**Bachelor thesis**

***Knowledge management in***

***Clube de Galitos Remo***



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**Word in Advance**

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Hereby I present my final thesis for my bachelor in Public Administration and Organizational Sciences at the University of Utrecht. This is the report of my research about knowledge management in rowing club ‘Clube de Galitos Remo’ from Aveiro, Portugal. In volunteer sports organizations like the rowing club there is a treasure of knowledge but often this is not well enough guarded and used. The concept knowledge management focuses on this part and can help organizations work more effective and improve on the area of knowledge. This helps in reaching the goals of the organization.

Since I was young I always was involved in different sport club in different ways. When time passed and I got older I got more and more got interested in how the club can be organized the best, with as less resources as possible. One subject that interested me in particular was knowledge. Often there is a lot of knowledge in the organization and with the people of the organization but that knowledge is hardly used. I was interested in a way that these knowledge and resources could be used more effective: knowledge management.

The ability to research this subject in a rowing club in Portugal was an unforgettable experience. The last few months is didn’t learn just things about the subject and doing research. I also learned a lot about a sport and a country that both always will stay very special to me.

In this experience a lot of people where important to me. To start I would like to thank all the people from the rowing club who have received me with open arms. In particular my thanks for the participants, who made time to talk with me, made the effort to speak in English and were very open to me. I would also like to thank my teacher Maikel Waardenburg, for the feedback he gave and his patience with me. Some of my fellows Erasmus’ also deserve thanks, because they listened to me and helped me with some grammatical question. The last thanks goes to parents who supported me from far by just having trust in me and gave me a pep talk at the right moment.

For now I would like to wish you pleasure with reading.

Anouk Eggen

**Contents**

Word in Advance Page 3

Contents Page 4

1. Introduction Page 5

1.1 Reason

1.2 Objective

1.3 Questioning

1.4 Reading guide

2. Methodological justification Page 8

2.1 Research paradigm

2.2 Research methods and motivation

2.3 Core concepts and operationalization

2.4 Research population

2.5 Description and justification of analysis methods

2.6 Reliability and validity

3. Theoretical framework Page 14

3.1 Knowledge

3.2 Knowledge management

3.3 Volunteer organization

3.4 Volunteer organization and knowledge management

3.5 Justification of theoretical framework

4. Analyses of research results Page 22

4.1 Introduction

4.2 Knowledge in the club

4.3 Characteristics of knowledge management

4.4 Problems in the club

4.5 Opportunities

5. Conclusion Page 41

6. Recommendations Page 44

7. Discussion Page 46

References Page 48

Annex 1: Topic list Page 50

**1. Introduction**

In the world of sports, records after records are being broken. We know more about how to make swimmers, boats or ice-skater go faster, but at the same time we have more and more questions. The amount of knowledge we have now is almost endless. For everyone, but especially for those who are not professionals, it is hard to divide the sense from the nonsense, or to keep up to date with all the new findings. But for athletes who want to be and stay on top, this is one of the necessary things.

In the world of volunteer sport organizations a system to organize the information and which helps to keep improving the knowledge is much needed. One concept that can provide a solution is knowledge management. Until now this concept has mainly been used in large, private organizations. For the sport organizations, which are often smaller organizations, this concept could also provide a solution. This concept helps to improve the development, use and internal flow of knowledge in the organization in the most effective way; things that they need to be able to stay on top. And this is what they want, because being in the top is the ultimate goal of every sports organization.

* + 1. **Research topic**

In comparison to fifty years ago, the sport organizations of today have different challenges to deal with. The first is the unimaginable amount of knowledge from which they have to filter there information. Others are the scare availability of resources and time, which can be explained by worldwide developments like individualism, more two-income families etc. Then there are the expectations of society which can be very high; they want an organization with high rankings, that gives good education to there kid and so on. To cope with all these different challenges good knowledge management is needed. Without knowledge management the organization will not be able to satisfy all the expectations and stay alive in this society that goes very fast and never looks back.

In this research we are going to research the presence of knowledge management in a small rowing club of the city of Aveiro, Portugal; Clube de Galitos Remo. We will look at how the knowledge and knowledge management itself has manifested there. We will also look at the challenges and opportunities that the club has experienced in relation to knowledge management.

**1.1.2 Organization**

The rowing club in Aveiro is an organization where a lot of information and knowledge comes together; knowledge about rowing itself, how to teach it, and also about how to govern an organization. This makes the rowing club a place where the use of knowledge management can be very effective and can lead to improving the club.

Clube de Galitos Remo is a rowing club situated in the north of Portugal in a small town called Aveiro. The rowing club is part of a bigger sports organization called Clube de Galitos. Both Clube de Galitos and the rowing club have each their own board. They govern the organization which provides rowing ‘classes’ every day for its members in all age categories. In the national competition of Portugal the rowing club is quite successful. In the history of the club a lot of national titles in different categories have been won by the members of the rowing club.

**1.2. Objective**

The objective of this research is to create insight in how knowledge management is being used in the rowing club of Aveiro and what this means for the organization.

The results of this research can be used to improve the use of knowledge management in the rowing club. By improving the use of knowledge management the organization can function better and achieve better results. The good use of knowledge management can help to prevent information loss, not only about the rowing, but also about the organization of the club and its members.

Besides the use of this research for the rowing club, the research gives an insight of how knowledge management is being used in a small volunteer organization. In the literature so far there is almost only information about knowledge management in private organizations or large governmental organizations. This research is an addition to the already existing information about knowledge management.

A last value of this research is for the researcher herself. Walking through this research process and writing the research report, is a learning process for the researcher about how to do good qualitative research.

**1.3 Questioning**

The main question that will be used in this research is:

*How do the members of Clube de Galitos Remo give meaning to the concept knowledge management and how is this expressed in their club?*

To answer this question interviews will be held with members of the rowing club and some of the documents of the club will be analyzed. The main question is divided in sub questions so that it can be answered more clearly and easily. Here the sub questions will be mentioned including the main goal of each of the questions and how these goals will be reached.

In this research there will be four sub questions:

*1. What kind of knowledge is being used in the rowing club?*

The first question will give us a more general introduction about what information there is in the club and how they look at information. Concerning this, some things can be found in the documents. To answer the rest of the question the interviews will be used to find the information. An example of a question asked in the interview is: where do you get your main information from?

*2. Which characteristics of knowledge management can be found in the club?*

This question will bring us deeper into the main subject of the research. This question is about the core concept, knowledge management, and how this is represented in the club. To be able to answer this question we have to know from the members what they know about knowledge management. They will also be asked how they see this concept in the daily and long term work of the club. Then some aspects of knowledge management in the club will be compared with some aspects of knowledge management that will be described in the theoretical framework.

*3. Which problems are there in the rowing club and how to these problems obstructs the use of knowledge management?*

We can’t expect from an organization that everything goes perfectly. And in a sport organization like this we can’t expect that knowledge management is perfectly implemented.

The problems in the club will be identified through the documents as well as by asking the participant the problems that are in the club. The participants will also be asked how and why these problems can prevent the organization from making knowledge management optimal. This question is also an important base for the answer to the next question.

*4. How can the knowledge management in the club be improved and how can this contribute to achieving the goals of the club?*

The last question is about trying to take the view on knowledge management in the club to a next and higher level. In the previous question we found out the current states and the problems of knowledge management in the club. Now the participants will be asked their perspective of the possibilities to improve: What do they think could be better and how? Why is it important to improve that specific thing? By asking these questions we can know the positions of the members for this last question.

Together the sub questions give us a complete view about the situation of knowledge management in the club. After the sub questions are answered, the main question can be answered and conclusions can be drawn. Now we have a good view on how knowledge management has manifested in the club, including problems and possible ways of improvement. Based on this information, several recommendations to the club can be formulated.

**1.4 Reading guide**

In the second chapter of this report all the used methods will be explained and justified, in which the research paradigm will also be mentioned. The next step is the theoretical framework that will be sketched in chapter three. In the fourth chapter, the analyses of the results will be explained: the way that knowledge comes up in the rowing organization, the aspect of knowledge management in the club and the problems and opportunities there are in the area of this concept. Some conclusions about this will be drawn in chapter five, where the main question will also be answered. Chapter six, the recommendations, will give recommendations to the rowing club about the concept of knowledge management. And finally in chapter seven we will discuss some things that concern feedback on the research.

**2. Methodological justification**

When conducting research it is important to explain and justify the research methods that are being used. The choice for some kind of research methods will influence the result of the research. In this chapter the research methods that will be used in this research will be described including the pros and cons of the methods.

After that, the core conceptswill be defined and operationalizated. There will also be a definition of the research population and a description of the selection mechanisms being used for this population. Finally reliability and validity will be described and the used research paradigm will be explained*.*

**2.1 Research perspective**

The goal of this research is to find out what role knowledge management plays in the rowing club of Aveiro. To support the goal of the research it is important to choose a research perspective and to clarify this. The research perspective can be seen as glasses through which the researcher sees the world. By describing the research perspective the researcher shows how he sees the world. This can give some opportunities, but can also give some restrictions to the research. The research perspective exists of different parts from which the first is ontology. This represents what is being seen as the reality. The ontology influences what kind of knowledge is being collected in the research. Here will be explained what the knowledge perspective is that is being used in this research, by the use of two sources; the discourses of Alvesson and Deetz (2000) and the views of Woolgar (1996).

Alvesson and Deetz describe four discourses, which are built from different combinations of the original concepts and problems which are local/emergent and elite/a priori. This combined with the relation to social dominant discourses as dissensus and consensus.

In this research the base of the research is a base of theory and the goals of the research are clarified in advance. The goal of the research is to have rational knowledge as output. This thing can be scaled under elite/priori as being described by Alvesson and Deetz.

In this research both of the social dominant discourses find some truth. According to consensus the search for order is one of the dominant aspects of natural social systems. In Knowledge management this aspect is very important, because people are looking for systems by which they can store knowledge. This discourse is explained by the mirror metaphor; things are like you see them. The other discourse, dissensus is often explained by the lens metaphor; people realize that things can be different when you look in a different way. This discourse also finds some ground in knowledge management, this is because learning from others is so important and it is the reason why you always have to collect more and more information.

By combining these aspects four different discourses can be formed. The critical theory discourse, which comes from a combination of elite/a priori and dissensus it the one that fits best for this research. Organizations are seen as social historical creations, which are a result of battle and dominance. The battle can be seen as the battle to survive in a world with a lot of competition but also the battles such as lack of money, or interests of volunteers. With the research some asymmetries and dominant values can be shown, so that by this the organization can be improved.

Woolgar describes three views, the naïve reflection, the meditative view and the constitutive view. Mostly between natural science and social science there is a strong debate about which view is the best and most valuable way to use for research. In this research both the meditative and constitutive view are used. The naïve reflection is impossible for almost all science research because it is based on universe reality.

In this research the result will not only be based on what the researcher thinks, but also on what she sees and knows. Not everything is directly accepted as true and it is realized that as researcher you influence the reality as well. This research is based on these assumptions and this has big impact on the way of doing research. First of all the background knowledge of the researcher is important, because it influences the result. This is because of the way information is interpreted. This interpretation also happens on the side of the participant, they create their own way of seeing the reality, which is influenced by their experiences. It is important to be aware of this fact.

The last view is the constitutive view, in which language has a large role. This view is less followed in the research as the meditative view, but still has influence. The constitutive view sees reality as construction of processes of interaction which are language based. Deriving sense is a social occasion and science is just one of the ways to construct reality. The way that experiences are put down in words and how they are shared, influences the result.

By the use of the literature of Alvesson and Deetz and Woolgar, the perspective that will be used in this research are put down in words and explained. The main perspectives that will be used in this research are the critical theory discourse and the meditative and constitutive view.

**2.2 Research methods and motivation**

This research is based on qualitative research methods. The first research method that is being used is interview. In the Dutch literature an interview is being described as “a type of conversation in which someone – the interviewer-­ himself determines to ask questions about behaviors, views, attitudes and experiences regarding to certain social phenomena, to one or more others, the participants or interviewees–, who themselves mainly limit to answering the questions.”(H. ’t Hart, H. Boeije en J. Hox, 2005: 274 – own translation). The interviews will be half structured/half open, which means that there is a brief manual for the interview. Before the interview there will be a prepared topic list, which will be a guide, but during the interview there is the possibility to depart from the list.

The second information source consists of documents of the organization. The types of document are annual reports, membership documents, records of general membership meetings,long-term plans etcetera. The information in the documents represents the official plans and information about the association. This information can also be used to place the information from the interviews in a framework*.*

For this research qualitative research methods will be used, because they result in specific and detailed information. The specific method is interview, which is ideal to gather specific and detailed information. The reason for this is because you have the possibility to go deeper into the subject with the participant. Interviewing also gives the opportunity to follow the story of the participant, more than in, for example, a survey. This means that you can get more information that is important from the participant’s point of view. This information you may never get with other research methods.

