contemporary literature does not indicate such issues to be of major influence, when deploying valid tests. With the use of practice-based research, the gap between practice and theory might be reduced, at least at those isolated cases where such research is conducted.

Due to a homogenous sample, one might question the degree to which the findings can be generalized. However, it was thought that the findings can be generalized to a large extent since it concerned how recruiters felt e-selection might support their day-to-day work, and what an e-selection should look like. Furthermore, the extensive use of interviews may lower the degree to which the findings may be generalized to some extent due to possibilities of misinterpretations, which are always possible even though the interviewees were provided the opportunity to evaluate their interview transcriptions. Lastly, due to the various laws regarding privacy, and the storage of personal information, the findings may only be generalized to organisations in a similar branch and in a country with similar laws enforced.

The outline of this paper is the following; the research methodology is discussed in chapter 2 whereas a refined problem definition was discussed in chapter 3. With the methodology and problem definition delineated, the process towards deriving requirements for e-selection was discussed in subsequent chapters. Chapter 4 encompasses the analysis and diagnosis of the results whereas chapter 5 encompasses the plan of action. The research question was answered in chapter 6, where the results were discussed, limitations were acknowledged and recommendations were provided.

2 Research methodology

2.1 Regulative cycle

This paper was driven by a practical problem and was aimed towards performance improvements of business processes in a particular context (Romme & Endenburg, 2006; Heusinkveld & Reijers, 2009). Therefore the approach in this paper was that of the problem solving cycle, or the regulative cycle (van Strien, 1997; van Aken, Berends & van der Bij, 2007). Following this regulative cycle led to the coverage of both issues of rigour as well as relevance (Shrivastava, 1987; van Aken, 2005). However, not all of the steps of the regulative cycle are reported in this paper, as is common in most business problem solving projects (van Aken, Berends, van der Bij, 2007): the implementation of the final design along with the evaluation of such an implementation is left to Company T.

The steps that were followed, and the corresponding actions taken, can be found in table 1 (van Aken, Berends & van der Bij, 2007):

Phase	Theoretical description	Practical application
Problem mess	Starting point of a problem solving project. This is an initial problem constructed by the organization	Anticipated shortage of employees with proper technical skills in the eastern part of the Netherlands
Problem definition	Analysis of the initial problem which leads to a formal definition of the problem to be investigated.	Using interviews to determine what kind of problems might be encountered when deploying psychological testing and web-based technologies in the selection process at Company T
Analysis and diagnosis	The actual problem will be analyzed. This leads to input for the diagnosis. Specific knowledge concerning the context and problem is created here	Using a focus group session in order to determine the relative importance of the problems identified in the problem definition
Plan of action	Based on contemporary literature and context specific information, a solution is designed. In addition, an implementation plan is constructed.	

Table 1 Steps of the regulative cycle which were followed along with a theoretical description and practical application

As can be seen in table 1, interviews, a focus group session and a literature review were deployed in order to provide an answer to the main research question. However, the research methodology concerning these additional methods was not discussed in this chapter. Instead, the research methodology concerning the interviews, focus group and the literature review can be found in chapter 3, 4 and 5 respectively.

3 Problem definition

3.1 Interviews

In order to get insight into the initial problem definition, semi-structured interviews were conducted (van Aken, 2004). Semi-structured interviews were chosen since they allow for comparison between respondents as well as possibilities to clarify and extend the statements of the respondent (Kvale & Brinkmann, 2009). In addition, the questions in the interview were all in the open-ended format in order to stimulate as much response as possible, as can be seen in appendix A and B. Before each interview, the respondents were told what the goal of the interview was, that information would be handled anonymously and that they would receive a transcription of their interview. The respondents could indicate if they felt their answers were adopted properly or that corrections were necessary.

The sample of interviewees consisted of both practitioners working at Company T, as well as several business clients of Company T, with details displayed in table 2 and the interview format in appendix A.a and A.b. These interviewees were chosen since they are knowledgeable about the specific context in which Company T is operating. Moreover, they could provide detailed information about how candidates currently were recruited and selected, what tools were deployed and what kind of problems or shortcomings were present. The sample consisted of five employees who work at Company T with one additional employee from an aligned company. In addition, three interviews were conducted at business clients of Company T.

No.	Date	Time	Location	Duration	Sex	Age	Education	Occupation
1	27-4	10:00 am	At work	27 minutes	M	26	HVE	Recruiter
2	27-4	11:00 am	At work	28 minutes	M	38	IVE	Recruiter
3	27-4	2:00 pm	At work	30 minutes	M	47	HVE	Recruiter
4	28-4	11:00 am	At work	35 minutes	M	46	HVE	Recruiter
5	28-4	2:00 pm	At work	25 minutes	M	30	IVE	Recruiter
6	18-5	1:30 pm	At work	26 minutes	V	27	HE	Recruiter
7	20-5	09:00 am	At work	75 minutes	M	Undisclosed	Undisclosed	Controller
8	23-5	09:00 am	At work	75 minutes	V	Undisclosed	Undisclosed	Coordinator
9	1-6	1:00 pm	At work	50 minutes	V	Undisclosed	Undisclosed	Personnel manager

Table 2 Interview and background information regarding the interview respondents

Then, the interviews were analysed using the transcriptions (appendix B). To interpret the information obtained from the interviews, we took into account, that the information is socially, and actively, created and thus intersubjective rather than subjective or objective (Kvale & Brinkmann, 2009). Using the selective reading approach, i.e. statements or phrases, which were deemed extremely interesting, were included in the final transcription of the interview, the content of the interviews was examined (van Manen, 1990). Content of the statements or phrases were then coded, driven by data, to come with categories of information (Strauss & Corbin, 1990; Gibbs, 2007). Examples of this analysis, and the code memo, can be found in appendix C. Here, statements and phrases which included terms, or references to terms, such as selection, personality or software packages were singled out. These terms, and other related words, were thought to relate to the central theme of this paper. Then, the statements or phrases were compressed into shorter formulations, or thoughts of the coder, in order to grab the main point of the statement (Kvale & Brinkmann, 2009).

3.2 Outcomes of the interviews

As was made clear in the initial problem definition, there was a heavy reliance on the use of web-based applications. However, their usability and user-friendliness was lacking to some extent. Also, greater emphasis was put on the more latent aspects of an individual, e.g. personality, social intelligence, intrinsic motivation, etc., yet these aspects are not fully incorporated in the business processes of Company T. Moreover, measurement of these aspects was not yet done using reliable instruments.

Using the interviews, two cause and effect diagrams were constructed in which the initial problem definition was displayed in relation to possible causes and consequences, divided into two subjects. Basically, the initial problem proved to be the cause of several consequences, as can be seen in figure 1, concerning the use of personal characteristics, and figure 2, the application of web-based technologies. In addition, these cause and effect diagrams have been discussed with the founder of Company T. Since this project is highly relevant for Company T, their ongoing support is vital in order to keep the relevance at a high level as well as their commitment to the project. As such, it was explained how, and why, these cause and effect diagrams have been derived from the initial problem definition, and the interviews. Here, agreement concerning these cause and effect diagrams was reached.

3.3 Personal characteristics

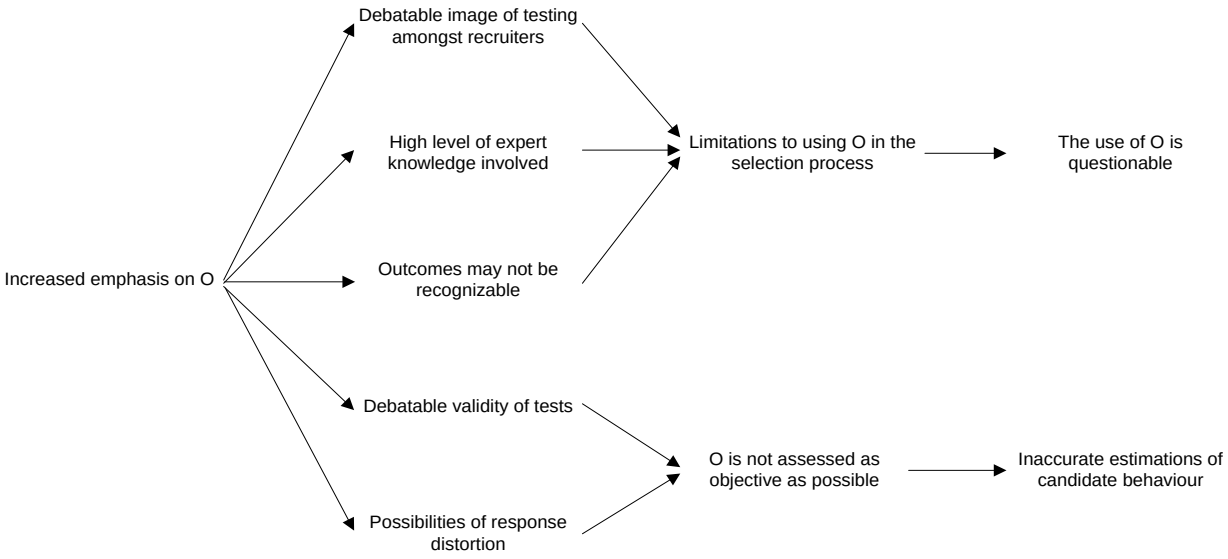

Figure 1 Cause and effect diagram of the increased emphasis on other personal characteristics during the selection process.

As said before, other personal characteristics (O) are those aspects of an individual which do not reflect the knowledge, skills or abilities. Of course, these aspects have to be relevant to working on a job, e.g. personality, motivation, physical characteristics, interests but also prior experiences (Spector, 2008). In turn, these characteristics have been linked in, various cases, to job related aspects such as performance (Gellatly, 1996; Locke & Latham, 2002; Peeters, 2006; McAdams, 2009), ability to work in teams (Gevers, Rutte & van Eerde, 2006), absenteeism (van Eerde & Thierry, 1996; McAdams, 2009) and stress (Dale & Fox, 2008; McAdams, 2009). In the case of Company T, each of the interviewees acknowledged the greater emphasis on the other personal characteristics of a candidate in addition to the knowledge, skills and abilities. This does not imply that such other personal characteristics were not used up to this moment, it is only stated that the degree of such usage has increased.

Furthermore, the importance of O became apparent after analyzing the interviews held with several business partners. It turned out that the KSA of an individual were regarded more and more as preconditions rather than break-off points between good and excellent performers. O has taken over that role to a great extent. However, the respondents did not deploy reliable instruments yet, in order to measure O. Thus, an increased use of objective measures in order to assess O in relation with such an increase in emphasis on O was not observed at Company T.

Moreover, from the interviews it became clear that some of the respondent felt they could make a judgment similar to that of a psychological test, i.e. self-report, or even better. In other words, they did not see the added value of deploying such tests. In line with the judgment of the respondents was the issue of the impact of O being tacit, i.e. the information is explicit, context specific and difficult to share (Hislop, 2005). In other words, each of the recruiters designates different effects to a certain level of each other personal characteristic. As such, there might be issues even when the O of each candidate is assessed objectively; the follow-up needs to be objective as well.

Also, the interviewees thought that an increase in the use of such (latent) aspects would lead to an increase in the provision of socially desired answers. Such a fear may be justified since the increased use of (latent) aspects is associated with increased opportunities to, possibly, provide socially desired answers (Chapman & Webster, 2003; Spector, 2008). While socially desired answers may be an indication that the test taker is highly aware of the requirements of the organization, it was considered unlikely that one can act in an unnatural manner for a long time (Spector, 2008). Furthermore, it was considered that the use of O in the selection process might lead to the exclusion of individual who are hesitant to disclose such personal information to organizations (Hausknecht, Day & Thomas, 2004). Another point indicated by the interviewees was that individuals may not recognize them in the outcome of a psychological test. Lastly, it was found that rejecting candidates based on solely O was more or less a taboo within organization where the emphasis should be on the technical knowledge of a candidate.

In all, the issues indicated by the interviewees were a sign that the mapping of individuals can be done in a more objective manner than was done previously. The process of selecting employees was not as objective as it can, and should, be, e.g. removing recruiter bias (Chapman & Webster, 2003; Stone-Romero, 2005).

3.4 Appliance of web-based technologies

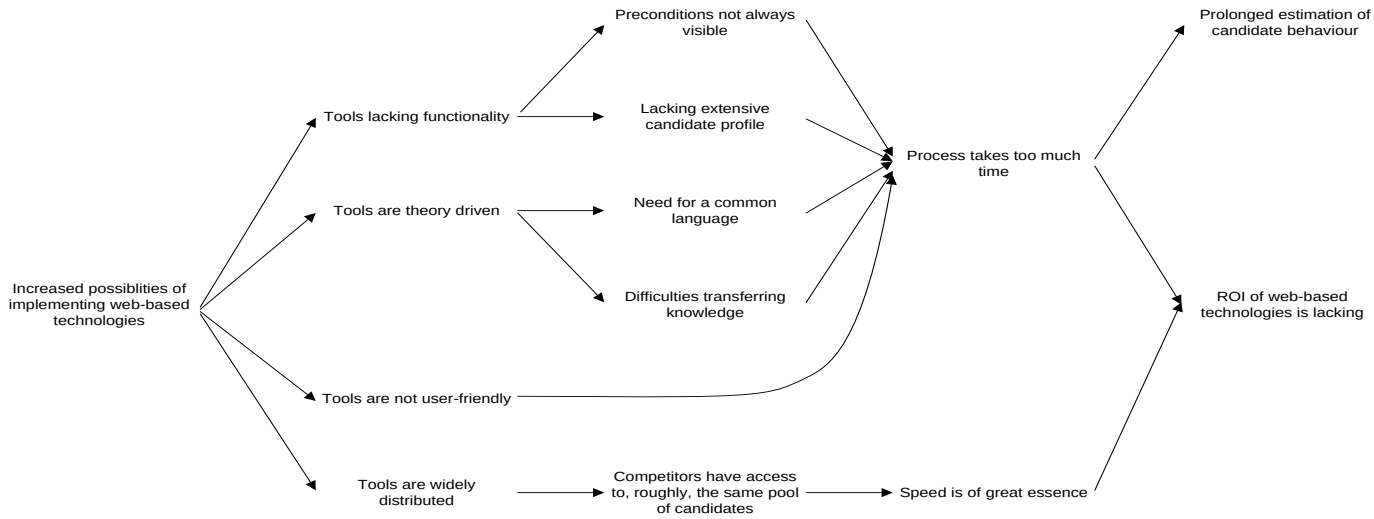

Figure 2 Cause and effect diagram of the application of web-based technologies in the selection process.

Besides the greater emphasis on O, there has been an increase in the application of web-based technologies, e.g. databases and database management tools, recruitment portals, etc. These web-based technologies are replacing the more traditional methods of recruiting employees (Stone, Lukaszewski & Isenhour, 2005) and they are changing the field of HRM in both a technical- as well as a developmental way (Hempel, 2004). In other words, these new technologies are shaping our view about HRM. However, these technologies are not fool proof yet.

To begin with, the entry barrier of using new technologies is rather low. Deploying a database, connected to some customer relation management (CRM) tool, or to an even more extensive enterprise resource planning (ERP) tool, can easily be done by calling in a software manufacturer. As a result, some organisations are deploying new technologies just to have a tech-savvy look (Chapman & Webster, 2003). On the other hand, due to the ease of distributing and applying such technologies, those looking for a job can easily upload their data to numerous databases or job boards using the internet. Even those having limited resources can gain access to a database and a website which automatically fills the database. Even though it takes time to grasp the possibilities of various technologies, this will lead to a situation in which competitors have access to, more or less, the same pool of candidates. While this does not have to be a problem on its own, it does force organisation to make solid decisions in a shorter time span, just to stay ahead of competition.

Furthermore, it became clear that the usability, functionality and user-friendliness of several current tools is lacking. In order to make a pre-selection from a large pool of applicants, preconditions needs to be easily accessible, yet this is often not the case. Especially the job boards, e.g. monsterboard.com, are either lacking information within candidate profiles or such information is hard to find. This may be due to not having a uniform method, or format, of entering data, across the multitude of online tools, as was indicated in several interviews. Also, the information provided in CV's and résumés is tacit to a large extent. It is hard, if it is even possible, to make such tacit information explicit (Hislop, 2005).

All of this leads to the process taking more time than necessary since additional information needs to be entered manually, or search manually, and information needs to be interpreted extensively, despite the reasons to apply web-based technologies are, among others, to save costs and time. Thus, due to lacking usability, functionality and user-friendliness, the applications are not meeting up with expectations.

3.5 Summary of the interview outcomes

Based on the interviews, and the subsequent cause and effect diagrams, of the increased use of personal characteristics (figure 1) and of the increased usage of web-based technologies (figure 2), a number of problems were prioritised. However, some of these problems were refined to some extent, e.g. "tools lacking functionality" was incorporated as a single problems since one can think of more problems than the two effects indicated in the cause and effect diagram in figure 2. The "problems" taken for further research are displayed in table 3.

No.	Issue description
1	Lacking functionality
2	Lacking user-friendliness
3	Tools are widely distributed
4	Access to a common applicant pool
5	Need for a common language
6	Difficulties transferring knowledge
7	Debatable validity of tests
8	Outcomes may not be recognizable
9	Possibilities of response distortion
10	High level of expert knowledge involved
11	Debatable image of testing amongst recruiters

Table 3 Summary of the problems encountered in the selection process at Company T.

4 Analysis & diagnosis

4.1 Focus group

After analysing the interviews, a plenary discussion session was organized, see appendix D for an impression. The main goal of this session was to refine the problems found from the individual interviews, as can be found in paragraph 3.4. With such a refinement, a prioritization was established, which was used in order to come up with solutions for each of the problems. A focus group seemed ideal for such a goal since one of the prime concerns was to "encourage a variety of viewpoints on the topic in focus for the group" (Kvale & Brinkmann, 2009, p. 150). The sample in the focus group was roughly the same as of the interviews with the absence of two external respondents and one employee of Company T; thus the focus group consisted of six subjects and a moderator.

After introducing the goal of the session, and explaining the organizing problems, the session started. The first step was for the members to create a ranking in which all of the problems were incorporated. Such ranking can prove to be difficult since a large amount of information needs to be processed (Tsiporkova & Boeva, 2006). Secondly, these rankings were discussed. Here, the moderator highlighted several scores and asked the corresponding member why he or she felt the problems was, or was not, thought to be bothersome. In turn, the other members were asked how they felt about the issue. This resulted in lively discussions concerning each of the problems. The third step of the focus group was for the members to explain how they thought the problems could be tackled, even though it is usually not the aim of a focus group (Kvale & Brinkmann, 2009). Members who rated an issue either very high or very low were initially asked if they could come up with a possible way of coping with the issue, after which this proposition was subdue to the opinion of the other members.

However, it was needed to construct a final ranking based on each of the individual rankings in order to discriminate between important and less important problems (Chen & Cheng, 2010). It was chosen to aggregate individual rankings using the Borda rule since the members had given linear orderings on the set of problems (Chebotarev, 1994). According to the rule of Borda, so called Borda scores were to be calculated with which an aggregated ranking was constructed (Truchon, 2008). The first step in the process to calculate Borda scores was to weigh the ranks per member, i.e. the highest ranked issue per member was given $(k - 1)$ points, the second highest ranked issue was given $(k - 2)$ points until the lowest ranked issue received zero points, with k equal to eleven, i.e. the total number of problems. Then, Borda scores were calculated by summing the weighted points per issue, across the members.

A final ranking was then created by putting the issue with the highest Borda score first, and so on. Problems with a tie were solved using their mean score and standard deviation since no solution was found regarding the Borda score rule. In table 4, the ranking per member and the weighing factor per rank, e.g. R_1 is the highest rank and thus the weighing factor is ten (11-1), can be found. The aggregated ranking can be found in table 5.

