

1. Table of Contents

1.	Table of Contents	1
2.	The Domain for Knowledge Capture	2
3.	Scope	3
4.	Knowledge Elicitation Schedule	3
5.	The Attributes of the Expert	5
6.	Maps Used	6
7.	Organization of the Knowledge Model	7
8.	Analysis of the Knowledge Capture Effort	8
9.	References	9

2. The Domain for Knowledge Capture

CRS Technologies is a corporate resources solution provider / consultancy. The company was founded in 1985 and has grown into one of the choice providers of Remuneration and Human Resources software solutions in South Africa.

The company offers a range of solutions, the primary being a self developed integrated Remuneration / Payroll and Human Resources software package. The success of this offering, and probably the most significant competency CRS offers, lies in the support that is provided. Consultants are appointed by careful selection and vast amounts of money is invested in developing every consultant. The training period per consultant is between 12 and 18 months where after the consultant gets the opportunity to qualify as a Client Relationship Manager.

Every consultant gets allocated a number of clients, starting with the less complex and building up to the more complex clients over the initial training period. In addition to independent clients (who buy the software and runs their solution in house) CRS also offers a Bureau service where the full solution is provided as an outsourced offering to clients. Every consultant is responsible for running at least one client's payroll in order to gain experience in a hands on environment. Ample opportunity exists for every consultant to get involved and excel in any other field of interest, including being educated in other languages, other business functions, and more.

As in any organization it has been one of the biggest setbacks when an employee left the company. In the case of CRS, the impact is felt very severely. The knowledge that every consultant carries with them, which is lost in such a case is not so much the know how of how the software system works, or how taxation or labour legislation is applied correctly (these skills are relatively easy to acquire), but rather the intimate knowledge of every client, and the client specific rules that exist between that consultant and their specific clients. Since every consultant usually ends up being the consultant of choice to their allocated clients, it takes very long (and is usually quite a nerve racking experience) to replace such a consultant, while at the same time ensuring that the service levels to the client is maintained and improved.

Numerous attempts have been made to capture this knowledge in the past, ranging from shadowing the consultant with another person, video taping, voice recording, documenting using long-winded text documents, and other more imaginative ways of which none has really succeeded. True to human nature, most often the departing consultant tends to cling to their knowledge, making the process even more challenging.

3. Scope

The aim of the knowledge elicitation effort was to gain insight into the contribution that a specific consultant brought to CRS, not just in part, but to be able to establish to the fullest which issues would have to be addressed once such consultant has left the organization, as well as to document the client specific knowledge that only that consultant would have.

Since the original scope of the exercise was so wide, the scope itself did not experience any migration, but rather the expectation thereof. Due to the historical difficulty in trying to capture a leaving consultant's knowledge, it was expected that in this case, it would be just as difficult, if not more due to the volumes, and that the amount of knowledge retained would not result in much (habitual expectation).

However, the wildest expectations were not only met, but exceeded to the point of blatant, but pleasant surprise. Not only was the consultant's knowledge captured in a most effective manner, but in the month that followed the consultant's resignation, it has already been established that the captured knowledge has made the transfer of an allocated consultant far more effective than any other previous effort.

4. Knowledge Elicitation Schedule

The organization was informed of the consultant's resignation toward the end of August 2005, with effect September 30, 2005. This provided for little more than a month in which the organization would attempt to elicit as much of the consultant's knowledge as possible.

The elicitation took the form of scheduled interviews / meetings between the student, Wim van der Merwe, and the consultant, Annaretha von Solms. The schedule was as follows:

<u>Date</u>	<u>Duration</u>	<u>Topic</u>	<u>Venue</u>
5/9	90min	Introducing Annaretha to aim, process and software to be used. Attempt to obtain buy-in. Determine Annaretha's areas of involvement.	Cape Town Boardroom
6/9	120min	Spilhaus Account Details	Cape Town Boardroom
7/9	180min	Bureau Involvement Details (including GKA account)	Cape Town Boardroom
9/9	180min	PathCare Account Details; Marketing Tools Portfolio	Cape Town Boardroom
14/9	150min	Foschini Account Details (including Conversion, Financials Upgrade and Re-evaluation of HR Systems)	Cape Town Boardroom
16/9	240min	CRS Career Management Workshop	Johannesburg Boardroom
27/9	180min	Truworths Project Involvement (including Employment Equity needs, Shares system details, Payroll auditing & controls needs)	Truworths Building Cape Town

The first session on September 9th was approached with relative care by the student, since it was seen as paramount that the consultant should subscribe to the goal of the effort. It was explained that in order to make the consultant's legacy be of longstanding tenure, it would be to her benefit to leave some tangible form of her knowledge behind.