The document have added value because they represent the official strategy and plans of the association, but also information about the life of the organization and how it develops. Besides that, from the documents you can see which topics are seen as valuable by the association. The documents make it possible to ask about specific topics that are interesting particularly for this organization.

The combination of the interviews and documents is valuable because some contradictions may arise. The personal experiences can be equal, editing or contradicting with the document. These types of research methods together represent a good view on the association and everything around it.

**2.2.1 Advantages and disadvantages**

The goal and type of research determines the type of research method that is being used. Some research methods serve the goal of the research better than other. Which method should be used can be decided after knowing the goal of the research and after considering the pros and cons of the different methods compared to the goal of the research. For this research interview is the best method, supported by the analyses of the documents.

Interviews have two big advantages above other methods for gathering information. The first is that you can come to know some things about subjects you as a researcher didn’t think of. Because the participant can tell what he thinks is important and has time to tell, other subjects than those that are on the topic list can come up. The interviewer can decide whether the information is relevant and wants to know more about it. In this way for example, problems can come up that the researcher never knew of or were not apparent. Because there is a small distance between the information and reality, the internal validity of the information is expanded (H. ’t Hart, H. Boeije en J. Hox, 2005). A second important aspect of interviews is that the information that is being received not only is about what, but also why. There will be more information about underlying reasoning, which helps the researcher in creating understanding in the situation. Both of these advantaged are being caused by the personal and open situation that is being created during the interview. A last advantaged of interview, compared to survey is that the participant is not influenced by the possibilities of the answer given by the researcher. In this way the answers are closer to their day to day feelings about the subjects.

Using interviews also has some disadvantages, mainly that it influences the structure in the research and by that the possibility to control it. The way an interview transpires depends both on the interviewer and the participant. The result can be influenced by interpretations of both parties involved. Another disadvantage is that the researcher could be too involved, which influences his independence. The researcher doesn’t have the roll of an outsider anymore; this is called ‘going native’. (‘H. ’t Hart, H. Boeije en J. Hox, 2005). One aspect of interviews that can also be seen as a disadvantage is that it costs a lot of time and energy, of the participants in particular.

**2.3 Core concepts**

The core concepts that are central in the research are: knowledge, knowledge management and the volunteer organization. The concepts will be more extensively defined and explained in the theoretical framework. Because of the operationalization, a short definition will be given first.

Knowledge is seen here not just as knowledge of facts, but also as something that is ‘about norms and values, views and attitudes, intuitions and feelings, experiences and skill, and expectations and ambitions – about all the things that make a human into an intelligent creature and who form the basis for its thinking and acting, and of the way people communicate with each other and work together.’ (Mackenzie Owen, 2001)

‘Knowledge management is in our eyes an approachthat put the roll of knowledge in and for the organization in the centre, and itself targets to adjust and to support knowledge work, so that the added value of knowledge can be optimized.’ (Frowein, 1998)

A volunteer organization is ‘a, formal or informal, organized connection between different people who regularly meet and/or organize activities for public interest, for which all revenues are used for the purpose of the organization and the implementation of the primary process is done by volunteers (Movisie).’

**2.3.1 Operationalization core concepts and justification**

Through interviews and the analyses of documents more information about knowledge and knowledge management in the rowing club must come up. It must be clear how these concepts play a role in the organization and how that is being structured. The operationalization of the concepts happens in the topic list, which is being used for half structured interviews. The topic list can be found in annex 1. The operationalization can also be used for the analyses of the documents because documents with the same theme were used for the research.

To shape an image of the structure of the rowing club and the involvement of the participants, the first question will be about what the role of knowledge management is in the rowing club. The next thing that will be asked is what they know about knowledge management. What they say to know about knowledge management can influence the other questions in the interview. The next questions will be about how they say knowledge management comes up in their organization, what their experiences are and how this could be approved in their opinion. During the interview knowledge management will be approached as everything that has to do with controlling and the approach of knowledge in the club.

**2.4 Research population**

The research population exits of members of Clube de Galitos Remo, the rowing club of Aveiro, Portugal. The different participants have different positions in the club, such as rower, coach, board member etcetera. All the participants are closely connected with the club, but in a different way. Some know more about the rowing and information that is involved there, others know more about the organizational aspects of the club. The amount of participants is based on covering all the different positions in the club and all the different views, to gather a view that is as complete as possible. It is also intended that the research population will give as broad a reflection as possible; this is the best way to get the most opinions, ideas and information.

According to Walsh (2004) there are three dimensions on which research units are selected: time, context and people. The duration of the research, which is very short, excludes the element time. The context of which the participants are selected is Clube de Galitos Remo. The last dimension is people, and in this case is the most complicated dimension. With the selection of the people several elements are included. The most important one is their knowledge about the rowing club. For example, a member that just entered two weeks ago is not valuable for this research. Another important thing is that the different participants have different views and knowledge. That is why people from different positions in the club are selected. A last element that is used in particular for this research is their ability to speak English. The selection of participant is being done with the help of one of the board members. This to make sure that the needed variation will be reached. Also because this was in some times the only way to get in contact with the intended participants.

**2.5 Description and justification of analysis methods**

Analyzing is the processing of datainto results and conclusions. In this research mainly the information of the interviews must be formed into result. For this reason the way that the interview will be analyzed is important for the whole process of interviewing. Before the start of the interviews, a topic list is prepared. This list is the guide for the interview. The tape of the interview will be transformed into a transcription. In these transcriptions all types of statements will be put under a theme, in a process called coding. The themes will be determined on the basis of the operationalization and things that come up in the interviews. To make the themes more recognizable, each theme is designated a color. After that all the statements about a certain theme can be put together and be compared.

For the documents the same system will be used. During reading the statements about different themes will be ordered by color. This data can be compared, also with the results from the interviews. The findings that this produces will be put down in the results and from these conclusions can be made. This way of analyzing is the best form that can be used when there is a lot of unorganized information. It creates order, this makes it easier to compare and draw conclusions.

**2.6 Reliability and validity**

Reliability and validity are two concepts that come up in the discussion about the quality of the observations. The quality of the observations is influenced by the quality of the operationalization which in turn influence the quality of the result and so the quality of the research. A good research is built on reliable and valid information.

Results are reliable when there are no random errors made. In interviews random errors occur because of other not directly related things that happen. These can influence the perspective of the interviewee. An example is that a rower just lost a match and that he thinks he has a bad coach, while normally he is very satisfied about the coach.

The reliability of the information of interviews is influenced by a number of factors. The first of all is that people are not 100 % rational. Some things are remembered better, like bad experiences. They will tell about those bad experiences, but not the good and this makes the results less reliable. Because people are not aware of their own behavior, the answers they give are often not complete. It also happens that people leave things out on purpose; they give socially desirable answers because sometimes the participants do not want to say what the really think. This makes is hard for the interviewer to find out the truth. The interviewer could also make some mistakes that influence the reliability. To make a research more reliable, the research population should be bigger. In this case the random errors eliminate each other.For qualitative research this however is a problem, because there is not enough time to take a lot of interviews.

When we talk about validity we are talking about the validity of interpretations. Swanborn (1997) describes different kinds of validity, from which three are important for this research. The first one is content validity, which has to do with the interpretation of concepts in the research methods. Are the concepts clear for the participant, does it include all the aspect and does it exclude all irrelevant things? In this research interview is the research method and that makes the validity on this aspect quite high. This because there is the possibility to intervene; the researcher can ask more question about one topic and adjust during the measuring. These aspects also make that the internal validity is high. Internal validity is about the way conclusions are drawn. Are the conclusions based on reliable result and how can be avoid that results are misinterpreted? As said, the possibilities you have in interviews make the results reliable and by asking more and more questions misinterpretation can be avoid.

The last type is external validity, which is about the scope off the results and conclusion. If you have a general context and a big research population, the conclusions can be used to state a general conclusion. Because this research is in a specific context and the research population is small, the result are not external valid. There can’t be made any general conclusions from the results of this report.

**3.Theoretical framework**

**3.1 Knowledge**

Knowledge is a concept that is used a lot in day to day live, but the meaning of it is never really clear. In literature different definitions of knowledge are being used, the definition is also depending on the subject of the article. The basic definition of knowledge is that is knowledge exist of all the facts that people can learn conscious. Mackenzie Owen (2001) adds to this that knowledge is not just the things we know. Knowledge is also about norms and values, intuitions, feelings, experience and skills, expectations and ambitions. Others (website informatiebeheer, 2009) say that knowledge is the ability that someone enables to do a certain task by connection data and let it react with own information, experiences and attitudes. Another definition comes from Diepenveen (2004), she says that knowledge the result is of learning, and that it is not something fixed, but something that continuously has to be adjusted and updated.According to Nonaka and Takuechi (1995) knowledge can be defined as a by ‘information produced belief that is anchored by the commitment and beliefs of the individuals and organizations that possesses it.’

Before a good definition of knowledge for this research can be formed, to basis assumptions about knowledge must be explained (Weggeman, 1997*).* The first assumption is that knowledge can not exist outside an individual. Knowledge can still be stored in a system, but because the information loses its meaning, it becomes a set of data. When meaning is added, data turn into information. The information turns into knowledge when it is being used for action. This brings us to the second assumptions about knowledge. Knowledge is an ability, a personal ability that makes persons able to do a certain task.

Mackenzie Owen (2001) has made a definition in which these assumptions can be found, this definition of knowledge will be used in this research. ‘*Knowledge is not just knowledge of facts, but also about norms and values, views and attitudes, intuitions and feelings, experiences and skill, and expectations and ambitions – about al the things that make a human into an intelligent creature and who form the basis for its thinking and acting, and of the way people communicate with each other and work together.’*

**3.1.1 Tacit and Explicit Knowledge**

It is possible to classify different kinds of knowledge. One important classification between knowledge types for organizations is made by Nonaka (1994). He makes the distinction between explicit and tacit knowledge.

Explicit knowledge is the kind of knowledge that is easy to put under words, this knowledge can be codified and transferred easily. People collect this knowledge mostly for example through reading and listening. Because the information does not depend on personal experiences, it can be transferred through simple and impersonal communication mechanisms. The mechanisms to think of are electronic communication, books, articles, and even policy and procedural manuals.

The other type of knowledge is tacit knowledge, a type of knowledge that is mainly collected through experience. This type of knowledge is hard to put under words. The result is transferring the knowledge from one individual or organization to another is extremely difficult. Nonaka and Takuechi (1995) say about tacit knowledge: ‘it is deeply rooted in action, commitment, and involvement in a specific context.’ The main way to increase tacit knowledge is through learning by doing. Some things we learn are too abstract to give words to it. In general ‘we can know more then we can tell’ (Polanyi’s, 1996). To transfer the knowledge from one to another is difficult when it can not be put under words. The best way to transfer is by having interaction with experts.

Nonaka en Takeuchi (2005) add a third kind of knowledge to this. This knowledge is called external knowledge and can be very important for an organization. External knowledge is all knowledge that is in and available from the outside world. This third kind of knowledge is important because there is always relevant information outside the organization. Putting an accent on the external information can prevent organizations from only looking inside. Looking outside can be useful in helping to take the information inside at the right time.

**3.1.2. Development of knowledge – emerging knowledge economy**

Until the end of the 19th century knowledge was being used primarily for the development of tools and products. In the society of today knowledge has a totally different function. Knowledge is being used to create new knowledge. These changes in the use of knowledge passed in different stages and had different causes. Primarily in the industrial revolution, from 1750 until 1880, knowledge was being used to make tools en products. The second stage in the change of the use of knowledge was the production revolution, which was from 1880 until 1945. In this stage knowledge is being used to design labor processes. The last stage so far is the management revolution, the stage in which we are now. Knowledge has a more and more important role and the economy and the organizations functioning in it are depending on the knowledge. The modern economy is often also called the knowledge economy.

Four major developments (Jacobs, 1996) are the cause of the emergence of the knowledge economy, the first is computerization and digitization. Computerization and digitization is about the broader use of information and communication technologies. In general we can say that the result is that al the processes in the organization go better, faster and more organized. This development makes is possible to use information no matter where you are, or what time it is. Because of this it becomes more and more important to be able to use the information on a right way. Not the possession of knowledge is what kinds, but the way the organizations deals with the knowledge.

Another development is that the lifecycles’ of product and technologies are shortened; this is caused by the use of the new information and communication technologies. Information is more accessible and earlier available. In order to keep clients, the new products are coming faster and faster. It is important to know what to competition is doing and this asks a lot of the knowledge of the organizations. Nowadays the organizations have to have a lot of knowledge about what is going on both internal and external.