	M_1	M_2	M_3	M_4	M_5	M_6	W
R_1	7	11	3	7	7	9	10
R_2	4	10	6	9	11	9	9
R_3	3	4	5	8	10	10	8
R_4	5	3	4	10	9	11	7
R_5	11	9	11	4	8	5	6
R_6	9	6	8	3	2	6	5
R_7	6	5	10	2	1	7	4
R_8	10	1	9	11	5	3	3
R_9	8	8	2	1	4	4	2
R_{10}	2	2	1	5	6	2	1
R_{11}	1	7	6	6	3	1	0

Table 4 *Final ranking of the problems per member. M_x are the members, R_x are the ranks and W is the weighing factor per rank*

I_{11}	I_9	I_{10}	I_4	I_7	I_3	I_8	I_5	I_6	I_2	I_1
41	40	39	34	34	33	32	29	24	14	10

Table 5 Aggregated ranking based on the Borda scores per issue.

As can be seen in table 5, problems 4 and 7 have the same Borda score. In order to resolve this tie, a look was taken at both of their mean and standard deviation. It was clear that, as can be seen from table 6, there was a higher level of consensus on problems 4, i.e. smaller standard deviation, and it was considered, on average, as more important, i.e. higher mean. As a result, issue 4 has been put in front of issue 7.

Issue description	μ	σ	Issue no.
Debatable image of testing amongst recruiters	7.83	2.483	11
Possibilities of response distortion	7.67	2.582	9
High level of expert knowledge involved	7.50	2.429	10
Access to a common applicant pool	6.67	3.011	4
Debatable validity of tests	5.00	4.899	7
Tools are widely distributed	6.50	3.619	3
Outcomes may not be recognizable	6.33	2.944	8
Need for a common language	5.83	2.639	5
Difficulties transferring knowledge	5.00	3.225	6
Lacking user-friendliness	4.00	1.897	2
Lacking functionality	2.67	1.633	1

Table 6 Mean scores and standard deviation concerning the eleven problems (N = 6).

Here, the order in which the problems were discussed was based on the final, aggregated ranking.

4.2 Debatable image of testing amongst recruiters

Psychological testing was perceived to have an added value when mapping the personal characteristics of an individual. Thus, the viewpoint that a human resource manager could do the job of predicting future candidate behaviour just as well as a psychological test could, was not shared by the members of the focus group. While people are capable of making some judgement concerning the personal characteristics of another person, such judgements were thought to be less accurate and less well-founded than those from a psychological test, as was noted by one of the members: "In a global sense, I can do the same; however, I am not able to back up my claims" (Respondent No. 5). Also, psychological tests, and the outcomes in terms of personal characteristics, were thought to provide insight in which person may be most appropriate in a specific context.

In addition, the members felt that possible problems encountered when interacting with customers who did not believe in the usefulness of such tests were of minor impact. It was believed that by demonstrating the effects of such tests, people could be convinced with ease. The members did indicate that they felt that people, who have had bad experiences with psychological tests in the past, could be convinced less easily. In all, the members felt that it is important to let other people recognize the added value of such tests since that would do only good, if they are deployed properly.

4.3 Possibilities of response distortion

The members of the focus group felt that, for outcomes of a psychological test to be useful, it should be impossible to provide socially desired answers. Especially when aspects such as personal characteristics are measured, this was perceived to be cardinal. Otherwise, "you still don't know who the person is" (Respondent No. 4). When the outcomes are not truthful, the use of such tools was considered a waste of time, money and effort. It was noted that when tests are not as accurate as practitioners want them to be, their added value will be rather low in a practical context.

It was felt that when it is not possible to ban socially desired answers from a psychological test, the test should be able to indicate that the answers provided are, likely, socially desired. First of all, being able to detect socially desired answers was thought to be a deterrent when communicated to test takers. Secondly, the members believed that information about possible socially desired answers would allow them to engage in a constructive discussion with a test taker in order to get the truth out.

4.4 High level of expert knowledge involved

As instructed at the start of the session, knowledge obtained from a test has some degree of tacitness, e.g. high levels of conscientiousness are attributed to some behaviour by one individual, but to other behaviours by another even though a definition exists. It was stated by one of the members that it was hard to grasp the idea that others may not know what you consider common knowledge. However, this aspect was, eventually, recognized by the focus group.

It came to light that the members felt the need for practitioners who are capable of interpreting psychological tests and giving practical advice based on such tests; "one should be able to give solid explanations concerning the outcomes of a test" (Respondent No. 7). Moreover, it was noted that the person who uses, and shares, such information needs to be careful. Using information from a psychological test in a negative manner was thought to lower the perceived added value of such tests for some practitioners.

4.5 Access to a common applicant pool

The notion of competitors deploying, more or less, the same tools was perceived to be the cause of competitors having access to, roughly, the same pool of applicants. Even though this problem is, in essence, the effect of competitors having easy access to the same tools, the members of the focus group rated this problem as more important.

During the discussion, the members reached agreement when one of them stated that it is not just the access that matters but rather what is done with the pool of applicants. For example, as was noted by one of the members, one applicant may register him- or herself at multiple secondment agencies, if they can "provide a superior service" (Respondent No. 6), this will determine who can make money from getting him or her work. In other words, the relationship established between a candidate and an agency was perceived to be more important than just having the candidate in the database.

4.6 Debatable validity of tests

Instead of the more traditional trade-off between validity and reliability, and costs when considering what kind of psychological test should be deployed, the members of the focus group considered the goal of deploying psychological tests to be leading. At first, some members noted they felt that less objective tools can be used when the goal is to obtain some (superficial) insights into a person. The outcomes of, for instance, a test will be used to trigger an applicant to expressing themselves more freely in a conversation. On the other hand, when the goal was to make decisions based on a, for instance, personality inventory or intrinsic motivation test, the tool needed to be as objective as possible. Other members noted that it is dangerous to apply less validated tools, even when the objectives do not have such perceived far-reaching consequences. In all, it was believed that, regardless of levels of validity, "a test should be followed by a personal conversation in order to make the person feel good about the test and its outcomes" (Respondent No. 2).

Furthermore, using personality inventories in order to decide whether or not an applicant is suitable for a job was perceived to be legitimate only when it is clear what kind of personality should be required and when the personal characteristics are measured with objective tools. Also, the members felt that one of the most important aspects to psychological testing is discussing the outcomes of a test with the test taker.

4.7 Tools are widely distributed

The cardinal thought of the members of the focus group was that this problem needs to be seen as a given fact; it was not about what technologies are applied, but how they are applied. It was felt that "everything can be copied, given enough time" (Respondent No. 4).

However, even though competitors were thought to have easy access to the same tools, it was felt that new technologies were still needed in order to stay ahead of competition. Competitive advantage was perceived to be twofold: deploying state-of-the-art technologies as well as devising innovative ways in order to exploit such technologies to the fullest.

4.8 Outcomes may not be recognizable

One of the aspects of deploying psychological tests should be, according to the focus group, that the test taker recognizes him- or herself in the outcomes of a test. The members of the focus group thought something to be amiss when such recognition is absent. A number of situations were proposed to be applicable; the applicant did not understand the questions, he or she did not answer the question truthfully, the picture one has about him- or herself needs readjustment, etc.

Discussing the outcomes of a test with the test taker was thought to be a first step in uncovering what went wrong. One of the members noted that when the applicant does not recognize him- or herself, this might be an indication that this person is not an appropriate candidate for the vacancy at hand; "Most vacancies require the person to have at least some level of self-reflection, and such a situation might indicate that such a level of self-reflection is lacking" (Respondent No. 2). However, this vision was not shared by the other members of the focus group. The overall perception was that when this situation would occur, it would be tricky to use such outcomes.

4.9 Need for a common language

A strict and rigid way of working, in order to ensure a common language, was thought to be one of the results of deploying (web-based) technologies. However, the members felt that working experience might counter this issue since one of the members noted that "such a systematic way of entering data has become a way of working" (Respondent No. 3). Having experience with a certain tool was perceived to be vital in gaining in-depth knowledge about the tool and, as a result, such systematic entry will become a way of working. Most of the members did not believe this issue would be great importance.

However, it was noted that getting information from a database management system, without working experience, might be a problem. The other members did not perceive this to be an issue. While the tacitness of information regarding psychological tests was recognized, it was considered strange by the moderator that this issue, and the subsequent one, received less attention. When raising this point, no additional comments were made; everybody held on to their original statement.

4.10 Difficulties transferring knowledge

Transferring knowledge from one employee to another was not perceived to be an issue. Even though the degree of tacit knowledge involved in their work was considered to be very high, the members of the focus group did not foresee major difficulties transferring such knowledge. Instead, they believed that quite some tacit knowledge may be made explicit using extensive software packages. An example was given that their current tools allow one to track all communication concerning a particular vacancy or candidate. In addition, comments can be made at crucial moments when decisions are made in order to clarify choices made.

Still, as one of the members noted, trying to transfer tacit knowledge, about details and personal feelings, consumes quite some energy which can be put to more effective and efficient use. "In this business, a lot of feelings come into play when making decisions. It is hard to explain decisions based on such feelings experienced only by yourself and not by the person you are explaining the situation to" (Respondent No. 2).

4.11 Lacking user-friendliness

Rather than focussing on problems such as user-friendliness, the main focus of the focus group was on presence, or absence, of key functionality. Evaluating software on functionality was thought to be more objectively than evaluating on user-friendliness, which was perceived to be very subjective. It was felt when making a buy decision, objective measures should be incorporated first and foremost. This was reflected by the notion of one of the members: "whether I have to double-click to open a new page, or just single-click, I don't care as long as I can do with the tools what I want to do with it" (Respondent No. 2).

It was, however, acknowledged that user-friendliness may hamper the gains in efficiency by deploying software packages. Such losses of efficiency, by lacking user-friendliness, were not thought to be major.

4.12 Lacking functionality

Besides user-friendliness, lacking functionality hampers the efficiency gains obtained by deploying software packages. However, the members of the focus group, again, were mainly focused on the presence of key functionality. Even though "the absence of a quick overview of the preconditions of a candidate requires me to spend more time, such additional functionality is not crucial" (Respondent No. 1). From the discussion, it followed that their main concern was to get a complete picture of an individual, i.e. all the relevant information could be acquired with the tools; efficiency was not considered a major concern.

4.13 Advanced prioritizing

The analysis has revealed the major importance of the validity and reliability of the knowledge used in (web-based) technologies. While competitors using the same tools, and having access to a similar pool of applicants was considered a great threat, it was also considered a situation one has to deal with. New and innovative ways of applying technologies should be devised in order to differentiate from the competition. Furthermore, all of the knowledge in such technologies, or tools, must be findable. User friendliness and functionality are not as important as being able to find the knowledge one is looking for.

In addition, the problems were grouped, in table 6, based on their perceived importance by the focus group. In the next chapter, priority was placed on group 1, then on group 2, and so on.

Group	Issue description	No.
1 "Must"	Debatable image of testing amongst recruiters	11
	Possibilities of response distortion	9
	High level of expert knowledge involved	10
2 "Should"	Access to a common applicant pool	4
	Debatable validity of tests	7
	Tools are widely distributed	3
3 "Could"	Outcomes may not be recognizable	8
	Need for a common language	5
	Difficulties transferring knowledge	6
4 "Perhaps"	Lacking user-friendliness	2
	Lacking functionality	1

Table 7 Grouped problems, in descending order of perceived importance from top to bottom.

5 Plan of action (design)

5.1 Literature review

Using the findings from the interviews and the focus group, a practical design was constructed for Company T which they can apply on their own, in order to improve their business processes (van Aken, Berends & van der Bij, 2007), i.e. the selection process. Contemporary literature was used to counter the problems identified. Here, search engines such as ScienceDirect, PsycINFO, etc., were used. In addition, specific attention was given to journals such as the Journal of applied psychology, Journal of personality and social psychology, Personnel psychology, International journal of selection and assessment, etc. Literature was searched by using the problems as topics, which were to be found in the title, keywords, or the abstract of an article.

Then, all of the solutions are combined into a practical design in which the proposed solutions by the members of the focus group were evaluated as well.

5.2 Group 1 – "Must" factors

5.2.1 Debatable image of testing amongst recruiters

In order to explore this problem, focus was placed on the gap between research and practice. There are several factors why psychological tests may not be embraced by HR practitioners (Ryan & Tippins, 2004). Five major factors were be identified and translated to the specific context of Company T:

- Due to jargon, some practitioners may not grasp the ideas presented in papers and journals, and do not see the added value of testing.
- Research usually does not take context into account, leading to lower scores and gains by deploying testing in practice, and thus, the abolishment of testing.
- Lack of time to integrate research findings into practice due to constant pressure
- Perceptions of practitioners not compatible with research findings
- Confusing legal requirements which lead to avoidance altogether

Furthermore, personality inventories are regarded as the least favourable psychological test compared to cognitive ability tests, work samples and interviews (Hausknecht, Day & Thomas, 2004). However, such perceptions of the applicant on the selection procedure have a minimal influence on the withdrawal of applicants on the selection process (Sackett & Lievens, 2008). In addition, some managers may believe that they become increasingly capable of making sound judgments regarding the prediction of behaviour of candidates. This usually results in an overreliance on intuition and discarding of psychological tests as a useful aid (Highhouse, 2008). Also, managers tend to see psychological tests not as probabilistic and as a result, they doubt they can be of use (Highhouse, 2008). Thus, "sound selection procedures are often either not used or are misused in organizations" (Sackett & Lievens, 2008). In the end, structured ways to select employees will always be better than unstructured ways (Ryan & Tippins, 2004). Moreover, when personality information is available, it can be used accurately in selection decisions (Dunn, Mount, Barrick & Ones, 1995).

Countering this problem was considered hard since there are no obligations to use psychological tests in a selection process, let alone obligations to use valid tests. Furthermore, there was less need to convince the employees at Company T, since they acknowledge the added value of psychological testing, despite their current deployment of non-validated tests. However, due to costs associated with psychological testing, which are to be allocated to the customers, Company T needs to convince them to pay for such tests since it will increase the quality of the service provided in the long run. This may be done by providing elaborate examples of deployed tests as well as scientific validations, in easy to understand terms. Furthermore, in line with the notion of tests being too analytical, it may be helpful to educate managers as to how psychological tests actually work, i.e. that they try to predict future behaviour but that they never predict 100% of such behaviour (Ryan & Tippins, 2004).

The solution proposed by the members of the focus group was to set a branch wide standard. An increase was observed in the degree that non-psychologists are given the opportunity to deploy certain psychological tests, in order to increase the level of usage. As a result, it was thought to be unlikely that strict regulations will be put in place by whatever authority able to do so. Such regulations are likely to increase the gap between research and practice.

5.2.2 Possibilities of response distortion

Response distortion is very well possible in self-reports (Barrick & Mount, 1996). Two major constructs can be distinguished when looking at response distortion (Paulhus & Reid, 1991): self-deception, i.e. tendency to think about oneself favourably, and impression management, i.e. deliberate attempt to create a favourable impression with others. Response distortion may be detrimental to certain individuals when rankings are used to determine appropriate candidates. Such distortion was considered harmful when an individual is not selected for a follow-up round due to his/her place being taken by someone who distorted their response (Stewart, Darnold, Zimmerman, Parks & Dustin, 2010). Thus, false positives may be hired and false negative may not be considered. Both situations lead to money being wasted (Spector, 2008).

In order to detect such response distortion, lie- or social desirability scales can be applied. Such scales would be included in the overall personality inventory and the responses on these scales would be used in order to determine the degree to which one has answered in social desired way (Barrick & Mount, 1996). However, the effect of socially desired answers on the predictive validity of personality inventories, i.e. the Big Five, is rather small and not significant (Hough, Eaton, Dunnette, Kamp & McCloy, 1990; Ones, Viswesvaran & Schmidt, 1993; Christiansen, Goffin, Johnston & Rothstein, 1994). Furthermore, self-deception and impression management had, more or less, an effect of equal amount on the predictive validity of the personality measures (Barrick & Mount, 1996).

The implications from this research were that one should not determine cut-off scores from current employees; they are less likely to distort their responses than would applicants do (Barrick & Mount, 1996). Secondly, adjusting tests for response distortion should not be applied in practice since the gain in predictive validity is negligible while the application of such techniques may be hard to defend (Barrick & Mount, 1996). Moreover, relatively few applicants will fake personality inventories in order to look socially desired (Hough, Eaton, Dunnette, Kamp & McCloy, 1990). Therefore, the removal of applicants who are distorting their responses is unlikely to have a large effect on validity (Schmitt & Oswald, 2006). Also, unproctored internet-based testing was not found to be a unique threat to response distortion in personality inventories (Arthur Jr., Glaze, Villado & Taylor, 2010).

Another solution would be to replace self-reports with other types of measures, e.g. structured interviews or assessment centres, since one is more likely to fake using a self-report than in a structured interview (Van Iddekinge, Raymark & Roth, 2005). In contrast, a structured interview has the danger of applicants engaging in impression management, compared to assessment centres (MacFarland, Yun, Harold, Viera & Moore, 2005). However, assessment centres are quite expensive and therefore usually applied for higher management positions. In addition, there are limitations regarding the use of structured interviews compared to self-reports, which are discussed in paragraph 5.3.2.

Thus, applying a sound test, i.e. self-report, would be sufficient to cope with response distortion it seems. Still, one may add lie- or social desirability scales to the personality inventory in order to see who is, and who is not, faking. Such information may be used to in a structured interview with the applicant. Furthermore, when unproctored internet testing is used, a proctored retest should be in place in order to verify the identity of the applicant (Tippins et al., 2006).

5.2.3 High level of expert knowledge involved

Contemporary research showed that all knowledge is likely to be some combination of tacit and explicit knowledge. Tacit and explicit knowledge are, at least in the practice-based view, regarded as inseparable and mutually constituted (Tsoukas, 1996; Werr & Stjernberg, 2003). Thus, people need to have some level of knowledge present already, in order to grasp new knowledge (Gupta & Govindarajan, 2000). Furthermore, knowing is linked to doing (Blackler, 1995). More precise; knowledge is needed to be able to perform activities, whereas activities are needed to use, develop, create or share knowledge (Hislop, 2005).

As a result, it is considered impossible to completely disembody knowledge from a person (Hislop, 2005). This notion has a great impact on this problem since it mainly touched the notion of how to handle with the outcomes of psychological tests; outcomes of such a test and the application of such outcomes should only be applied by knowledgeable individuals who are active in this field of business. Since training employees of Company T in industrial and organizational psychology, as well as in administering and interpreting psychological tests, did not seem feasible, it was proposed that professionals should be hired or contacted when needed. However, due to cost issues, it might be an option to provide several training programs and practical experiences with regard to a specific test (Szulanski, 1996; Boer, van Baalen & Kumar, 2004). Furthermore, the follow up of such training would be to maintain a certain level of activity in order to develop and create more knowledge.

In all, it seems best to deploy a professional when working with psychological tests in order to deal with the aspects of tacit and explicit knowledge, as well as working experience and, perhaps, legal issues. If an employee persists on being knowledgeable themselves, concerning the administering and interpreting of psychological tests, it seems best to provide educational programmes as well as guided practical experiences in order to create, develop, discuss and use knowledge.

This solution was in line with the members of the focus group, who felt that the tools applied for objectively mapping personal characteristics should be handled by professionals, i.e. psychologists. Such professionals have the knowledge as to how outcomes are to be interpreted and what the consequences of specific outcomes, and combinations of outcomes, are when predicting future behaviour. Thus, they are to deploy their tacit and explicit knowledge about test taking and translate the outcomes, i.e. give advice, to those who are going to make decisions based on these outcomes. Furthermore, it was noted that one should take into account current legal regulations as well as those of the union branch, i.e. Dutch institute for psychologists (NIP).