Upon demonstrating the CMapTools software to the consultant, she was visibly impressed and mentioned that it reminded her of "spinnekoppies" [spiders]. The subsequent sessions were referred to as drawing "spinnekoppies" of "the cob webs in her head", and the student believes that the consultant started to look forward to these sessions to the point where she enquired whether she could use the CMapTools to map a workshop on Career Management herself (see 16/9). This was seen as a breakthrough by the student.

These slides were hardly edited at all, and the student thought it well to include the slides in the knowledge model to demonstrate the keenness of the consultant to use the software (see Career Management Development Project).

Every session had a focus point, and it seemed natural to choose the consultant's clients to be these topics. The fourth session on September 9th concerned the PathCare account which went relatively quickly, and left time to discuss the consultant's involvement in the Marketing Tools Portfolio.

The consultant had also been on a seminar on Provisional Tax, but since she had compiled a very extensive presentation on the topic, which she has presented to the other consultants on previous occasion, the student thought it well to rather include her presentation as a resource. This saved some time, which was limited to start with.

The elicitation sessions appeared to become easier as time progressed, with more and more knowledge being offered every time (and probably also due to the student becoming more skilled in the use of the software).

5. The Attributes of the Expert

The consultant's name is Annaretha von Solms, and she has been with CRS for just more than a year. Annaretha excelled during her training period and was at the point of starting the Client Relationship Manager development phase. She is getting married in 2006 and has decided to pursue a career in Interior Decorating.

Her positive attitude and willingness to contribute made her an ideal candidate to serve as "first attempt" to capture knowledge by the student. She understood the benefits to be associated with the process of knowledge elicitation for the organization, especially since she had to take over from another consultant who, at that stage, left very suddenly without providing any knowledge regarding the position that was becoming vacant.

Annaretha had three client accounts, namely Foschini, PathCare and Spilhaus. She also ran the payroll for a bureau client called Gert Kruger and Associates (GKA) and was involved in the marketing tools portfolio of the Western Cape region. Even though not being allocated to the Truworths account, she was involved in the Employment Equity Needs Analysis, the Shares System Needs Analysis and the Payroll Controls Needs Analysis workshops due to her skill in understanding and

interpreting the client's needs. Her involvement in the Career Management Development process was due to a personal interest.

6. Maps Used

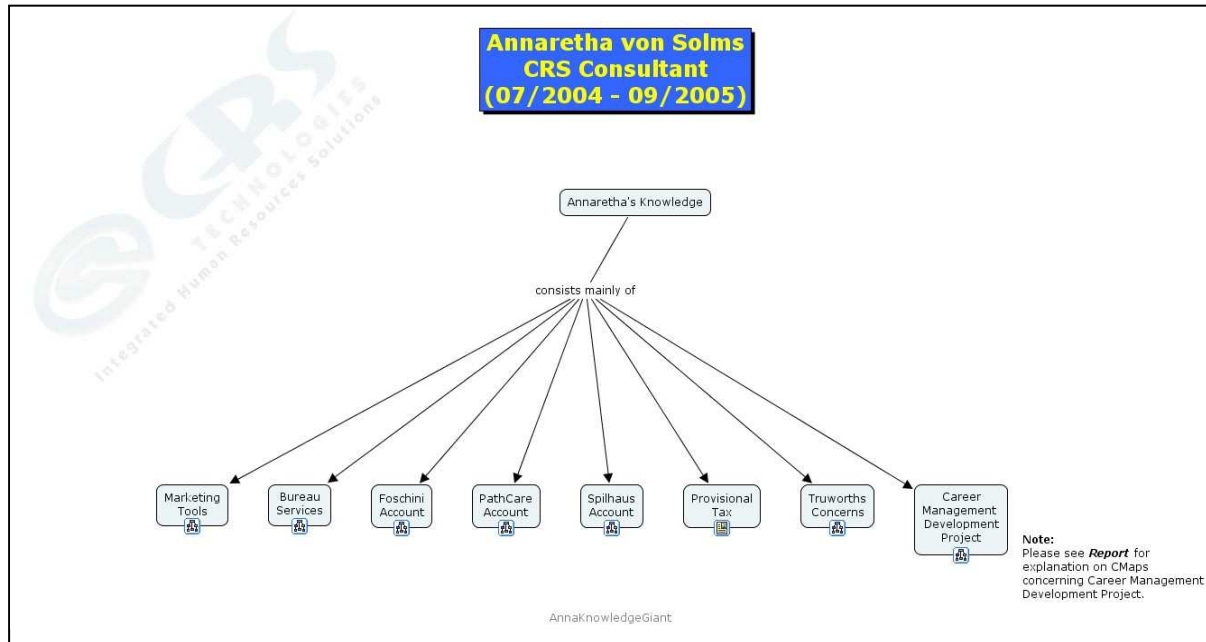
The nature of the knowledge the organization is primarily concerned about, is more informational than procedural. The activities and processes performed throughout the client base and also within the organization are fairly standard and shared among all the consultants and administrative personnel. The real concern when a consultant leaves, is the knowledge about that consultant's relationships with their clients, and if any, the current issues and projects at those clients.