The third operative source for the knowledge economy is dematerialization. Not the technologies are the things an organization can beat the competition with anymore. All the technologies are available for everyone, as an organizations you can not have any advantage from this. Nowadays knowledge about immaterial things can give you a head position.

The last development is the emergence of the network economy. It was called the network economy because the human networks became more and more important. In this economy people and organizations specialized on what there are really good at, the rest of the necessary information they get trough networking and working together. A challenge of this network economy is the organizing the networks.

The different stages together lead to what we call the knowledge economy. The most important elements of the knowledge economy are (Frowein, 1988):

* Alpha and Gamma knowledge is getting more important, next to science knowledge*.*
* An advance on the competition can be made by making products and processes continuously more specialized and more knowledge intensive.
* Complete offers are given to the client n combination with partners who can offer the necessary additional and specialized knowledge.
* The necessary to build on a extra competences in the organization, the so called learning ability. By doing this an organization can be part of the dynamic economy instead of always being one step behind.

**3.2 Knowledge management**

In this part the core concept of this research will be explained. First the emergence of knowledge management will be described, followed with a definition of knowledge management. Than different currents in knowledge management will be put down and finally different components of knowledge management will be described.

**3.2.1 The emergence**

In the knowledge economy as we know it in this modern society we expect a lot of organizations. To stay in the competition they have to have a lot of knowledge and have to be able to anticipate on changes which are always waiting around the corner. More and more knowledge that they need passes by with the modern information and communication technologies, but another important part is often in the heads of the experts. The availability and interchangeability of knowledge also has to be higher because of the large dependency between different organizations from allover the world, in all areas. Al these things explain why there was such a big need for a way to handle all the information. The thing that has come up is knowledge management.

A window of opportunity for the emergence of knowledge management had to do with the new developments in the area of information and communication technologies. With these developments it is possible to support high standardand knowledge intensive work. But the information and communication technology just led to the improvement of the structuring of the administrative processes. Knowledge management comes in and focuses on substantiveknowledge intensive processes. The use of knowledge management is about using the information technologies in a different way. It also brings a new way of thinking in organizations: ‘The quality of knowledge in an organization is of strategic significance.’ (Mackenzie Owen, 2001)

A last reason for the emergence of knowledge management is that is has become more and more important for organizations to keep learning. Knowledge management can help with this because it structured information and makes it broader available in the organization. When information is structuredwell, employees have easier access to new information which can help them in doing there job. An organization that has shared knowledge and knows how to learn from this will have a strong position in the competition*.*

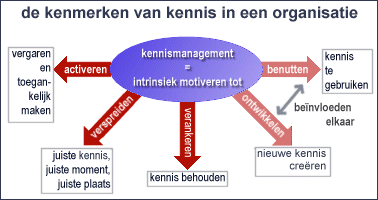
**3.2.2 A definition**

The aim of knowledge management is to control knowledge and make the profit and added value of the knowledge as big as possible. One of the assumptions for knowledge management is that knowledge can be identified and mapped. That some procedures for the generating, controlling and application of knowledge can be made and that this knowledge can be put in information systems. For this the modern information and communication technologies create good opportunities.

The controlling of knowledge is fixated on getting crucial information through the organization on the most effective way. Important in this is that the information has to be at the right time at the right place. A thing that has to be said is that crucial knowledge is not by definition scarce knowledge, although scarce knowledge can be crucial. The crucial knowledge is that knowledge that contributes to the goals of the organization (Diepeveen, 2005).

It is also possible to say that knowledge management is about developing and sharing knowledge in such a way that performances will improve. The knowledge can be shared through documents, information systems and networks. The knowledge that is shares has a central role in the organization and can not be controlled by one department.

The aims and goals of knowledge management are seen different by a lot of people; this results in different definitions of the concept as well. In the eyes of Frowein and Mackenzie Owen (1996) knowledge management means ‘that the organization is dependent on knowledge that is in the heads of employees, of the gained experiences and of the knowledge available in documents and information systems. That is also about knowledge in there own business processes (internal) and knowledge about what is happening in the outside world (external)’. Triam (2009) approaches knowledge management in a different way. According to the Triam institute, knowledge management is at the same time the development, use and maintenanceof six different competences. The competencesare; to motivate, activate, spread, anchor, develop and to use knowledge. This idea is being visualized in the schedule.



The definition used in this research does not disagree with the other definitions about knowledge management, it only puts the accents different. The definition used comes fromFrowein (1998): *‘Knowledge management is in our eyes an approach**that puts the roll of knowledge in and for the organization in the centre, and itself targets to adjust and to support knowledge work, so that the added value of knowledge can be optimized.’*

**3.2.3 Stock- en flow approach**

In the use of knowledge management differences can appear from organization to organization. In the literature one of the most important differences in knowledge management use is being described. This difference is a difference between the ways that the knowledge infrastructure of an organization can be designed, the two currents are called the stock- and flow approach.

*Stock approach*

In the stock approach knowledge is seen as something that can be replaced objectively from one person to another or from one person to a source where it can be saved. This means that knowledge can be used independentfrom time, place or persons. Knowledge in this view is a product of some unique properties which can be seen as a tangible object*.* One of the main study objects of the stock approach is the way how to safe information in systems and databases. They search for a way to model the knowledge. Mathematical methods are being use for saving information and for this creating new information is needed. To solve issues that come up in the knowledge management, people focus on different kinds of knowledge systems, databases etcetera. They focus on the different ways by which knowledge can be modeled*.* In Western Europe this approach is the most popular.

*Flow approach*

The starting point of the flow approach is that knowledge is not objectively transmittable from one person to another. This because the knowledge is depending on the experiences of his carrier. Seen from the flow approach the knowledge will be influenced by subjective values during every transaction, this can be conscious or unconscious. The focus of the flow approach is to promote and support communication between the individuals in the organization. By creating different moment to meet, joint learning processes can be started. This vision requires a lot of the organization. To make the knowledge go through the organizations smoothly, they have to organize possibilities to exchange the information. Examples of these activities are presentations about the running subjects, information markets and days for special topics*.* One requirement is that there is a possibility to exchange information face to face.

Even though the approaches are very different, they don’t necessarily exclude each other. The methods of both perspectives can be used in the organization together and in most cases this even leads to the best way of exchanging the knowledge. For example a face to face transfer can be supported by new information technologies, or the other way around.

**3.2.4 Strategic and operational component**

In knowledge management the main goal is to support and control knowledge so that the added value of knowledge is as big as possible and can be used is most optimal way. This knowledge can be divided in two major components: strategic and operational. The bases of this dividing are the main goals and subjects of the knowledge (Frowein, 1998).

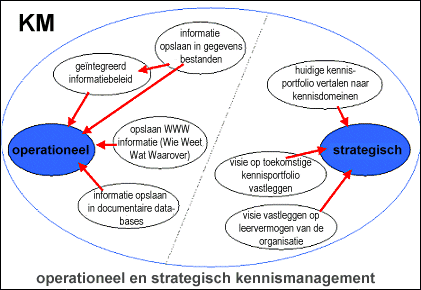
*Strategic component*

The knowledge that is important in the strategic component is mainly knowledge about the organizations itself. For example which are the subjects the organization knows a lot about; the knowledge portfolio. Knowing which knowledge you have is important for two things. The first is that you can create ‘knowledge domains*’*. These knowledge domains can be professional as well as about the competences of people, groups or the organization as a whole. The second thing that can be accomplished is deciding which knowledge will be needed in the future. The strategy that comes up in knowledge management is equal to the strategy that is being used for the organization as a whole. To keep improving the knowledge portfolio, good learning abilities of the organization are required*.*

*Operational component*

The operational knowledge is about the knowledge that is used in the day to day work and the way the organization deals with this knowledge. The systems that are there already are a good way to approach this knowledge. Knowledge management makes sure that the entrance to these systems is clear and flexible. Important is that there also is a connection to the implicit information that is in the heads of the employees.

Operational knowledge management can be seen as a continuation of good information management. To keep the level up, in the day to day work there have to be effective learning processes.



In the picture the different aspect of the different components are being visualized. Important of these components and knowledge management in general is that it is not a specific department in an organization that can control the knowledge. It can be seen as an integral aspect and this means is has to be tailored to the other management aspects of the organization.

Source: [www.geocities.com/kennismanagement](http://www.geocities.com/kennismanagement)

**3.3 The volunteer organization**

In most cases the volunteer organization produces a product that is untouchable. About the volunteer organization also can be said that often there is interaction between the ‘costumer’ and the organization. This is why we consider the volunteer organization as an organization in the service sector (Van der Aa, Elfering, 2003). Assuming this we can say the following about the volunteer organization. The customers, active participants or members, are also the performers, participants like all others. A core value of the organization; commitment to the mission is expected. The core task is to maintain the collective involvement of members, in which a structure of informal connections is appropriate (Gastelaars, 2006). A definition of a volunteer organization highlights different aspect of the organization. The definition that will be used in this research is: *‘A volunteer organization is a, formal or informal, organized connection between different people who regularly meet an/or organizes activities for public interest, for which all revenues are used for the purpose of the organization and the implementation of the primary process by volunteers is done.* (Movisie)*’*

**3.4 The volunteer organization and knowledge management**

Normaly knowledge management is being used in the private sector or in large public organizations. This does not mean that knowledge management in other sectors can not be of any use. In a volunteer organization knowledge management is important as well and can create a better and more effective organization (Van Gorp, Lam, 2002).

**3.4.1 Added value**

In the volunteer organization there are lots of issues that can be managed and solved through knowledge management. Here some of these issues will be discussed and explained why knowledge management can be so important for these issues.

*Management of motivation*

In volunteer organizations everything depends on the motivation of the volunteers: if they are not motivated, the organizations will have a hard time staying alive. Why people are motivated can have lots of reasons. One person can be motivated because of personal development. Some may join the club because they want to develop their own talents and qualities, want to learn from others or want to experience. Another person in the same organization can be there because of social involvement. His motivation is to meet people, help them and share knowledge and abilities with others. Important for the organization is to make space for these personal motives and keep people enthusiastic. Knowledge management can help in finding out what the volunteers want and can. This can be used both to motivate the volunteers and reach the goals of the organization.

*Continuity and Coordination*

The modern volunteer organization is different than the volunteer organizations of hundred years ago. Developments that have influenced society have also influenced the volunteer organization and the volunteers, developments like flexibilization, individualization and more people that both work and have a household. This makes that people are more conscious and critical about what the do with their free time. For the volunteer organization this means that they have to adjust their work and they have to structure their organization again. They also have to respond on what the volunteer has to offer. All this asks for more coordination and for this coordination knowledge management can be used. Making the volunteer work more flexible is good for the use of the potentials of the volunteers, but the knowledge transferis in danger when this happens. To keep continuity in the transfer of information and knowledge, this subject requires extra attention.

*Quality*

A last issue that will be discussed here is quality. As said above, the volunteer is more critical about what he will do with his time and in which organization he will spend it. To win some volunteers, the quality of the organization is really important. Not only the volunteers, but also clients and other interested persons attach values to the quality of the organization. Knowledge management can help improve the organization in a lot of different ways. This can be simple through putting primary processes and deals on paper. But it can be more difficult for example by using external knowledge sources or improving internal learning.

**3.4.2. Challenges**

Unlikethe private sector, the volunteer organization does not have a lot of money, time or manpower they can invest in the implement knowledge management. This leads to some challenges, for example when we talk about learning and gathering knowledge. The volunteer has his normal job to do, so often he does not have time to go to an extra information course. Another thing is that documents and archives are spread over different people, because there is know central place to store it. For an organization to function well, these are some primary requirements. For a volunteer organization these can be hard to achieve.

To expend their abilities they are dependent on external knowhow and financing. Also the time they can invest is limited, because if they ask too much the volunteers will go away. These are all challenges a volunteer organization has to deal which, but not only when it is about implementing knowledge management.

Although knowledge management in the volunteer organization has to deal with a number of challenges, there are also some chances. For example creativity and own initiative are two things that you can find in this sector and in contributes to the renewal and emerge of organizational connections. In the volunteer world there is a culture which is very fruitful for knowledge management. Important is that knowledge management keeps motivating.

**3.5 Justification of theoretical framework**

In the construction of the theoretical framework and the constructions of the four sub questions are some similarities visible. The first part of the theoretical framework is about the more general side of knowledge and tells us which developments is has gone threw. It also tells us about what knowledge is and what types of knowledge there are. In the first sub questions the same structure will be used, but then applied on the rowing club. The information from the rowing club can be put in the theoretical frame. On this way because it is more clear and easier to understand how it works.

The same thing counts for chapter two and the second sub question. With answering this question, the theory can be seen as a frame in which the information can be placed. For the description of knowledge management we have taken the subject and construction that is used more often when knowledge management is being explained. The concepts that are being taken are being seen as the most important concept of knowledge management.