5.3 Group 2 – “Should” factors

5.3.1 Access to a common applicant pool

In the field of secondments, there is one unwritten rule; first come, first serve when applicants are concerned. In other words, one can only charge a recruitment and selection fee when he or she has introduced the applicant, which is hired, to an organisation first, before other agencies have done so. As a direct result, it was noted that speed is of the essence, especially since competitors have access to, roughly, the same pool of applicants.

When an applicant is looking for a job, it is likely that he or she is concerned about getting a job, regardless of which agency will provide him or her one. With such an attitude, organisations fear they scare away, the best, applicants by having a negatively perceived selection process (Ryan, Sacco, McFarland & Kriska, 2000). This notion is reflect in contemporary research on applicant reactions. Applicant perceptions, and reactions, on the selection process are linked to, for instance, intention to accept a job. However, these linkages were meagre at this point. In other words, applicant perceptions have little influence on withdrawal behaviour (Ryan, Sacco, McFarland & Kriska, 2000; Truxillo, Bauer, Campion & Paronto, 2002). However, the amount of research done in this field of science is relatively meagre and conclusions might change.

While applicant reactions may not influence withdrawal behaviour, it may influence preferences for one agency over another. Even though there is a first come, first serve rule, applicants need to approve with them being introduced to a certain organization or for a certain vacancy. Whereas personal aspects, e.g. gender, age, do not influence perceptions of the applicant on the selection process, perceived procedural characteristics do, albeit marginally (Hausknecht, Day & Thomas, 2004). There are several practices which may be deployed in order to counter the negative perceptions of an applicant (Ryan & Ployheart, 2000). Moreover, "applicants will not react negatively to tools that are well developed, job-relevant, and used in selection processes in which the procedures are appropriately applied, decisions are explained, and applicants are treated respectfully and sensitively – these concerns apply to all tools equally" (Ryan & Tippins, 2004, p. 315).

The solution to counter this issue is then twofold; first of all the employees at Company T need to respond very quickly to market demands by having access to all relevant data quickly. This way, they can be the first to introduce candidates to a certain organization or for a certain vacancy and the candidate is provided with a message that their application is considered important. Secondly, they might want to consider making themselves more appealing to candidates for those times in which the amount of jobs exceeds the amount of candidates. By offering, and communicating, an honest and respectful selection process, face-to-face appointments when needed, feedback on decisions made and a clear overview of tools which are going to be applied, and why, they may be more appealing than competitors (Ryan & Ployheart, 2000; Ryan & Tippins, 2004; Sylva & Mol, 2009). Company T should work with the fact that they share a candidate pool act accordingly; displaying and executing an appealing and fast paced selection process.

5.3.2 Debatable validity of tests

When using psychological tests in a selection process, it is important that such tests provide information on "who will be a good employee" (Ryan & Tippins, 2004, p. 308), i.e., the test should have a high level of validity when it comes to predicting those aspects which are important for working at an organization, e.g. performance, motivation, turnover, etc. Since those aspects are always in relation to some context, one is actually trying to achieve fit between the person and the environment, i.e. job, team, organisation and organisation culture (O'Reilly III, Chatman & Caldwell, 1991; Ostroff & Aumann, 2004; Greguras & Diefendorff, 2009; Vogel & Feldman, 2009). However, more issues are important when looking at which tool is the most appropriate for a certain situation: costs of developing a test, costs and ease of administrating a test and the likelihood of adverse impact (Ryan & Tippins, 2004; Finch, Edwards & Wallace, 2009). Still, one should only look at these issues when having a number of valid tools from which to choose.

Even though cognitive abilities tests have a high level of predictive validity (around 0.51, i.e. it can predict up to 51% of the variation in performance in future work behaviour), it was stressed in this paper that greater reliance was put on the other personal characteristics (O) of individuals (Schmidt & Hunter, 1998; Ryan & Tippings, 2004; Spector, 2008). Cognitive levels were considered more and more to be a precondition which can be checked by educational level to some extent. Moreover, personality inventories, on their own, have been demonstrated to be very useful in the selection process (Barrick & Mount, 1991; Kieffer, Schinka & Curtiss, 2004; Bartram, 2005; McAdams, 2009) as well as having incremental validity over cognitive ability tests (Ones, Dilchert, Viswesvaran & Judge, 2007). Contemporary research shows that one of the most validated personality inventories is the NEO-PI-R, or the Big Five (McAdams, 2009). Especially the trait conscientiousness has been linked to performance in numerous cases (Barrick & Mount, 1991; Kluemper & Rosen, 2009). As a result, tests based on the Big Five, e.g. Personality And Preference Inventory (PAPI), Role Diagram Approach (RDA), were considered more advantageous over tests which are not, e.g. Jung Type Index (JTI), Meyer-Briggs Type Indicator (MBTI). Lastly, motivation, and ambition were found to be important for future job performance. One may have the abilities to perform a particular set of tasks; he or she may not be truly motivated to do so and thus will not perform well (Ryan & Deci, 2000).

While such inventories rely on self-reports, trends have emerged which aim to measure personality by other means than self-reports (Sackett & Lievens, 2008). One interesting, and potentially practical issue in this context, is to apply structured interviews (Barrick, Patton & Haugland, 2000; van Iddekinge, Raymark & Roth, 2005). While some evidence shows that structured interviews are more valid measures of personality than self-reports (McCrae, Stone, Fagan & Costa, 1998; Mount, Judge, Scullen, Sytsma & Hezlett, 1998), other research criticised such claims (Murhpy & DeShon, 2000) or have found only moderate correlations between self-reports and other ratings (Barbaranelli & Caprara, 2000). In addition, research has shown that conscientiousness and emotional stability cannot easily be measured using structured interviews (Barrick, Patton & Haugland, 2000). The greatest issue here is that the interviewer is capable of making a sound assessment of the personality measures (Schmidt, Viswesvaran & Ones, 2000; van Iddekinge, Raymark & Roth, 2005).

Measuring personality through the use of social networks web sites is another innovative method. From such sites, a distinction can be made between high and low performers. In addition, one can get to information which usually does not come up during an interview (Kluemper & Rosen, 2009). Also, one may get insight in the personality of an individual just by looking at such social networks sites (Kluemper & Rosen, 2009). Whereas some claim this technique may counter effects of dishonesty and identity, this is questioned by the author of this paper. In the end, it still concerns humans providing information about them. As soon as they realize such web sites are sources of information, they may alter the information on them.

Yet another trend found was that of unproctored internet testing (UIT), i.e. testing without a human test administrator, which has direct linkages with e-selection. While one may wonder whether internet testing will yield similar scores to traditional methods, i.e. paper-and-pencil, great equivalence was found between the scores (correlations between 0.74 and 0.93, with a mean of 0.85) (Lievens & Harris, 2003). However, despite the advantages, i.e. increased consistency and increased efficiency, several drawbacks came apparent as well (Chapman & Webster, 2003; McManus & Ferguson, 2003; Tippins et al., 2006). Besides issues of honesty, cheating and applicant identification, there are also issues such as impact of contextual factors, ethics and adverse impact, e.g. availability of internet, experiences with a computer / internet, loading speed of the web-page, accuracy of the data, etc. (Stone-Romero, 2005; Tippins et al., 2006). It was stressed that UIT needs to be regarded as a tool and that it needs to be supplemented with a face-to-face interview, rather than other means such as webcam taped videos (van Iddekinge, Raymark, Roth & Payne, 2006), in which the outcomes, as well as experienced issues, can be discussed. In addition, one might consider administrating a second set of tests in order to examine whether or not the applicant has filled in the test him- or herself and with or without any help.

In all, it was advised that Company T should rely on traditional methods based on the Big Five, and expand such inventories with measures of motivation and ambition. Even though one member of the focus group commented that for "generating input for a discussion" less validated tests may be applied, this was not recommended. As said before, validity is what counts first and foremost. Secondly, structured interviews were not considered a viable option for Company T since they do not have appropriate employees which are capable of assessing personality traits. Hiring someone to do so is likely to be more costly than administering a self-report test. Lastly, due to their striving to be innovative, Company T would be well to keep track of the latest development regarding UIT. While having some drawbacks, mainly cheating, it was regarded to have potential in the face of e-selection. With the addition of a second set of tests, or perhaps warning about the existence of such tests, and an interview, such drawbacks may be countered.

5.3.3 Tools are widely distributed

Tools can be easily obtained by competitors, but they are vital to the selection process as well. As a result, one should deploy certain tools in order to help achieve goals, but deploying them is no guarantee for good results; it is also about how you use them. Moreover, the manner in which tools are used should be hard to copy. This notion reflects the topic of core competence (Prahalad & Hamel, 1990); the application of certain tools should not be cardinal to competing with competitors. A core competence should be regarded as a skill rather than a resource (Mooney, 2007). Such skills should allow for the organisation to define and solve problems in order to grow (Lei, Hitt & Bettis, 1996). Thus, the fact that current tools can be acquired by competitors with great ease needs to be taken as a given. Instead, one should aim to use such tools in order to define new problems and solve them.

One such a new problem, which already has been defined, is the upcoming shortage of employees with proper technical skills. How might such tools, are perhaps new tools, help to cope with such a shortage? Whereas Company T is already trying to combine both the hard skill, i.e. KSA and the soft skills, i.e. O, when introducing candidates to an organisation or vacancy, they might also offer HRM consultancy regarding the mapping of existing employees in a particular organisation. In addition, if one would map the ambition, work motivation and achieved performance as well, they provide quite some valuable information grouped together, to that organisation. Using such information was expected to lead more realistic and safe planning schedules, being able to plan successions more easily, distributing training programmes more effectively, manage competences, and so on. Another solution would be to start a branch wide database, in which all of the employees of linked organisation are present. While such a database should include all available knowledge, it would be an anonymous database in order to secure privacy. Each of the linked organisations would then have access to the database and may look for suitable entries. If they find one, they may contact the organisation in which the organisation work and request if they could hire (temporarily) that employee.

The addition of knowledge to the tools, or a combination of tools used, was proposed by the members of the focus group as well. However, they did not specify what type of knowledge should be added, or how the tools should be applied in order to gain competitive advantage. In all, solving this issue meant that a practical application of e-selection was devised for Company T. As a result, the final design can be found in paragraph 5.5.

5.4 Group 3 – “Could” factors

5.4.1 Outcomes may not be recognizable

Discrepancies between the perception of the test taker and the outcomes of a (self-report) test are present in most types of testing, from personality- to cognitive ability testing. Furthermore, such discrepancies may occur for those who distort their response, and for those who do not. However, it is only when feedback is provided that such discrepancies come to light, which is exactly one of the functional purposes of providing feedback (Bannister, 1986). While determining discrepancies is one step, finding out why they are present is the next.

Harping on the field of applicant reactions, it seems that, especially personality, tests may be seen as invasive to privacy since applicants cannot, or are encouraged not to, distort the information provided, and, therefore, not to alter the subsequent impressions (Rosse, Miller & Stecher, 1994). Tests may reveal socially undesirable information which may lead to not being selected and as a result, one may state that he or she does not recognize him- or herself in such undesirable outcomes. Besides such principle based on justice, there are also issues concerning self-serving biases, applicant characteristics (Chan & Schmitt, 2004). In other words, the motivation for test taking, and the belief in a certain test, may influence the performance on a particular test (Arvey, Strickland, Drauden & Martin, 1990; Chan, Schmitt, Sacco & DeShon, 1998; Bauer, et al., 2006). On the other hand, discrepancies may occur due to the test deployed. Issues may be found in the area of test content and method, which may be perceived as not valid (Chan & Schmitt, 2004). Members may not understand the questions, do not grasp what they are mean to do, etc. Deploying test with high levels of validity may counter such issue to a large extent; the type of test may still influence the test taker.

In the case of unproctored internet testing, some additional problems came to light. First of all, the speed of internet, especially in the case of a timed cognitive ability test, may contribute to a discrepancy between scores on a test and the actual capabilities. In addition, without a supervisor, there is no possibility to ask questions; this may promote perceived unfairness and it does not contribute to an understanding of the test taking (Bauer, Maertz Jr., Dolen & Campion, 1998). A possible solution would be to retake the test with a supervisor present (Tippins et al., 2006).

Whatever the reason for perceived discrepancies, it was understood that this was a signal that something is amiss and that further investigation is needed. Since no solutions were found, which address this particular issue, the proposed solution would be to, first, discuss the findings with the test taker and dig deeper into the measured performance. Here, he or she should be provided the opportunity to explain why and where there is a discrepancy. This may be done using the STAR (Situation, Task, Action, Result) interview technique in which the test taker describes several situations in which he or she displayed a certain behaviour in contrast to the measured performance. The choice then would be to administer another test, but then another version of it, to discard the test taker from the candidate pool or to select the test taker based on the STAR technique. If the choice would be to administer a second test and the test taker still perceives discrepancies, one should wonder whether the test taker is being honest and capable of reflecting on the self.

In all, if the test taker perceives discrepancies, the test will be of little use in the selection process. Since the cause of such discrepancies may be attributed to the test taker or the test itself, it was proposed that sound and valid tests should be applied in order to minimize the effect of the test being ambiguous. Furthermore, test feedback should be provided before the test taker receives information about being selected to proceed to the next stage or not (Bauer, Maertz Jr., Dolen & Campion, 1998). When discrepancies are discovered, it was proposed to engage in a conversation in which the results are being discussed in-depth. For instance, one might look for internal contradictions; one might state that he or she is a true entrepreneur, yet little preference is shown for risk taking. Discussing such contradictions might help to get the conversation going in a direction that matters might be resolved.

5.4.2 Need for a common language

One of the main goals to use databases is to increase efficiency by increasing the speed and reach of search endeavours. In order for a database to yield such gains in efficiency, queries need to function properly (Stone-Romero, 2005). However, efficiency is depended on the degree to which reliance is put on the systematic entry of data. If the reliance on systematic entry of data is high, there is a greater chance of input errors, and thus data which does not correspond to set standards, which results in lower efficiency and vice versa. Furthermore, when a database is programmed in a strict sense; several queries need to be used in order to cover all possible terms for a single topic. Ideally, it should not be necessary to enter the data in an extremely strict sense, e.g. an educational programme such as chemistry should match with terms like chemical engineering.

It was proposed that some sort of dictionary, or taxonomy, should be devised. In such a dictionary, terms which cover the same theme, are linked to each other. Then, instead of searching a database based on terms, one is actually searching within themes. This leads to a database management tool which is more efficient, user-friendly and less prone to errors (Mohamed, Orife & Wibowo, 2001). Secondly, systematic entry of data concerns the degree to which tacit information can be made explicit. This requires employees to be consistent in their data entry; otherwise tacit information will be lost in the transfer of knowledge. It might be an idea to formulate a manual in which the explicit, and tacit, knowledge of the employees is captured in order to provide a standard way of working, e.g. in order to serve as an introduction to new employees. Such a standard way of working will aid the employees in consistently adding data into their software package.

5.4.3 Difficulties transferring knowledge

In organisations, knowledge sharing is an important issue for day-to-day operations, as is the case at Company T. Due to the great deal of tacit knowledge required for working at Company T, as was indicated during the focus group, it may be difficult for new employees, or even more experienced colleagues who do not work with a certain client, to pick up (new) tasks; knowledge sharing provides opportunities to transfer expertise and knowledge from expert to novices (Wang & Noe, 2010). Thus, knowledge sharing would be beneficial for Company T as a whole (Boer, Berends & van Baalen, 2011; Hong, Suh & Koo, 2011).

A lot of factors contribute to the degree that employee share knowledge within an organization. However, since the context of this paper concerns a single company in which the employees were rewarded based on individual as well as team performance, it was assumed that the employees have the motivation and willingness to share knowledge. Of course, one may consider rewarding separate knowledge sharing actions since that was found to be a stimulant in order to increase knowledge sharing among employees (Yang & Wu, 2008), but that was not proposed explicitly here. Furthermore, there is little inter-group or inter-personal conflict, there is trust amongst the employees, they are all committed to the organisation, they were all assumed to have beneficial traits for knowledge sharing and the culture of Company T is aimed to collaboration, and thus knowledge sharing (Hislop, 2005; Yang, 2007; Matzler, Renzl, Müller, Herting & Mooradian, 2008; Yang, 2008).

Even though the basis of knowledge sharing was present, the problem still stands; whereas explicit knowledge may be shared easily, this is not the case for tacit knowledge (Hislop, 2005). Contemporary literature showed that one may classify knowledge transfer in structured and unstructured processes. Whereas explicit knowledge may be transferred easily using structured processes, e.g. formal documents, tacit knowledge usually requires more unstructured knowledge transfer processes (Chen & McQueen, 2009). Such unstructured processes may be seen as way to share knowledge rather than extracting it from those holding the information, i.e. socializing in order to share information (Fernie, Green, Weller & Newcombe, 2003; Boh, 2007). However, in order to share such tacit knowledge, it may be argued that strong connections need to be present between the actors (Granovetter, 1973; Ahuja, 2000; Burt, 2000; Boer, van Baalen, Kumar, 2004; Boer, Berends & van Baalen, 2011). In addition, the context of both the origin of the tact information as well as the application of the information plays a role in the sharing (Fernie, Green, Weller & Newcombe, 2003); however, in Company T the context was unlikely to play a major role since each of the employees was working, more or less, in the same context. Furthermore, the actor trying to acquire information is required to have at least some level of cognitive capabilities in order to grasp the information (Chen & McQueen, 2009).

A solution proposed by the members of the focus group was to add commentary in their software package at each of the steps taken during a selection process. This way, the reasoning behind a choice can be made more explicit. While this may be a viable option to some extent, there is still the problem of tacit knowledge not being communicated (Hislop, 2005).

As a result, it was proposed that the employees should keep up adding commentary at every step they take during the selection process in order to share their explicit knowledge as well as noting their thought on why choices were made. Also, keeping track of all communication between the employee and candidate, and employee and organisation was recommended to be kept in place as it was. In addition, it was advised that employees would interact with each other when they want to share in tacit knowledge hold by others, or when they want to share their tacit knowledge with others. It was further proposed that these interactions can either be emergent or they can be set up as an intervention in which the employees are required to share their experiences and knowledge with the rest of the employees; both should be in place (van den Hooff & Huysman, 2009), and the latter was already in place to some extent. When interaction is sparked due to some current problem, collaboratively solving the problem will also contribute to sharing tacit knowledge (Berends, van der Bij, Debackere & Weggeman, 2006), and was proposed to be undertaken. Such a combination of rich explicit knowledge sharing as well as providing the basis of sharing tacit knowledge seemed best.

5.5 Group 4 – "Perhaps" factors

Since these issues were not thought to be of major importance, no solution was proposed. Missing out on some efficiency was not deemed as important as other factors as long as everything is findable. In addition, preference regarding software packages is highly subjective and switching between such packages will result in loss of efficiency since one needs to get adjusted to the new package. Moreover, digging into functionality would be another study on its own, as would be the quest to improve user-friendliness.

One remark was made regarding a possible solution in order to solve the issue of lacking functionality; since the importance of other personal characteristics is growing, their software packages should enable a more extensive personal profile in which these aspects are more prominent that they are now. On the other hand, the knowledge, skills and abilities (KSA) need to be easily accessible as well since Company T is operating in the technical branch in which such KSA are regarded as highly important.

5.6 e-Selection at Company T; a final design of solutions

With the requirement issues solved, the next step was to determine how the individual requirements can be combined into a single design. Such a final design serves as a guideline for Company T, when they decide to deploy e-selection in order to deal with the upcoming shortage of employees with proper technical skills, as well as the increased use of O in the selection process. Two major topics were derived and the requirements for both psychological testing as well as web-based technologies have been examined. This final design was summarized in table 8.