The majority of the CMaps are therefore knowledge maps about the consultant's clients with knowledge about what is currently important to every client. It is this knowledge that CRS needs to maintain the very high, and expected, levels of support to the clients of a consultant once they've left.

The consultant's involvement in the bureau also included performing the monthly processing of a client's payroll. This process involved a series of activities with a number of check lists to be signed off every month. The map concerning Annaretha's Bureau Client: Gert Kruger and Associates (GKA) attempts to capture these activities and check lists.

7. Organization of the Knowledge Model

In order to make it easier for the consultant responsible for filling Annaretha's position, the student attempted to keep the CMaps as simple and forthcoming as possible. In order to achieve a global picture of Annaretha's knowledge regarding her position at CRS, a CMap called AnnaKnowledgeGiant was created.



The major focus points of Annaretha's involvement in CRS are presented on this map, and it serves as "table of contents" to all the aspects of her knowledge regarding CRS. From this map all other maps can be reached by following the respective links. The sequence of links are as follows:

Annaretha's Knowledge Giant

- Marketing Tools
- Bureau Services
 - GKA Account Details
- Foschini Account Details
 - Conversion to CRSv3.01 Details
 - SAP Financials Upgrade Details
 - Re-evaluation of HR System Details
- PathCare Account Details
 - eMail&Fax Facility Notes (MSWord document)
 - Additional Notes (MSWord documents)
- Spilhaus Account Details
- Provisional Tax Details (Powerpoint presentation)

- Truworths Concerns
 - Employment Equity Needs Documentation
 - Modular Integration around a vacancy created
 - Shares System Needs Analysis
 - Payroll Controls Needs Analysis
- Career Management Development Project
 - 12 unfinished, partly edited maps as attempted by the consultant

All maps are currently being used by consultants at CRS and the company logo was added to the maps as part of the organization's agreement on corporate documents.

8. Analysis of the Knowledge Capture Effort

This particular effort was initiated by the crisis of a consultant resigning, and the student was forced to come up with a way to effectively capture the knowledge that would otherwise be lost to the organization. What made the project exceptional was the fact that it was not merely a theoretical exercise, but had the potential to really add tremendous value to the organization. The real value of the effort has only come to light after using the maps for about a month after the departure of the concerned consultant - service levels to the relative clients have been maintained, if not increased, and then current projects have been either successfully completed, or are still underway successfully.

In addition, the CMapTools Software is being rolled out to the other three regions of the organization, and the student is currently attempting to demonstrate the powerful and valuable tool for eliciting and modelling knowledge not only from consultants and internally, but also by using it during workshops and needs analysis exercises at clients.

Not surprisingly, the CMapTools Software has emerged as a very powerful but easy way to document knowledge about the CRS Software solution, and is currently being reviewed as an option to assist in generating supporting material for the application.

The student has also managed to setup a CMap Server and aims to further initiate the sharing of not only knowledge regarding the formal work environment, but also more toward the extremely tacit knowledge surrounding hobbies, gardening, travel and the like.

9. References

COFFEY JW, ESKRIDGE TC, SANCHEZ DP. 2004. *A case study in knowledge elicitation for institutional memory preservation using concept maps*. Pamplona, Spain.