For both knowledge as well as knowledge management the development or emerge are being described to give a better idea of how to put the concept in more general concept.

In the third chapter a brief description of the concept volunteer organization is given. This concept is important for given meaning to the type of organization the research organization falls in to.

The last chapter describes the importance of the connection between the two concepts that came up earlier, knowledge management and the volunteer organization. The reasons and challenges that the volunteer organization has to deal with given here can be a guide while searching for the problems and opportunities of knowledge management in de rowing club.

**4. Analyses of research results**

In the introduction of the results the structure and organization of the research organization, the rowing club of Aveiro, will be described. The participants will also be introduces briefly. The next four parts of this chapter all equal one of the sub questions. These questions will be answered with the use of the information from the interviews and documents. The first question is about the different kinds of knowledge that is being used in the club. The second question, part three of this chapter is about the characteristics of knowledge management that can be found in the club. Then we will analyses the problems that the club has. Finally we will look at how knowledge management could be improved.

During the presentation of the result first the result will be presented and then the will be illustrate with examples coming from the interviews and documents. The results will also be compared with the theory of the framework where possible. With this it is important to remind that the result can not be seen as ‘the truth’, but just represent the things that happen in this rowing club and what the participants see as the reality.

**4.1 Introduction**

The rowing club is part of a bigger organization called Galitos. The main club Galitos has different sections and each sport is represented in a section. The rowing club is also named the nautical section and as a section they are almost independent from the main club. The most important connection is that the money of the rowing club comes in through the main club, but the way the rowing club chooses to spend the money is free up to them. Then there are some meetings between the board of the rowing club and the board of the main club, to keep each other updated and maybe give some advice.

The rowing club has a board of three people who govern the organization. The first person in the board is the president, who is supported by a secretary and someone responsible for the rowing education. The core business of the club is the rowing education, which is divided in two units. The first is called the rowing school under which all the athletes until 15 years fall. The second in called the competition team in which all the juniors and senior row. On the head of each section is a coach, Pedro Velhinho for the rowing school and José Velhinho for the competition team. As a coach in this club you receive some money, a thing that is very common in Portugal. The club has two locations; the main building is the boat house. The building is in 500 meters from the center of the city in an area which used to be the area for trading fish. The second building is in the center of city and there the ergo meters are placed. The ergo meters are mostly used for the winter trainings of the athletes.

The participants in this research are all people who are or were close connected to the club. The first participant is Pedro de Matos, the president of the rowing club. For a couple of years he is in function as president. Then there is José Velhinho, who is the head coach of the club. Since he is 10 years old he is involved in this club as rower or coach. More then 20 years ago he started coaching in this club. Both as rower and as coach he spent some time in the national rowing federation. The next participant was the head coach of the rowing club between 2000 and 2004, Rob de Rooij. Now he works with one of the top teams in Portugal, the Olympic double two. One other participant is João Alves, who started with the age of twelve as a cox’s in the club. One year later he started rowing on a high level in the club what he did for sixteen years. Now he is part of the main board of Galitos and there he has the function treasurer. The last participant, Rui Rosa, also started rowing in his youth, now around ten years ago and he still is one of the top rowers of Galitos.

**4.2 Knowledge in the club**

The first sub question is about the knowledge in the club: *What kind of knowledge is being used in the rowing club?* This knowledge can be divided in two major categories: knowledge about organizing and about rowing. We will talk about these two categories. We will also review whether knowledge is tacit or explicit in the eyes of our participants.

**4.2.1 Organizational knowledge**

On organization areathe knowledge can be divided in two main categories, the information used for day to day practice and that for the long term. When we look at the board of the rowing club we can see that the president has the task to focus on the long term and the two other board members are concerned with the day to day practice. The day to day practice for example is about making the inscriptions for the regatta’s or organizing the events for recruiting new members**.** Every year there are multiple events where mainly students of primary and high school are attracted to come and practice rowing in the hope some will become a member of the club. The main event is the ‘summer school rowing camp’: in the center of the city people are gathered and will give interested people some first classes in how to row.

The recruitment of new members is also something that concerns the long term: *‘We know how much new members we need every year to make the pyramid stay healthy and keep enough senior rowers.’* On the long term there are also some other projects that the people of the club keep occupied. The president of the club wants to improve the social part of the rowing club and for that he wants to create a bar in the boathouse. For this they also need extra incomes, which can be collected by side activities like renting boats for tourist. All these kinds of projects are necessary for the club so that they will be able to invest more in the core business rowing. In some cases the rowing club needs support from other organization like the city council. One of the first projects that is on the agenda is improving the boathouse, in particular the outside. In this case the help of the city council could be used in a very practical way. *Next month we are going to arrange the area in front of the gate [the boathouse]. There are going to be people from the mayor that are going to help us.* Whenever necessary or needed the board is not afraid to ask help from external organizations. This because they are much focused on making the condition for the club and the rowing better.

That rowing, on a high level, is and will stay the core business of the rowing club is clear. *‘The thing I can bring first in rowing is that they can be champions. We don’t have in the city too much clubs that can bring people to be national champion or to be in the national team.’* The goal of being champion is both the goal of individual rowers as well as of the club. The club needs the champions so that they can keep attracting other rowers, other champions. Around this practical goal the club has more long term goals. They want to be an organization that is there for the people and can offer rowing classes on every level: for high competition and for leisure*. ‘The goal for them is to be champion in team and we need to have champions to have the youngster to have one guy, they want to be him. And then my goal for the club it is around this, it concerns more the social part.’*

The goals and practices of the organization part of the club is just a small part of the knowledge of the club, the other part is the knowledge about the core business rowing.

**4.2.2 Rowing knowledge**

The other type of knowledge that the organization has, is knowledge about the core concept rowing and teaching rowing. For rowing, more than for some other sport, knowledge is very important; *‘the most important thing in rowing is the knowledge.’* In the learning process of rowing there are three elements that are important: the technical, the physical and the psychological aspect. The technical aspect of rowing is about how to make the stroke, when to put the blade in the water, knowledge about how the boat will react when you do this or that etcetera. The physical part is more about how the body works then about how the boat works. It is important to know this because in a sport like rowing you are searching for the limits of your body. You have to know well how the body and you body works, before you can find the limits on a safe way. This physical knowledge is presented in every training in this club; *‘For al the rowers we have individual trainings schedules. We have training is five different intensity zones, they now exactly how much power the have to put and on which hart rate to be.’* The last aspect is about psychology, which is very important if you imagine that some rowers spent most of there free time on the water. Coach José say about this: ‘*The first thing is; you should have pleasure when you row.’* The psychological part is also about self-esteem and confidence, the relation with the coach and team members. These are all factors that are important for the results in the boat.

Although all this sounds as everything you need to know, in sports not everything is based on knowledge. An important aspect of rowing is of course the practice. Knowing everything about these three aspects doesn’t necessarily make you a good rower. But on the other hand, without any knowledge about the basics it is hard to make good practice. Like in a lot of sports the balance between theory and practice is important.

Around these three aspects there are more things about rowing that are important. This is for example how to put the boat correctly in the water or how to give the right measurements to the boat. This type of knowledge is practical knowledge about how to deal with the materials and boat. This information about these secondary conditions is also important because it sets the frame in which the training or race will be made.

Where the balance is between the theoretical part and the practical part is hard to know. It is also difficult to say where the balance is between the different aspects of rowing knowledge. Inside the club there are a lot of different views about what is the most important aspect of knowledge and on which aspects the rowing education should be build. Some people think good rowing start with having a good basis of knowledge of the technical part of rowing. It is important to know how to make a stroke before you make a stroke. One of the old rowers thinks about rowing this way: *‘For me you don’t have to be strong but you have to have the knowledge. It is such a difficult sport that you really need it.’* For others rowing starts with learning the secondary conditions, like how to put the boat in the water. After all that is one of the first things you have to do before you will make your first stroke. Other persons may think is start with a good physical base, or with the psychological part; for example to don’t be afraid of the water and the boat. What is seen as the most important is very personal and also dependent on the history of the person. A good example is the current coach of the club who has a degree in the physiology. He puts the accent in the area he knows the best; *‘I think fitness [being fit] is first. If you don’t have fitness [aren’t fit] it is difficult to make anything, but when you have fit, you should be able to learn how to row well.’* The information that is important doesn’t only depend on the history of the person, but also on the current function. Different functions require different kinds and amounts of knowledge. In the rowing club for example José, the coach of the competition boats knows a lot more then Pedro, the coach of the rowing school. Both positions require different things of the coaches and they both have the capacity they need. For Pedro, who coaches the kids it is for example more important to be enthusiastic. *‘This is more important than the coach to have a lot of knowledge about physiology and rowing. In different groups and for the athletes, specially the youngsters [you] have to be enthusiastic.’*

To have all the information there is might be impossible and is not necessary if you want to contribute to the club. Which information is seen as important is also dependent on a lot of different factors.

Inside the club, and in the rowing world in general, there are not only differences in which aspects are seen as more important, but also about the information in content. Coaches and rowers from different back grounds; this can be another country, club or even coach may have learned a different stroke. There are a lot of discussions about what the perfect stroke is, what it looks like and how this can be reached. The former coach of the club Rob says about this: ‘*I’m educated by the Dutch Royal Rowing Federation en I have my view on the stroke, my way of working. Next year there could come an Australian or whoever to the club and then everything could be different again*.’ As a coach is it important to let the rowers know what is your view on the stroke. And what are your theories about rowing and how to make practice. This helps them to put the comments in a frame and understand the critics that are given to them. Coach José made this clear in the next way: ‘*At the beginning when I came to the club I put my own rules about how I want them to practice, to make the weights, to make the practice at the water, to make all these thing. I told the way I want them to row technical and I explained why they should row like that.’* By doing this a lot of questions can be answered before they are asked, but it still doesn’t mean that all the coaches and rowers in one club think the same about rowing. When a rower has been coach for a long time by one coach, his view on rowing doesn’t changes as quick as the coach may change. This sometimes can lead to differences in opinion between the rower and the coach: *‘I think something, the rower thinks something else and the truth always is somewhere in the middle.’* Of course this is dependent on the experiences of both the coach and the rower. As an inexperienced rower you will take for granted what the coach says. Between both experiences coaches and rowers talking about the differences is important.

**4.2.3 Tacit and explicit knowledge**

In the theoretical framework the concepts tacit and explicit knowledge came up. Most of the knowledge mentioned above can be classified as explicit knowledge, it can be learnt by reading, listening and in most cases the information is easy to codify and transfer. Not all the information is as easy transmittable as that, especially not if you work with kids. *‘If you talk to kids for example you don’t say: “It is written in this book, read it.” You simple say it is like; you have to do it like this. Then we try to justify in the simplest way we can for them to understand.’* Besides the part of knowledge that is describe above, there also is a lot of tacit knowledge in the club. This kind of knowledge is hard the put under words and is mainly learned by experience. In learning how to row this can be seen as the difference between theory and practice. Sometimes the coach can give the theory, but for the rower it is still hard to put it in practice. Coach José: *‘I have a schedule of exercises that I can give to the rowers. For example when they have to learn the catch, we have ten different exercises they can make to improve. And then the movement has to be repeated over and over again.’*

In the organization there is also information that can not be specifically named, but according to one of the rowers Rui this information is about the culture of the organization. In the club the contact between the older and younger members is very import. By this contact some traditions are transmitted and young guys are transformed into rowers. This process is important to keep the culture of the club alive. *‘Rowing is a sport that is not just about learning to do the sport and be the best. You have the living, the traditions, you have the respect that the older guys transmit to the younger guys and the jokes that you make and that is very important to create persons. You know persons with personality. You need the seniors to transmit the traditions and culture.’* Because the type of knowledge he is talking about can not be put in schemes or even under words it is a good example of the tacit knowledge there is in the club.

A last type of knowledge that is important for organization is external knowledge. In the outside world there always is a lot of information that could be useful for your organization. It is important to attract this and then use it to improve the way of working. This can lead to being better able in reaching the goals. In the club information from outside is captured in several ways. The most important way is having coaches who have proved themselves in the past. Because the rowing club can offer the coaches some money, they can attract good coaches that have a lot of information. The information is being transmitted to the rowers and so integrated in the club. Even if there isn’t a change of coaches, still new information comes in the club. A simple method for this is reading books: *‘João’s training programs have some things of this book, but this is just a bible for physical things.’* Another method for keeping updated and getting new information is through networking. ‘*We have a small club with 5 coaches with whom we used to row together and now we all are coaches and have our degree in physical education. So we keep a small group but we talk a lot with each other and when someone has something new, we phone each other.’* These are some of the ways that new information keeps flowing into the organization. On this way the information in the organization stays accurate and up to date. This contributes to the way of working and the results the club books.