Problem	Solution
Debatable image of testing amongst recruiters	Deploy valid psychological tests and persuade customers, with elaborate examples when needed
Possibilities of response distortion	Add a lie scale and deploy feedback sessions with test takers. Also, deploy valid psychological tests. Another solution would be to deploy measures which do not rely on self-reports, i.e. structured interviews / social media
High level of expert knowledge involved	Hire professionals to cope with the level of expert knowledge involved with psychological testing
Access to a common applicant pool	Adopt an attitude of fast responses to changes in the market and offer, and communicate, an honest and respectful selection process
Debatable validity of tests	Deploy valid psychological tests and expand such test taking with the use of unproctored internet testing
Tools are widely distributed	Add specific knowledge to the use of various tools, see recommendations
Outcomes may not be recognizable	Deploy valid psychological tests as well as feedback sessions with test takers. In addition, omit test takers for which the test outcomes are persistently not recognizable
Need for a common language	Buy, or develop, a taxonomy which allows for easier data entry and retrieval in the database
Difficulties transferring knowledge	Set up formal knowledge sharing sessions and allow informal knowledge sharing sessions to take place. Adopt collaborative problem solving when needed. Denote, in the tools, as much information as possible in order to clarify decisions.
Lacking user-friendliness	No solution was constructed
Lacking functionality	Search for tools, or buy an add-on, which enables extensive personal profiles in the current tools, i.e. both the KSA and O.

Table 8 e-Selection at Company T; A final design of solutions

5.6.1 Support for e-selection

The first, and foremost, requirement of e-selection, for it to be viable for Company T, is that e-selection is perceived as useful. Such a positive perception should be towards the use of, advanced, web-based technologies as well as the application of valid psychological tests, and usually start with displayed support from higher management (Parkers, 2000). While such a positive perception was considered to be present at Company T at the time, such a perception might not be present at their customers. The perception of the customer is of some importance to Company T since the costs of psychological tests were likely to be allocated to them. Convincing customers might be done with the help of scientific research, translated in lay mans terms, or by administering a test alongside the HR manager and going through the process with them in order to demonstrated the added value.

5.6.2 The e-selection tool and process

When support for the concept of e-selection is gained, the next step is to design e-selection tailor fit for Company T. With the increased usage of web-based technologies, and having to share applicants with competitors due this increase, along with the anticipated problems in mind, the employees at Company T need to adopt an attitude of fast responses. When an applicant applies for a vacancy, they need to, be able to, react within a matter of minutes in order to exploit the possibility as much as possible since it was expected that the competitor will also have, or already has, access to this candidate. While user-friendliness and functionality were considered less important by the members of the focus group, the only proposition made here was to buy, or develop, a tool which suits the current set of tools and way of working the best.

A quick response was considered unlikely to be sufficient in order to satisfy possible candidates. It was proposed that an honest and respectful selection process needs to be followed and communicated to candidates. Such a process would hold face-to-face appointments when needed, feedback on decisions made and a clear overview of tools which are going to be applied, and why. Especially when the market conditions are in favour of the job seeker, this will help to increase a positive image about the organisation.

The e-selection tool chosen should allow less rigid entry and retrieval of data. It was proposed that some sort of taxonomy would be present in the tool, which allows less rigid ways of working in order to increase effectiveness and efficiency. This taxonomy groups terms belonging to a single instance, after which each of the terms corresponds with each other. Instead of having to execute various database queries including each of the terms on their own, a single query would be enough to obtain the same results.

5.6.3 Knowledge sharing

Furthermore, when looking at efficiency and effectiveness, it was proposed that several knowledge sharing mechanisms would be put into place. First of all, it was proposed that a manual should be constructed in which the standard way of working at company T is described. This helps to transfer explicit knowledge, and may also help to transfer tacit knowledge, to new employees but also to existing employees. Another mechanism proposed was that of entering as much information into the tool used as possible, in order to clarify decisions made. Other employees can then look up selection processes regarding older vacancies and discover which decisions were made and why. A more active variant of this mechanism is to ask colleagues to think along, trying to fathom their reasoning and gain new insights. Moreover, it was proposed that the employees engage in knowledge sharing sessions, both formal and informal, in which they share experiences as well as knowledge with each other. Whereas formal sessions were already taking place, to some extent, on a weekly basis, informal sessions may help to share even more tacit knowledge due to their nature of intrinsic motivation.\

5.6.4 The use of O

Regarding the increasing reliance on O, it is of vital importance that valid psychological tests are deployed. Valid psychological tests were considered those who have been validated with scientific means and by scientific literature, such as tests based on the Big Five, or the NEO-PI-R. Besides such personality inventories, it was proposed that measures of ambition, motivation, and other personal characteristics besides the KSA, were to be included. Using such valid tests helps countering issues such as response distortion as much as possible, i.e. the validity of psychological tests was not found to be significantly affected by response distortion. When preferred, it would be possible to add a lie scale to the personality inventory, in order to determine when responses are distorted. Such information can be used to "confront" the test taker and determine what is amiss. In addition, valid tests may counter the issue of outcomes not being recognizable by the test taker, i.e. lower chances that discrepancies are present due to an inaccurate test. When discrepancies arise, usually during the feedback session, it was proposed that a structured interview would take place in which the results are discussed in-depth and during which the test taker can elaborate his point of view. However, if discrepancies persist, it was advised to omit the candidate from the selection process since it no decisions can be made about his or her personality.

While most psychological tests rely on self-reports, other measures of O were found. Support for these measures was not convincing yet, but they may prove to be useful when self-reports are lacking, e.g. consistent discrepancies between outcomes and self-perception. The first to be proposed was to measure O with the use of structured interviews. However, impression management may lower the validity of this method and a professional has to be hired in order to accurately measure O. Secondly, assessment centres may be deployed but they were considered too costly besides when it concerns higher management positions. Lastly, social media, e.g. LinkedIn or Facebook, may be used. While some research suggests that such pages contain accurate information about a person, this was not considered highly plausible in most cases.

When looking at the desire of Company T to be innovative, and when looking at the expected future of test taking, unproctored internet testing should not be missed out on by Company T. Such tests produce similar scores as traditional paper-and-pencil self reports do. However, issues such as identification of the test taker, availability of internet, adverse impact may pose a threat to this method of testing. Still, when combining unproctored internet testing with face-to-face interviews, and perhaps a second set of tests in order to determine the identity of the test taker, this method was thought to have a large deal of potential now and most certainly in the future.

Furthermore, it was proposed that professionals should be hired when it concerns delicate information such as personality, motivation, ambition, etc. Especially when an honest and respectful selection process is advocated, reliance should be placed on professionals with high levels of skill and ethics rather than employees with lower levels of skill. Another possibility would be to train, or educate, employees in the interpreting and understanding of psychological testing. However, such a measure will consume a lot of time, energy and money whereas such an education needs to be kept at a certain level in order to be reliable.

5.6.5 Summary

In all, it was proposed that valid psychological instruments were to be applied by skilled professionals. Knowledge was to be shared among the employees in order to benefit from both the explicit and tacit knowledge available within Company T.

Furthermore, the web-based technologies were examined in order to support the selection process at Company T. However, they also support web-based psychological testing directly by providing the means of being able to do so, e.g. directly storing outcomes of a psychological test into the database.

6 Discussion

With the problems solved, and a final design constructed, an answer was provided for the main research question, and the sub questions, limitations were highlighted in this chapter and a final conclusion was drawn.

6.1 Answering the main research question

The main goal of this research was to uncover requirements of an e-selection tool that contributes to improving the selection process at Company T. In turn, two sub questions were derived which aimed directly at uncovering requirements for psychological testing and web-based technologies that contribute to improving, and supporting, the selection process at Company T. By taking a practical approach, and following the regulative cycle, a design was constructed taking the context specifically into account. The final requirements can be found in table 9.

Overall requirements	Offer an honest and respectful selection process
Requirements for psychological testing	Deployment of valid tools based on the Big Five, or another validated personality inventory
	Integration with web-based technologies, i.e. unproctored internet testing
	Innovative ways of measuring personality, e.g. structured interviews, social media
	Being able to detect response distortion
	Feedback sessions during which the outcomes of psychological tests can be discussed
	Experts capable of dealing with the expert knowledge associated with psychological testing
	Convinced customers / employees
Requirements for web-based technologies	An attitude of fast responses to changes in the market
	A taxonomy which allows easier data entry and retrieval in the database
	Establishment of standards and adoption of a standard way of working
	Storage of as much tacit information as possible, e.g. elaborate note taking tools
	Time and space for knowledge sharing, e.g. formal and informal knowledge sharing opportunities
	Integration with the current set of tools
	Integration with the mindset at Company T

Table 9 Requirements of e-selection at Company T

Recapping on the final design proposed in paragraph 5.6, psychological tests were found to be suitable for Company T, also in a web-based environment. Whereas the specific requirements of psychological tests may be found in chapter 5, it was found that issues, which may hamper the validity of tests, only have a minimal and non-significant effect. As such, deploying a validated test would ensure, to a large extent, valid results. However, when deploying unproctored internet testing, it would be best to deploy a second set of test with an observer present in order to verify the identity of the test taker. Moreover, it was advised that professionals were to be hired in order to deal with the expert knowledge encountered when deploying psychological tests. Another possibility would be to train one or two employees in the use of psychological testing, yet chances are that their level of interpreting and connection outcomes does not reach that of a true professional, i.e. industrial and organizational psychologist. It was found, though, that Company T appreciates to have full information concerning candidates and was keen on knowing when candidates distort responses. As a result, one of the requirements for psychological tests was to add a lie scale with which distorting candidates could be detected, even though the effect of such distorters is non-significant.

In addition, tool core functionality was found to be more important than aspects such as additional functionality or user-friendliness. As a result, it was only required that new tools could be integrated with their current set of tools and their way of thinking. In addition, when looking at the anticipated problems, it was proposed that new tools should allow for quick responses to changes in the environment, e.g. real-time information concerning new candidates, allow for extensive note taking in order to transfer knowledge and it should allow integration with their current web-sites, i.e. automatically process candidates applying for a vacancy via the website.

In the end, when the requirements of e-selection are met, Company T can provide their customers innovative tools in order to select candidates effectively, efficiently and in a sustainable manner (Kehoe, Dickter, Russell & Sacco, 2005).

6.2 Discussion of the findings

While the concept of e-selection was considered very interesting by the founder of Company T, the originator of the initial problem definition, the drivers of applying web-based technologies were found to be different than those provided in contemporary literature. In such literature, the two main drivers of applying web-based technologies, or e-HRM, were considered to be increasing the efficiency and the effectiveness of the selection process, with the ultimate goal being to reduce costs (Chapman & Webster, 2003; MacManus & Ferguson, 2003). However, these drivers were not found to be cardinal in the sample examined. Instead, it was cardinal that employees could use the new technologies in order to execute the selection process; core functionality was rated as most important, efficiency and effectiveness were rated less important. While the respondents may have noted implicitly that they value efficiency and effectiveness, they did not so explicitly during the focus group.

Another driver to implement e-selection is to reduce the influence of recruiter bias (Chapman & Webster, 2003). E-selection aims to increase the objectivity of the selection process by removing as much human intervention as possible, as a result protected groups will be treated more fairly. However, this driver was only indicated by one of interviewees. During the focus group, almost no attention was given to such an opportunity of e-selection. Due to employments laws in the Netherlands, protected groups are already treated fairly compared to other nations. In addition, the sample consisted of mainly recruiters, who may be hesitant to discuss issues which may make a great deal of their day-to-day work obsolete.

In contrast to the beliefs held at Company T, response distortion was not found to be a significant problem for deploying psychological tests. However, since such beliefs cannot be taken away by simply displaying literature, lie scales were proposed in order to give Company T a feeling they could process test takers who are distorting responses. Furthermore, the current tests deployed at Company T, i.e. tests which are not scientifically validated, were administered by employees of Company T while they do recognize the added value of valid tests and the hiring professionals in order to deal with the expert knowledge involved with psychological testing. This was found contradictory to a certain extent.

Thus, the results suggest that the gap between research and practice is indeed a real gap. Conducting practice-based research may help to close such gaps, at least at those isolated cases where such research is conducted. In turn, they may “spread the message”, which should ultimately lead to a reduction in the research-practice gap.

6.3 Limitations

One of the first limitations is the use of interviews. While these were setup rather cautiously, it was recognized that misinterpretations are always possible. As said before, the information is socially, and actively, created and thus intersubjective rather than subjective or objective. Of course, the interviewees were allowed to reread their interview in order to make comments where needed, only one respondent made use of this opportunity. Furthermore, a sample of just nine respondents, not randomly chosen, may be considered a limitation as well. Most of the interviewees were working at Company T, and might have had a similar mindset regarding issues in the selection process.

Furthermore, there were some limitations related to the use of personal characteristics and the use of (web-based) technologies. One of the most prevalent issues is privacy. When a psychological test is administered, such information needs to be treated confidentially. Also, when the outcomes of psychological test are stored in some sort of database, for which authorization is provided, a candidate must rely on the agreement that personal information will not be transferred to a third party, i.e. any party besides the organisation which administered the test.

Secondly, deploying web-based technologies to measure, and store, personal information, may lead to inaccuracies. Candidates may have the feeling of not being able to fully describe themselves or, on the other hand, they may feel that the tools are invasive to their privacy (Stone-Romero, 2005). Also, with such a heavy reliance on web-based technologies, one may unintentionally discriminate between individuals who have prior experience with such technologies and those who do not (Anderson, 2003). Moreover, candidates may feel that they have changed while the information in a database remains static. Whereas personality characteristics are unlikely to change of a short period of time (McAdams, 2009), candidates still may have the concern that decisions are going to be made on out-of-date information. Thus, one should allow changes to be made in the KSAO, to some extent, in order to satisfy candidates and to ensure up-to-date candidate profiles (Stone-Romero, 2005).

Also, this research was done in a particular context, namely that of Company T, and the sample was rather homogeneous, i.e. mainly recruiters. As a result, it was considered likely that interesting viewpoints of other individuals may have been missed out on. While it was not an issue whether the findings could be generalized to other contexts, additional viewpoints may have been useful in order to get some more discussions during the focus group.

6.4 Recommendations

In addition to a final design, in which the solutions were proposed in order to deal with the problems associated with e-selection in the context of Company T, several recommendations were proposed as well. In all, it was recommended that Company T should move into two, non-exclusive, directions; deploying a wide array of e-recruitment and e-selection tools in order to select suitable candidates for their customers and/or offering consultancy services for their customers in deploying far-reaching e-services. Thus, it concerns how one may deal with having access to digitally stored measures of KSAO (Cronin, Morath, Curtin & Heul, 2006).

One of the cardinal questions in the pursuit of e-selection is whether to make or buy the required software (Kehoe, Dickter, Russell & Sacco, 2005). There are quite some e-selection, and related, software packages. However, most of these are constructed by large software manufacturers such as SAP. As a result, such packages are very costly. On the other hand, off-the-shelf products may be less preferred due to limited possibilities to make it personalise it. Instead, it was proposed to search for either a modular off-the-shelf package, or to cooperate with a software manufacturer in order to implement Company Specific requirements. In the end, the e-selection package needs to be intertwined with other enterprise resource planning (ERP) functionality.

6.4.1 Selecting suitable candidates

When Company T decides to choose to deploy e-selection tools in order to select suitable candidates, one must take several conditions into account: the required educational level for the vacancy, the organisation for which candidates need to be found, the perception whether the vacancy is hard or easy to fill, the perceived popularity of the vacancy, etc. Either case requires an adaption of the general model proposed; a partially automated multiple-hurdle system with appropriate predictors at each stage. Such a system holds that each candidate needs to pass a set number of hurdles, i.e. meet set various requirements, in sequence. The pool which passes all hurdles is invited for an interview after which a final selection is made. The general idea behind such a system is that costs are minimized and social capital is maximally utilized (Kehoe, Dickter, Russell & Sacco, 2005). However, it is important that, when multiple hurdle are applied, that a thorough job analysis has been done in order to have a clear profile to which the candidate has to comply.

Such a system begins with having an easy to use website on which all of the vacancies are present along with relevant information (Gueutal & Falbe, 2005). Here, applicants can upload their C.V. and apply for a specific vacancy. The first step, after applicants are applying self-selection (Ryan, Sacco, McFarland & Kriska, 2000), is usually a keyword search based on the KSA and, if available, O on the uploaded C.V. This holds that one scans for keywords essential for the job (Mohamed, Orife & Wibowo, 2001; Stone-Romero, 2005). However, it was considered unlikely that O is available for most applicants at this phase. Only when the applicant is already in the database, a keyword search can be done on O. If the C.V. contains (most of) the keywords, the candidate moves on to the next stage. A second step would be the administering of a cognitive ability test, due to the low costs associated with it (Ryan & Tippins, 2004). Here it was proposed to make use of a cut-off score associated with educational levels. Thirdly, making a personality inventory using self-reports and unproctored internet testing would be in place, with a follow up interview in order to discuss the results of such a test. It was proposed that such a test was based on the Big Five because of its high level of validity. Due to response distortion, it was proposed not to make use of a cut-off score. Rather, one should map the different personalities in the team and determine whether one is looking for a complementary or an equal personality compared to the rest of the team. Automating this hurdle was considered troublesome due to the subtle distinctions between individuals. Instead it was proposed to partially automate this hurdle. The test is administered online, outcomes are generated automatically, yet a professional interprets the result before providing feedback to the system. A possible fourth hurdle would be an assessment centre or work sample. This test is last in line due to the high costs associated with it (Ryan & Tippins, 2004) and being possibly of little use for Company T. Also, the incremental validity of such a test over a cognitive ability test and a personality inventory was considered rather low (Ryan & Tippins, 2004).

The number of hurdles applied depends, among others, on the level of skill requirements. The lower the required skill for a vacancy, the less practical it would be to administer a lot of time and money (Finch, Edwards & Wallace, 2009). In addition, the perceived popularity matters. When there is little interest in the vacancy, one might discard a multi hurdle process when they feel it lowers the popularity of the vacancy even more. While cognitive ability is a sound predictor for future performance (Ryan & Tippins, 2004), it has not been used at Company T before. As a result, this hurdle may only be used when wanting discriminate between good and excellent performers regarding a particular, popular, vacancy. Still, it was proposed to include the cognitive ability test either way, when the required educational level is at least intermediate vocational education, i.e. in Dutch: MBO.

6.4.2 Offering consultancy

While organisations are already constructing planning schedules in terms of machining hours, based on information in their ERP package, this could also be done with regard to the planning of employees. In that form, e-selection can be deployed in order to assist organisations to strategically deploy social capital in the long run. Such a strategic deployment takes both an employer as well as an employee perspective, and was assumed to result in a win-win situation. As such, providing consultancy in this area was recommended to be a main service of Company T in the future.

Relying on the notion of person-environment fit, e-selection can help to select the appropriate candidates for a particular function, and it can help in the planning of successor in case of emergency or promotion. For this to be feasible, organisations need to map each of its employees both in terms of knowledge, skills and abilities, as well as other personal characteristics. However, this process of fit needs to be considered as a continuous process since the person as well as the environment is likely to change over time (Caldwell, Herold & Fedor, 2004; DeRue & Morgeson, 2009). Moreover, person-environment fit is not just restricted to selecting new employees, such fit may also be achieved when developing, or retaining employees (Schneider, Kristof-Brown, Goldstein & Smith, 1997).

In more detail, using the KSAO of employees, one can allocate training programmes more fittingly. It is important to look beyond the KSA and take other aspects, such as ambition, interests and motivation, into account (Ryan & Deci, 2000; Anthoney & Armstrong, 2010). An employee can request a training programme whereas an employer may invite an employee to receive a training programme. Such decisions should be based on the performance appraisals, ambition, motivation as well as personality of the employee, which should all be available in an e-selection tool. Using the same information, one can make more appropriate decisions when looking at promotions. It is in the best interest of both parties to appoint employees to a suitable function, based on measures as objective as possible.

Moving from the individual setting to a team setting, the KSAO of an individual may prove the basis for setting up teams for particular goals. Depending on the level of cooperation, goal and dependency on each other (Tesluk, Mathieu, Zaccaro & Marks, 1997), the other personal characteristics do not matter, need to be in line with the rest of the team or need to be complementary to the rest of the team. Having one single database in which all the employees are present, along with their KSAO, such decisions can be made more easily.

The departmental level, in turn, provides ample opportunities to link the planning of social capital to that of the planning of machinery. In other words, a resource-based view (RBV) was proposed (Aryee & Budhwar, 2008). One of the key questions here would be: to what extent is the department able to handle the expected workload for the next month, six months, year or two years? In order to answer the question, one needs to map the (amount of) required competences to handle the expected workload and the degree to which these are available. Then, based on the extensive database with the KSAO of each of the employees, one can make a planning and a backup planning, and setup actions to be taken for the future, e.g. hire new employees, allocate training programmes, but also keeping employees motivated, committed and healthy. Note that such practices fit a level strategy, i.e. keeping the workforce size constant, better than a chase strategy, i.e. hiring and firing based on market trends (Silver, Pike & Peterson, 1998). Such a RBV suggests that one needs to invest in employees since they are invaluable. Using an extensive database and following the thinking of (e-)competence management, such investments can be with high levels of utility. Specifically, in order to assist their customers to handle their future workloads, while assuming it becomes increasingly difficult to meet production schedules over time, Company T should address the following practices within competency management (Belkadi, Bonjour & Dulmet, 2007; Berio & Harzallah, 2007):

- Identification; identification and definition of required competencies
- Characterisation; formalising competencies and storing key features
- Allocation; division of labour according to possessed competences
- Assessment; measuring the level of competence (e.g. in individuals, groups)
- Acquisition; planning and deciding on how and when to obtain competencies
- Development; training and learning on-the-job
- Mobilisation; providing the right condition for human resources to make the full use of their competences
- Knowledge usage; the actual use of the identified, assessed and acquired competencies

Then, looking at the entire organisation, one can deploy the social capital in a strategic sense and in line with the KSA, ambition, personality, interest and motivation of the employee. It is more likely that fit will be established based on objective measures rather than on politics and good-will of one's' direct superior. When employees are working in a suitable environment in a function they can, should and want to do, certain positive attitudes and behaviours will be the result, which in turn lead to outcomes (Chen, Langner, Mendoza-Denton, 2009). Moreover, striving for healthy and employable employees can be incorporated in order to enhance both morale and motivation of employees and to keep production up to level. In all, one deploys their employees as efficient and effective as possible, not only on the short term but also on the long term.

Taking this idea one step further would be to expand such a database to other organisations and cooperate, albeit in the same branch. In such a database, all of the employees of these linked organisations are present along with their KSAO. Of course, the employees would appear anonymous in the database, in order to secure privacy issues, separated only by organization and a certain employee number. Each of the linked organisations would then have access to the database and may look for suitable entries or request from other organisations. In the case an appropriate entry or request is found, contact will be made and check whether one could hire or lend (temporarily) the employee.

In summary, by taking a more personal look at employees, based on characteristics which are measured as objective as possible, a win-win situation may be achieved when using such information properly. The main goal is to achieve fit between the person and the organisation, of both current and new employees, and an e-selection tool would be appropriate to handle all of the information involved in achieving such fit. Here, Company T can provide consultancy to organisation in order to learn how to strategically deploy social capital.

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Appendix

A. Protocol for the interviews

a. Interview at Company T

Met behulp van dit interview wil ik inzicht krijgen in de manier waarop jullie op dit moment kandidaten rekruteren en selecteren. Dus welke tools jullie gebruiken en hoe er een keuze wordt gemaakt met betrekking tot potentiële kandidaten.

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?
    a. Waarom zijn deze tools gekozen?
2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?
    a. Welke informatie uit de tools gebruikt u?
    b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?
3. In welke mate vindt u deze tools geschikt voor dit werk?
    a. Wat zijn de positieve aspecten van de tools?
    b. Wat zijn de negatieve aspecten van de tools?
4. Welke functionaliteit mist u nog in de tools?
    a. Hoe compenseert u het ontbreken van deze functionaliteiten?

b. Interview customers of Company T

Met behulp van dit interview wil ik in kaart brengen hoe binnen deze organisatie om wordt gegaan met het werven en selecteren van kandidaten met betrekking tot vacatures. Met andere woorden, op wat voor manier men hiermee aan de slag gaat, wat voor tools er gebruikt worden en hoe de keuze gemaakt wordt met betrekking tot potentiële kandidaten.

1. Hoe is het werving en selectie proces ingeregeld binnen de organisatie?
    a. Welke activiteiten worden door de organisatie zelf uitgevoerd?
    b. Welke activiteiten worden ingekocht bij externe partijen?
    c. Waarom deze verdeling?
2. Hoe worden de W&S activiteiten op dit moment uitgevoerd?
    a. Hoe ziet u de toekomst?
    b. Ondervindt u steun, in welke vorm dan ook, van een tool?
    c. Zo ja, ga naar vraag 4, anders vraag 3.
3. Op welke wijze zou een tool u kunnen ondersteunen bij het uitvoeren de W&S activiteiten?
    a. Hoe zou zo'n tool gestalte moeten krijgen?
    b. Hoe verwacht u dat u met deze tool kunt werken?
    c. Welke informatie verwacht u eruit te kunnen halen?
4. Op wat voor manier kan een tool, in welke vorm dan ook, u ondersteunen bij het uitvoeren van de W&S activiteiten?
    a. Zo ja; hoe kan de bestaande tool uitgebreid worden?
    b. Zo nee; hoe zou een dergelijke tool eruit moeten zien?
5. Welke tools gebruikt u voor de activiteiten die in-house uitgevoerd worden?
    a. Waarom heeft de organisatie voor deze tools gekozen?
6. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?
    a. Welke informatie uit de tools gebruikt u?
    b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

7. In welke mate vindt u deze tools geschikt voor dit werk?
    a. Wat zijn de positieve aspecten van de tools?
    b. Wat zijn de negatieve aspecten van de tools?
    c. Op welke wijze verwacht u problemen bij het gebruik van deze tool?
8. Welke functionaliteit mist u nog in de tools?
    a. Hoe compenseert u het ontbreken van deze functionaliteiten?

Aanvullend wil ik in kaart brengen hoe men omgaat met het opleiden van personeel. Hoe men de keuze maakt wie er in aanmerking komt voor een opleiding, en hoe bepaald wordt welke opleiding dan gevolgd gaat worden.

1. Hoe zien de opleidingsmogelijkheden voor personeel eruit binnen de organisatie?
    a. Hoe worden de mogelijkheden gecommuniceerd?
2. Hoe wordt de keuze gemaakt met betrekking tot de opleidingen?
    a. Hoe kan het personeel zich aanmelden voor een opleiding?
    b. Hoe maakt men de afweging over het wel of niet opleiden van personeel?
3. Welke tools worden gebruikt in de opleidingsbeslissing?
    a. Wat zijn de positieve aspecten van de tools?
    b. Wat zijn de negatieve aspecten van de tools?
4. Welke functionaliteit mist u nog in de tools?
    a. Hoe compenseert u het ontbreken van deze functionaliteiten?

B. Interview transcriptions

a. Interview Respondent No. 1

Organisatie:	*Company T*
Geslacht:	*Man*
Leeftijd:	*26 jaar*
Hoogste afgeronde opleiding:	*HBO (Management, Economie & Recht)*

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?

Ik gebruik op dit moment een breed scala in instrumenten om geschikte kandidaten te vinden. Ten eerste gebruik ik het software pakket van het bedrijf, OTYS. In dit pakket staan alle vacatures, met daaraan de gekoppelde kandidaten, en alle kandidaten die wij ooit een keer hebben gesproken. Het is dus het is vanzelfsprekend dat elke zoektocht in dit pakket begint.

Daarnaast hebben wij een aantal websites in beheer waarop kandidaten zichzelf kunnen aanmelden, de werken-bij-websites zoals wij deze noemen. Het is een onderdeel van onze e-recruitment tools die wij in kunnen zetten voor de klant, of om een bepaald deel van de kandidaatsmarkt aan te boren.

Deze sites gebruik ik dan ook om te kijken of er nog interessante kandidaten bijgekomen zijn. Veelal zijn deze sites automatisch gekoppeld aan OTYS, maar dat is niet bij alle het geval. Verder gebruik ik social media, zoals LinkedIn, om naar kandidaten te zoeken, maar ook de meer traditionele media, zoals job boards, worden gebruikt om kandidaten te zoeken.

Naast dit alles kijk ik ook in mijn eigen netwerk, opgebouwd over de afgelopen tijd. Dit doe ik doe het voorleggen van mijn vraag naar een bepaalde kandidaat, aan bekenden.

   a. Waarom zijn deze tools gekozen?

Deze tools zijn vooral gekozen om een zo breed mogelijk publiek te kunnen benaderen zonder dat het extreem veel tijd kost. Kandidaten zoeken in bijvoorbeeld OTYS kost vrij weinig tijd omdat je slechts “search agents” hoeft op te stellen door middel van het opgeven van zoektermen.

Verder zijn de meeste van onze werk-bij-websites gekoppeld aan OTYS, wat inhoudt dat wanneer mensen zich aanmelden voor een bepaalde vacature, of open sollicitaties, deze automatisch in de database terecht komen en wij een bericht ontvangen over deze nieuwe kandidaat. Dit vergemakkelijkt het proces van het vinden van kandidaten; het kost minder tijd.

Daarnaast willen wij graag innovatief zijn, en proberen daarom veelvuldig gebruik te maken van social media, om de trends op het gebied van deze media te kunnen volgen, beoordelen en erop te anticiperen. Je ziet dat men op zulke sites de persoonsgegevens veelal beter bijhoudt dan op job boards als monsterboard; men hoeft niet telkens het CV te uploaden.

Het eigen netwerk zet ik in omdat ik weet wat ik van de mensen kan verwachten, en omdat ik weet wat zij precies van mij verwachten. Er is al een basis waardoor de communicatie met elkaar gemakkelijker kan verlopen.

2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?

   a. Welke informatie uit de tools gebruikt u?

Voor mij zijn de opleidingsinformatie, werkervaring en interesses belangrijk. Deze informatie probeer ik dan veelal ook uit de zojuist genoemde tools te halen, om zo tot een geschikte kandidaat te komen. Ervaring heeft mij geleerd dat het een combinatie van harde en zachte eisen het beste is om geschikte kandidaten te selecteren.

b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

Indien ik een geschikte kandidaat heb gevonden via één van mijn tools, dan bel of mail ik deze persoon over de vacature die mogelijk interessant kan zijn voor hem / haar. Bij ons is het de regel dat elke kandidaat die voor wordt gesteld, minimaal één keer is gesproken door de recruiter.

Maar de harde eisen uit het CV verifieer ik nog een keer waarna het mij vooral gaat om de persoon zelf. Ik wil een inschatting kunnen maken van hoe deze persoon waarschijnlijk zal gaan functioneren bij mijn klant.

Dus de uiteindelijke keuze zal gebaseerd zijn op het beschikken over de juiste kwaliteiten in termen van opleidingsniveau en werkervaring, maar ook op de indruk die de persoon na heeft gelaten op mij in termen van persoonlijkheid, interesses en ambitie.

3. In welke mate vindt u deze tools geschikt voor dit werk?

a. Wat zijn de positieve aspecten van de tools?

Het meest positieve aan de tools is dat bijna alles en iedereen vindbaar is met, voor mij haast belangrijker, de contactgegevens van deze persoon. Op deze manier kan ik een waardevolle database opbouwen. Deze database bestaat dan niet alleen uit het CV van de persoon, maar ook onze indruk over deze kandidaat wordt er aan toegevoegd, net als zijn arbeids- en sollicitatieverleden zoals bij ons bekend is.

Maar kan ik ook informatie over de markt verkrijgen. Via bepaalde zoekmachines kan ik kijken hoeveel vacatures in een bepaalde sector open stonden, hieruit kan ik dan aannames maken over de werkgelegenheid, etc.

b. Wat zijn de negatieve aspecten van de tools?

Het nadeel van deze tools is wel dat alle recruiters min of meer in dezelfde vijver aan het vissen zijn. Wanneer je een geschikte kandidaat vindt is de kans groot dat jouw concurrent deze al heeft gevonden, of snel na jou gaat vinden. Dit hoeft niet perse problemen op te leveren, maar wanneer een kandidaat door twee bureaus wordt voorgesteld voor eenzelfde vacature kan dit toch voor problemen zorgen. Volgens mij komt dit doordat de tools die wij inzetten, ook door andere bureaus ingezet worden:, abonnement op monsterboard.nl, etc.

Daarnaast is het natuurlijk altijd lastig om een persoon goed te lezen wat betreft zijn persoonlijkheid, ambitie, etc. Ervaring maakt dat je er steeds beter in wordt, maar je kunt er toch altijd naast zitten omdat iemand zich anders / beter voordoet dan hij / zij is.

4. Welke functionaliteit mist u nog in de tools?

Zoals net aangegeven mis ik toch wel de mogelijkheid om het huidige profiel van een kandidaat uit te breiden met, bijvoorbeeld, psychologische testen. Op deze manier vul je het profiel van de kandidaat, CV etc, aan met een persoonsprofiel van de zachte eisen. Dit zou handig zijn bij bijvoorbeeld mensen die snel van baan wisselen maar waarbij het niet duidelijk / inzichtelijk is waarom ze dit doen. Met behulp van enige testen zou het misschien mogelijk zijn om hier wel inzicht in te krijgen.

Verder mis ik, bijvoorbeeld, op de job boards de mogelijkheid om bepaalde voorwaarden van de kandidaat in te zien. Zaken als reisvoorwaarden, salarisindicatie, etc. zijn aspecten waarop je snel een keuze kunt maken tussen bepaalde kandidaten. Deze zaken zijn veelal wel aanwezig, maar op de één of andere manier komen deze niet altijd naar boven wanneer je het CV download.

a. Hoe compenseert u het ontbreken van deze functionaliteiten?

Het ontbreken van de randvoorwaarden compenseer ik door meer tijd te steken in het stroomlijnen van het CV dat ik heb gedownload en deze randvoorwaarden gevonden op het online profiel. Dat kost wat meer tijd, maar dan heb ik wel alle informatie bij elkaar.

Daarnaast probeer ik, om het ontbreken van een psychologisch persoonsprofiel te compenseren, mensen een aantal vragen te stellen om op deze manier toch de benodigde informatie te verkrijgen. Dit werkt in de meeste gevallen redelijk, maar er gaat wel veel tijd en moeite in zitten; dit is zeker het geval wanneer de kandidaat niet veel vrij geeft over zichzelf of dat deze langzaam op gang komt hierover.

b. Interview Respondent No. 2

Organisatie:	*Company T*
Geslacht:	*Man*
Leeftijd:	*38 jaar*
Hoogste afgeronde opleiding:	*MBO (Economie)*

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?

Ik gebruik vooral OTYS, ons eigen software pakket, werk.nl en nationale vacaturebank. Verder pols ik wel eens bij collega's, maar daar houdt het wel op.

   a. Waarom zijn deze tools gekozen?

Mijn keuze voor de job boards is dat ik snel wil kunnen zien of een persoon geschikt is op basis van zijn harde eisen; opleidingsniveau, werkervaring en dat soort zaken. De zachte eisen kan ik hier toch niet uit halen, dus ik wil snel kunnen kijken wie ik wel / niet kan benaderen over een bepaalde vacature. Als er 30 man uitkomen, en er zijn er maar 2 goed is dat geen probleem.

Het gaat er mij om dat er maar iets uitkomt. Ik stel minder hoge eisen aan systemen dan bijvoorbeeld enkele van mijn collega's.

2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?

   a. Welke informatie uit de tools gebruikt u?

In de tools ben ik op zoek naar trefwoorden die je uit de vacature haalt of waarvan ik denk dat ze belangrijk zijn voor de vacature. Wanneer ik een aantal kandidaten heb, dan filter ik zelf verder.

   b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

Ik kan het beste werken wanneer ik een rijtje met kandidaten heb, en ik dat rijtje kan doorwerken. Met doorwerken bedoel ik dan dat ik zijn CV open en alles daarin kan doornemen zodat ik een gevoel krijg over de kandidaat. Als ik ergens twijfel over heb, dan zijn dit aspecten die ik moet verifiëren bij de kandidaat. Als ik een goed gevoel heb, dan zet ik ze in OTYS.

Van het rijtje kandidaten dat door mijn pre-screening kwam blijven er altijd een aantal over waar ik een goed gevoel over heb, en ik dus in OTYS heb gezet. Dit vormt dan weer een nieuw rijtje, en deze wil ik allemaal afchecken. Dit houdt in dat ik de persoon bel, vraag of hij nog werk zoekt en, zo ja, wat hij dan precies zoekt. Zo krijg je een ander beeld van de persoon dan wanneer je vraagt of hij interesse heeft in een bepaalde vacature. Op basis van zijn antwoord op mijn vraag wat hij / zij nu precies zoekt, bepaal ik of ik de vacature voorstel, of eventueel iets anders.

Deze manier van werken spreekt mij aan omdat de snelheid hoog zit. Wanneer je mogelijke kandidaten mailt, dan duurt het langer voor je reactie krijgt. Na 2 à 3 dagen verslapt mijn aandacht, dus probeer ik in korte tijd de middelen waarmee ik graag werk. Wanneer ik niets vindt, gaat alles even in de koelkast.

3. In welke mate vindt u deze tools geschikt voor dit werk?

   a. Wat zijn de positieve aspecten van de tools?

Wat heel praktisch is, van OTYS, is dat de mail bewaart blijft en gekoppeld aan de kandidaat of klant. Je kan dus alles terug zoeken. Niet voor mij, maar wel voor andere personen, is dat je met OTYS heel specifiek kan zoeken in de database. Ik doe dat niet, ik zoek ruim om zelf verder te zoeken; maar de mogelijkheid bestaat om "en en en" te zoeken.

b. Wat zijn de negatieve aspecten van de tools?

Op bijvoorbeeld werk.nl moet je zelf eerst een vacature opvoeren voordat je CV's mag inzien, en dan nog blijft alles anoniem. Dit levert een extra drempel op. In OTYS en de andere job boards kan ik zo geen negatieve aspecten noemen; ik wil direct actie / resultaat. Dit kan met alles behalve met werk.nl.

4. Welke functionaliteit mist u nog in de tools?

Het systeem, OTYS, kan inderdaad verder, maar ik ben daar niet van; ik zie er de voordelen van maar ik doe het niet. Bijvoorbeeld Twitter toevoegen in OTYS, of andere social media; dit kan natuurlijk volledig geïntegreerd worden. OTYS gaat ver, maar dat kan nog toegevoegd.

a. Hoe compenseert u het ontbreken van deze functionaliteiten?

Zoals ik al aangaf: ik ben niet van al deze verregaande ontwikkelingen. Ik heb behoefte aan een rijtje dat ik kan afwerken, en deze pakketten gebruik ik vooral in de pre-screening van kandidaten.

c. Interview Respondent No. 3

Organisatie:	*Company T*
Geslacht:	*Man*
Leeftijd:	*47 jaar*
Hoogste afgeronde opleiding:	*HBO (Management, Economie & Recht)*

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?

In eerste instantie gebruik ik het hoofd; meestal komen er wel een aantal namen in me op wanneer ik een nieuwe vacature krijg. Ook pols ik enkele van mijn collega's om te vragen of zij zo iemand weten voor een bepaalde vacature.