**4.3 Characteristics of knowledge management**

The second sub question of this research is: *Which characteristics of knowledge management can be found in the club?* These main characteristics are whether knowledge is transmitted according to the stock- of flow approach. Another factor is if knowledge is being used for operational of strategic purpose. These main characteristic will be handled in four major theme that came up on the area of knowledge management.

**4.3.1 Transmission of knowledge**

The first is the transmission of rowing knowledge which is almost everything that the club is about. In this transmission we can divide three kinds of flow; from coach to coach, from coach to rower and between the rowers. Through these three ways the knowledge is spread in the organization. One coach shares his knowledge with one ore more others coaches. These coaches one there turn transmit there knowledge to a certain amount of rowers. In most cases they amount of rowers for one coach is to big transmit al the knowledge, so that is why the rowers mutual also transmit the knowledge.

The information transfer that happens between the coaches has a lot of characteristics of the flow approach of knowledge management. There is a lot of communication between the individuals. The information that they transmit is not independent from time or place. You can see this in the interaction between the two head coaches of the different units in the rowing education. *‘Zé [José] also takes part in their [the younger rowers] evolution of rowing. So the are speaking together in that team for rowing and there are always talking about it. So they are obliged more or less to talk about rowing and how to improve that team.’* This kind of communication seems to have to do more with the operational component. The coaches also have more contact about rowing in general, which has more to do with the strategic component. ‘*One of the things the head coach should make is teaching the other coaches. That’s what I do: we join just to talk about the technique, talk about the physiology, talk about how to measure the boat. We spent some time doing things like that.’* This way of sharing the knowledge is more focused on the future; we have this information now, we need it in the future, how can we keep it in the club.

The communication between the rowers and the coaches happens in several ways with most of the time to goal to make the performances of the rowers better. This is mostly the operational component that is important, the day to day knowledge that is necessary. The important task for the coach is to make clear where the rowers can find the information they need or even provide this information. How and on what level this goes is of course dependent on the level of the rower’s. On the lower level talking and explaining is very important, you can not give a book to a kid and say read it. When the level of the rower gets higher more information from documents is used. ‘*When I find something new in the internet or talking with the other guys, I send it to them: “Look at this, it is a new paper, it is a new journal. You can read it ok.”’* So in the early years of the rowing education the information is mainly transfer through the flow approach. Later objective data transmitted according to the way of the stock approach is added to the learning process. The information that is being transmitted between the coaches also has a long term goal. In some cases not only the rowers learn from the coach, but the coach can learn from the rowers. This will improve to quality of the knowledge and education in both long and short term.

A last way by which rowing information is transmitted is through the contact between the rowers. Interesting is that the rowers see this as something that happens natural. It is not something that is planned before, which no one asks of them and just happens. The coaches and president have another perspective on this; they don’t see it as a process that goes naturally. *‘What we try is that al the rowers help to teach the younger’s.’* The truth about how it really goes will probably be somewhere in the middle; it is a natural process which sometimes needs some extra stimulation. There are different ways in which the rowers help each other. The most common way is that one of the seniors gives help to one of the younger kids with whatever they need. You can think of just answering questions about the boat, the technique or the training. The help can also be more practical; for example putting the boat in the water of helping with the measurements of the boat. Rui helps in the following way: ‘*A small kids has doubts and he wants someone to answer his question. Lot’s of times that what I do with the kids. I know what the coach means when he says something. Help them with the technique, with the ergo meter, with the series, tell them where the series are for.’* In some cases the help is between team mates, when one team member knows less then the others, the others can help them by telling him what they know. *‘Last year we had a freshman in the boat. I try to teach him some of the things we already now. I sat down with him and talk about how we have train good and be strong on the regatta. I explained all what we do should before the regatta, the week before the regatta, during the regatta, after the regatta.’* This way of transmitting knowledge is very important because the coaches can’t reach everyone. The rowers with a lot of knowledge sometimes become the coaches. ‘*If I see they’re are doing something wrong. I speak. I go there; stop, you are doing this wrong. Do it like this or like that. I correct them, almost as if I where the coach.’*

All the different ways in which the knowledge is a transmitted makes that the knowledge flows good through the organization. In this way not only the short terms knowledge transfer is guaranteed, but also a part of the long term transfer. Because what the youngest rowers learn now, they can learn to others in 10 or maybe 20 years.

**4.3.2 System for information saving**

As earlier concluded we can say that it is very important for an organization to have a lot of information of good quality. And it is also very important to make this information open for the people who need it. To have all this three factors some other factors are important; the input of new information, the saving of information and the way to make the information available. Afactor that raises above all the other factors is continuity. Continuity is import in al these factors and for all these factors. In the rowing club some of these factors are not so good organized, which result in problems with the other aspect.

The first aspect is the input of new information. The club get’s new information of high quality in several way. We discussed some of them before, for example reading documents of networking. Another important one is taking help from other on areas you don’t know so much about or don’t have so much manpower. But for this rowing club the most important source of information they have is from the coaches they attract. The club has an impressive history of coaches from a lot of different countries and coaches who booked good result. All these coaches bring different information in the club because they have different backgrounds. The information the coaches have can be used to improve the organization. One of the people that were attracted was a Bulgarian coach: ‘*I can remember that they say: we are going to take this coach to learn our coaches how to coach.’*

After the new information is taking inside the club, it is important to save the information and this is something where the club has some problems. What most of the time happens is that after a while the coaches leave again and all the information they put in the club take with them. The next coach may have some complete other theories about rowing and the information of the other coach is not used any more. ‘*I think I was the first coach in Portugal who says this is my plan, my technique. But when I left no one asked me for it.’* In some cases the information stays, but this is mainly the explicit information, that is easy to transfer. *‘We have our data program in the computer and we leave all the training programs and all the result of lactate test or the result from an ergo meter test, 2k or 5k. We left all that stuff in the computer.’* This problem is not just in the area of rowing knowledge but also the organizational knowledge. The cause of this problem is that almost nothing is written down, but everything happens face to face and from experience. *‘We have a lack of system. We lose the information and that is stupid.’* When persons leave they take all the information and experiences they have and the club stays behind with nothing. In the club they have tried some things to safe the information, but as it was not one of the priorities, the attempt didn’t end with much result. *‘In the beginning I tried to make to coaches write the things they do. And because of this and that it was not possible and I was taking too much time in other thing and I was not able to ask them to do more.’*

In the club there is a high level of face to face communication which makes the transmission of knowledge very easy and the members also learn a lot by experiences. Although this is al very good, the club loses information because it is not written down. In some cases more people at a certain time leave and the possibilities for face to face transmission are not there any more. All the things that are not written down get lost at such a point.

The next factor for good knowledge management in making information available for everyone who needs in whenever he needs is. This is very difficult for the club because the only way they share the information is by talking. And just talking can cause that the information stays in some limitedgroups. *‘One head coach does all of it, but because of that the information stays in a limited**group. One head coach this year and another one next year.’* The face-to face communication can not keep up with the information request. The methods for sharing the information are not so effective in some cases and definitely not a method that is available every time. In some rare cases the individual rowers had information saved because they saw the value of the information and saved it. ‘*All the training programs I have with me because I thought it is useful. I have everything since 2000, all the training programs, all the regatta preparation. I have with me. Just on paper. I have this huge pile and at that time I didn’t think of it getting it by email*. This is good for this individual and on this way a little bit of the treasure of information that the club has stays saved, but for the club this is of no use. First of all probably because they don’t know someone still has it.

All the things named before have some relation to continuity. The lack of continuity in for example the coaches makes that the information is not well transmitted. It also works the other way around: because the information is not well saved, the continuity in for example the training programs can not be guaranteed. Getting new information over and over again is not important if it is not used later on. There are some cases in which the continuity of the information is ensured. The club knows some situations where rowers become coaches and of course on this way the information stays in the club and is being reused again in an effective way.

**4.3.3 The dependence on coaches**

In the club there are two other factors that have a lot of influence on the way that knowledge is being managed. The first is the role of the head coach in the organization. The head coach has a lot of influence because he has the most information about the core concept of the club and he also controls the way this information is being spread. In the first part of this section we could see that all the information about rowing comes from one head coach and this makes the club very dependent on them. When the head coach would leave the cycle through which the information streams in the organization would stop. The president realizes this and wants to be independent from the coaches. But in reality for a club constructed on this way, it is easier said then done. *‘It was one of the first things to the board wanted to do, one of the things; I could not be dependent on the coaches. I have to be independent from them to go if they want and to stay if they want.’*

The coach has also a lot of influence on the way that the knowledge is being handled and structure. One example of this is the period when Rob was coach. Some of the participants say that his way of coaching was more organized and structured than the way of the others. ‘*He [Rob] was our coach between 2000 and 2004 at Galitos and he managed to make some very strong team and we had rules and we certain hour to train on ergo meter. He planned everything, all the regatta and he gave us a way of learning and to transmit the knowledge.’* When he left his way of coaching and his structure went with him and from the point of view of knowledge management this was a great loss. Of course for a coach it is important to be able to have your own way of working, but it would be a good thing if the coaches would learn from there predecessors.

The board of the club has a important roll in this, because they are the stable factor. The board already realizes that the dependence on the coaches is not good. And they realize they have to get things on paper to make the dependence smaller. This would also give the ability to learn from the coaches, keep the good aspects in the club and bring more continuity in the club. Important is that not all of the writing to be done is in the hand of the coaches. ‘*He [the president] goes; he has meetings with the coaches once a week, once in the two week. If we had a structure to manage it could be completely different.’* For the president it could be a good task to bring this structure and give the meetings also a long term use by saving the information and use it strategic.

**4.3.4 The power of knowledge**

The last factor that has influence of the success of knowledge management is the fact that knowledge gives some power. In this country it is not so obvious that you share every thing you have and all your knowledge with all the others. In this organization the situation is the same. For example the president is open about not sharing all his knowledge. ‘*I have my own plan and each year I want to do a little bit of the entire plan. I put it on the paper, I have it, but I think i don’t make it public. I just shared it with my team; they know what I want to do.’* In the culture of the coaches it is also not so common to share your knowledge. *‘In this county no coach will ever show his for example training planning for on the long term, or will show the preparation for the regattas.’* The explanation for this is not only in a cultural difference between for example the Netherlands, but also with the fact that they are afraid to lose there position. Rob, who is a Dutch coach form origin and is relatively open say the following about it: *‘It is important to have open communication, but never show the back of you tong. I never did that because then you’re out of business.’* When not all information is shared openly it becomes extremely difficult to manage the knowledge. On short term we can’t expect changes on the position of sharing the information. But this means that the information there is available, should be taken with both hands.

Not in all cases not total openness of the information is bad for knowledge management. In some cases sharing information with just some people can be used as an instrument for knowledge management. By giving some people some specific information, you can expect to get something back. In the rowing club this instrument is being used: *‘I’m always open over the planning, but not with everyone. I choose two or three athletes a group, representatives of every group. People who are just intelligent and then I say: we have this, what is you opinion about it.’*

Clear is that the possession of knowledge gives some power or is a way to keep power. But that not all information is shared openly can be seen as an extra challenge for good knowledge management.

**4.4. Problems of the club**

In the rowing club not all things are perfectly arrange and knowledge is not perfectly managed. This is because often these kinds of thing don’t have the priority of the volunteers working for the organization. Or thing happened that were not planned and totally destroy al that was build op. In the third sub question we are going to look at these things: *Which problems are there in the rowing club and how to these problems obstructs the use of knowledge management?*

**4.4.1 Money**

According to all the participant the biggest problems they have in the club are financials problems. ‘*But I mean, then the club has financial problems, it is not very comfortable in terms of finance. And the most biggest problems are the once related to money.’* The problems with the money are already going on for a little while and the main problems of the money is that the club is not getting enough money. They are supposed to get money from the city council and every year they sign a contract which says they will receive money if they live up to some terms. The rowing club is living up to the terms, but the city council still doesn’t pay. ‘*And it starts with the Camara [city council] of Aveiro. Theoretically they support, but they don’t pay to the club anything for seven years. And when the club has no incoming it is very difficult to manage. Although we bring titles, every year we bring national titles.’* Whether is has been seven or two years that the city council did not pay is not clear. The participants say different years, in variation from seven until two years. On paper the club has enough money, because they have the contract and the city council owns them a lot, but in reality they don’t have enough money on the bank account to pay the bills every month. In the reflection on the last season (2007-2008) the situation was describes as following: *‘From the financial point of view, this season could be considered disastrous.’*

The whole Galitos, not just the nautica section, didn’t receive any money of the city council for a long time. And for the other section it of course is not comfortable to miss such a huge a mount of money, but the rowing club has been hid the most hard. The explanation for this is that the rowing club doesn’t have any other incomes then the money they receive of the city council, the fee that the members pay and some small amounts of sponsorships. If you compare this with for example the basketball club, who is going strong, this is a big difference*. ‘Well the thing is that the club is living on there athletes. But it is not enough because with this money we can give, what we want is to give ways to get each section to get there own money without having to wait for the state. To have a bar, a restaurant. And the other sections are ok. Basketball has money enough, the have sponsor, a restaurant now open.’* The rowing club is really focused on getting this as well, but there is a long way to go and this asks a lot of time and energy the people. This of course goes of the time they have for other things.