Daarnaast gebruik ik natuurlijk mijn eigen website, gekoppeld aan OTYS, en de job boards. Ook Flexserve wordt gebruikt, maar dit is vooral voor de administratieve aspecten als verloning van medewerkers etc.

Verder pols ik contacten in het veld over mogelijke geschikte kandidaten voor een bepaalde vacature. Hier moet je dan denken aan bijvoorbeeld recruitment bureaus, het CWI, maar ook klanten.

   a. Waarom zijn deze tools gekozen?

Ik heb voor deze tools gekozen omdat ze mij kunnen ondersteunen in het gehele proces van het vinden en selecteren van kandidaten.

2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?

   a. Welke informatie uit de tools gebruikt u?

Ik selecteer puur op kernwoorden, of een combinatie van kernwoorden. Deze kernwoorden haal ik dan uit de omschrijving van de vacature; termen waarvan ik zeg dat ze belangrijk zijn voor deze vacature. Maar het moeten ook kernwoorden zijn waarvan je kan verwachten dat er geschikte kandidaten uit het systeem komen.

Zoals ik net al aangaf zijn deze tools voor mij vooral ondersteuning, het belangrijkste is dat de selectie in het hoofd gebeurd. Bijvoorbeeld OTYS, dat gebruik ik om vacature te plaatsen, om de database te bekijken, om klantgegevens bij te houden en om de contactgeschiedenis bij te houden. Op deze manier ondersteunt het mij omdat ik dit niet allemaal uit mijn hoofd kan doen.

   b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

Kort gezegd: je belt mensen, je stelt ze de functie voor, gaat een gesprek met ze aan en legt het CV naast de vacature. Hetgeen de klant belangrijk vindt, hoe de onderneming van de klant eruit ziet en wat de behoefte is gebruik je om te kijken of de kandidaat geschikt is. Dit doe je met het hoofd en met onderbuik gevoel. Je legt mensen langs de lat en kijkt in hoeverre ze overeen komen met het plaatje dat de klant heeft geschetst, en andersom.

Als er meer aanbod is, dan gebruik je meer kennis zaken van de klant. Als er minder aanbod is, dan heeft de kandidaat het voor het zeggen.

3. In welke mate vindt u deze tools geschikt voor dit werk?
    a. Wat zijn de positieve aspecten van de tools?

De combinatie van OTYS en Flexserve is heel geschikt, omdat het je database is. Ook je toekomstige kandidaten en klanten kun je vinden door middel van deze pakketten.

Het is wel een heel theoretisch verhaal, deze pakketten. Alles wat je erin stopt, zie je niet meer. De zaken die belangrijk zijn, kun je bij jezelf neer leggen. Dat kan met het system wel, maar dan moet je wel heel systematisch werken. De winst die je kunt behalen met de pakketten ligt aan hoe jezelf werkt.

    b. Wat zijn de negatieve aspecten van de tools?

Het is voor mij allemaal wel heel theoretisch, deze pakketten. Alles wat je erin stopt zie je in principe niet meer. Nou ja, je moet heel systematisch werken om het maximale uit dit soort system te halen en dat is voor mij niet weggelegd. Ik vind het gemakkelijker om zaken op papier te hebben zodat ik dat er snel bij kan pakken. De winst die je kunt behalen met de pakketten ligt, volgens mij, vooral aan hoe je zelf werkt. Dit hoeft niet perse negatief te zijn natuurlijk, maar zo ervaar ik het.

Wat ik wel als negatief ervaar is dat de waarde voor woorden voor een ieder anders zijn, maar dat dit niet terug komt in zulke pakketten. Een tool zou heel erg persoonlijk ingericht moeten worden. De database zou gevuld moeten klantspecifieke data, maar dit zal wel meer kosten met zich mee brengen.

4. Welke functionaliteit mist u nog in de tools?

Uitbreiden van het systeem maakt het kunnen werken ermee niet beter. Het kan allemaal ook best objectiever, maar er zal altijd een mens bij te pas moeten komen. De functionaliteit is goed / slecht afhankelijk van de persoon. Ook is de kennis van een persoon is persoonsgebonden; dus als deze weggaat is de kennis ook weg.

Wat ik wel mis in OTYS is dat je kandidaten niet kan koppelen aan een klant. Kandidaten kunnen op een aantal factoren passen bij een bedrijf, dat je ze er aan toe kan schrijven. Dat je alle mensen die bij een bepaald bedrijf passen snel op kan vragen als pre-screening.

    a. Hoe compenseert u het ontbreken van deze functionaliteiten?

het zelf ergens op te schrijven als notitie. Dit kost natuurlijk allemaal even extra tijd, maar aan het einde van de rit denk ik er wel tijd mee te winnen.

d. Interview Respondent No. 4

Organisatie:	*Company T*
Geslacht:	*Man*
Leeftijd:	*46 jaar*
Hoogste afgeronde opleiding:	*HBO (Vliegtuigtechniek)*

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?

Als eerste gebruik ik OTYS, onze eigen e-recruitment tools en verschillende social media zoals LinkedIn. Daarnaast wil ik nog wel eens de job boards gebruiken als monsterboard.nl en nationalevacaturebank.nl. Natuurlijk gebruik ik tegelijkertijd ook mijn eigen netwerk wat ik over de jaren heb opgebouwd.

   a. Waarom zijn deze tools gekozen?

De reden dat ik deze tools gebruik is voor mij heel makkelijk; het zijn "proven technologies". Ik weet dat ze werken uit ervaring, maar ook van verhalen van bekenden. Natuurlijk passen we sommige van deze technieken toe in een eigen jasje, zoals de werk-bij-websites, maar het idee dat erachter zit hebben wij niet zelf bedacht.

2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?

   a. Welke informatie uit de tools gebruikt u?

Met de tools die ik gebruik ben ik vooral op zoek naar de opleiding, achtergrond en werkervaring van een kandidaat. Als ik daar een prioriteit aan moet geven dan gaat het mij vooral om de opleiding, daarna de werkervaring en dan de achtergrond van een persoon. Verder kijk ik dan nog naar de hobbys en interesses van de persoon. Ook let ik op de opmaak van het CV en dergelijke zaken.

Bij dit alles hou ik wel bepaald randvoorwaarden in het oog zoals regio, salarisindicatie, etc. Ervaring leert dat mensen maar een bepaalde afstand willen reizen naar het werk, of dat mensen niet veel lager dan hun salarisindicatie willen zitten; dus die informatie neem ik zeker mee.

   b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

Het is lastig vertellen hoe ik precies een keuze maak; door ervaring weet ik wat een geschikte kandidaat is. Ik leef me in, in een vacature, in de vraagstelling van de klant, in het CV van de kandidaat (met ambitiepatroon erbij), etc. Daar komt dus een heel scala van aspecten bij elkaar en hier gaat het er mij dan om dat er een match is tussen kandidaat en vacature.

Ik bespreek deze zaken ook met de kandidaten, vooral als ik een persoon voor wil stellen of wanneer ik wat extra informatie wil krijgen omdat ik het idee heb dat er wat in zit. Een soort controle of ik goed zie hoe men zich wil neerzetten. Dit soort besprekingen met kandidaten wekken de nodige sympathie op, en ik hoop daarmee een positieve indruk achter te laten.

3. In welke mate vindt u deze tools geschikt voor dit werk?

   a. Wat zijn de positieve aspecten van de tools?

Ik ben misschien wel veeleisend, qua systemen, maar ik vind de tools die ik gebruik maar voor 90% geschikt. Het sluit niet helemaal aan bij hoe we werken; onze werkprocedures kunnen wij er niet helemaal in kwijt. In bijvoorbeeld OTYS kan ik niet aangeven hoe laat iemand op gesprek komt terwijl dit natuurlijk wel belangrijk is, zeker als het systeem ook dient ter ondersteuning van de mens.

Maar ik werk met deze tools omdat er niets anders is. Ik zeg altijd maar; je moet genoegen nemen met een systeem wanneer er aan minimaal 75% van je eisen voldaan wordt.

b. Wat zijn de negatieve aspecten van de tools?

Net gaf ik al een voorbeeld van een negatief aspect; het niet kunnen onderbrengen van onze werkprocedures. Dat is toch wel het grootste negatieve aspect wat ik kan noemen. Verder is, als ik naar OTYS kijk, het systeem niet volledig, half geprogrammeerd, onvoldoende nagedacht over hoe het in de praktijk werkt, een RSI monster, etc. Al met al kan de gebruiksvriendelijkheid omhoog.

4. Welke functionaliteit mist u nog in de tools?

In mijn ogen moet, en kan, het allemaal efficiënter, effectiever, meer geautomatiseerd, objectiever en onafhankelijker. Hier is het natuurlijk wel de vraag wat we, in ons vak, nu precies objectief willen hebben; de kandidaat en de vacature die we voor ons hebben liggen.

Maar ik realiseer me ook dat de effectiviteit van een tool, wanneer je subjectieve processen gaat automatiseren, afhankelijk wordt van de kwaliteit van hetgeen ingevoerd wordt. Het is lastig om elke keer alles op dezelfde manier in te voeren wanneer het systeem ruimte laat voor variatie. Je wilt een database die eenduidig is in de informatie borging waarbij je onafhankelijk wilt zijn van de menselijk manier van invoering en rubricering. Een voorbeeld: Als je een tabel maakt met functienamen zal iedereen er een andere beschrijving aan geven. Dit soort vergissingen wil je voorkomen.

Zoals ik het zie kan dit door de harde zaken automatisch op te alten nemen en daarnaast een objectieve tool die de zachte criteria objectief in kaart kan brengen, onafhankelijk van de menselijke interface. Het moeten die criteria zijn die belangrijk zijn bij het vervullen van de functie.

5. Hoe compenseert u het ontbreken van deze functionaliteiten?

Op dit moment kost het allemaal extra tijd, het is allemaal niet onmogelijk, maar je moet alles dubbel controleren: de kandidaat vragen of hetgeen wat ze ingevuld hebben ook echt klopt zoals ze het bedoelen etc. Maar deze checks voeren wij alleen maar uit op de hoofdrubrieken, dus in de details kunnen nog genoeg fouten sluipen.

e. Interview Respondent No. 5

Organisatie:	*Company T*
Geslacht:	*Man*
Leeftijd:	*30 jaar*
Hoogste afgeronde opleiding:	*MBO (Werktuigbouwkunde)*

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?

Ik gebruik op dit moment vooral OTYS, de grotere job boards, enkele e-recruitment websites die in ons beheer staan en verder mijn eigen netwerk. Met dat laatste doel ik dan vooral om contacten die ik opgedaan heb tijdens mijn vorige baan als recruiter, en op mijn kring van kennissen in de omgeving waar ik woon.

   a. Waarom zijn deze tools gekozen?

OTYS is voor mij een praktisch programma omdat ik daarmee alles kan bijhouden; mails verstuurd, acties ondernomen, etc. Die ondersteuning is voor mij heel praktisch. Ook de database in OTYS is voor mij heel praktisch om snel te kijken of er mensen zijn, die wij al eerder hebben gesproken, die mogelijk zouden passen op een bepaalde vacature.

De andere tools gebruik ik vooral omdat ik er al langer mee werk, en ik weet dat ik er resultaat mee kan boeken. Een uitzondering hierop zijn de e-recruitment websites, deze gebruik ik als een soort van project; om snel kandidaten in een bepaald vakgebied, i.e. werktuigbouw/ verspaning, te kunnen vinden.

2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?

   a. Welke informatie uit de tools gebruikt u?

Uit de tools haal ik vooral de geschiedenis van de persoon; opleiding, werkervaring, dienstjaren per werkgever, etc. Hiermee maak ik een inschatting in welke mate de persoon geschikt zou moeten zijn om het werk uit te voeren.

Het beleid bij Tjellens is om elke kandidaat minimaal 1x zelf te spreken. In dit gesprek probeer ik dan ook te achterhalen wie de persoon nu echt is, dus verder te kijken dan wat hij heeft geleerd en gedaan.

   b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

Uiteindelijk maak ik de keuze door een afweging te maken wat ik denk dat nodig is voor de vacature, aangevuld met wat ik denk te passen bij de organisatie. Dat laatste is in mijn vakgebied niet altijd interessant omdat men vooral alleen achter een machine werkt, maar omdat er toch altijd wel wat samenwerking bij komt kijken, probeer ik toch een inschatting te maken in hoeverre de kandidaat zou passen binnen het team.

3. In welke mate vindt u deze tools geschikt voor dit werk?

   a. Wat zijn de positieve aspecten van de tools?

Voor mij zijn de tools uitstekend ter ondersteuning van het zoeken van kandidaten en het bijhouden van alle administratieve zaken, zoals mail conversatie. Daarnaast kun je snel relevante zaken vinden, zoals opleiding, werkervaring, etc.

b. Wat zijn de negatieve aspecten van de tools?

Het lastige aan de tools is dat ze niet altijd precies werken zoals ik verwacht dat ze werken. Om een voorbeeld te noemen; ik kan in OTYS zoeken naar een bepaalde kandidaat, waar ik van weet dat hij erin zit, maar dan krijg ik hem toch niet naar boven ondanks dat ik de goede termen gebruik. Een collega lukt dit dan bijvoorbeeld wel. Er gaat dus ergens iets mis, maar je kunt dan niet gemakkelijk vinden waarom en wat je er aan kunt doen.

Daarnaast kom ik het geregeld tegen dat mensen die ik benader voor een bepaalde vacature, ook al door andere bureaus zijn benaderd. Dit is vervelend omdat een, naar verwachting, goede kandidaat al voorgesteld zijn door andere bureaus, en wij er dus geen geld meer aan kunnen verdienen. Dit ligt niet per se aan de tool zelf, maar meer aan de mate waarin andere bureaus, min of meer, dezelfde tools inzetten.

4. Welke functionaliteit mist u nog in de tools?

    a. Hoe compenseert u het ontbreken van deze functionaliteiten?

Het zou gemakkelijk zijn om wat relevante persoonlijke informatie in een CV of online profiel te kunnen vinden. Hiermee doel ik dan op de aspecten die ik tijdens een intake gesprek naar boven probeer te halen; wat voor soort persoon is het, waarom ziet zijn werkverleden eruit zoals dit eruit ziet, etc. Ondanks dat wij toch minimaal één gesprek per kandidaat afnemen is het toch handig om een pre-screening te kunnen maken aan de hand van zulke persoonlijke informatie. Ik compenseer dit vooral door er meer tijd en moeite in te steken.

f. Interview Respondent No. 6

Organisatie:	*Company T*
Geslacht:	*Vrouw*
Leeftijd:	*27 jaar*
Hoogste afgeronde opleiding:	*WO (Bedrijfskunde Bsc, HRM, Msc)*

1. Wat voor tools worden er op dit moment gebruik met betrekking tot het rekruteren en selecteren van kandidaten?

Ik gebruik mijn eigen netwerk. Daaronder versta ik ten eerste de collega's op kantoor en ten tweede mensen verder in mijn eigen netwerk. Verder gebruik ik enkele job boards zoals monsterboard.nl en nationalevacaturebank.nl. Ook gebruik ik ons eigen software pakket OTYS. Het e-sourcen ben ik nog onder de knie aan het krijgen, daarmee bedoel ik dan queries in google invoeren om zo mensen op social media sites te vinden. Als je daar direct in zoekt, krijg je meestal minder goede resultaten.

   a. Waarom zijn deze tools gekozen?

Omdat dit werkt.

2. Op wat voor manier worden de tools gebruikt in het werving en selectie proces?

   a. Welke informatie uit de tools gebruikt u?

Uit de tools haal ik in principe een paar aspecten van een kandidaat; de afgeronde opleiding, opgedane ervaring, salarisindicatie, geografie, maar ook wat voor soort persoon het is. Dit laatste is wat lastiger, maar je bent bij een bedrijf geweest, je hebt daar mensen gesproken en daarmee heb je dan een beeld in je hoofd van wat ze nodig hebben. Dat probeer ik dan terug te zoeken in de kandidaten. Verder zoek ik ook uit wat de bereikbaarheid van het bedrijf is, of men er met het openbaar vervoer kan komen of dat een eigen auto toch wel het meest praktische is. Ervaring heeft mij geleerd dat mensen in hogere functie wat meer over hebben voor een andere baan, qua verhuizen en reizen, dan mensen in de lagere functies.

In onze eigen database gebruik ik vooral queries aan de hand van de aspecten zoals ik die hier hierboven heb geschetst. Het gaat mij dus vooral om een combinatie van harde en zachte eisen.

   b. Op wat voor manier maakt u de keuze uit verschillende aangemelde personen?

Wanneer ik een aantal geschikte personen heb gevonden, dan bel ik ze op. Aan de hand van dit gesprek krijg ik een eerste indruk; praat iemand makkelijker, kan hij zichzelf goed verkopen, heeft hij inzicht in zichzelf en zijn werkervaring, etc. Zo probeer ik te achterhalen wat voor iemand het is.

Maar, praktisch gezien, stel je een aantal mensen voor zodat de uiteindelijke beslissing dan bij de klant ligt. Je krijgt zelf wel een voorkeur, aan de hand van de zachte factoren; het gaat om het gevoel wat je bij iemand krijgt.

3. In welke mate vindt u deze tools geschikt voor dit werk?

   a. Wat zijn de positieve aspecten van de tools?

Wanneer ik alle tools ben nagelopen, dan krijg ik het idee dat ik er alles aan heb gedaan om een geschikte kandidaat te vinden. De tools zijn, voor mij, heel effectief in het vinden van kandidaten. Maar dit is dan vooral een eerste aanzet, om de geschiktheid te bepalen moet je toch echt met de personen om tafel.

b. Wat zijn de negatieve aspecten van de tools?

Geschiktheid kun je dus niet van papier lezen, dat is wel een negatief aspect van de tools. Verder is, bijvoorbeeld, de job board nationalevacaturebank.nl onpraktisch omdat alle gegevens min of meer door elkaar staan. Het kost tijd om alle informatie door te kunnen nemen. Ook zijn de zoekcategorieën op de job boards veelal te smal of te breed waardoor je soms mensen kan mislopen, of juist teveel hits krijgt waardoor je weer door alles heen kan gaan.

4. Welke functionaliteit mist u nog in de tools?

In OTYS vervelend dat je alle vinkjes aan moet zetten, anders klopt de zoekcriteria niet. Hiermee bedoel ik dat je zoekcriteria invult, en daarna nog moet aanvinken dat je erop wilt zoeken. Ik zou verwachten dat dit automatisch zou gaan.

Daarnaast zou het praktisch zijn om de zachte criteria van een persoon te zien, in de tools. Maar het is lastig om deze aspecten hard te maken en te vergelijken met een vacature. Ook speelt het een rol dat mensen blinde plekken hebben en zichzelf neigen te overschatten. Verder is het leuk om de mensen zelf te spreken.

a. Hoe compenseert u het ontbreken van deze functionaliteiten?

Meer tijd en moeite erin steken.

g. Interview respondent No. 7

Organisatie: *Company S*

Datum: *23-5-2011*

Over Company S

Op dit moment is er nog geen echte tak van werving en selectie binnen Company S. Er zijn nu drie business units; technisch advies, een werkplaats (om opstellingen te testen) en het opleidingencentrum. Het opleidingen centrum werkt met "erkenning verworven competenties" (EVC) trajecten. In de toekomst wil men zich ook gaan richten op het werven, selecteren en plaatsen van kandidaten. De strekking zou hier zijn om gekwalificeerd personeel te leveren door kennis toe te voegen aan kandidaten.

Twee opties om dit van de grond te krijgen is door samenwerkingsverbanden aan te gaan met bestaande werving- en selectie bureaus. Deze leveren dan de kandidaten waar kennis aan wordt toegevoegd. Een andere optie is dan om zelf de werving en, een uitgebreide, selectie uit te voeren. Deze laatste optie is wel meteen intensiever dan de eerste optie, maar biedt misschien wel meer mogelijkheden voor Company S.

Tools en praktijken

Binnen Company S werkt men op dit moment met een competentiemanagement systeem. Hierin worden de competenties van een persoon gekoppeld aan een functieprofiel. Aan de hand van een dergelijke koppeling kan men kijken in welke mate de harde eisen van een kandidaat, i.e. knowledge, skills & abilities, overeenkomen met de vereisten van het functieprofiel. Ook kan er gekeken worden indien iemand van een bepaald functieprofiel wil overstappen naar een ander functieprofiel, in termen van waar er nog wat kennis toegevoegd moet worden, of hoe goed men wel/niet op een functie past.

In het competentiemanagement systeem staan nu vooral de harde aspecten van een kandidaat terwijl de zachte aspecten, i.e. persoonlijkheid, ambitie, motivatie, ook een belangrijke rol spelen. De softkills bepalen of de investering in opleiding en begeleiding in een kandidaat het waard is. Ook mist het systeem op dit moment een zoekfunctie. Dat is nu geen ramp, maar wanneer de aantallen omhoog zullen gaan, dan is het praktisch om een dergelijke functie te implementeren.

Verder zie je dat in de technische sector de zachte aspecten van een kandidaat een kleine rol spelen. De mensen in de techniek leggen vooral de nadruk op de harde eisen, en dan vooral de technische kennis en kunde van een persoon. Toch zie je al wel dat bedrijven deze harde eisen steeds meer als randvoorwaarde gaan zien, en zich meer richten op de zachte aspecten van een persoon. Belangrijk is dan dat deze zachte aspecten goed gemeten worden.

Voor Company S zijn deze zachte aspecten al langer van belang omdat deze, onder andere, het arbeidsethos van een kandidaat vertegenwoordigen. Dit ethos is belangrijk omdat het voorspelt in welke mate een kandidaat daadwerkelijk goed zal gaan presteren bij een klant. Hierbij speelt motivatie ook een erg grote rol. Ten eerste bepaalt de motivatie van een kandidaat in welke mate hij/zij kennis opneemt van een opleiding. Verder kan men uit de motivatie van een kandidaat halen wat het verwachte gedrag is wanneer de kandidaat ook daadwerkelijk aan de slag gaat.

Wanneer Company S gaat beginnen aan een werving en selectie tak, zou de huidige tool nog wel toereikend zijn. De business is dan nog redelijk klein, waardoor er minder eisen aan een software pakket gesteld hoeven worden. Maar, wanneer deze tak van sport gaat groeien, dan is het wel zaak om een pakket in dienst te stellen waarmee meer zaken geautomatiseerd kunnen worden.

Informatiestromen

Gekeken naar de "erkenning verworven competenties" (EVC) trajecten binnen Company S, dan kan er gezegd worden dat men heel gedetailleerd in kaart kan brengen wat de nu kennis en de kunde van een kandidaat is. Maar, zulke intensieve trajecten geven nog meer informatie vrij dan dat er op dit moment gebruikt wordt. Bepaalde zachte eigenschappen komen ook aan bod, maar worden nog niet formeel en oppervlakkig gemeten. Sommige assessoren hebben de vaardigheden om meer te zien dan alleen wat gemeten moet worden, i.e. zachte eisen erbij in plaats van enkel de harde eisen, maar andere hebben deze vaardigheden weer niet in gelijke mate. Het gebruik van psychologische testen zouden hier eventueel een aanvulling kunnen zijn, echter, deze discipline kan dan niet worden uitgevoerd door de huidige (technisch vakbekwame) assessoren.

Wanneer een EVC traject doorlopen is, volgt hieruit een rapport. Het is mogelijk om in grafische vorm weer te geven in welke mate een kandidaat geschikt is voor een bepaald functieprofiel, maar van deze optie wordt nu geen gebruik gemaakt. Om de kwaliteit van het rapport zo hoog mogelijk te houden, is het noodzakelijk om zo accuraat mogelijk met de kandidaten te werken.

Wie de persoon aan het einde van de rit is, is dan een optelsom van de harde eisen en de zachte eisen. Een belangrijke kanttekening die hier gemaakt moet worden is dat men wel begeleiding geeft aan de kandidaten, wanneer ze aan het werk gaan of tijdens de opleiding bij Company S. De omgeving is van grote invloed op het presteren van een persoon, hier moet dus genoeg tijd een aandacht aan gegeven worden. Ook krijg je meer informatie over een persoon wanneer je hem/haar intensief begeleid tijdens de opleiding of het EVC traject. Op die manier weet je dan precies wie de persoon is die je voor je hebt, en kun je gepast beslissingen nemen op zijn/haar situatie.

De daadwerkelijke selectie en plaatsing

Voor de respondent is het belangrijk, wanneer er een selectie gemaakt moet worden, dat ze informatie heeft over de randvoorwaarden van een kandidaat. Met deze informatie kan er al een preselectie gemaakt worden, waarna men meer gedetailleerd verder kan gaan zoeken. Ook geeft de respondent aan dat ze kennis over het huidige gedrag van een persoon zou gebruiken, en in wat voor functies hij/zij gewerkt heeft. Daarnaast is het ook van belang om te weten wat het kennis niveau van een kandidaat is, en in welke richting dit niveau is opgebouwd.

Met deze kennis kan er dan gekeken worden wat voor soort vacatures er bij een kandidaat passen. De uiteindelijke keuze wordt gemaakt op basis van de sociale aspecten en de kennis van een kandidaat. Bij Company S wil men graag kennis toevoegen aan een kandidaat, om hem vervolgens te plaatsen. Deze kennis kan zowel op het harde-, als het zachte vlak zijn. Harde zaken kunnen aangeleerd worden door ze op te leiden, zachte aspecten kan men bij brengen door een kandidaat proef te laten draaien binnen de eigen werkplaats. Natuurlijk kan men de persoonlijkheid niet veranderen, maar men kan wel leren hoe men op het sociale vlak met elkaar om gaat / hoort te gaan.

Ontwikkelingen op HRM gebied

Met betrekking tot de ontwikkelingen op het gebied van het automatiseren van enkele human resource management (HRM) praktijken, hiertegen kijkt de respondent positief. Wel wordt er de kanttekening geplaatst dat het noodzakelijk is dat men een uniforme taal spreekt. Als je dit niet doet, dan ben je geen eerlijke vergelijkingen aan het maken, wat niemand ten goede komt. Een oplossing is om met erkende beroepsprofielen te gaan werken, die opgesteld zijn door kenniscentra. Op deze manier standaardiseer je de gegevens die in een database geplaatst worden.

Belangrijk is dan wel om te kijken of het profiel niet te smal, of juist te breed is. Indien dit het geval is, dan is het lastig om te bepalen of de persoon geschikt is, maar dan is het ook lastig om te bepalen of, en welke, aanvullende opleidingen eventueel geschikt zouden zijn.

h. Interview respondent No. 8

Organisatie: *Company Z*

Datum: *20-5-2011*

Werving

Er is op dit moment een tekort aan opgeleidde techneuten, zeker in de specifieke markt waarin Company Z actief is. Om toch aan voldoende kandidaten, en personeel te komen, zet men een verscheidenheid aan tools in. Deze tools zijn de volgende:

Vacatures uitzetten bij verschillende bureaus: men heeft met een aantal bureaus goede relaties opgebouwd, elk van deze bureaus met zijn eigen specialiteit. Door zo'n relatie op te bouwen, kun je de kwaliteit van de geleverde kandidaten verhogen omdat men van elkaar weet wat men wil.

Via eigen personeel werven: door in te zetten op het interne personeelsbestand, hebben toekomstige kandidaten al een beter beeld van de organisatie doordat de medewerker dit goed over kan brengen.

(afstudeer)stages: men wil zich richten op het opbouwen van langdurige contacten met scholen en universiteiten door het hele land. Door, bijvoorbeeld, stages aan te bieden, op bedrijvendagen te staan op scholen en universiteiten, kan men al in een begin stadium personen kennis laten maken met het bedrijf en kan men in contact komen met mogelijke toekomstige werknemers.

Advertenties via het internet: men heeft gemerkt dat de traditionele bladen minder opbrengen dan wanneer de advertenties op het internet worden weg gezet. Wanneer iemand een baan zoekt, zal deze sneller op het internet kijken dan de krant erbij pakken. Aan sites als LinkedIn, etc. moet dan gedacht worden.

Inhuren HR deskundigen

De kanttekening die de respondent hierbij maakt is dat al deze tools gezien moeten worden als een hulpmiddel. Verder de kanttekening dat het belangrijk is om de interesse voor de techniek te vergroten, omdat deze op dit moment vrij laag is. Daarbij komt kijken dat men tegenwoordig niet meer zijn hele leven bij een organisatie blijft werken, men kijkt steeds meer naar welk bedrijf het beste bij hem/haar past. Op hierop in te spelen is het voor bedrijven belangrijk dat ze zichzelf zo goed mogelijk kunnen presteren naar de kandidaten toe. Verder wordt er gekeken naar de mogelijkheden om mensen intern op te leiden, in plaats van mensen te werven.

Zelf werven levert op dit moment niet genoeg op, daarom staat men liever op bedrijvendagen om zo het bedrijf meer bekend te maken in de wereld. Ook is men bij het Career Center Twente aangesloten. Deze vereniging probeert hoog opgeleid personeel enerzijds in de regio te houden, en anderzijds aan te trekken vanuit andere regio's. Ook zet deze vereniging vacatures online, etc.

Selectie

In principe zie je twee stappen, men kijkt eerst naar een fit op vooral technisch gebied om vervolgens ook meer naar de persoon en zijn ambitie te kijken. Ook wordt hier opgemerkt dat personeel aannemen via een bureau is over het algemeen wat gemakkelijker, voor wat betreft het ontslaan van personeel.

Wanneer een aantal kandidaten zich hebben aangemeld voor een bepaalde vacature, dan maakt men de eerste keuze op basis van de kennis met techniek. Dit is een zeer belangrijk aspect in deze context. Hiervoor gebruikt men vooral het CV en de aanbevelingen die in het CV aangegeven staan, of op een andere manier binnen komen. Mensen die qua kennis aansluit wordt uitgenodigd voor een eerste afspraak.

In deze afspraak zal de kandidaat in contact worden gebracht met enkele technische mensen van de afdeling waar de vacature open staat. Dit zullen veelal de project manager en de afdelingschef zijn. Men controleert de technische bagage van de kandidaat, omdat men echt op zoek is naar specialisten. Natuurlijk wordt hier ook de rest van de achtergrond gecontroleerd en besteedt men aandacht aan wie de persoon zelf is.

Wanneer deze eerste afspraak goed bevalt, van beide kanten, dan wordt men uitgenodigd om een tweede afspraak aan te gaan. Op dit moment komt er ook iemand van een ander vakgebied erbij, bv iemand van P&O. Gespreksverslagen van de afspraken worden, als het nodig is, intern rond gestuurd zodat andere personen hun mening kunnen geven over de kwaliteit van de kandidaat. Hier wil men kijken wat de ambitie van de kandidaat is en waarom hij/zij de keuze heeft gemaakt om bij Company Z te solliciteren. Het is de bedoeling dat men zich voor langere tijd aan zich bindt, dus is het belangrijk om de keuze zo gefundeerd mogelijk te maken.

Bij het selectieproces kunnen psychologische tests worden toegepast. Deze worden dan toegepast om mensen dieper te doorgronden. Dit wordt vooral gedaan op sleutelposities. Websites, met vacatures, zijn ook een handig hulpmiddel om aan (geschikte) kandidaten te komen. Meer dan een hulpmiddel zijn zulke websites dan ook niet. Het gaat toch ook om het gevoel dat men bij een kandidaat heeft; het werven wordt min of meer een marketing verhaal. Daarom moet men interesses opwekken bij mogelijk kandidaten.

Dus, een CV is prima, maar je moet de mensen ook zelf zien en spreken. Men zit er, volgens de respondent, niet op te wachten om online nog meer in te vullen dan dat ze op dit moment al doen; dus geen psychologische tests bij het uploaden van een CV. Men zit bij Company Z niet echt te wachten op een tool die een deel van het selectieproces automatiseert, ook niet bij de voorselectie. De vraag die men heeft is hoe men reageert wanneer er een afwijzing volgt door zo'n geautomatiseerd systeem. Juist omdat er een grotere nadruk ligt op het vermarkten van de organisatie, is het belangrijk dat bij afwijzingen de reputatie van de organisatie niet wordt beschadigd.

Opleidingen

Wanneer je kijkt naar het verstrekken van interne opleidingen, dan worden deze op dit moment verdeeld door inschattingen van het afdelingshoofd en de projectmanager. Men kijkt hoe iemand zich gedraagt gedurende het project, en op basis daarvan wordt gekeken wie in aanmerking komt voor een opleiding. Een kanttekening die hier gemaakt wordt is dat men het gevoel heeft dat het niveau van de hogescholen wat omlaag is gezakt vergeleken met een aantal jaar terug.

Op dit moment is men bezig met het in kaart brengen van de huidige, en toekomstige, populatie van medewerkers. Vanuit de instanties die de certificaten van Company Z beoordelen, wordt er meer de nadruk gelegd op tevredenheid en opleiding van personeel; immers, men moet geschikte medewerkers hebben om voort te kunnen blijven bestaan. Men wil dus overzichtelijk krijgen wat iedereen kan, nog niet kan en wat men mogelijk nog kan leren. Hiervoor heeft men dus ook duidelijke functieprofielen opgesteld, zodat er duidelijk is wat er nu precies van een medewerker wordt verwacht en dat men kan bekijken welke kennis nog ontbreekt. Voor dit gehele proces zoekt men dus nog een software pakket, wat alles kan digitaliseren.

Al met al wil men dus eerst duidelijk krijgen hoe ze precies mensen kunnen werven binnen de hedendaagse markt, daarna wil men zich richten op het in kaart brengen van de huidige groep medewerkers; in termen van kennis en kunde, maar ook persoonlijkheid. ambitie en dergelijke aspecten.

i. Interview Respondent No. 9

Organisatie: *Company B*

Datum: *1-6-2011*

Werving

Men werkt binnen het bedrijf niet met vaste functie profielen omdat de organisatie een sterke projectmatige manier van werken heeft. Als gevolg kijkt men naar wat er nodig is binnen een bepaald team en probeert daar iemand voor te vinden. Men kijkt naar wat er moet gebeuren en wie over welke capaciteiten beschikt, en zal dan ook eerst intern kijken of vacatures opgevuld kunnen worden. Wanneer men intern niemand kan vinden, dan gaat men naar buiten kijken; dan worden over het algemeen specialistische bureaus ingezet maar soms zal men deze taken ook zelf uitvoeren.

Selectie

Aangegeven werd dat men de technische kennis en kunde van een kandidaat vooral ziet als randvoorwaarde; de zachte eisen spelen een grotere rol in het selectie proces. Om deze zachte eigenschappen van een kandidaat te meten gebruikt men geen hulpmiddelen, de methode hier is vooral het onderbuikgevoel van de HRM manager. Men ziet psychologische testen als situatie onafhankelijk en vind dit een belemmering voor de praktijk. Omdat men verder van mening is dat psychologische testen te manipuleren zijn, i.e. sociaal wenselijk invullen, worden ze niet ingezet. Als laatste gaf men aan dat ze niet het idee hadden dat kandidaten bereid waren om zulke testen in te vullen.

Een eventuele mogelijkheid om psychologische testen in te zetten in om gespreksstof boven tafel te krijgen. Alleen, hiervoor denkt men zulke testen niet nodig te hebben; dit kan men zelf net zo goed. Een andere reden om geen gebruik te maken van psychologische testen was omdat de “psychologische antenne” niet uitstaat binnen de organisatie; het gaat meer om de techniek dan om de persoon. Hoewel dit in contrast is met wat er eerder is gezegd, kon hier geen verklaring voor worden gegeven door de respondent.

De omgang met andere collega’s is wel belangrijk binnen de organisatie, dus zachte eisen spelen toch wel een rol, maar hiermee houdt men geen rekening bij het selectieproces. Zulke zaken komen aan het licht wanneer men er eenmaal werkt. Wanneer men echte twijfels heeft over de persoon, dan wordt er overwogen om toch een test af te laten nemen, maar hierbij wordt dan wel gekeken naar verwachte duur van de arbeidsovereenkomst, etc. Men gaf aan dat ze van mening waren dat de verantwoordelijkheid voor de kwaliteit van de kandidaten bij de bureaus lag, indien deze ingeschakeld werden.

Opleidingen

Binnen de organisatie is er geen individueel budget voor opleidingen, men kan te allen tijde een verzoek tot opleiding indienen. Deze behoefte aan een opleiding kan ook aangegeven worden tijdens de periodieke beoordelingsgesprekken, zowel vanuit de medewerker als vanuit de leidinggevende. De opleidingsbehoefte voor de organisatie, of de afdelingen, komt terug in het jaarplan van de organisatie. Om met groei om te kunnen gaan, moet de allocatie van opleidingen besproken worden. Elk verzoek tot opleiden wordt getoetst aan een aantal punten;

- Is het noodzakelijk?
- Is het functiegericht?
- Kan iemand dit al?
- Heeft de organisatie er iets aan? (indien de opleiding persoonsgericht is)

Indien hier een positief beeld uit komt, is de kans zeer groot dat men de opleiding mag volgen. Verder wil de organisatie het personeelsbestand in kaart brengen zodat ze weten wat het kennisniveau van elke medewerker is, en wat zijn/haar capaciteiten zijn. Dit moet allemaal functiegericht en aan te tonen zijn door de medewerkers, zodat deze kennis in de database objectief is. Deze kennis kan men dan weer matchen met interne vacatures wanneer deze zich voordoen.

C. Interview protocol

In this appendix, an extensive example of the interview protocol was provided. This code memo (Kvale & Brinkmann, 2008) was used in order to code the various statements found in the interviews. The codes were derived after the interviews were conducted, i.e. they were data driven.