The problems with the money take up a lot of time and energy of the volunteers of the club. The president might be the best example of this. ‘*On the problems of the day is that sometimes I can not think ahead. And sometimes I know I have to have money in the end of the month to pay. I’m spending 15 days of the month thinking how to get that money. And I don’t have too much time to think.’* The president has his priorities on solving the problems with the money and he invests a lot of time in that. He is trying to find sponsorships, talks with the city council, he does all that. *Then it is a lot of work that comes from the president and that is only one guy that is dynamic an tries to get meetings with company’s and with the camera [city council] all to get support and to get money, to get even if they don’t give money but if they give some work like now the camera is going to make the outside, the road and a little garden.’*

That the president does this is important, maybe so important that without this, the club won’t be there any more in 20 or 30 year. But when the president won’t look at things like knowledge management, in the club probably now one will. The president or one of the other board members, of in last case on of the coaches should look a things like knowledge management. Because once they will have there own bar and there own money, it is questionable if of the rest of the club some things will be left.

Besides the problems with the money, it stays really important for the club to keep looking and taking care of the other things, because they have to keep making performances. *‘The club doesn’t have any money, is in a very bad situation with the boathouse, the access and the route to get there. But for me that is not an excuse.’* But in the current situation it is not like that. The focus is solving the problems of the money of the day. When those are solves they look for a solution of the problems of the money on the long term. This means that things like managing the knowledge that is in the organization hardly gets any attention.

**4.4.2 Problems with facilities**

A problem that could partly be seen as a result of the problem with money is the problem with the facilities. The boathouse of the rowing club is not in the best state and the way to come there is even a bigger disaster. The club is not far from the city centre but the road is a sandy road with a lot of pits. ‘*Because the road is not ok, in the winter it is completely in the mud.*’ The boathouse itself is a bighangar which has all of the primary conditions. It has a roof, there is water, showers, a toilet, but it doesn’t have any thing ‘extra’. Having good facilities is very important for the organization. *‘In the rowing we have a problem; no conditions, no road, almost impossible to survive. Well if they at least want to do the building, the front area, new dressing room and a new road. If that is possible I think we have a change. That is why the president is so concerned about that and on that I agree with him.’* Since last year the conditions have slightly improved. Before, when you wanted to put your boat in the water, you had to go in the water. Now they have a platform from with you can put you boat in the water. This means no more wet and cold feet in the winter before and after the training. These problems with the facilities caused by the problems with money result in limitations for practicing rowing, the core business of the club. *‘The way we are organized now, money buys everything. I mean if we don’t have something we need money to buy that. I talk boats, the oil, the gas for the motorboats, I talk about electricity. We have lots of limitation when we don’t have the money to buy the basic stuff. That is the biggest limitation I’m talking about.’* The problems with the money and the facilities influence the organization into the heart.

These problems also result into less good knowledge management, the first case in which we can see this is that the conditions in which the knowledge between the coaches and rowers is transmitted are not optimal. For example for a coach it is really important to be able to see the training of the rowers on the water. On the water you can see what they are doing wrong, the coach gives tips that the can directly implement. But in this club sometimes it is not possible for the coach to go with the rowers on the water: *When you have a club without money, sometimes you want to go to the water with the motorboat and you don’t have gas.’* The problems result in sometimes having training is bad conditions or having training without a coach. The result of these problems is that there is no stable team and this makes is hard to make long term plans. Without long term plans and goals it is hard to have a good and organized team where it is possible to transmit knowledge in a proper way. *‘We have our team, it is not a stable team. Last year we won the lightweight eight and this year I have just two guys. You can’t make programs for four or five year.*’ Without a stable team with goals there won’t be good knowledge management. This because you can’t look forward and think about what is important and what should be transmitted.

Another thing that is hard because of the facilities is to attract new rowers. The conditions are not good and when you don’t now the sport it is easier to choose another sport that does give a good first impression. *‘But if you have a child and he says “I want to go to the rowing.” You say ok and you come with your car and you just come one time. During the winter it is not normal: you are about 500 meter from the center of the city and it look like this is another planet.’* For the club is it very important to keep having new and young rower so that the knowledge can keep being transmitted. The younger ones learn from their coach and the seniors and later they teach the things they have learn to other young rowers. Without new people the cycle will stop and a lot of information will get lost.

In some cases the club has a good long term, strategic plan but it is just impossible to make this plan happen. An example is with the boats, for a club it is very important to invest in the boats and materials. Because the boats are expansive you can not buy a lot of boats in one time. A strategic plan to keep the quality of the boats in average good enough is important. In the club they are aware of this fact, but the lack of money just makes it impossible to buy new boats. Even if they now they should do this to ensure continuity and quality for in the future. *‘We know that our boats are getting old and that that will be a problem for in the future and that we were supposed to invest now more in the boats, more quality. But we don’t have money.’*

**4.4.3 Breaking the** **cycle**

In this club most of the knowledge is transmitted through face to face contact. Important is that members experience new things together or the older ones explaining thing to the younger ones and help them with getting experience. In this process continuity is very important. There has to be continuity in the amount of new people that come to the club, in the amount that leaves etcetera. You can see this as a certain cycle that has the shape of a pyramid. A lot of kids have to come in, some of them leave others become juniors. This to have enough seniors at the end. Important is that this cycle is stable and there is enough flow of knowledge. A couple of years ago the board made the choice to invest in the senior group instead of the younger kids. The result was that not enough new kids came to the club and the cycle was being broken. *‘They forgot about the young guys, about the formation of the young kids to rowing. What happens is that you have a pyramid. You have the base with the kids and you get older and some leave. What happened in two years no kids came in and started rowing. And then the junior became senior and there where no kids to become junior. Then those seniors stop rowing for several reasons, for several ways. What happened is that the cycle wasn’t filled.’*

As a result of this also the cycle for transmitting the knowledge is not healthy anymore. The first reason is that a lot of knowledge left when the seniors stop rowing. Together they had a lot of knowledge but they had now one they could give the knowledge to. *‘We don’t have a system. What is happening and what has been happing is that a small group of athletes has learned a lot and they have been though by really good coaches, have applied this knowledge in their daily routine. But then there wasn’t a way to transmit this information.’* In a healthy situation most of the knowledge would have stayed in the club because the seniors had past it to the junior that came after them.

Later the board realized they made a mistake and started investing in the kids again. Now in the club there are kids, lots of them. The problem now is that there are not enough people to teach them and pass them knowledge. This is on the part that just concerns rowing, where the older guys sometimes function as the coach. But also important, it happens at the area of the culture of the organization. Rui, one of the few seniors that is left now, he experiences this problem. He tries to teach the younger kids the culture and everything around rowing, but he realizes that they are not with enough to reach everyone. *‘And now we see that [the culture] is all lost. We try but we are very few with to many kids. We should be more. The once that are new in rowing, they don’t transmit that tradition and culture. It is difficult to transforms people and we don’t transform people like that a long time ago.’*

**4.4.4 Lack of manpower**

Good knowledge management in not something that happens over a night. Time has to be invested in it and this means that in the organization has to be able to put knowledge in the centre. In the rowing club things work in a different way. Not saving knowledge or transmitting knowledge is in the centre, but getting things done. The organization has so few volunteers that they can just focus on the day to day things. According to João the reason for this lack of volunteers is that it is difficult for a lot of people to help, because they are not close. *‘The thing is that from the people that are in the rowing club, lots of them don’t live in Aveiro and don’t work in Aveiro and then it is difficult to help.*’ This leads to problems for the people that are there, like the president. They have to do everything alone because there is now one else. *‘I guess that is the biggest problem, he doesn’t manage other people to do because he has nobody.’* The result is that people have to do things alone and this in not good for spreading the knowledge or learning things. When you do things alone the information will not be transmitted on a single way or there is no need to talk about it or write it down. *‘In here we have a big problem because it is one guy managing al and then a lot of the information gets lost, he makes it all, he makes it all happen. Some times he makes it, some times he makes it wrong. Because it is just one guy.* The other result is then when you don’t talk about it or work together, there will be not change for evaluation of feedback. Then the changes to learn from the mistakes you made are very small.

Another downside of having not so many people available is that you have to be careful with the people you have. For example you can’t ask too much of them because you don’t want them to leave because the have to do that much. Besides that it is harder to find the right guy for the job, because you don’t have so much to choose about. *‘We have election to, two years in two years, but normally no one shows up to the election, so if is appearing one person we have to say is will be you because we don’t have anyone.’* The result of this is that the person could get a position for which he is not qualified or hardly knows anything about. But because it is better then nothing the club just has to go with it. Of course this is not good for the quality of the club and knowledge management within that.

**4.4.5 Personal relations**

In the rowing club personal relationships are very important and they can make or break the knowledge management in the club. The personal relationships are so important because the people are in the club because they like it; they like the club, the people who are there. When they don’t like it any more, they have no reason to stay. ‘*And most of the people, we are doing this because we like. There are missing people because the club is not a political way to be on top. People run away because we don’t have money. The ones they stay is because the like it too much.’*

In the history of the club there are a lot of cases where people leave because of personal reason or because they can’t get along with the people in the club any more. The current coach José left one time and an important factor for that was that he had to work with someone he didn’t like: *After that there came another coach from Romania and we don’t have such a good relationship, that’s why I left.* In the case that people leave, they normally don’t leave anything behind. This is because al the information the have is in the heads of the people. *‘People just did things and then it would get lost, because the people would leave.’* This is not just in the hands of the people but also in the hands of the rowing club. It is rare that when someone leave they ask the person transfer the information. Even if the person was taken into the club with the main goal to bring in new information. ‘*He didn’t show up at the boathouse anymore. And they didn’t ask him to transfer the information and just said ok.*’

More surprisingly is that in some cases the information is left behind, but if someone leaves because of a disagreement, the people that stay behind might be too stubborn to use the information, how valuable it might be. When coach Rob left, this happened. *‘Normally he made a system for us but when he went out. The people who came didn’t like him so much and the though o this stupid things coming from abroad and so we lost everything.*’

From these examples we can see that personal relationship can seriously be in conflict with good management. This is one of the problems in a volunteer organization, because the personal relationships are just as important as the good result, because the people are there because they enjoy it.

**4.5 Opportunities**

In the previous section we saw that the club is not perfectly organized, has some problems and the way that knowledge is management is not perfect as well. Where problems are, often people see solution. Especially in cases where they are involved in because they like it and they care about it, like the rowing club. In this section the last sub question will be answered and the sub question has to do with improvement and opportunities. *How can the knowledge management in the club be improved and how can this contribute to achieving the goals of the club?*

The ideas that people have about the club and how is can be improved best is very personal and depends also on the role that he participant has in the club. In some cases people think that before the knowledge management can be improved some other things in the club have to be improved. Some of the areas that should be improved according to the participants are very close related to the problems discussed in the last section.

**4.5.1 Financial independence**

The main problems of the club now have to do with money. One of the main goals of the current board is to become financial independent form the public support. The plan to do this is by making a bar in the boathouse. And the other boathouse can be used for renting boats for tourist. Another plans is of coach José where the gymnasium of the club and the ergo meters can be used as a source of income by renting them. *‘For example we have some agrees with handicap people and the people from the jail. And if we have nice conditions we can say ok at Monday morning they go there and practice one hour and after they take a round in the cannel and they pay.* The money the club will earn with these kinds of things will be invested in the club again and of course this will improve the club. If the money problems are solved, the club can be improved in another way and that is that there will be time again to think of other things. Now all the plans that are made are dependent on money and the club can’t look to far ahead because they don’t now how the situation will be in some time from now. *‘We have a lot of problems, especially money problems. But also we need different ways to bring money to the club. Now we are like; money enters en and money goes out. So it is difficult. The plans we have now are depending on the money we get. We just have money for the day so it’s difficult to improve.*’ If the money problems are solved, the club can focus on other things, like managing knowledge. For knowledge management it is important that knowledge and the role of knowledge is at the center of the organization. At this point in the organization most of the things are about money and so it is hard to have good knowledge management.

With having money the club can invest in things that can improve knowledge management. A thing that is very important in the eyes of the president is always having someone around. Currently the boathouse is just opened three hours a day, mainly when one of the coaches is there. *‘And you know we don’t have on person all the time in the club. The club opens half past 5 until 8. Just a few hours on a day and I know this is a problem.’* But when there is a bar in the boathouse, this means that the boathouse could be open almost at every time of the day. Is also would mean that the dependence of the club on the coaches would be less big. If they can’t be there one time it is not such a big problem. When the boathouse is open more often, more members can come, the interaction between the different members can increase and probably the binding with the club will increase as well. All these things are important for a strong club with good knowledge management.