The statements used at each code are denoted beneath the code and its corresponding definition. In addition, thought of the coder were included as well in italic.

a. Code memo

Name of the coder: The author of the paper

Date: 2-6-2011

Code	Definition
Image of testing	Perceptions on the, lack of, added value of psychological testing

- "Dus de uiteindelijke keuze zal gebaseerd zijn op het beschikken over de juiste kwaliteiten in termen van opleidingsniveau en werkervaring, maar ook op de indruk die de persoon na heeft gelaten op mij in termen van persoonlijkheid, interesses en ambitie"
  - *O matters to a large extent, yet I rely on making such judgments myself*
- "Het is lastig vertellen hoe ik precies een keuze maak; door ervaring weet ik wat een geschikte kandidaat is. Ik leef me in, in een vacature, in de vraagstelling van de klant, in het CV van de kandidaat (met ambitiepatroon erbij), etc. Daar komt dus een heel scala van aspecten bij elkaar en hier gaat het er mij dan om dat er een match is tussen kandidaat en vacature"
  - *I know how to select proper candidates due to my empathic abilities, I do not use tests*
- "Uiteindelijk maak ik de keuze door een afweging te maken wat ik denk dat nodig is voor de vacature, aangevuld met wat ik denk te passen bij de organisatie. Dat laatste is in mijn vakgebied niet altijd interessant omdat men vooral alleen achter een machine werkt, maar omdat er toch altijd wel wat samenwerking bij komt kijken, probeer ik toch een inschatting te maken in hoeverre de kandidaat zou passen binnen het team"
  - *I try to make judgments myself.*
- "Aangegeven werd dat men de technische kennis en kunde van een kandidaat vooral ziet als randvoorwaarde; de zachte eisen spelen een grotere rol in het selectie proces"
  - *The role of O is increasing.*
- "Toch zie je al wel dat bedrijven deze harde eisen steeds meer als randvoorwaarde gaan zien, en zich meer richten op de zachte aspecten van een persoon. Belangrijk is dan dat deze zachte aspecten goed gemeten worden"
  - *Psychological testing is required in order to measure O as objectively as possible*
- "Men ziet psychologische testen als situatie onafhankelijk en vind dit een belemmering voor de praktijk"
  - *Psychological tests cannot be applied since context is not included*
- "Een eventuele mogelijkheid om psychologische testen in te zetten in om gespreksstof boven tafel te krijgen. Alleen, hiervoor denkt men zulke testen niet nodig te hebben; dit kan men zelf net zo goed"
  - *The added value of psychological tests is rather low, HR can do the same job just as well*
- "De softkills bepalen of de investering in opleiding en begeleiding in een kandidaat het waard is"
  - *O is a large determinant in business decisions and should be measured objectively*
- "Bij het selectieproces kunnen psychologische tests worden toegepast. Deze worden dan toegepast om mensen dieper te doorgronden. Dit wordt vooral gedaan op sleutelposities"
  - *Psychological tests are applied in order to get a better picture of a candidate. When it concerns a position higher in the hierarchy, there is more need for such tests.*

Code	Definition
Response distortion	Faking and the like in psychological testing

- "Ervaring maakt dat je er steeds beter in wordt, maar je kunt er toch altijd naast zitten omdat iemand zich anders / beter voordoet dan hij / zij is"
  - *Faking is all around and experience cannot not counter that all the time*
- "Omdat men verder van mening is dat psychologische testen te manipuleren zijn, i.e. sociaal wenselijk invullen, worden ze niet ingezet"
  - *Response distortion lowers the perceived validity of psychological tests*

Code	Definition
Expert knowledge	How easily the outcomes of a psychological test can be understood and interpreted by non-experts

- "Wel wordt er de kanttekening geplaatst dat het noodzakelijk is dat men een uniforme taal spreekt. Als je dit niet doet, dan ben je geen eerlijke vergelijkingen aan het maken, wat niemand ten goede komt"
  - *There is a need for professionals who can understand and interpret psychological tests*

Code	Definition
Common applicant pool	Issues concerning the sharing of applicant with competitors

- "Het nadeel van deze tools is wel dat alle recruiters min of meer in dezelfde vijver aan het vissen zijn. Wanneer je een geschikte kandidaat vindt is de kans groot dat jouw concurrent deze al heeft gevonden, of snel na jou gaat vinden"
  - *Competitors are working with, more or less, the same pool of applicants*
- "Daarnaast kom ik het geregeld tegen dat mensen die ik benader voor een bepaalde vacature, ook al door andere bureaus zijn benaderd"
  - *The pool of applicants which is shared by competitors seems to be showing an increasing trend*

Code	Definition
Validity of testing	Levels of validity concerning various psychological tests

- "Dit houdt in dat ik de persoon bel, vraag of hij nog werk zoekt en, zo ja, wat hij dan precies zoekt. Zo krijg je een ander beeld van de persoon dan wanneer je vraagt of hij interesse heeft in een bepaalde vacature. Op basis van zijn antwoord op mijn vraag wat hij / zij nu precies zoekt, bepaal ik of ik de vacature voorstel, of eventueel iets anders"
  - *Trying to determine O, yet this is done rather subjectively and biased*
- "Dit doe je met het hoofd en met onderbuik gevoel. Je legt mensen langs de lat en kijkt in hoeverre ze overeen komen met het plaatje dat de klant heeft geschetst, en andersom"
  - *O is not measured objectively, yet it is a leading characteristic in the selection process*
- "Uit de tools haal ik in principe een paar aspecten van een kandidaat; de afgeronde opleiding, opgedane ervaring, salarisindicatie, geografie, maar ook wat voor soort persoon het is. Dit laatste is wat lastiger, maar je bent bij een bedrijf geweest, je hebt daar mensen gesproken en daarmee heb je dan een beeld in je hoofd van wat ze nodig hebben. Dat probeer ik dan terug te zoeken in de kandidaten"
  - *O is not measured objectively, yet it is a leading characteristic in the selection process*
- "Aan de hand van dit gesprek krijg ik een eerste indruk; praat iemand makkelijker, kan hij zichzelf goed verkopen, heeft hij inzicht in zichzelf en zijn werkervaring, etc. Zo probeer ik te achterhalen wat voor iemand het is"
  - *Validity of measuring O yourself is low due to bias from both sides, despite being important*
- "Daarnaast is het natuurlijk altijd lastig om een persoon goed te lezen wat betreft zijn persoonlijkheid, ambitie, etc"
  - *There is a need for objective measures of O*

Code	Definition
Distribution of tools	The barrier of entry when looking at the acquirement of (web-based) technologies

- "Volgens mij komt dit doordat de tools die wij inzetten, ook door andere bureaus ingezet worden:, abonnement op monsterboard.nl, etc."
  - *The tools applied are necessary, yet easily obtainable*
- "Dit ligt niet perse aan de tool zelf, maar meer aan de mate waarin andere bureaus, min of meer, dezelfde tools inzetten"
  - *The tools applied are necessary, yet easily obtainable*

Code	Definition
Recognizable outcomes	To what extent a test taker recognizes him- or her in the outcomes of a psychological test

- "Wie de persoon aan het einde van de rit is, is dan een optelsom van de harde eisen en de zachte eisen. Een belangrijke kanttekening die hier gemaakt moet worden is dat men wel begeleiding geeft aan de kandidaten, wanneer ze aan het werk gaan of tijdens de opleiding bij Company S"
  - *Feedback provided to the test taker, of candidate, is important since it forms the basis for the rest of the selection process*
- "Ik bespreek deze zaken ook met de kandidaten, vooral als ik een persoon voor wil stellen of wanneer ik wat extra informatie wil krijgen omdat ik het idee heb dat er wat in zit. Een soort controle of ik goed zie hoe men zich wil neerzetten"
  - *Things might go wrong when assessing a candidate, therefore one should always check whether you got things right*

Code	Definition
Common language	The degree to which rigid entry of data is required in the use of (web-based) technologies in the selection process

- "Alles wat je erin stopt, zie je niet meer. Dat kan met de system wel, maar dan moet je wel heel systematisch werken. De winst die je kunt behalen met de pakketten ligt aan hoe jezelf werkt. Nou ja, je moet heel systematisch werken om het maximale uit dit soort system te halen en dat is voor mij niet weggelegd"
  - *Systematic entry of data is necessary to obtain the maximum level of effectiveness and efficiency*
- "Maar ik realiseer me ook dat de effectiviteit van een tool, wanneer je subjectieve processen gaat automatiseren, afhankelijk wordt van de kwaliteit van hetgeen ingevoerd wordt"
  - *Current tools require systematic entry of data, which may hamper the effectiveness and efficiency of the tool*

Code	Definition
Knowledge transfer	The need to share knowledge with another employee in order to execute the selection process or learn from another

- "Wat ik wel als negatief ervaar is dat de waarde voor woorden voor een ieder anders zijn, maar dat dit niet terug komt in zulke pakketten. Een tool zou heel erg persoonlijk ingericht moeten worden"
  - *A lot of tacit knowledge is involved in the selection process*
- "Ook is de kennis van een persoon is persoonsgebonden; dus als deze weg gaat is de kennis ook weg"
  - *Tacit knowledge is within the individual, therefore you want to make it explicit when possible in order to make the best use of it*

Code	Definition
User-friendliness	Ease-of-use of the applied (web-based) tools

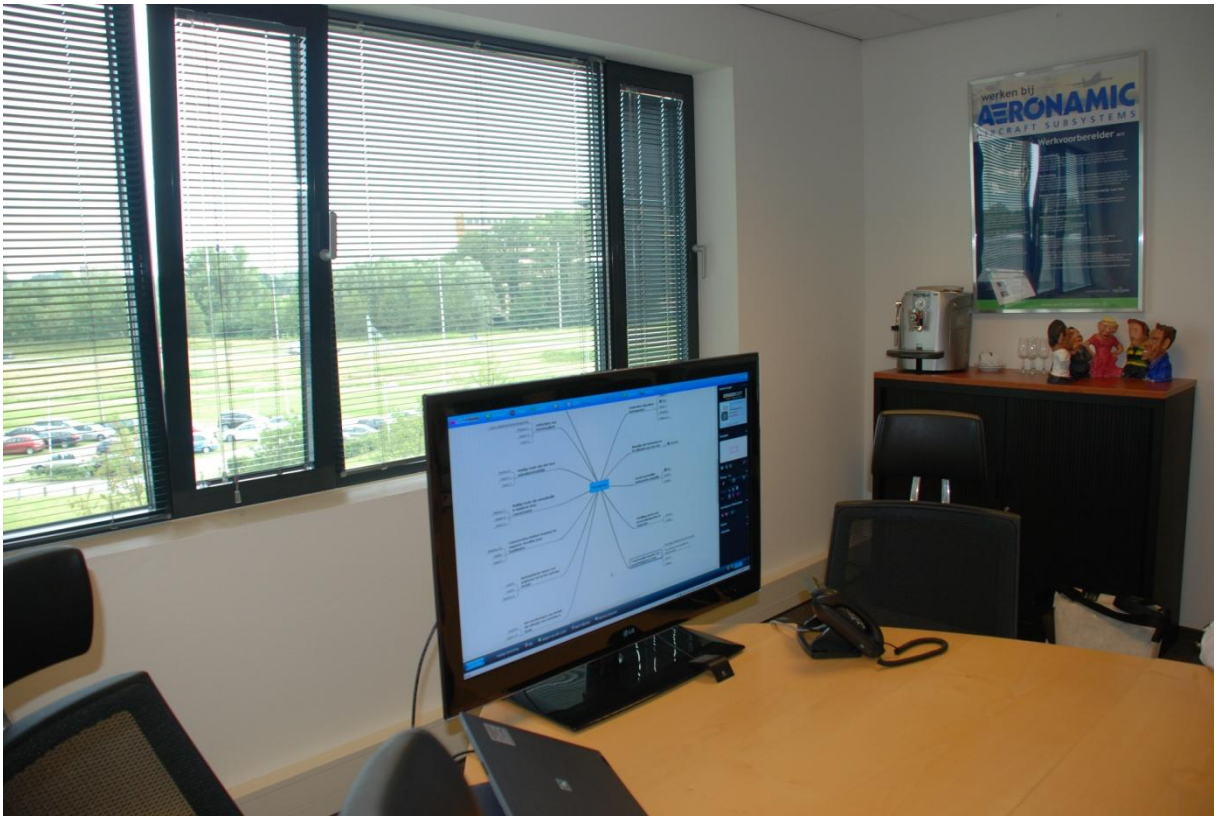
- "Wat heel praktisch is, van OTYS, is dat de mail bewaart blijft en gekoppeld aan de kandidaat of klant. Je kan dus alles terug zoeken"
  - *When the tool support the employee in an easy manner, user-friendliness is perceived to be high*
- "Op bijvoorbeeld werk.nl moet je zelf eerst een vacature opvoeren voordat je CV's mag inzien, en dan nog blijft alles anoniem. Dit levert een extra drempel op"
  - *Low user-friendliness will make increase the reluctance to work with a certain tool*
- "Bijvoorbeeld OTYS, dat gebruik ik om vacature te plaatsen, om de database te bekijken, om klantgegevens bij te houden en om de contactgeschiedenis bij te houden. Op deze manier ondersteunt het mij omdat ik dit niet allemaal uit mijn hoofd kan doen"
  - *When the tool support the employee in an easy manner, user-friendliness is perceived to be high*
- "Het lastige aan de tools is dat ze niet altijd precies werken zoals ik verwacht dat ze werken"
  - *Tools should be intuitive in order to be perceived as user-friendly*

Code	Definition
Functionality	The functioning of (web-based) tools applied for the selection process and the support of psychological testing

- "Deze tools zijn vooral gekozen om een zo breed mogelijk publiek te kunnen benaderen zonder dat het extreem veel tijd kost"
  - *Functionality chosen in order to increased effectiveness and efficiency*
- "Wanneer mensen zich aanmelden voor een bepaalde vacature, of open sollicitaties, deze automatisch in de database terecht komen en wij een bericht ontvangen over deze nieuwe kandidaat"
  - *Automation is regarded as cardinal for effectiveness and efficiency*
- "Het meest positieve aan de tools is dat bijna alles en iedereen vindbaar is met, voor mij haast belangrijker, de contactgegevens van deze persoon"
  - *Functionality chosen in order to increased effectiveness and efficiency*
- "Zoals net aangegeven mis ik toch wel de mogelijkheid om het huidige profiel van een kandidaat uit te breiden met, bijvoorbeeld, psychologische testen"
  - *There are still ample opportunities to increase functionality*
- "Maar ik werk met deze tools omdat er niets anders is. Ik zeg altijd maar; je moet genoegen nemen met een systeem wanneer er aan minimaal 75% van je eisen voldaan wordt"
  - *Functionality is created based on the viewpoint of the manufacturer rather than the customer*

D. Impression of the focus group

In the focus group session, each of the participants had an iPad, connected to the internet, to their disposal, and access to a shared mind map in the collaborative software tool Mindmeister. On the main screen, each of the problems identified were displayed in Mindmeister.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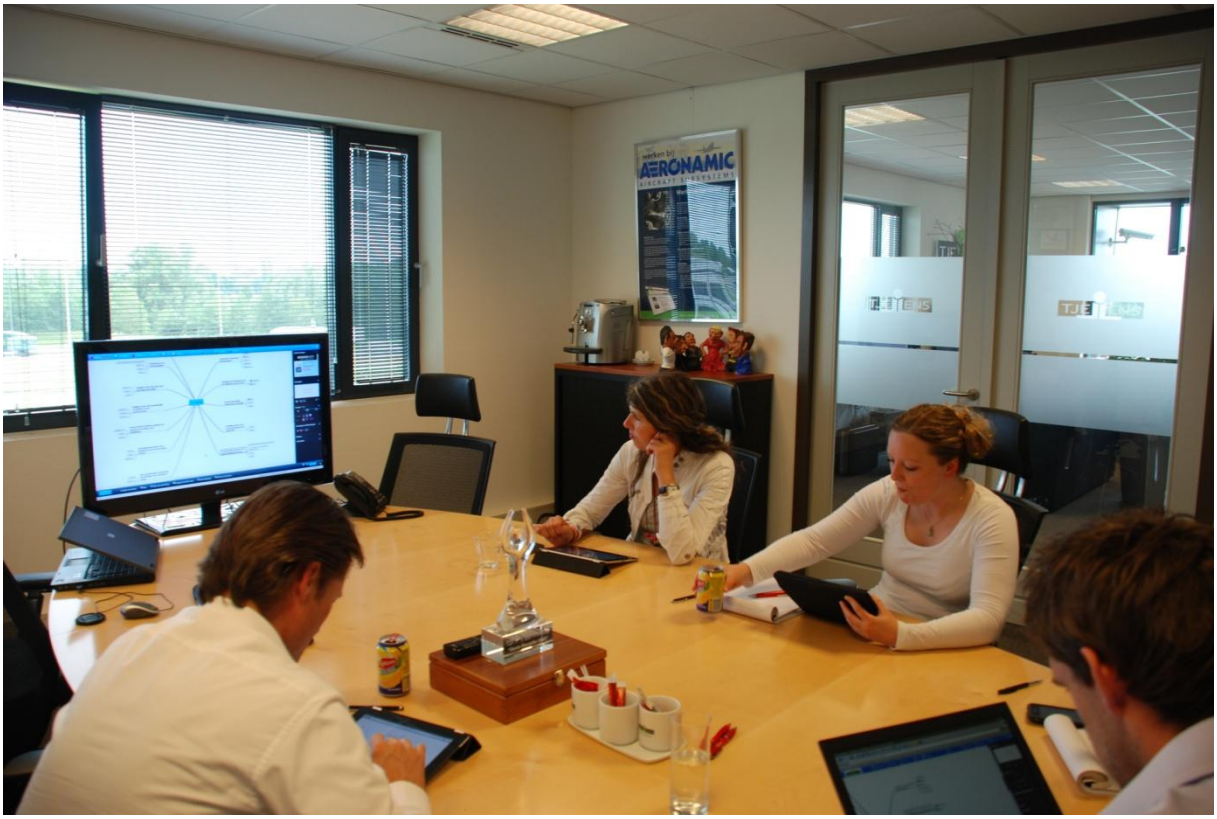
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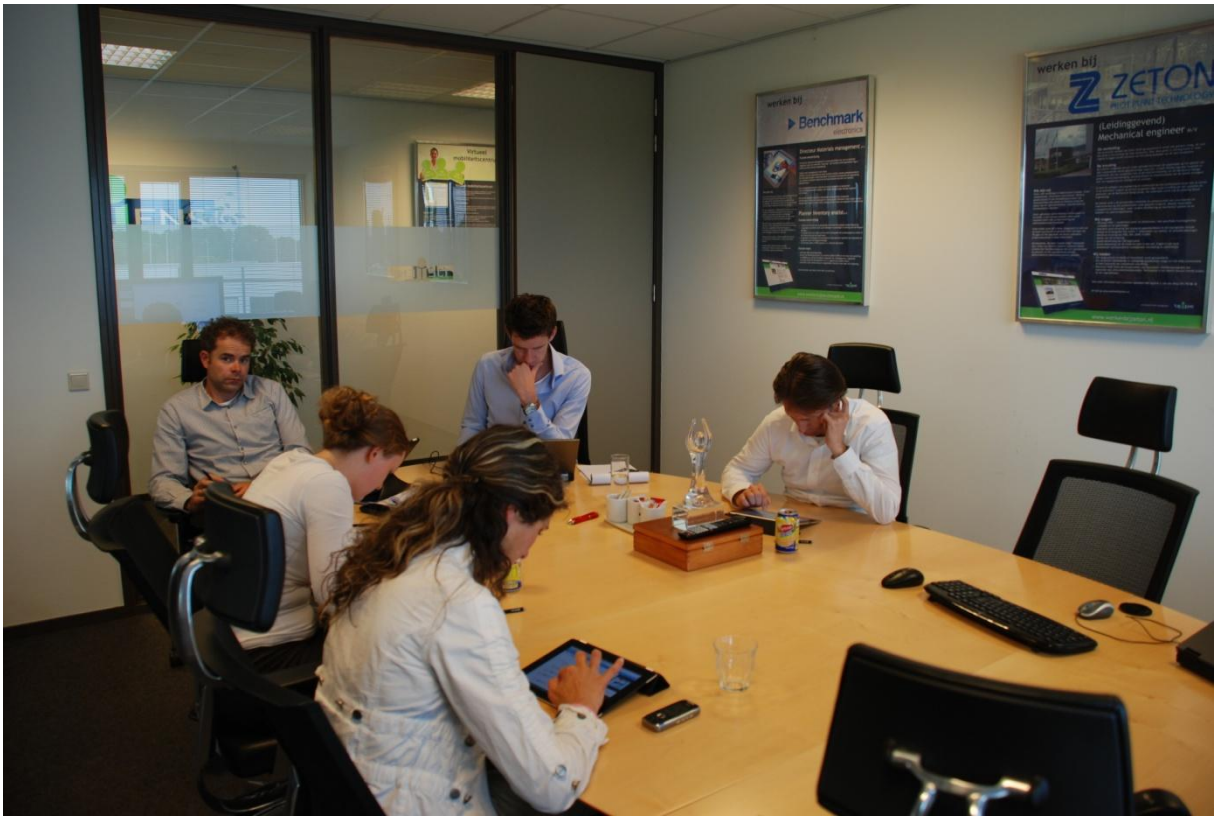
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(Leidinggevend)
Mechanical engineer