**4.5.2 Boathouse**

From another perspective the boathouse is seen as the main thing that has to be improved. The improvement of the boathouse and having more money are very close related. The reasons for why the boathouse should be improved are quite similar as those for the need for more money. Without good facilities it is hard to look further, have long term plans and grow. *‘Before we can grow up, we should have better conditions. Without that it is, with this condition it is impossible.’* The club is working for a long time now on improving the boathouse and the other facilities. They still have hope that soon it will be good. Maybe this hope is right, because last year they made a big improvement with the platform for putting the boats in the water. *‘For 20 year we are trying, the road is the same. I can see the light at the end of the tunnel and it will be the end of this year. And improving boathouse, improving the road results in that we can improving the bar in the club.’*

Improving the boathouse can also mean that the rowing can improve and this means more champions, a thing that is very important for the club. The materials and conditions, in which the trainings are now made, result in trainings that are not optimal. Improving the conditions can make the trainings more effective. This result is boats going faster and more champions. Having the champions is important for the club because it results in having more status and with that having more new members.

**4.5.3. Creating a system**

From the participants a lot of people say there is a need for a system in the club. Now the way things go is very unstructured, focused on the day and the boarders between the tasks of the different functions are very vague. For knowledge management things go the same way, most knowledge is transmitted by face to face contact on a very uncontrolled way. In the past there where times when things were more organized. One of the examples is that the rowing club was one of the first having a website which was very good used for communication with the members. *‘The rowing was the first who just wanted to have there own website and it was very cool, because you could see the training schedule there and so on. Well the system was almost there. Now they erased it and now everything is in the boathouse.’* And another advantage of the website was that this was a good way to structure and save some of the information. Because by putting things on the website the saving and structuring was done automatically. The problem with the system is that it has to be made and so far everyone is waiting for it to come itself. *‘We have this lack of rules and this lack of system and the system we have to make. We can wait for the sun to make the system.’* The biggest problem with creating the system is that there is now one who takes the first step. Most of the conditions to make a good system are already there in the club. Things like the need for a system, knowledge and experience. Just the person who takes the first step and gets the people together is missing now. *‘I think we could do everything at the same time. We have knowledge enough; we have people very experience at the boat house. I think what is missing is someone to get every one together, someone who thinks that we can construct the system for transmission of knowledge and also make the social part.’*

The system that should be created can have many different faces but one thing that gets a lot of value is that the different people and functions get more specific tasks. This because everyone wants to do things he likes and is good at. For example it would be weird to have the best coach of the club cleaning the toilet. This is a waste of resources. *‘It is important to give a specific task to each person, because if you don’t give a person a specific task you will go away because you don’t like it. You think what am I doing here, fixing the motorboat. I want a task a real task and I think that is why it is important to have a specific task for everyone.’* For an club like this it is impossible to get a tasks well organized directly and this is not necessary as well. But to have a good organized club and in that good knowledge management some basic standard should be reached. Rui has a good idea of what these basics look like: ‘*In an organization you always have two or three essential part. You have the economic or financial, you have the human resources and you have the operational part. The minimum structure that I’m talking about is one guy for everything of this. So you have a guy to manage all what was about the money about the economical, receiving the coach, making the payments, managing the accounts. If you have a guy to manage all the operational things that starts with the coaches, in the trainings, someone that goes to regatta’s, that manages the inscriptions in the regatta’s, that has the contact with the other clubs and the federation.’* Having these tasks this specific is good because everyone knows what he has to do and it is certain that everything will be done.

Creating more specific task is not only helpful for the person in the function itself, but also for the people who need them. João names an example from the way the Dutch clubs are organized. There in the rowing clubs they have a book for every year with all the data about the clubs and the persons that might be important. A system like this they don’t have nor in the Portuguese rowing world, nor in the club. Making something like this is really easy, but really effective. *‘In the Netherlands you have it, it is a book for every year, who is in the board of each club, who are the coaches, the person who can borrow you trailers. We don’t have a system, we don’t have that and I don’t know. Ohh then we will see; that is the Portuguese way. It would be easy to create a small book, just for the club.’* Another thing that is really easy to create but can help a lot with transmitting information and other kinds of communication is a mailing list. *‘Well what is missing in all clubs for example is a mailing list. I’m on the board asking for that because I think it is very important, because the members want to now the news, but also the small things. And the boathouse on the rowing is missing a mailing list and it is so easy to make a mailing list. But what to do if you don’t have the basics like telephone or mailing list.’*

Having the system is important in more ways. The first is that with the system the information is better saved and transmitted. This contributed to a wider range of knowledge in the club, makes the knowledge more accessible and makes it easier to expand the knowledge both in quality and quantity. In the past a lack of system also led to a lack of motivation with the rowers. This because everything is vague and there is no clear structure and you can’t see if there is any progress. *‘And what made that people went a way: for four years they were saying there is a lack of system. And the coach and board say: yes, yes, but is means: no, what ever. And that is the result of it: no system means lack of motivation. You don’t feel you are going on the right way.’*  The system can also be used as way to get control and by having control reaching the targets you set yourself. This is what coach Rob did when he was just new in the club: *‘The system I implemented, that was quite rigorous, quite tuff, maybe too much. The idea was always to use the system to achieve the target. And for me as a coach beginning in 2000 the system was a way to get control. By shock and control and then see how we do it.’*

So system that is needed can have different forms and start with really simple things. A small thing can help to achieve the goals, some will have more impact then others, but all will have some effect.

**4.5.4 Goals**

Besides having a system, it is very important to have a goal. The goals help with the transfer of knowledge, because you know what you are going to use the knowledge for. It also helps for the motivation. *‘Without a goal you don’t feel you are going on the right way. You don’t see a tunnel, you are just going somewhere. We need a system to have a tunnel and a main goal. And if we don’t have that what are we doing there.’* A thing that comes together with the goals is the planning. How are we going to reach this goals, making planning on the long tern is not the strongest sides of the Portuguese people. *‘Planning is another aspect and Portuguese people are really bad in that. To plan, especially on the long tern, it really is a lack of these people and that is why a lot of things are going wrong in this country. I make a planning for the whole year, with 52 weeks. I divide it in small periods and then every period had a specific goal.’* The goals and planning are important for the rowers as well as for the coaches. For the rowers the goals on the long term are important because they want to know what they are doing all the work for. But on day to day basis they will mainly focus on the short term, like which training is there tomorrow. The possibility for them just being able to focus on this, will bring them confidence, what will lead to results. *‘Well I can say for us it was important to have a goal, to have clear what we wanted to achieve. Of course for an athlete the day to day basis is very important because the schedule brings you confidence and the confidence can bring you to the results. So I think it is important first to see the mountain and then you have to know with steps you have to take.*’ The long term goals are also important for the coaches, not only because he has to make the training schedule. It also makes it easier to place the results of today in a perspective. And this perspective can then be used to motivate the rower. *‘It is the long term that I think you should watch, make the goals and it helps you for the athletes. Today is good, but not good enough. Another day he is shit and you say ok, but it is not so shit, we have time. Because the long term goals help you to nivelate where you want to get.’*

The goals are not just important on high level of rowing or helping to place the training schedule. Having goals helps to motivate the smallest kids. What the goals and results are now of the senior are what the want to be later. This could be their goal and their motivation to train hard. *‘We have to learn this to the kids. That we have to make a plan to the kids, what do you want to do, what is you main goal. We always should have that. It is like the carrot, some people like the carrot and will go after it. “I want that carrot.”’*

**4.5.5 Explicit basics**

In the rowing club there is a lot of knowledge and this knowledge is transmitted by face to face communication and experience. These situations where the knowledge is transmitted are often one on one and this makes it not very efficient. This is because most of the information that is being shared in the first stage of rowing is simple and value free knowledge. *‘For example, you are a freshman, how to put the feet in the boat, how to pick up a boat. How are some of the parts called: the riggers, the foot stretchers.’* It is explicit knowledge that no one has ever made explicit. It is important to write these things down and it is not much effort. And the advantage is that what they learn now in years, than they can learn in a few weeks. *‘We should have a small book to learn and we should have a small test after two week, just to remember. Go to the boat, how to pick up the boat, how to transport the boat? How can you be good if you don’t know the basic stuff. Well I know the answer, sixteen years of being there every day. If you have a system, don’t needs some much time.* Writing it down is also a way to preventing it from getting lost. But writing down is not the only way the information can be transmitted. Rui gives another option; a presentation of the coach. *‘I think it would be very important, this weekend I said it to Zé [José]. You have to make some theoretical classes. Every year new kids begin rowing. I think it would be very important to do the presentation he did in the beginning for the new guys that come. I’m talking about simple thing like showing the kids on which sites they can see the rules of rowing. And in half an hour you can say very important thing and then let them develop that.’* Transmitting these basic things, whether written of oral, is important and help the rowers have better result. The older rowers of the club have experience a lot of thing and in that they misted some basic rules. *I experienced lots of situation in my regatta’s, I learned my lessons. But new things I could prevent and I don’t know. Because I never read the rules and I have no one who ever cared about teaching me the rules.’*

Writing down the basic is a one time effort, but it can be used over and over again. It can help the rowers in a lot of situations and it saves time because not everything has to be explained to each individual separately.

**5. Conclusion**

In this research about knowledge management we have looked at how knowledge management plays a role in the rowing club of Aveiro, Club de Galitos Remo. Forh this we have divided the concept in parts; the knowledge that is in the club and the knowledge management that is in the club. Besides this also the problems and opportunities concerning knowledge management in the rowing club. In this conclusion the most important results will be discussed and the research question will be answered.

The main research question that is central in this research is: *How do the members of Clube de Galitos Remo give meaning to the concept knowledge management and how is this expressed in their club?*

In this conclusion we will discussed de different parts of the concept of knowledge management that have come up. Finally the general conclusion will be presented as the answer on the main research question.

**Knowledge**

The knowledge in the rowing club can be divided in two types of knowledge, organizational knowledge and rowing knowledge. The organizational knowledge is mainly about the general plans for the club like the long term goals or how to recruit new members. The board members are the once who know the most about these topics. Some of the members have collected knowledge about these topics as well, but this is mainly trough experience. The knowledge and activities in the organizational part are used to support the core business of the club which is rowing and teaching how to row.

The second type of knowledge is the rowing knowledge. Knowledge is a very important aspect in a sport like rowing. The knowledge in rowing has three major aspects: the physical, the psychological and the technical. Besides this also some practical knowledge is important. Which aspect is seen as the most important is different for every individual. The opinions about whether the practical or the theoretical part of knowledge is more important when you start to learn rowing are also different. Some say good rowing starts with good theoretical knowledge, others think that without good physical conditions you can never learn things about rowing well. To be on one line in these kinds of subject is difficult. There is not even a general agreement on what the perfect stroke is. This is why it is important for every coach to make clear to his rowers what his vision is on ‘the perfect stroke’.

The knowledge used in the club is both tacit and explicit knowledge. The explicit knowledge is knowledge about some of the basic things you learn in rowing. The tact knowledge is some of the knowledge that can be seen as knowledge for the more advance. But is also is some of the knowledge you need for rowing that you can just get through experiencing. Explicit knowledge is also the knowledge that has nothing to do with the stroke but the things around rowing that are important, like culture. This knowledge can just be transmitted by a lot of face to face contact and by experiencing it.

**Characteristics of knowledge management**

In the organization most of the information is transmitted through face to face contact. The information transmitted is not independent of time or place. That is why we can conclude that the way of transmitting the knowledge is part of the flow approach. In the knowledge about rowing that is transmitted we can see three major ways; from coach to coach, from coach to rower s and between the rowers. All these different ways make that the knowledge has a broad area where it goes to. In the club the transfer of knowledge is mostly focused on the short term, but the way the club is organized makes that the transfer on the long term is covered. It is a cycle: what someone learns now, he teaches to someone else some years later.

Important in knowledge management is to have knowledge of good quality that is open for whoever needs it. To reach this you have to have input or new information, a way to save the information and a way to make the information available. In the club there are different ways that new information comes in, for example through reading or networking. A system for saving the information the club doesn’t really have. All the information is spread over the persons and when someone leaves it takes a part of the information with him. The lack of system results in difficulties in making the knowledge available. To get the information, you have to talk with the person who has it. This is not really easy, clear and efficient. An important thing for good results in all these processes is that there is continuity, but this is a thing with which the club is having difficulties to reach.

In the club there are two other important things that influence the way knowledge is managed. The first is that there is a big dependence on the coaches. The coaches have an important role in the club. The have a big influence on the way that knowledge is being transmitted. Besides that they are the main source of knowledge and when the leave they take a lot of knowledge. As long as there is this dependence, there is now guarantee that knowledge stays in the club in an effective way.

The second factor is that knowledge gives some power. This makes it sometimes not attractive to share all the knowledge, what of course is not in favor of good knowledge management.

**Problems**

In the club there are different problems that obstruct the use of good knowledge management. The biggest problems the organization is dealing with right now are problems with money and, close related, problems with the facilities. These problems take a lot of time and energy from the people in the club. This results in not having time left to invest in good knowledge management. The problems with the money also make it hard to make plans for longer time. This again because there is no energy left, but also because no one knows what the situation will be like in a few moths or years. Long term plans are important for knowledge management because on that you can adjust your day to day activities and you know which knowledge is needed. The problems with the facilities result in no good conditions for the transfer of knowledge.

The transfer of knowledge in this club is based on e to face contact. This is a process that works as a cycle where someone learns something and later on teaches this to someone else. Because of different reason this cycle has been broken in the last years. The transfer of knowledge suffers from this, because or there are not enough sources, or there is no one to transmit the knowledge to. This results in a stop of the cycle or later a lack of sources.

The lack of sources can be seen as a lack of manpower, with is a problem for the organization. Not only because there is no one to transmit the knowledge. When those people are there, still nothing else is being done with the knowledge. Information is not being structured or written down, because there is no one to do this. This of course does not help in good knowledge management.

In a club that is build on volunteers, personal relationships play an important role. People are there because they like it. When they don’t like it the will go away and take the knowledge they have. In other cases we have seen that if people don’t like each other, the transfer of knowledge between them is a harder of not existing process. This is not good for the flow and finally management of the knowledge in the club.

**Opportunities**

For the main problems of the club concerning money and the facilities there are some solutions. The board has plans to create some other sources of income for the club to make it financial independent. When the club is financial independent there will be more time for other things and the problems with the facilities can also be solved. This creates opportunities for knowledge management; more time can be invested in saving and transmitting the knowledge. There will also be the opportunity to make long term goals on which the use of knowledge can be adjusted. And the conditions in which the knowledge will be transmitted will be better, which result is better transfer of the knowledge.

In the eyes of the participants there is a need for a system. In the organization all the conditions needed for a system are already there, the only thing is that the first step has to be taken. In the past they proofed already that a system is possible. What the system should look like is not so clear. One of the things that the system should have is clear tasks. The basic tasks the organization should have are economical, human resources and operational. Important of the tasks is that is makes more clear what everyone has to do and that is gets done. Important is that it becomes easy for the members to reach the ones they need. To make this easier al that is needed is a form with al the contact information. The system contributes to better transfer and saving of information. It also makes it easier to transfer the knowledge to a wider public. The system can also lead to more motivation from the rowers.

Another thing that the club is missing are goals. Goals are important because then you now what you are working for and which information you need. With a goal you can also make a planning, which makes it easier to transfer knowledge because the tasks gets more specific. Both long term and short term goals are important.

There is a last thing that is missing in the knowledge management of the club. It is very simple, but it can have a huge contribution to the way that knowledge is transmitted. Here it is about make the basics that you need for rowing explicit. A big part of the information is explicit knowledge, but just never put on paper before. When this is done, the information is saved properly and the transfer of this knowledge can go much faster once it is written.

Looking back on the main question: *How do the members of Clube de Galitos Remo give meaning to the concept knowledge management and how is this expressed in their club?*  we can say that the members of the club do not pay any special attention to the concept knowledge management. This mainly because they are occupied by problems and all the practical things they have to do every day. This results in an organization where knowledge is mainly transmitted by face to face contact and just learnt by experience. The results of that are an inefficient way of transmitting the knowledge and great loss of information.

In the future however, where they don’t have to deal with some of the major problems, the participants see a more important role for knowledge management, because they realize that it is needed in order to take the club to a higher level. The main focus is on making a system for the transfer of knowledge and putting more information on paper, to start with explicit knowledge.

**6. Recommendations**

The research, from which this report is a text and analyses, has as a goal to create insight in way that the members of Clube de Galitos Remo give meaning to the concept knowledge management and how this is expressed in their club. De results of this research are written down in chapter four and five of this report. From the results that the research gave, some things can be taken and be used to form a recommendation to the rowing club.

In this recommendation first some aspect form chapter 4.5 will be discussed. Then we will talk about the importance of evaluation. The last point will be about focusing on the things that the club already has.

**Opportunities**

In chapter 4.5 some opportunities that the club has are described. Two of these have such a big value that they will be taken out and use in the recommendations. For improving the knowledge management in the club most important is to create a system and to write down the basics.

The system can have more that one form but mostly it is important to clarify the different rolls. What kind of things have to be done in the club? Who is responsible for this, under which function does this fall? It is important to have a main structure in which all these questions are answered. In this way you can control whether everything is done. It is important to put these structures on paper. This is important because the persons in the functions can change and for the next one to know what he has to do it is important to have this written down. Writing some basics down and given some specific tasks also helps to improve to continuity.

The second thing is to write down some basics. A part of this is already included in building a system for the organizational part. Concerning the rowing knowledge it would be very useful to write some things down and give this to the rowers. Some of the rowers said they missed some basic information which they needed in regattas and trainings. Writing these basics down is important because then all the rowers have the same basic knowledge. Continuity in the basic information of the rowing is being safeguarded. Besides that it also is an effective and efficient investment of the time. One time it takes some research about what are the specific things a rower needs to know, once it takes some time of writing it down. After this the information can be spread to a large group with hardly any effort. And there is more time available that can be spent on teaching the more complicated things of rowing.

**Evaluation**

A mechanism that is hardly used in the organizational part of the club is evaluation. The only time that the mechanism of evaluation is being used in when thing already went really wrong. An example is the way to recruit new members. Only when they have no new members for the recruitment, then they will evaluate. Evaluation can also be very useful when this do go well. You can learn for example: what was it, that made the action into such a success and how can we repeat this. Sometimes you can also realize that the success was cause by some thing you didn’t do on purpose. Or that thing you thought would be very successful, where not so successful. After evaluating the next time you can invest the time in thing that really have effect.

Evaluation helps in given insight of the strength and weaknesses of the club and of its challenges and opportunities. Once these things are now the club can make more specific and effective plans.

**Focus on the available resources**

Knowledge management in not just about getting as much information as possible. Important is to look in the organization and the knowledge there is as well. The main focus of the club now is to where they want to go; an independent organization with a beautiful boathouse. Because the focus is so often on the things that are on the planning hardly ever is looked at al the good thing that are already there in the club. Inside the club there are a lot of things that can help the club improve, if they are used correctly.

An example is the great amount of knowledge all the experiences coaches brought into the club in the past and bring into the club now. All these information can be used on a longer term then used the time the coach is there. From the way of coaching both the new coaches, the other coaches and the rowers can learn something. Important is to talk about these kind of thing and not just go with the new flow when a new coach arrives.

Another thing is that there is a lot of enthusiasm in the club that might be used more effectively. Maybe the kids don’t mind writing down what they have learned from the coach and this can be used for saving the information.

The recommendation is to look into the club and analyze which resources there are and how they can be used best. When there come some kinds of structure in this and more insight, some valuable things might come up.

**7. Discussion**

In the discussion we will look back on the research and analyze some of the aspects of the research. First we will talk about the choice for this subject. Then the reliability and validity of the research will be discussed. Then some things about the quality of the research and things that may have influenced the quality will be said. We will conclude with some questions and suggestion for follow up research.

**Choice for subject**

When I was at the point that I decides that I wanted to write my thesis about knowledge management in the rowing club I did not know the club so well. My decision to do this research was based on my experiences from the way Dutch sports and rowing clubs are organized. When I learned more about the subject and the rowing club in Aveiro I realized that the idea I had of the club and my presumptions where totally wrong. At a certain point I wondered if they did anything I could relate to knowledge management. It became a challenge to search behind all the problems the club has and just come up at first and see what else there is. Finally I think I got useful information about the way the knowledge is being used and managed in the club, but my final results are different that what I expected them to be. What I learned from this is that it is important to first look really good at the organization and not look in a superficial way, think that you are observing, but you are just confirming your own presumptions.

**Reliability and validity**

A research is reliable when no random errors are made. In the interviews the presents of the random errors was decreased because of the experience and trainings in taking interviews of the interviewer. The possibility you have in interviews to keep asking questions about the same thing is used to prevent from getting just on side of the answer or incomplete answers. The interviews gave quite a complete view of the reality of the participants. Of course there may always have been some things that have been left impeccable, which is not good for the reliability. This could be prevented by having more interviews, but the choice for having some qualitative good interviews had more advantages then increasing the reliability with the quantity.

Because of the setting of the research it was hard to keep the participants anonymous. Even by not mentioning there names or function, in most cases the people could have been tracked by the way they used to answer the question and the perspective and information they used. This may have caused that some of the participants have given social desirable answers which can influence the reliability of the results.

The validity is about the validity of interpretations. The three different kinds of validity have been discussed in the methodological justification. The content validity is being secured by using a topic list during the interviews. Between the different interviews the topic list was being adjusted where needed, to increase the content validity.

With interne validity we are mainly concern about the right way of the interpretation of the answers of the participants. The fact that both the interviewer as the interviewees where not speaking in there native language can have caused some problems in this area. During the analyses of the interviews the whole interviews where used. This made it possible to use the context for the interpretation of the answers.

The last type of validity is external validity, about in how far the research can be used as general findings. This type is validity is low. The results can just be used to say something about the rowing club of Aveiro. It is not possible to say something about any other rowing club in Portugal or any other sports club in Aveiro. The goal of the research was not about providing general results.

**Quality of research**

A number of factors have been of influence of the quality and result of this research. The first has come up earlier, the wrong presumptions of the researcher. These wrong presumptions may have resulted in some wrong choices for the way that the research in constructed. For example in the theoretical framework some thing are discussed that are not so useful and other thing have been left out that could be useful. Because of the fact that the presumptions where adjusted later, no big mistakes in the research are made.

Another factor that has influenced the quality of the research is the freedom in choosing the participants. There was a lot of freedom and this was in favor of the quality of the research. The participants are a good reflection of the perspectives there are on the rowing club. Without this freedom the results of the interview probable would not have been as reliable as they are now.

A last factor that might have had some influence on the quality of the research is the Portuguese culture. It is hard to make an appointment with someone for example for an interview. In some cases the interview was delayed even though everything was prepared. In another case the interview was in an hours, will I was not prepared. Is also happened that on emails you wouldn’t get a reply or the promised document are not send. This dimension sometimes made is hard to stay focused on the main goals, but is also was a valuable experience.

**Follow up research**

For follow up research first of all it would be interesting to see how the same organization will be doing in five or ten years. The organization looks to be in the beginning of a stage of different changes. Will all the hope changes be there and will these changes have the hoped effect on the organization? Besides this organization I think it would be interesting to see how the concept knowledge management is developed in an organization that is more professional in this area like the National Rowing Federation. This because I think with the implementation of knowledge management culture plays an important role. The National Rowing Federation would be a good chance to see this, because they don’t have big problems with money but as far as I know now, the quality of the knowledge in the Federation is not high. Another way to see this is with a comparison with for example another country, like the Netherlands. The way that the rowing is organized in the Netherlands is very different from here. I’m curious in how far this is causes by cultural differences.

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**Websites**

* Information rowing club: [www.galitos.pt](http://www.galitos.pt)
* Website informatiebeheer: <http://labyrinth.rienkjonker.nl/glossary>
* Triam instituut: <http://www.float.nl/index.php?item_id=6&titel=Visie_en_missie>
* Movisie: kennis en advies voor maatschappelijke ontwikkeling <http://www.movisie.nl/119080/def/home__/vrijwillige_inzet_/wat_is_een_vrijwilligersorganisatie/?OnderwerpID=115025>
* Kennismanagement: in theorie en praktijk <http://www.geocities.com/kennismanagement/kenn.htm>

**Annex 1 Topic list**

* Introduction of me and the research, ask for taping
* Function, tasks, relation of the participant with the club

(mensen en organisatiecultuur, technologie/systemen, processen, structuur van de inhoud, en strategie. )

* Idea’s about knowledge management
  + In general
  + In the club
* One experiences with knowledge management in de club
  + What learn and how
  + What toughed and how
  + Tacit and Explicit knowledge
* Knowledge management in the club
  + What is the main use of information in the club
  + How is information being saved (structure)
  + How is information being transferred
  + How is the information used.
  + Is there a big los of information (continuity, information loss, saving of information)
* Problems in the club
  + What kind or problems
  + Why a problem for the use of knowledge management
* Possibilities for improvement of knowledge management in the club

To think of:

Tacit versus explicit knowledge

Knowledge about rowing and about organizing

Strategic versus operational knowledge